Analysing the Future Market – Target Countries for German HEIs

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Abstract

Recruitment from abroad has become a global hot topic in higher education in recent years. Countries that have been recruiting international students for decades, as well as countries very new to the scene play vital roles in this education exchange. The goal of this paper is to provide a small glimpse of Germany's position, the German-specific slice of the vast and multi-faceted landscape of international student recruitment. We begin this paper by placing the problem in its context, trying to describe how various factors are converging on German higher education which will deeply affect Germany's performance as a leading economic and educational player in the global context in the near future. We will briefly outline the specific situation of German demography and how empty study places and a low number of qualified students entering the labour market are causing deep concern on many levels of German society. With this in mind, we introduce how higher education institutions (HEIs) can benefit from recruitment abroad while taking into account the dangers of brain drain. In a second chapter, HEI interests are named and briefly described in order to give the reader a background on university perspectives and priorities. The third chapter focuses on country selection based on how important Germany is as a destination country for international degree seeking students and on the number of potential sending students for each country. We then concentrate on seventeen countries from this larger group, chosen according to their highly diverse features in terms of geography, economy, and cultural settings. We offer quantitative and qualitative data regarding the specific contexts and situations of these countries and endeavour to offer the most comprehensive view of the educational, economic and social highlights of the nation as best as can be done in a few short pages devoted for each. This third chapter intends to offer some concrete information to be considered when HEIs explore potential target countries. The fourth chapter unearths which instruments are available for HEIs in order to approach the target country of interest. To combine these instruments and HEI interests into a useful organisation, we created a matrix. Chapter five delves into five of the seventeen countries formerly profiled, applying the instrument and interest matrix to each. In this way, we are able to offer options and suggestions as to what might best work for each context, depending on the priorities of the HEI. Chapter six offers a specific case study of the current leader in international student recruitment. This offers a comparative view of what is being accomplished in a country with a strong standing in economic and political importance as well as substantial historical ties to international recruitment, and therefore, an important competitor to Germany in the relevant market segment. We end with conclusions and recommendations in chapter seven, completing this initial voyage into the next generation of international student recruitment in Germany.

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Acronyms and Abbreviations

APS - *Akademische Prüfstelle*: academic test centre
CHE – Centrum für Hochschulentwicklung (Centre for Higher Education Development)
HE – higher education
HEI – higher education institution
ENQA – European Association for Quality in Higher Education
KMK – *Kultusministerkonferenz*: Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder*
KEI – Knowledge Economy Index
MDEC - Main Destination English speaking Country
ROI – Return on Investment
THES – Times Higher Education Supplement
UN – United Nations
UNESCO – United Nations Educational, Scientific, and Cultural Organization

German words and expressions

Abitur – University entrance certificate, Students must have followed a specific curriculum and programme to be able to take the exam leading to this certificate.
Akademische Prüfstelle – APS (academic test centre)
Bildungsausländer – Foreign students coming to study in Germany for a certain period of time and intending on returning to their country of origin
Bildungsinländer – Students in Germany of foreign origin with a German HE entrance qualification (Hochschulzugangsberechtigung), many having been educated and now integrated into the German educational system
Bund – Federal government
Land, Länder – Federal state/-s
Fachhochschulen – Universities of Applied Sciences
Feststellungsprüfung – A course specific examination which can be taken at special pre-university institutions called Studienkolleg. One can enrol in all major subject courses allocated for the secondary education certificate.
Gemeinnützigkeit – a non-profit organization
GUS: Gemeinschaft Unabhängiger Staaten – C.I.S. (Community of Independent States)
Gymnasien – secondary schools
Hochschulpakt – (University Pact) The name of a funding agreement between the federal state and the states which reacts to the uneven development of student numbers among states, intending to boost numbers of students to the Eastern parts of Germany.

Hochschulzugangsberechtigung – non-German university entrance qualification

Reifezeugnis / Abschlusszeugnis des Allgemeinbildenden Lyzeums - two types of secondary education certificates

Sprachdiplom – language diploma

Studienkolleg – higher education preparatory course at a pre-university institution

Other Notes

For the purposes of this paper and to avoid confusion between the traditional British and American systems of numerical values, we adopted the standard American system in establishing equivalencies for naming large numbers. The American system is becoming the global standard and is used in international organisations such as the World Bank and UNESCO, as well as widely borrowed for British government publications:[1]

Thousand = 1,000
Million = 1,000,000
Billion = 1,000,000,000
Trillion = 1,000,000,000,000

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The authors would like to thank Siegbert Wuttig and the entire team of the DAAD offices in Bonn as well as the branch offices abroad for their extensive comments and expert views on the country analyses and strategic questions. We also want to express our gratefulness to Andy Nicol from Coventry University and Chris Price from MJD Consultancy for their willingness to contribute their expert knowledge by reviewing the paper and advising us particularly on marketing aspects.

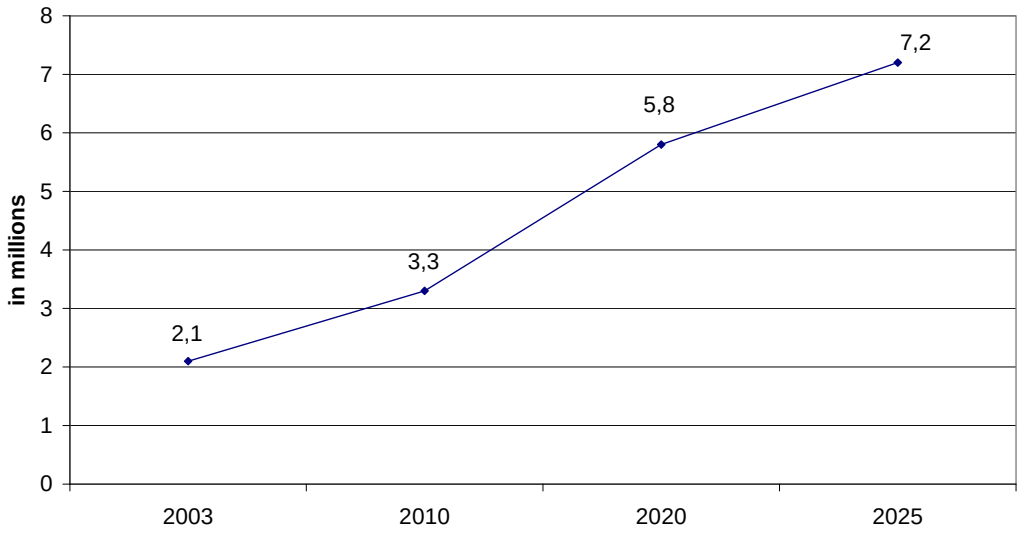
[1] For more information, see the AskOxford website at:
www.askoxford.com/asktheexperts/faq/aboutwords/billion?view=uk

1. Situation and problem description

A number of German universities are expected to face problems in the recruitment for a sufficient number of students in the upcoming decades after what is known as today's 'student peak.' Due to a very diverse demographic development as well as a heterogeneous demand situation in the labour market, some higher education institutions (HEIs) will face this challenge in certain academic fields within the next two years. Other institutions will face this change within five years for most of their subjects, while some will likely rest more or less unaffected for a decade or more. The situation of some HEIs might also differ from the overall situation in their respective federal state. For example, while an HEI might attract many students from other German regions, or might consider itself to be in a stable position and be located in a city of emerging importance, the surrounding federal state might face serious demographic challenges in the future. This could create tensions between HEI positions and state interests. The expected situation will call for a highly segmented and individualised strategic approach. In the coming decades, most HEIs will be required to find new ways to attract students outside of their normal sphere of influence. In order to prepare themselves, they will need information on the development of student populations in other countries.

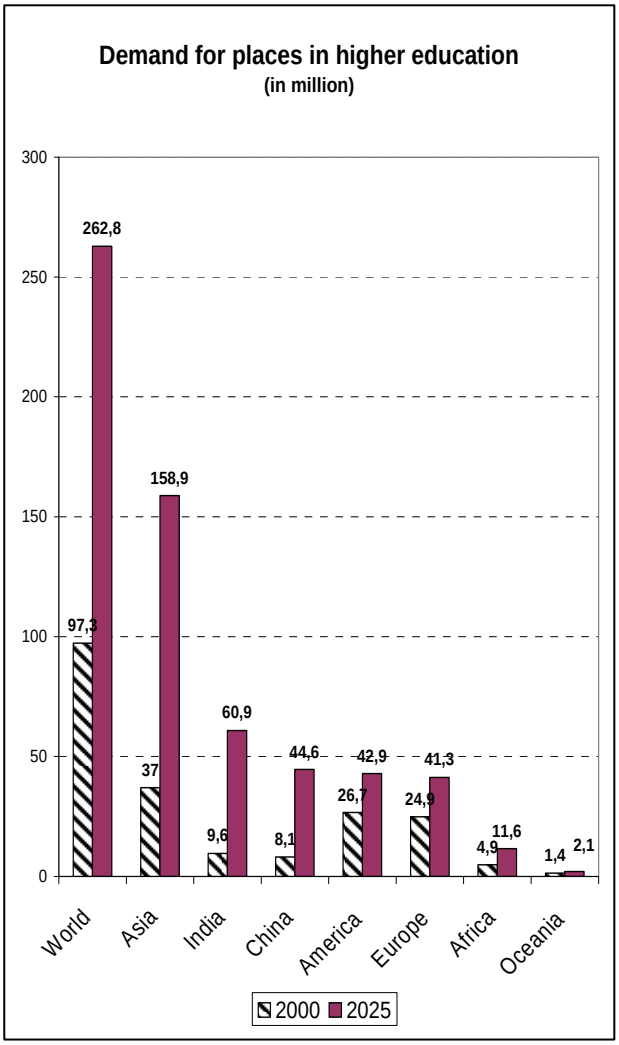
The two best known forecasts of student mobility (*Vision 2020* by the British Council and *Global Student Mobility 2025* by IDP Education Australia) expect about a 6% annual increase in study place demand for internationally mobile students. This translates to 2.1 million internationally mobile students in 2003 to an expected 3.3 million in 2010 and about 5.8 million in 2020.
With a growth rate of approximately 9%, by the year 2020, Asia (particularly East Asia) will send about 3.8 million students into the global higher education market. These 3.8 million students will account for 65% of the global student potential (British Council 2004).

Number of internationally mobile students



Source: IDP Australia 2002 und British Council 2004

According to IDP, the demand for higher education places from internationally mobile students will soar to 7.2 million in 2025. At the same time, the overall global demand for places in higher education will peak at 263 million, compared to 97 million in 2000. In this global context, between 2000 and 2025, India's demand will rise from 9.6 to 61 million, with an average growth rate of 7.7%, while China will face a rise from 8 to 45 million, with an average growth rate of 7.1%.



These two countries will most certainly lead the market as the main providers of potentially mobile students, together contributing to a demand for 105 million places, or 65% of the overall Asian demand of 160 million places. The Asian demand accounts for 60% of the global demand for higher education places. In addition to these two countries, steep increases in demand are expected in Turkey, Morocco and Iran (IDP 2002). In other world regions, the demand will also increase, albeit not as dramatically. According to both studies, Europe will see an increase from 25 to 41 million students seeking study places abroad, particularly due to the educational expansion in the Central and Eastern European countries; the Americas will face a rise from 26.7 million to 43 million students, with the main growth rates in Latin America, and particularly in Brazil, Mexico and Colombia. The demand for study places coming from Africa will more than double from 5 to 11.6 million, but education demand will still not reach a sufficient percentage of the population. Oceania will see an increase from 1.4 to roughly 2.1 million outgoing students, remaining marginal in its student market contribution. It should be noted that these studies and projections assume a rise in the participation rate in general education, and in higher education in particular, related to the relative growth of per capita income. Both of these variables are difficult to predict and the relation between them even more challenging. Therefore, we only refer to the basic estimation as a point of reference, refraining from including the various scenarios offered in the studies. However, even based on a very conservative assumption, the fact remains that the education markets of the future are to be found in places of the world different than in the past, with a strong bias towards Asia.

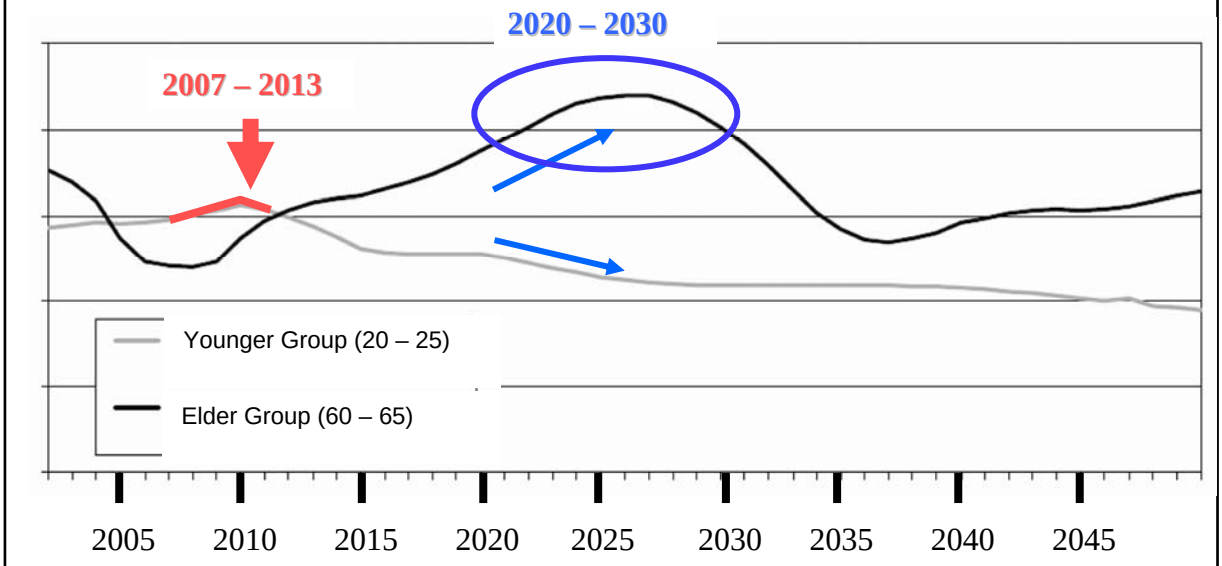
As mentioned above, the methodological approaches of the IDP's *Global Student Mobility 2025* and the British Council's *Vision 2020* do not adequately cover our specific needs and interests. We decided to refrain from relying upon these two well-known analyses of future student markets and trends forecasts for mainly two reasons. Firstly, these reports provide only very rough and generalised data for the specific purposes of this study. Thus, they do not allow to draw the conclusions and to develop the practical suggestions on an individualised and customised level we aim to offer. Secondly, these reports were prepared for specific customers (UK universities in the first case and Australian HEIs in the second) and do a fine job in providing the data and analyses needed for these target groups. However, for exactly this reason, the results are not transferrable to the particular German situation. Thus, our research project aims at providing this information in a country profile format, based on UN data and linked with other resources available. The project is also limited concerning perspectives of possible agents. Although looking at the goals and needs

of meta-level players such as the *Länder* and the *Bund*, this paper does not aim to develop strategies for these players, but restricts its analysis to the strategies of HEIs. Therefore, we only refer to possible strategies or interests of the former as far as they relate to or influence the strategies of HEIs. We will, however, shed light on possible strategies and approaches for HEIs concerning future student markets. To meet this challenge, we will analyse the methods (such as offshore, franchising, and recruitment) that might be applicable for which demand level, for which HEI type, and in which market.

1.1 Impact of Demographic Change to the German Higher Education Systems

Before one can discuss new international strategies for HEIs in Germany, it is necessary to provide a short view of the main impacts of demographic change to the higher education system in Germany. In general, Germany is encountering the same developments in the demographic shift which are typical for industrial countries in the post-industrial phase (with 'industrial country' as referring to a society which becomes increasingly heterogeneous in aspects of national origin, mother tongue, cultural habits and social differences). First, this means an extension of the lifecycle: people are getting older. This fact alone, however, does not lead to an increase in the population in total. Similar to other industrialized countries and following a second typical development, the country is experiencing a declining birth rate, which has decreased in Germany to one of the lowest levels in the world. Thus, the population is becoming older and it is also decreasing. The consequences of these combined phenomena will provoke serious problems regarding the demand for higher education. The following graph shows the progression in terms of different age groups in a scissor-like form. The increasing older group cohort (60 to 65 year-olds) reflects in particular the so-called baby boomers, which in the German context means those born between the years 1955 and 1965. Naturally, more relevant for HEIs is the declining grey line regarding the younger cohort group (20 to 25 year-olds).

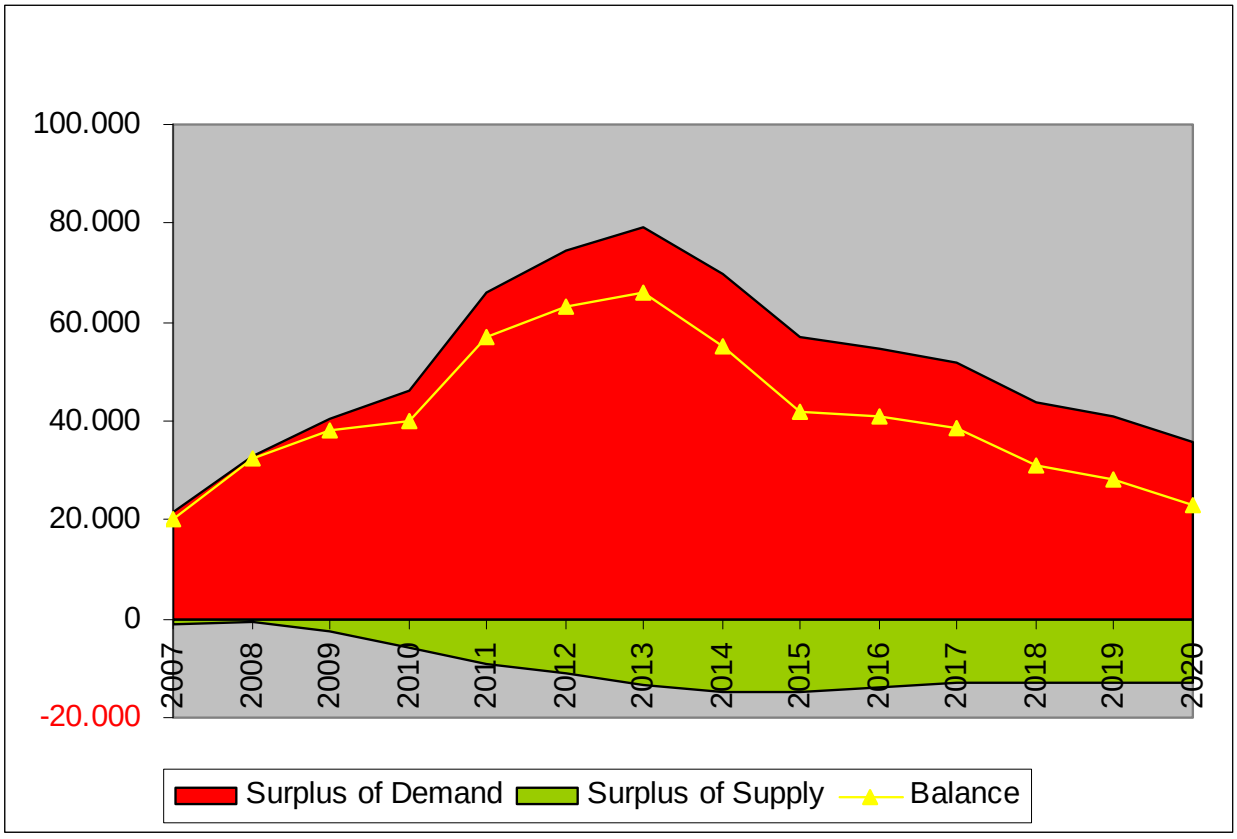
Progression of age group population development for 20-25 and 60-65 year-olds (2005-2050) in millions



Source: StBA 2004 – 10. koordinierte Bevölkerungsvorausberechnung, Variante 5

In addition, this graph shows a phenomenon, which may be referred to as a 'demographic echo' to the baby boomers. On average, this generation had given birth to only 1.36 children per woman, but they are numerous and therefore, one can see a small hill representing a temporary increase in the numbers of the younger cohort. This phenomenon can be found in many industrialized countries where discontinuous demographic developments have taken place. A factor specific to Germany and not related to the demographic shift, but that is contributing to the complexity of the situation is a political decision taken in the majority of the *Länder*. Most of the *Länder* will shorten the secondary school phase so that the normal duration of schooling will last twelve years. This decision temporarily and quite dramatically increases the number of school alumni. Because the shortening of the school cycle will be conducted at different times over a period of seven years, the development of declining demand for higher education as a consequence of the demographic shift will be superposed for more than a decade. This expected effect is shown in the next graph, which offers a prediction of the demand for higher education from 2007 to 2020.

Predicted demand for HE in Germany, 2007 to 2020



The red area indicates a prognosis by CHE-Consult on higher education demand in the phase between 2007 and 2020, which translates to missing capacity. The prognosis is based on the actual prediction of the *Länder* for the number of school alumni with general higher education access.[2] The progression of the increasing demand reflects the demographic echo, the shortening of the school years, and an increasing participation rate in the secondary education cycle leading to general higher education access.

[2] Gösta Gabriel, Thimo von Stuckrad: Die Zukunft vor den Toren - Aktualisierte Berechnungen zur Entwicklung der Studienanfängerzahlen bis 2020. Arbeitspapier 100. Gütersloh 2007.

Another important fact should also be mentioned in order to better understand the German context. After the reunification of East and West Germany in 1990, the birth rate in the eastern parts of Germany greatly declined. In addition, younger people (particularly young women, and especially young well-educated women) left there homelands due to insufficient economic perspectives and headed to western Germany. Although currently the birth rate is continuously increasing in relation to the relatively low average for the German population, 18 years after a drop in birth rates has translated to a declining demand in higher education for eastern German universities. The eastern *Länder* are today confronting a lack of secondary level schooled students, which will lead to a reduction in higher education enrolment of between 40% and 50%, compared to 2005. This effect is also included in the prognosis above, where the green section indicates predicted free capacities in the eastern *Länder*, whereas the negative values representing needed capacities are mainly in the west.

An agreement between *Bund* and *Länder* called the *Hochschulpakt* 2020 reacts to this uneven development and endeavors to cope with the unequal demand and the different interests of the eastern and the western *Länder*. The agreement intends to stimulate eastern *Länder* as well as eastern HEIs to attract students from the west, which should release pressure for some of the demand in the western states. Furthermore, due to the agreement, the western *Länder* are committed to enrol in total 91,000 additional students between 2007 and 2010. The first phase of this agreement will end in 2010 and is intended to be prolonged from 2011 to 2020, provided the partners meet their mutual obligations.

There is yet another typical development of industrialized countries which touches upon the questions of educational attitudes and success in study programmes. This development entails different generic patterns within immigrant communities as compared to the main culture. Germany has not yet focused on the impact dimension of the challenges of this development to the higher education system, not at least due to the fact that thus far these groups are extremely underrepresented in secondary and especially in tertiary education.

In conclusion, one can ascertain that a dramatic shift in the demographic development in Germany will provoke important consequences to the HEIs. Nonetheless, currently only the eastern *Länder* and their HE-systems are directly confronted with these impacts. In the whole of Germany, the issues of the decline of younger age groups and the lack of secondary school alumni are displaced by the immediate impacts derived from the shortening of the school cycle, the increasing rate of participation in secondary school, and the demographic echo of the baby boomers. In this respect, German HEIs normally are not focusing on questions of demographic change because they are coping with the political assignment of enrolling more students. In contrast, HEIs in eastern Germany are dealing with a declining demand for study places in higher education and are anticipating developments which will become very important for all HEIs in about 15 years. Thus, these institutions could be conceived of as kinds of laboratories for the remaining German universities.

1.2 Brain Drain or Brain Gain?

There is continuous debate, particularly among international educators, on the question of whether global educational mobility leads to brain drain. The theory of brain drain (or 'human capital flight') stems from discussion during the 1950s when scientists and technologists moved from the United Kingdom to Canada and the United States (Dilworth 2007). Logically, the opposite of brain drain is brain gain, which describes the influx of intelligentsia into a geographic region or country. In economic theory, the movement of highly skilled workers, scientists and other intelligentsia is considered to have a positive effect on the receiving economy, whereas long-term effects so far have not played a role (Straubhaar 2000). As Straubhaar points out, the New Growth Theory – a counter-theory to the over-simplistic neo-classical theory – regards an additional influx of brain power as beneficial to the economy:

> *An inflow of human capital might produce positive externalities that spill over to other sectors and regions of the host economy. Thus, regions should* a priori *be interested in becoming the targeted destination of a mobile qualified labour force.*
>
> (Straubhaar 2000, p.7)

This is certainly also true for destination countries in higher education. However, it is equally true that the outflow of qualified scientists and students poses a serious threat to the origin society, depraving it of important assets for growth and economic well-being. Interestingly enough, in Straubhaar's terminology, the provision of education for students is considered an 'export' which occurs by 'importing' students. This of course only sheds light on one aspect of educational service providing, as there are also real 'export' models such as offshore or franchising activities. In the context of brain drain or brain gain, however, it is a vital condition *sine qua non* that the students and scholars physically leave their country and move to another country. In this context, the import is therefore always physically real whereas the export is a virtual artefact. The situation becomes more complex when considering offshore activities or franchising.

Both movements, brain drain and brain gain, can be either coincidental or initiated. People either move for personal reasons (poverty at home, limited career chances, hope for better opportunities abroad, etc.), or they can be actively motivated to move (marketing, recruitment, etc.). Logically, active recruitment almost systematically equates to the acceptance of loss of capacity, at least temporary, in the country of origin. So does that mean student recruitment activities are deliberate endeavours to foster brain drain? Not if we refer to the basic definition of brain drain. Brain drain is, according to Straubhaar, the "permanent emigration of qualified persons." A study period abroad, however, does not necessarily mean that this person will not return home after his studies. In fact, Johnson and Regets found that the question of permanent or temporary migration is country-specific. In their 1998 analysis, they unearthed that in regards to the United States, students from South Korea or Taiwan are more likely to return to their country of origin, whereas students from China and India tend to opt for permanent emigration to the United States once they have finished their studies. It can also be observed that the higher the degree achieved, the lower the likeliness a student is to return to his country of origin (Johnson/Reget 1998). In the case of returning students, one speaks of brain circulation; if even numbers of students move between two or more countries, the term brain exchange can be employed. Beine et al. showed in their 2001 study that migration

of highly skilled workers or intelligentsia can have two different effects: either migration opportunities encourage investment in education (those benefitting from education expect a certain rate of return making it worth the cost), or at least a large proportion of skilled individuals permanently leaves the country. The conditions for each outcome are rather diverse, but in general, the authors observed that if the country is underdeveloped, or its economy is close to what they call an "underdevelopment trap" with few migration options available, the opening of migration opportunities has a positive effect. The same holds true for an economy possessing a high performance level in growth, resulting in migration activities which may have intermediate values (Beine et al. 2001).

However, the real problem lies with the second phenomenon: permanent emigration. It can be argued that this kind of brain drain imperils the economy of origin in various ways. It depraves it from individuals currently possessing high potential, it reduces its ability to grow (hindering the creation of wealth), and it also reduces the number of children to be born in the upcoming future. Considering that in virtually all countries the level of education of a child is closely linked to social heritage, this means that these countries are also depraved of a significant socio-economic asset for the future. At the same time, all these factors are turned into benefits for the receiving economy. In a purely neo-classical setting, this would be translated into a free market theory claiming that quality prevails and the strongest survive. However, we know from other areas of society that the simple import of excellent people from other countries is often to the detriment and expense of the native people's education. This effectively reduces economic and other relevant capacities of these countries as it seems to be cheaper to import fully educated people rather than invest in one's own system.[3]

A strong brain gain policy does not necessarily lead to a long-term positive impact, particularly if the immigrating high potentials are not adequately integrated or if they are marginalised. *The Guardian* on September 13, 2007 reported that a Universities UK study revealed unwanted side effects of increased international student recruitment (Ramsden 2007, *The Guardian* 2007). Miyagiwa also showed in his empirical analysis that various different economic effects, both positive and negative, can be imposed on the host as well as the source country of the migrants, depending on certain settings (Miyagiwa 1991).
A practical, yet not so well known, example is the emigration of high potential Arab scientists. In 2004, the Gulf Centre for Strategic Studies presented a study of brain drain effects on the Arab science community and on the economic impacts incurred. As Wagdy Sawahel of SciDevNet states:

> *The study found that the emigration of intellectuals from the Arab world accounts for about one-third of the total 'brain drain' from developing countries to the West. Arab countries lose half of their newly-qualified medical doctors, 23 per cent of engineers and 15 per cent of scientists each year, with three quarters of these moving to the United Kingdom,*

[3] A striking example is the soccer business in Europe where, under the Bossman rule, every soccer team was allowed to employ as many foreign players as possible. With the option to import highly skilled and excellently trained players from Latin America, Eastern Europe and Africa, the teams could boost their performances without heavy investment in talent scouting and youngster training. However, in the long run the national teams suffered from this policy and investment in local youth was much more limited. Since then, some teams have been trying to establish a more balanced strategy. It should be noted, however, that Germany has shown some tendency to focus more on qualification initiatives (DAAD 2008).

> *United States and Canada. This is estimated to equate to annual losses to Arab states of more than US$2 billion. The study also found that 45 per cent of Arab students who study abroad do not go back to their countries after graduating.*
>
> (Sawahel 2004)

According to the study, the reasons are to be found in the economic and political settings of the countries combined with social as well as personal influences. Extremely low salaries and a non-high tech based industry are among the aspects driving scientists to go elsewhere. Political instability in many countries (such as in Iraq, Iran and Syria) is also of consequence. These countries, as well as some Asian countries, are very aware of the risk of loosing high potential scientists to other world regions, notably to North America and Europe. In effect, any strategy for student and scholar recruitment focusing on real physical mobility should, alongside a clear orientation concerning development policies, contain a clear and adequate idea regarding the question of temporary and permanent recruitment.

2. Dimensions of Interest

Stakeholders involved in the discussion of student recruitment from abroad, such as higher education institutions, *Länder* or the *Bund*, may follow different interests in doing so. In addition, the interests will most likely differ not only between the types of stakeholders, but also within one stakeholder group. Before describing possible strategic settings of these various players, the authors will layout what they consider the five most likely interests that might be pursued. It should be underlined that the primary focus of this paper and the main target group for recruitment is *degree seeking students* rather than exchange programme students partaking in a semester or year-long study abroad experience.

2.1 Quantitative Interest

Student Numbers

The quantitative interest, or the interest to stabilise or increase the number of international degree seeking students in a particular HEI, in a *Land* or in the Federal Republic of Germany as a whole, is the most obvious interest to most stakeholders. Thereby, 'quantitative' interest is double-sided. On the one hand, due to the demographic change in Germany, some regions will face dramatic decreases in students leaving with a university entrance certificate, the *Abitur*. Some regions will not face this problem until after 2020; however, some regions will face this issue within the next two to five years. In addition, the influx of students from abroad is no longer steadily rising, but is demonstrating a reverse trend. From 1997 to 2003, the number of first-year students from abroad with a non-German university entrance qualification (*Hochschulzugangsberechtigung*) rose from slightly more than 30,000 to approximately 60,000, and thus by nearly 100%. However, this peak was followed by a decline, both concerning individual countries (e.g. Chinese student numbers have decreased by 42%) and also more generally, with a 7% drop overall (DAAD 2007, p.24-28) compared to the target of 10% international students set for Germany (DAAD 2008). On a global scale, this is a rather peculiar finding vis-à-vis the fact that the numbers of study place seekers (mainly from Asia) are dramatically increasing. The reasons for the decline in international student recruitment numbers in Germany are not well known. One plausible factor contributing to this decline can be that since it coincides with the introduction of the bachelor/master structure in a considerable number of subjects. It seems at least possible that these two developments might be inter-related, despite the general view that the introduction of bachelor/master structure would facilitate mobility and increase the attractiveness of the German higher education system. To further develop and test this hypothesis, further in-depth analysis would be needed that is beyond the scope of this paper. Nonetheless, in terms of the quantitative aspect, it can be assumed that there is a decline, notably in some *Länder* such as Baden-Württemberg and Niedersachsen. Thus, both the demographic development and the overall tendency of reduced first-year student enrolments from abroad should create a strong quantitative interest in international student recruitment.

Return on investment

Another quantitative interest is of an economic nature. The return on investment, both for the HEI itself and the larger economy, is an important consideration for student recruitment. For the receiving economy, the benefits are two-fold. The first benefit is financial gain. The United States and the United Kingdom offer two examples of countries with a clear perception of higher

education as a commodity (defined here as an economic good), helping to highlight this aspect. In the United States, the Institute for International Education (IIE) states in its 2007 *Open Doors* report that the United States received nearly 10 billion US$ (approximately 6.73 billion €)[4] in tuition fees from the 583,000 international students who also spend another 11 billion US$ (approximately 7.4 billion €) on living expenses (IIE 2007). In the UK, a HESA report states that in 2004-05, a total of 240,000 international EU and non-EU students contributed slightly less than £1.5 billion (approximately 2.09 billion €) and £180 million (approximately 251 million €), respectively, through tuition fees. The number of international students climbed to 318,000 in 2007. Living expenses and other expenditures are estimated at around £3.74 billion (approximately 5.2 billion €) from both non-EU and EU students with a ratio of approximately 3.3 to 1 (Vickers/Bekhradnia 2007). Considering a gross domestic product of £1.98 trillion (approximately 2.76 trillion €) in the UK and 12.4 trillion US$ (approximately 8.3 trillion €) in 2005 (no figures available for 2007), this translates to international students being responsible for 2.6% of the UK's and 1.7% of the United States' gross domestic product. It is no surprise that besides the relevance in terms of academic quality, international students are considered a serious economic factor in both of these countries. Additionally, every HEI engaging in recruitment will benefit its region directly by increasing the influx of students and scholars who will spend money on accommodation, subsistence and leisure activities.

2.2 Qualitative Interest

Diversity

The qualitative interests cover areas which are less easily measured, but can be of crucial importance to the internationalisation of an HEI. HEIs which, from their perspective, have a sufficiently high percentage of international students, might nevertheless be interested in a broader regional diversity of their student base. For example, they might be interested in recruiting from a very limited number of countries in the context of internationalisation at the home campus.

Student Performance

Another qualitative aspect is the academic quality of the students. Even if an institution is able to fill their study spaces, it might be worthwhile to increase the performance quality of the students enrolled. This aspect often applies to recruitment for master's programmes, but it could also be used to raise the performance level of undergraduate students. In addition, many of the international students will have experienced methods and approaches different from those taught in German schools and HEIs. Thus, a heterogeneous group structure can lead to a higher diversity of perspectives and also allow those students lacking international experience to widen their horizons. From time to time, it will also challenge the traditional methodology taught in an HEI. This is a qualitative factor many HEIs consider to be important.

Political Aspects

It is conceivable that some HEIs are interested in supporting political gains or political interests through education activities. For example, the advancement of education, the increase in participation rates, the amelioration of access equity and an increase in the number of female students are all declared goals of German development policy. The issue of the empowerment of

[4] Currency rates were based on the daily rates provided by: http://www.bankenverband.de/html/reisekasse/waehrungsrechner.asp, last retrieval November 27, 2007.

women and the promotion of gender equity in fact qualifies as No.3 of the eight millennium development goals of the United Nations (UN 2007).

Reputation

A very legitimate interest of an HEI is to increase its reputation worldwide. This added attribute often offers positive returns in various areas such as greater chances of success in research funding applications, recruitment success, (ultimately increasing recruitment cost effectiveness), as well as enhanced opportunities in establishing new partnerships. Usually, high reputation can be a self-fulfilling prophecy. By helping to attract the best scholars and students, learning, teaching and research outputs increase, thereby improving the HEI's position in the market and ultimately, further increasing the reputation. Even though it may require some time to tarnish a reputation, (since clients and observers may not immediately know about quality issues and deterioration) once lost, reputation is very difficult to be regained. The inertia inherent to the system which helps to prevent immediate loss in reputation – characteristic to the business world – also hinders its re-building. Thus, reputation is a two-edged sword and any instrument applied in order to influence reputation must carry two qualities: long-term effectiveness and quality assurance.

3. Analysis of Demand Countries

Following an analysis of the needs and strategies of the major players in Germany while focusing on HEIs as the primary target for further analysis, the next step includes scrutiny of possible resource countries. In order to organise and decide upon which countries to consider more in-depth, the authors first categorised the possible source countries into relevant 'types' based on empirical findings. In a second step, seventeen country profiles representing varying educational, economic and social situations are offered.

3.1 Categories of resource countries

On a theoretical level, resource countries can be divided into different types depending on their relation to Germany and on the demand for higher education. We decided upon three main criteria, all quantitative due to the limitations inherent to qualitative criteria and difficulties in creating groups based on this type of information. The main and basic consideration was not to design artificial and purely theoretical types and then try to group the countries accordingly, but rather to start from empirical evidence and let the evidence decide which groups or types might appear.

The ***first criterion*** is whether Germany is a top destination for students from the relevant country. UNESCO's Global Education Digest (2006) provides information regarding for which countries Germany is a top destination for students, ranked from 1 through 5. As can be imagined, depending on the size of the student groups and the total population, this 1 through 5 ranking can be misleading in terms of importance for Germany. For example, for a country such as China, Germany is only ranked as the 5th most important destination country, however, due to its large population and number of students studying abroad, Chinese students account for the single largest foreign student group in Germany. On the other hand, a smaller country choosing Germany as the top destination country may still only send a small number of students. Therefore, we decided to consider any country for detailed profiling which has at least a No.5 rating for Germany as a destination country. Careful consideration was taken to include the interest in Germany as a destination country as well as outgoing student numbers of individual countries. Both of these aspects were deemed crucial for initial pre-selection. Thus, the criterion ***importance of Germany as a destination country for students*** is a condition *sine qua non* but does not carry further explanatory value for the differentiation of the final group. Based on the DAAD's 2006 data on the "100 most important countries of origin of foreign students in 2006, by quantity," and the figures on top destination countries from UNESCO's Global Education Digest, we arrived at the following 88 countries (in alphabetical order) fulfilling this criterion[5] (DAAD 2007):

[5] Due to the limited opportunities for students of the Democratic People's Republic of Korea (North Korea) to study abroad, we did not include this country in the list, despite Germany being a No.2 destination country (accounting for 216 students in 2006).

1	Albania
2	Afghanistan
3	Algeria
4	Argentina
5	Armenia
6	Australia
7	Austria
8	Azerbaijan
9	Belarus
10	Belgium
11	Benin
12	Bolivia
13	Bosnia and Herzegovina
14	Brazil
15	Bulgaria
16	Cameroon
17	Canada
18	Chile
19	China
20	Colombia
21	Côte d'Ivoire
22	Croatia
23	Czech Republic
24	Denmark
25	Ecuador
26	Egypt
27	Estonia
28	Ethiopia
29	Finland
30	France
31	Gabon
32	Georgia
33	Ghana
34	Greece
35	Guinea
36	Hungary
37	India
38	Indonesia
39	Iran
40	Iraq
41	Ireland
42	Israel
43	Italy
44	Japan
45	Jordan
46	Kazakhstan
47	Kyrgyzstan
48	Latvia
49	Lebanon
50	Libya
51	Lithuania
52	Luxembourg
53	Macedonia
54	Mauritania
55	Mexico
56	Moldova
57	Mongolia
58	Morocco
59	Netherlands
60	Nigeria
61	Pakistan
62	Peru
63	Philippines
64	Poland
65	Portugal
66	Republic of Korea
67	Romania
68	Russian Federation
69	Senegal
70	Serbia and Montenegro
71	Slovakia
72	Slovenia
73	South Africa
74	Spain
75	Sudan
76	Sweden
77	Switzerland
78	Syria
79	Thailand
80	Togo
81	Tunisia
82	Turkey
83	Uganda
84	Ukraine
85	United Kingdom
86	USA
87	Uzbekistan
88	Vietnam

Sources: Wissenschaft Weltoffen 2007; UNESCO Global Education Digest, 2006

The ***second criterion*** is the ***size of the 15 to 24 year-old age group*** as projected by the UN for 2030, also taking into account the more comprehensive demographic development of this group between 1980 and 2050. Two countries, India and China, stand out as being the only countries with a 15 to 24 year-old age group of more than 100,000,000 with India surpassing China by approximately 70% (!) in 2030. Following these two countries, the remaining can be grouped according to their forecasted populations. In this way, the entire sample can be divided into the following four categories: bright green represents the top group with more than 100,000,000; light green indicates the next level with more than 10,000,000; yellow corresponds to the medium group with more than 5,000,000; light red indicates the group with more than one million youth and dark red represents the countries with the lowest number of 15 to 24 year-olds.

1	India	245,357,000
2	China	170,804,000
3	USA	47,835,000
4	Nigeria	46,888,000
5	Pakistan	41,860,000
6	Indonesia	40,641,000
7	Brazil	34,969,000
8	Ethiopia	27,563,000
9	Philippines	21,646,000
10	Mexico	18,089,000
11	Egypt	17,619,000
12	Vietnam	15,874,000
13	Russian Federation	14,633,000
14	Iran	14,290,000
15	Turkey	13,303,000
16	Uganda	13,222,000
17	Sudan	10,968,000
18	Japan	10,227,000
19	South Africa	9,812,000
20	Thailand	8,674,000
21	Iraq	8,610,000
22	Colombia	8,285,000
23	France	7,718,000
24	United Kingdom	7,697,000
25	Algeria	6,932,000
26	Argentina	6,877,000
27	Ghana	6,321,000
28	Morocco	6,127,000
29	Uzbekistan	5,771,000
30	Côte d'Ivoire	5,590,000
31	Peru	5,556,000
32	Italy	5,455,000
33	Cameroon	5,329,000
34	Syria	5,275,000
35	Spain	4,982,000
36	Republic of Korea	4,285,000
37	Canada	4,187,000
38	Ukraine	4,004,000
39	Senegal	3,863,000
40	Poland	3,514,000
41	Guinea	3,257,000
42	Australia	2,960,000
43	Kazakhstan	2,771,000
44	Ecuador	2,594,000
45	Chile	2,514,000
46	Bolivia	2,316,000
47	Romania	1,924,000
48	Netherlands	1,860,000
49	Tunisia	1,689,000
50	Belgium	1,153,000
51	Sweden	1,138,000
52	Portugal	1,109,000
53	Greece	1,078,000
54	Czech Republic	1,064,000
55	Hungary	924,000
56	Belarus	876,000
57	Austria	844,000
58	Bulgaria	616,000
59	Slovakia	529,000
60	Mongolia	459,000
61	Georgia	413,000
62	Croatia	409,000
63	Bosnia Herzegowina	337,000
64	Gabon	317,000
65	Latvia	208,000
66	Macedonia	207,000
67	Slovenia	180,000
68	Estonia	143,000

Source: UN Home, Population Division. World Population Prospects: The 2006 Revision Population Data
http://esa.un.org/unpp/index.asp?panel=2

It can be observed that twenty countries have been eliminated due to missing data, resulting in 68 remaining countries. This grouping immediately highlights the top priority countries when considering the potential target group. Besides India and China, this comprises of 16 countries in the top segment and another 16 in the middle group segment.

The ***third criterion*** is the ***share of students within the international student body in Germany***. Most statistics, such as UNESCO's data, tend to focus on the *entire* sample of foreign students. In these cases, the overall foreign student number relies on the nationality of the students as the

differentiating criterion. This means that students of foreign nationality who obtained their high school certificate in Germany or at a German school abroad are also considered foreign students. Besides the well-known discussion regarding Turkish students in Germany and the question of naturalisation, this seems to be a problematic approach in the context of international student recruitment. A country might have a substantial overall share in the foreign student segment in Germany, but only a fraction of those might actually be international students with a foreign high school diploma (a striking example is Croatia with more than 4,000 students listed but only 700 so-called *Bildungsausländer*, i.e. students with a foreign high school certificate (Wissenschaft-weltoffen 2007). Therefore, we decided against this approach and to only use the numbers of international students with a foreign high-school certificate. A problem which remains thus far unsolved is the fact that, as stated by Wissenschaft Weltoffen, the registration of international students varies and in many universities short-term study abroad students are counted alongside full-fledged degree seeking students. However, for our purposes, this problem is reduced by our choice to consider both types of students as indicators for interest in Germany and due to our predominant focus on non-European countries as target regions, making the sizable factor of ERASMUS exchange students not as relevant.

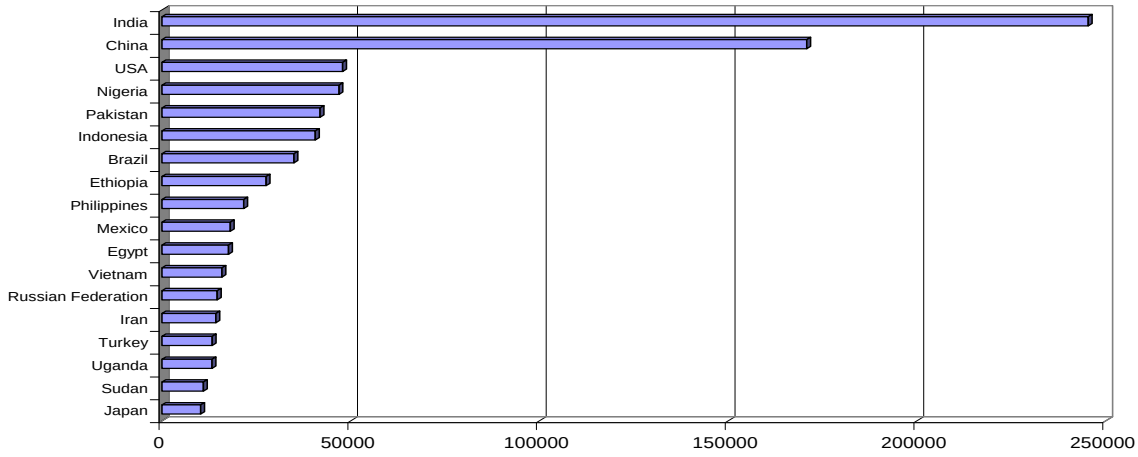
Again, the countries were group according to empirical findings, using the same four group identifications. The green group is formed by countries which count more than 8,000 students; light green are those with more than 3,000; the yellow group comprises of countries providing more than 1,000 students and the red group indicates those providing more than 100 students. As a result, the countries could be grouped as follows:

1	China	26,061
2	Bulgaria	12,423
3	Poland	12,301
4	Russian Federation	9,826
5	Morocco	7,190
6	Turkey	7,077
7	Ukraine	6,928
8	Cameroon	5,389
9	France	5,293
10	Austria	4,225
11	Spain	3,976
12	Republic of Korea	3,875
13	Romania	3,781
14	India	3,583
15	Italy	3,517
16	Georgia	3,210
17	USA	2,757
18	Greece	2,547
19	Iran	2,481
20	Indonesia	2,376
21	Hungary	2,241
22	Tunisia	2,200
23	Vietnam	2,148
24	Czech Republic	1,996
25	Japan	1,949
26	Belarus	1,887
27	Brazil	1,726
28	Syria	1,520
29	Slovakia	1,507
30	Mongolia	1,284
31	Mexico	1,231
32	Pakistan	1,138
33	Colombia	1,112
34	United Kingdom	1,063
35	Bosnia Herzegowina	892
36	Peru	882
37	Egypt	859
38	Thailand	856
39	Kazakhstan	806
40	Latvia	773
41	Netherlands	747
42	Estonia	738
43	Croatia	709
44	Belgium	704
45	Uzbekistan	622
46	Chile	583
47	Sweden	538
48	Canada	507
49	Nigeria	498
50	Argentina	446
51	Portugal	442
52	Ecuador	402
53	Iraq	380
54	Ghana	375
55	Sudan	367
56	Macedonia	340
57	Ethiopia	308
58	Australia	273
59	Slovenia	261
60	Cote d'Ivoire	251
61	Senegal	232
62	Bolivia	207
63	Algeria	194
64	Guinea	194
65	Gabon	184
66	South Africa	140
67	Philippines	133
68	Uganda	119

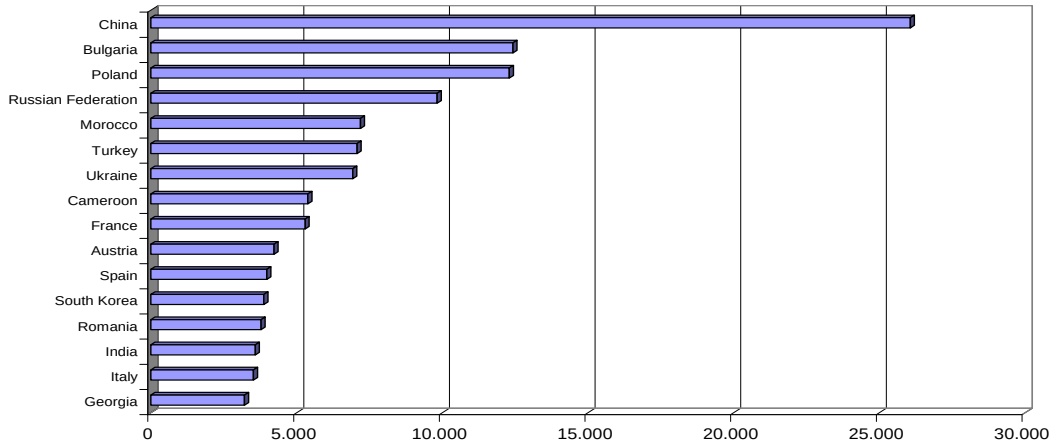
Source: Wissenschaft Weltoffen 2007

The distribution is rather steep for both indicators:

Size of age group 15-24 (in 1000)



Number of international students (Bildungsausländer)



Grouping the countries according to these dimensions allowed us to include both the country's perspective on Germany as a target destination for degree seeking students as well as the country's role as a source of international students from the German HEI perspective.

We think that this differentiation is crucial for strategy development. If the country in question is the number one provider of international degree seeking students, the inherent interest in German HEIs must be considerably high to secure the influx from this country or even to enlarge it. On the other hand, countries for which Germany is the main host country for degree seeking students will be more accessible to recruitment measures than those where Germany plays a small or negligible role, even if this country provides a large percentage of international students. Combine this with

the prospected development of the main target age group (15-24 year-olds) and the results show the degree to which differentiated strategies are needed.

A striking example is China. The number of Chinese freshmen in German HEIs decreased from 6,985 in 2002 to 3,818 in 2005 (equivalent to -45.3). This is particularly dramatic for Germany because it accounts for 66% of the entire loss of international students! The loss was so dramatic that China lost its leading position, taken over by Poland. Despite this shift in leading positions, Poland did not, in fact, increase its enrolment numbers, but stagnated (DAAD 2007). At the same time, Germany was and is a rather less important destination for Chinese students, even though it still ranks as the No. 5 destination country. Clearly, Germany must have a huge interest to reverse this trend, whereas China can afford to remain indifferent. Of course, the focus is always on the best students rather than sheer numbers, but China is likely to be a market offering a large AND a high performance level target group.

On the other hand, India will be a major source country for international students worldwide in the coming years, but up until now only provides less than a sixth of the number of foreign students compared to China. Both findings obviously call for very special strategies.

Accordingly, we first grouped the countries depending on their performance in the two differentiating criteria. As we do not rank the indicators according to importance, the lists are in alphabetical order. The first group or type now consists of those countries which show green groupings in both indicators, or green in one and light green in the other. These are:

Type A Countries			
Country	Students in German HEIs	Age group 15-24 in 2030	Germany's position as destination country
China	26,061	170,804,000	**5**
Russian Federation	9,826	14,633,000	**1**
India	3,583	245,357,000	**4**
Turkey	7,077	13,303,000	**1**

This group can be considered as the prime group of source countries and might be expected on the forefront of strategic targeting.
The following type are those countries which show a fairly even spread among the two criteria still on a rather high level (either light green or yellow). This group comprises altogether of 15 countries:

Type B Countries			
Country	Students in German HEIs	Age group 15-24 in 2030	Germany's position as destination country
Cameroon	5,389	5,329,000	**1**
France	5,293	7,718,000	**4**
Italy	3,517	5,455,000	**1**
Morocco	7,190	6,127,000	**2**
Brazil	1,726	34,969,000	**2**
Indonesia	2,376	40,641,000	**4**
Iran	2,481	14,290,000	**1**
Japan	1,949	10,227,000	**4**
Mexico	1,231	18,089,000	**4**
Pakistan	1,138	41,860,000	**3**
USA	2,757	47,835,000	**4**
Vietnam	2,148	15,874,000	**4**
Colombia	1,112	8,285,000	**4**
Syria	1,520	5,275,000	**3**
United Kingdom	1,063	7,697,000	**3**

The third type is determined by those countries which show substantial deviations between one indicator and the other. As in this case, the approaches might differ considerably to take into account one advantage and one disadvantage. Type C is represented by only two countries which show a striking difference between the actual importance for Germany and the worrisome development of the relevant age group until 2030:

Type C Countries			
Country	Students in German HEIs	Age group 15-24 in 2030	Germany's position as destination country
Bulgaria	12,423	616,000	**1**
Poland	12,301	3,514,000	**1**

Type D is formed by those countries where a still rather large student share coincides with a significantly low age group sample:

Type D Countries			
Country	Students in German HEIs	Age group 15-24 in 2030	Germany's position as destination country
Austria	4,225	844,000	**1**
Georgia	3,210	413,000	**1**
Ukraine	6,928	4,004,000	**1**
Republic of Korea	3,875	4,285,000	**3**
Spain	3,976	4,982,000	**2**
Romania	3,781	1,924,000	**2**

The fifth type shows the opposite characteristics, a rather large target group is combined with, up until now, a small to negligible share in international students in Germany:

Type E Countries			
Country	Students in German HEIs	Age group 15-24 in 2030	Germany's position as destination country
Egypt	859	17,619,000	**2**
Ethiopia	308	27,563,000	**2**
Nigeria	498	46,888,000	**3**
Philippines	133	21,646,000	**5**
Sudan	367	10,968,000	**1**
Uganda	119	13,222,000	**3**

The sixth type shows mid-level characteristics in one indicator and low level ones in the other:

Type F Countries			
Country	Students in German HEIs	Age group 15-24 in 2030	Germany's position as destination country
Belarus	1,887	876,000	**2**
Czech Republic	1,996	1,064,000	**1**
Greece	2,547	1,078,000	**2**
Hungary	2,241	924,000	**1**
Mongolia	1,284	459,000	**1**
Slovakia	1,507	529,000	**3**
Tunisia	2,200	1,689,000	**2**
Algeria	194	6,932,000	**3**

Argentina	446	6,877,000	**4**
Côte d'Ivoire	251	5,590,000	**4**
Ghana	375	6,321,000	**3**
Iraq	380	8,610,000	**2**
Peru	882	5,556,000	**2**
South Africa	140	9,812,000	**5**
Thailand	856	8,674,000	**5**
Uzbekistan	622	5,771,000	**5**

The final type G comprises of all the countries which are on the lower end of the scale in both criteria:

Type G Countries			
Country	students in German HEIs	Age group 15-24 in 2030	Germany's position as destination country
Australia	273	2,960,000	**5**
Belgium	704	1,153,000	**4**
Bolivia	207	2,316,000	**5**
Bosnia and Herzegovina	892	337,000	**1**
Canada	507	4,187,000	**5**
Chile	583	2,514,000	**3**
Croatia	709	409,000	**1**
Ecuador	402	2,594,000	**3**
Estonia	738	143,000	**2**
Gabon	184	317,000	**3**
Guinea	194	3,257,000	**5**
Kazakhstan	806	2,771,000	**3**
Latvia	773	208,000	**2**
Macedonia	340	207,000	**2**
Netherlands	747	1,860,000	**3**
Portugal	442	1,109,000	**3**
Senegal	232	3,863,000	**4**
Slovenia	261	180,000	**1**
Sweden	538	1,138,000	**5**

The next step of the project consisted in selecting those countries which we were interested in describing in detail in order to show the diversity of the countries in question, but also to provide in-depth information for HEIs that would like to target certain countries. In order to select the sample countries, we based our choices on the types as described above.

Since type A countries are so vital for Germany, we selected them in total. This group comprises of four countries. For the other groups, the selection was based on whether the country was representative of the different types of countries within each cluster. It was also important for selection to maintain geographical variety, when possible, in order to take into consideration regional cultural phenomena and a broad world sample. From the type B group, we also selected four countries: Brazil, Indonesia, Vietnam and the USA. The type C countries, Poland and Bulgaria, were both taken into consideration. Among the type D countries, we selected the Ukraine, and in the type E group, Egypt, Nigeria and the Philippines were chosen. Group F is represented by Tunisia and Thailand, while type G will be sampled by Chile. Altogether, this translates into a sample group of 17 countries which will be analysed based on a broader set of indicators in the next chapter:

Countries selected for analysis, sorted by type

Country	Type	Students in German HEIs	Age group 15-24 in 2030	Germany's position as destination country
China	A	26,061	170,804,000	**5**
India	A	3,583	245,357,000	**4**
Russian Federation	A	9,826	14,633,000	**1**
Turkey	A	7,077	13,303,000	**1**
Brazil	B	1,726	34,969,000	**2**
Indonesia	B	2,376	40,641,000	**4**
USA	B	2,757	47,835,000	**4**
Vietnam	B	2,148	15,874,000	**4**
Bulgaria	C	12,423	616,000	**1**
Poland	C	12,301	3,514,000	**1**
Ukraine	D	6,928	4,004,000	**1**
Egypt	E	859	17,619,000	**2**
Nigeria	E	498	46,888,000	**3**
Philippines	E	133	21,646,000	**5**
Thailand	F	856	8,674,000	**5**
Tunisia	F	2,200	1,689,000	**2**
Chile	G	583	2,514,000	**3**

3.2 Country analyses

3.2.1 Description of indicators

Population
This indicator describes the development of the age group of 15 to 24 year-olds, showing the potential of a target country as a recruitment market.

Education
Participation rates (secondary, tertiary) – Defined as the upper secondary gross graduation ratio (preparation for direct entry into ISCED 5A education) and the gross entry ratio to tertiary higher education for university studies, not vocational studies (ISCED 5B). Participation rates present a key aspect of the likelihood to be able to recruit many youth in the 15 to 24 year-old range. It should be kept in mind that of the individuals in this age group, only a portion will be eligible for entry into tertiary education. The rate of students having graduated with a secondary education *compared to* the number enrolling in tertiary education is unfortunately unavailable from the UNESCO database. The two ratios provided describe only the percentage graduating from upper secondary and the percentage entering tertiary higher education, as compared individually to the larger 15 to 24 year-old population base.

UNESCO's data[6] refer to the percentage of the population at the official or intended tertiary school entrance age (referring only to a single year cohort, such as 18 year-olds, for example, and not to a broader age group). It is likely that the percentages drop for each successively older age cohorts beyond 17 or 18 (i.e., less 20 year-olds enter tertiary education than 18 year-olds).

For country comparisons, Germany's upper secondary gross graduation rate for 2003 and 2004 was 34%. The world average for these same years was 53.6% and 55.2%, respectively. For gross entry to tertiary higher education, Germany's 2003 and 2004 percentages were steady at 37%. The world's averages for these categories were 46.4% in 2003 and 46% in 2004.

Tuition fees: Data for tuition fees were taken from the German Academic Exchange Service (DAAD) Country Information webpage. They provide insight into what is often a crucial factor to higher education access for students and their families. In order for comparability between countries, original currencies have been calculated into Euros for the average of the year indicated based on Oanda's historical currency exchange site.

Economic Data
GDP per capita: This indicator helps to identify the average financial capacity of prospective students and thus, the likeliness to be able to fund their living expenses in Germany. Gross Domestic Product was chosen as a base for the economic situation of a country rather than Gross National Income primarily because the latter takes into account foreign financial gains (German companies in the United States, for example), at least a portion of which is often reintegrated back into the host economy.

[6] UNESCO also publishes *World Data on Education* containing "profiles of 161 education systems" (UNESCO 2006/07). Unfortunately, data related to state expenditure on education in China or Indonesia, for example, is available only for the early 1990s, which is irrelevant to the issues at stake. However, the background information for countries with less active development is broad and of interest.

In 2006, the world's population totalled 6.5 billion people and the GDP was 48.2 trillion US dollars. This translated to a per capita GDP of 7415 US$, up from 7000 US$ in 2005 and 5213 US$ in 2000. This change represented a 42% growth increase from 2000 to 2006.

The World Bank organises countries into income categories according to their Gross National Income per capita. This information is useful in our country analyses to gain insight into the economic situation of different regions studied. It should be noted that the information used for the country profiles is in terms of GDP, whereas these categories are based on *GNI per capita* (formerly GNP). Estimates of 2005 gross national income per capita divide countries into the following groups, including the countries profiled for this paper according to their respective income categories, as well as Germany as a reference point:

High Income Category (10,726 US$ or more) United States, Germany	*Upper Middle Income Category* (3,466 US$ – 10,725 US$) Bulgaria, Chile, Poland, Russia, Turkey
Lower Middle Income Category (876 US$ - 3,465 US$) Brazil, China, Egypt, Indonesia, Thailand, Tunisia, Ukraine, Philippines	*Lower Income Category* (875 US$ or less) Vietnam, India[7], Nigeria

Education Expenditure: Four percentages are included within the education expenditure table: public education spending as a percentage of GDP, public spending as a percentage of government spending, and the share of education spending by both secondary and tertiary levels. These figures offer a glimpse of the sums directed towards education in general and secondary/tertiary education more specifically. They also allow for a better understanding of the priority governments place on improving their education base and the opportunities that may be available for students within their own country. The following table categorises the countries selected according to the data based on the World Bank's "Country Profiles" for education expenditure. These first four figures are combined with the GDP per capita, also obtained from the World Bank. The last three columns are the authors' calculations in order to determine the average expenditure on per capita on education in general, for secondary levels, and for tertiary levels. These figures help to make some general comparisons across countries by calculating sums spent on secondary and tertiary education levels according to government spending on public education as a percentage of the GDP and the share of education spending for both levels. The authors recognize that many other factors and externalities contribute to a student's financial support in all levels of education. These figures do not represent what a student receives, but divides the allocated funds across the entire population as a benchmark for comparison. Nonetheless, categorising the data in this way offers a broad overview of how governments spend money on education and to what degree these shares may affect the student population.

[7] It should be mentioned that India's 2006 GDP per capita is calculated to be 824 US$, whereas the GNI per capita is listed at 2010 US$.

Education expenditures and shares of education spending by level

Country		Public Education Spending (% of GDP)	Public education spending (% of Government spending)	Share of education spending: Secondary	Share of education spending: Tertiary	GDP per capita	Public education spending per capita	Secondary public education spending per capita	Tertiary public education spending per capita
Brazil		4.0%	10.9%	39.4%	18.9%	5829$	233$	92$	44$
Bulgaria		4.2%	10.9%	44.6%	19.7%	4091$	171$	76$	34$
Chile		3.4%	18.5%	39%	14%	8836$	300$	117$	42$
India		3.8%	10.7%	37.5%	27.9%	824$	31$	12$	9$
Indonesia		1%	9%	39.2%	23.2%	1635$	16$	6$	4$
Philippines		2.7%	16.4%	25.8%	13.4%	1382$	37$	10$	5$
Poland		5.4%	12.7%	36.4%	21.2%	8890$	480$	175$	102$
Russia		3.5%	12.9%	40.1%	18.3%	6930$	243$	97$	44$
Thailand		4.2%	25%	24.4%	21.7%	3187$	134$	33$	30$
Tunisia		7.3%	20.8%	41.6%	24.1%	3000$	219$	91$	53$
Turkey		4%	20.8%	32.9%	27.9%	5403$	216$	71$	60$
Ukraine		6.3%	19.3%	32.6%	29.4%	2277$	143$	47$	42$
China		..	..	..	..	2000$	..	..	..
Egypt		..	8.0%	..	..	1426$	..	..	..
Nigeria		..	..	..	..	793$	..	..	..
Vietnam		..	..	..	..	724$	..	..	..
U.S.*		..	..	..	..	44,146$	..	..	..

*U.S. – Report does not apply to high income countries

Sources: Education spending and shares of education spending: World Bank, Ed Stats “Country Profiles.” Data are for the most recent years available in 2000-2005. GDP per capita: World Bank Key Development Data and Statistics - calculated based on GDP and population data for respective countries. Data based on 2006 estimates. Education spending and shares of education spending per capita: authors’ calculations based on the above World Bank data.

As can be observed, despite rather high levels of spending on tertiary education in India, for example, the sums are still very limited due to the low GDP base. Another example is Chile, which designates one of the lowest percentages for the share of public education spending towards higher education; nonetheless, the high GDP balances this low percentage, so that the country falls within a moderately high level of spending for tertiary education (per capita). Tunisia, with a GDP that falls within the lower mid-range of countries (along with Bulgaria, the Ukraine and Thailand), allocates the highest percentage of government spending towards public education (7%), as well as high to relatively high shares of this percentage to secondary and tertiary levels (about 66% total). These policies translate to rather high levels of spending per capita for secondary and tertiary education. When choosing a target country for international student recruitment, it is valuable to know what kinds of governmental financial support and infrastructure exist for education. German HEI’s can take advantage of these situations to offer more than what the home country can offer for their students. When considering off-shore campuses or other strategies, this kind of information can also be quite invaluable.

GINI Coefficient (of inequality): This is the most commonly used measure of inequality. The coefficient varies between 0, which reflects complete equality, and 100, which indicates complete inequality (one person has all the income or consumption, all others have none). It can be used as an access indicator to measure the degree to which the cohort of secondary education graduates without financial support have the potential to attend tertiary education in their home country.

The lowest GINI coefficient in the world is Denmark's with 24.7, followed by Japan with 24.9 and Sweden with 25. Other countries in the range of 25 through 29 include the Scandinavian countries of Finland and Norway, two Western European countries – Austria (29.1) and Germany (28.3), and several Eastern European countries (Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Hungary, Slovak Republic, Slovenia and Ukraine). On the spectrum closer to inequality are countries that are found mostly in sub-Saharan Africa and Latin America. The countries with the highest GINI coefficient include Namibia with 74.3, Lesotho with 63, and Sierra Leone with 62.9. Other countries with coefficients of 55 or above include Brazil, Columbia, Guatemala, Haiti, Panama, Paraguay and South Africa.

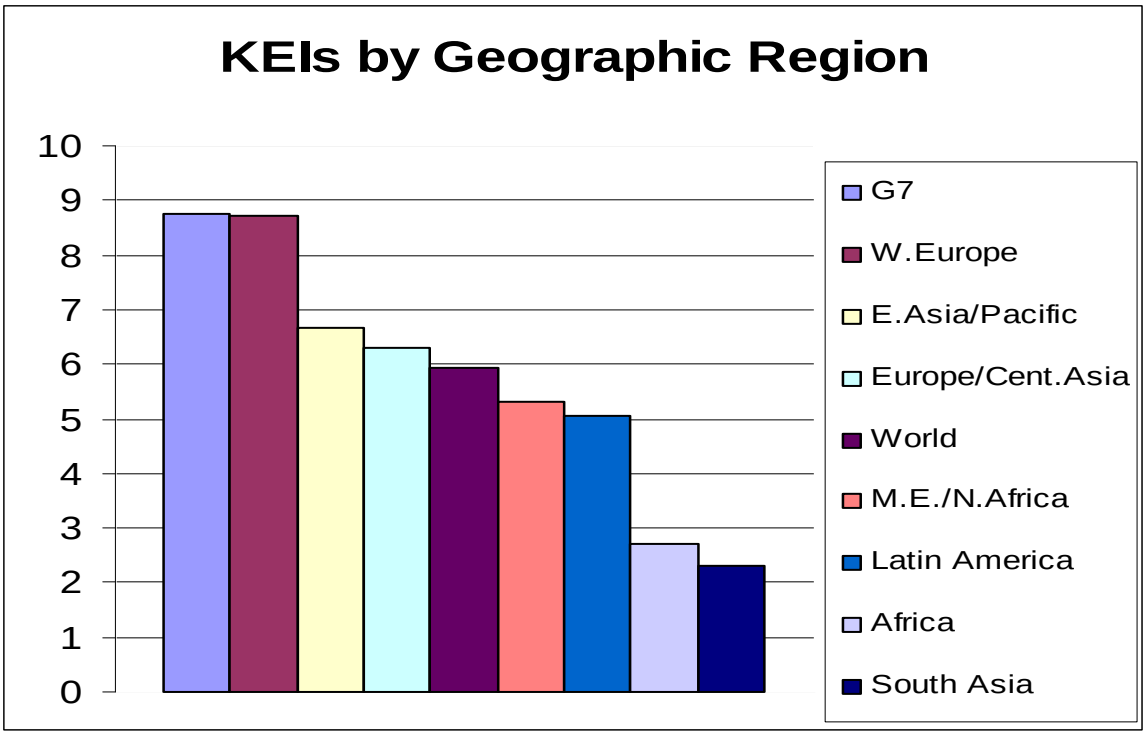
Knowledge Economy Index (KEI), 2007: The World Bank's Knowledge Assessment Methodology designed this index as a proxy to "a country's preparedness to compete in the knowledge economy," taking into account 83 variables to measure performance in four categories. These categories help to determine to what degree countries allow knowledge to effectively contribute to economic development. More specifically, "it is an aggregate index that represents the overall level of development of a country or region towards the Knowledge Economy. Variables are normalized on a scale of 0 to 10 relative to other countries in the comparison group. The KEI is calculated based on the average of the normalized performance scores of a country or region on all four pillars related to the knowledge economy - economic incentive and institutional regime (EIR), education and human resources (ED), the innovation system (IN) and ICT (information and communication technology)" (World Bank 2007).
The individual KEI indexes refer to the following:

> EIR – Economic Incentive and Institutional Regime: "the simple average of the normalized scores on three key variables: Tariff and Non-Tariff Barriers, Regulatory Quality, Rule of Law"
> IN – Innovation: Researchers in R&D, Patent Applications granted by the US Patent and Trademark office, scientific and technical journal articles
> ED – Education: Based on Adult literacy rate, secondary enrolment, tertiary enrolment
> ICT – Information & Communication Technology: Based on telephone, computer and internet penetrations (per 1000)
>
> (World Bank 2007)

World figures for the Knowledge Economy Index vary from 9.26 (Sweden) to .62 (Sierra Leone) on a normalized scale of 1 to 10. The five countries obtaining a 9.0 or above in 2007 includes Scandinavian and Northern European countries (Sweden, Denmark, Norway, Finland, and the Netherlands).There are 20 countries with a score of 8.0, mostly of which are Western countries, but also include the Chinese territories of Taiwan and Hong Kong, as well as Japan. Countries with a score of at least 7 are largely Eastern European, but also include a few Southern European countries and the Republic of Korea. Countries with a score of 6, and therefore still above the world average of 5.93, include Central and South American countries, as well as Malaysia and a couple of the Middle Eastern states (Kuwait and Qatar). The geographic distribution of countries with a score of at least 5.0 becomes more diverse, including some Eastern European states, several South American countries, some Middle Eastern countries, as well as South Africa. Countries with a score of 4.0 or above include China and East Asia, Central Asian and Central European countries, as well as some South American countries. Obtaining a score of at least 3.0,

countries in North Africa, Central America, and a few from sub-Saharan Africa can be found. Also in this score range is India and Indonesia. Mostly sub-Saharan African countries obtained a score of 2.0 through 2.9, as well as Bangladesh, Nepal and Laos. The 20 countries with the score of 1.0 through 1.9 were mostly from sub-Saharan African and Pakistan. Lastly, the five countries with the lowest score of below 1.0 were all in sub-Saharan Africa.

In order of ranking, based on data from 2007, the geographic regions with the greatest to the lowest KEIs are the following: G7 countries (8.74), Western Europe (8.70), East Asia and the Pacific (6.67), Europe and Central Asia (6.30), Middle East and North Africa (5.30), Latin America (5.06), Africa (2.72), and South Asia (2.32). The most significant drops are between Western Europe and East Asia/Pacific (2.03 decrease) and between Latin America and Africa (2.34 decrease).



Data related to Germany

Development of Bildungsausländer: In Germany, the term *Bildungsausländer* is clearly defined, whereas in English, a one word equivalent does not exist. In the following country analyses, we will often refer to this group. Following the DAAD definition, *Bildungsausländer* are understood as "students of foreign nationality (or stateless students) who gained their higher education entrance qualification at a foreign school; they keep this status even if, in addition to their school-leaving qualification, they gain an entrance qualification from a German *Studienkolleg* (higher education preparatory course)" (DAAD 2007). In addition to the DAAD information from the Wissenschaft Weltoffen (2007), UNESCO's Global Education Digest (2006) was also used as a data source. In contrast to the DAAD data, UNESCO's numbers on students studying abroad in a country refer to both *Bildungsausländer* (foreign students in Germany) and *Bildungsinländer*, students of foreign origin integrated into the German system, often living with their families in Germany and having obtained their degrees in Germany. For countries such as Turkey, with a large immigrant

population in Germany, the figures from DAAD and from UNESCO can be very different for the same year: 7077 vs. 27,582, respectively (2004). This translates into about 20,000 Turkish students who are already living in Germany and not coming from Turkey to study abroad and then return to their home country. This may also affect calculations for the top five country destinations. Although this gap is very large in the Turkish case, most countries' data are relatively approximate. In such cases of an existing large immigrant population in Germany, it was noted within the section. In addition, the development of first year students can only be presented for some of the countries as the Wissenschaft-Weltoffen only provides data for the top 20 foreign student populations in Germany.

Enrolment Requirements: These details were taken from the ANABIN database (Anerkennung und Bewertung ausländischer Bildungsnachweise), which was established by the Central Office for Foreign Education (Zentralstelle für ausländisches Bildungswesen) and the Hessian Ministry of Higher Education, Research, and the Arts. They offer a nuanced look at the specific situation and requirements of students from different countries interested in studying in Germany.

Country Characteristics: When considering from where to recruit international students, each country presents a special case with particular historical contexts, linguistic and cultural specificities, educational limits and advantages, as well as relationships with Germany. To gain a better and more comprehensive understanding of each example country we have chosen for this paper, we have included a description of the key elements that are important to take into account.

All data are always drawn from the same sources. They are as follows:
Population: UN Department of Social and Economic Affairs – Population Division. World Population Prospects: The 2006 Revision Population Database: www.un.org/esa/population/unpop.htm.

Participation Rates: The Global Education Digest, 2005: Comparing Education Statistics Across the World. UNESCO Institute for Statistics, Montreal 2005: http://www.uis.unesco.org/template/pdf/ged/2005/ged2005_en.pdf.
The Global Education Digest, 2006: Comparing Education Statistics Across the World. UNESCO Institute for Statistics, Montreal. 2006.
http://www.uis.unesco.org/TEMPLATE/pdf/ged/2006/GED2006.pdf

Tuition Fees: DAAD German Academic Exchange Service: http://www.daad.de/de/index.html
Oanda's historical currency exchange site: http://www.oanda.com/convert/fxhistory

GDP: The World Bank Key Development Data and Statistics. GDP per capita calculated based on GDP and population data for respective countries:
http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:20535285~menuPK:1192694~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html

Education expenditure: Where available, we drew this data from the World Bank's EdStats within the respective "Country Profiles":
http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTEDUCATION/EXTDATASTATISTICS/EXTEDSTATS/0,,contentMDK:21605891~menuPK:3409559~pagePK:64168445~piPK:64168309~theSitePK:3232764,00.html

GINI Coefficient: World Development Indicators (WDI), pp.66-69. The International Bank for Reconstruction and Development/World Bank, Washington, D.C. 2007.
http://siteresources.worldbank.org/DATASTATISTICS/Resources/table2_7.pdf

KEI: World Bank Knowledge Assessment Methodology: www.worldbank.org/kam

Development of *Bildungsausländer:*
1) 2007 Wissenschaft Weltoffen: Facts and Figures on the International Nature of Studies and Research in Germany, German Academic Exchange Service (DAAD). Bielefeld Germany 2007: http://www.wissenschaft-weltoffen.de/daten/7/index_html?lang=en
2) The Global Education Digest, 2006: Comparing Education Statistics Across the World. UNESCO Institute for Statistics, Montreal 2006.
www.uis.unesco.org/TEMPLATE/pdf/ged/2006/GED2006.pdf

Enrolment Requirements: Anabin Database: Informationssystem zur Anerkennung ausländischer Bildungsabschlüsse: http://www.anabin.de

Country Characteristics: German Academic Exchange Service (DAAD), 2007: www.daad.de

3.2.2. Country Analyses

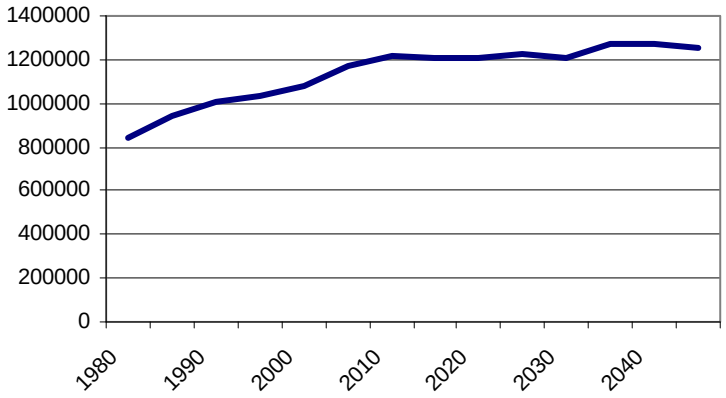
All 17 country analyses follow the same pattern in describing population development, education, economic data, data related to Germany, and country characteristics. Unfortunately, data is not always available for every indicator in every country. In these cases, the indicator is marked with 'no data available.' The authors recognize these indicators are but a small selection out of many possible indicators, but that for the purposes of this paper, they address the relevant question: which country should be targeted with which strategy?

For an overall comparison, a special data sheet is provided for all world averages. In many individual indicators such as for the KEI, Germany is used as a point of reference.

3.2.2.1 World

World Population

World: Age Group Development 15-24



Year	in 1,000	(%)
1980	84,4390	19.0
1985	93,8412	19.3
1990	100,4090	19.0
1995	103,1390	18.0
2000	108,0395	17.6
2005	116,8022	17.9
2010	121,2833	17.6
2015	120,7236	16.5
2020	120,5671	15.7
2025	122,8473	15.3
2030	126,0888	15.2
2035	127,6443	14.9
2040	127,0809	14.4
2045	125,2132	13.9
2050	123,1691	13.4

- The world's average for 15 to 24 year-olds is estimated to remain relatively stable through 2050, accounting for between 1.2 and 1.3 billion of the world's population.
- The share of this age category as part of the entire world population is estimated to decrease slightly every year, from 17.9% in 2005 to 15.2% in 2030.

Education

World: Participation Rate

	Upper secondary gross graduation ratio	Gross entry ratio to tertiary higher education
2003	53.6%	46.4%
2004	55.2%	46%

Tuition Fees

Not applicable.

World: Economic Data

GDP / Capita:	2000	5,213 US$
	2005	7,000 US$
	2006	7,415 US$
	42% (Growth Rate 2000-2006)	

Education Expenditure:	Not country specific: no data available

GINI Coefficient – (2007 World Development Indicators)	Not country specific: no data available

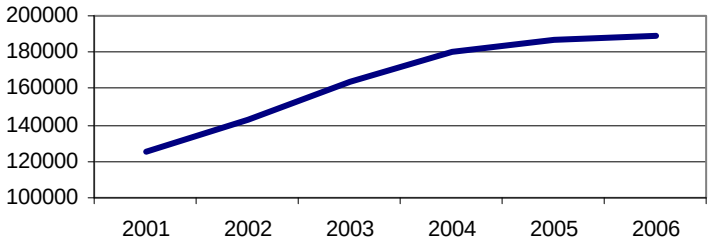
Knowledge Economy Index (KEI), 2007:

Rank	compared to '95		KEI	EIR	IN	ED	ICT
15	**-1**	**Germany**	**8.54**	**8.38**	**8.93**	**8.08**	**8.79**
-	**-**	**World**	**5.93**	**5.11**	**8.00**	**4.21**	**6.38**

- The World Bank divides 140 countries into income categories estimated from the 2005 Gross National Incomes per capita. It is estimated that individuals from High Income countries earn an average of at least 10,726 US$ per capita, per annum; Upper Middle Income countries from 3,466 US$ to 10,725 US$; Lower Middle Income countries from 876 US$ to 3,465 US$; and Low Income countries 875 US$ or less. Although the GDP tends to be usually slightly different than the GNP, the figures are roughly the same. As seen from the figures above, the world's average of 7,415 US$ per capita indicates that the 'average' country would fall into the Upper Middle Income Category.*
- The world's average KEI is almost 6 on a scale of 0-10 for 137 countries ranked. With the worldwide KEI ranging from 9.26 (Sweden) to 0.62 (Sierra Leone), the average is above the median.
- In terms of specific indexes, the world's average for the Innovation Index is by far the strongest, displaying a powerful 8 points, whereas the Education Index is the weakest, hovering just below 4¼ points. Clearly, there is work to be done to raise the Education Index across the world.

Data related to Germany

World: Development of *Bildungsausländer*



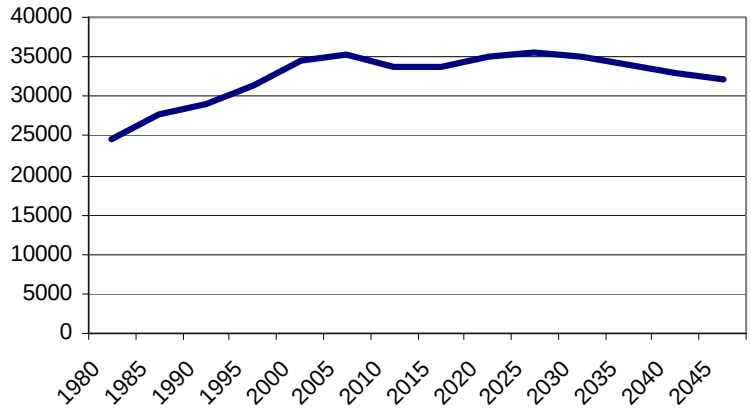
Total *Bildungsausländer* Students in Germany	
2006	189,450
2005	186,656
2004	180,306
2003	163,213
2002	142,786
2001	125,714

- Foreign student numbers in Germany have progressively increased since 2001, with a decrease in the rate of recruitment in the most recent years.
- The greatest increase in student numbers occurred between 2002 and 2003, with an additional nearly 20.5 thousand students. Between 2001 and 2002 as well as between 2003 and 2004, over 17 thousand students were added for both periods.
- Although still on the rise, the rate of increase in foreign students dropped from 2004 onwards, increasing by 6,350 from 2004 to 2005 to less than 2,800 from 2005 to 2006.
- Overall 7% less international students are newly enrolled in German HEIs (because of the time delay effect, these data will appear later when describing overall student numbers).

3.2.2.2 Brazil

Population

Brazil: Age Group Development 15-24



Year	in 1,000	(%)
1980	25,534	21.0
1985	27,774	20.4
1990	28,911	19.3
1995	31,417	19.4
2000	34,633	19.9
2005	35,348	18.9
2010	33,737	17.0
2015	33,596	16.0
2020	34,930	15.9
2025	35,531	15.5
2030	34,969	14.8
2035	33,914	14.0
2040	33,018	13.3
2045	32,248	12.8
2050	31,363	12.3

- Brazil's 15 to 24 year-old population is expected to remain relatively stable from 2007 through 2030, with just a slight dip in the coming years until 2015.
- It is estimated that compared with 2005, the size of the age group is reducing but by small margins (a reduction of approximately 380,000 or 1%). Nevertheless, Brazil's total population of 188,694 million people will place it as the 5th most populous country in the world and the 8th most important for the 15 to 24 year-old age group.
- Brazil is estimated to be the most populated Latin American country in terms of total population. It is also expected to have the largest 15 to 24 year-old age group in this region of the world.

Relevance:

- Brazil is an important target country, particularly regarding the Latin American countries. Its stable population and large numbers are an attractive option for German HEI recruitment efforts.
- Currently, the vast majority of the Brazilian students in Germany are funded through stipends and grants, though self paying students are not yet successfully addressed.*

* DAAD 2008

Education

Brazil: Participation Rate

	Upper secondary gross graduation ratio	Gross entry ratio to tertiary higher education
2002	61%	33%
2003	64%	34%

- High upper secondary graduation ratios that surpass the world's averages combined with lower than average entry into higher education suggests that emphasis is placed more on secondary versus tertiary education.
- Almost double the percentage of students graduate from upper secondary versus those entering into higher education.

Relevance:

- Brazil offers a large potential for the recruitment of an important number of qualified students (upper secondary graduates).
- The difference between the percentage of upper secondary graduates compared to the percentage that enter tertiary higher education seems to indicate a potential need for more scholarships since many Brazilian students do not go on to university because of a lack of financial resources, an assumption supported by the economic indicators.
- High levels of upper secondary graduation hint at the level of value placed on education in Brazilian culture.
- As completion of secondary education is a prerequisite for vocational training as well, many graduates enter the labour market as soon as possible, as family income is pivotal to quality of life. Thus, these potential students are more difficult to convince of the advantages in entering higher education.*

Based on the DAAD, 2008

Tuition Fees

At private universities, there is a trend to raise tuition fees. The price of tuition ranges from 50€ to 800€ per month. Some universities under municipal responsibility charge minor fees.*

*DAAD 2008

Brazil: Economic Data

GDP / Capita:	2000	3,706 US$
	2005	4,734 US$
	2006	5,829 US$
	57% (Growth Rate 2000-2006)	

Education Expenditure:	Public Education Spending: % of GDP	4.0%
	Public Education Spending: % of Government spending	10.9%
	Share of education spending by level: Secondary	39.4%
	Share of education spending by level: Tertiary	18.9%

Data are for the most recent years available in 2000-2005, World Bank

GINI Coefficient (2007 World Development Indicators; data from 2004):							57
Knowledge Economy Index (KEI), 2007:							
Rank	compared to '95		KEI	EIR	IN	ED	ICT
54	**+4**	**Brazil**	**5.50**	**4.52**	**6.01**	**5.68**	**5.80**
15	**-1**	**Germany**	**8.54**	**8.38**	**8.93**	**8.08**	**8.79**
-	**-**	**World**	**5.93**	**5.11**	**8.00**	**4.21**	**6.38**
-	**-**	**Latin America**	**5.06**	**4.49**	**5.99**	**4.56**	**5.20**

- The Gross Domestic Product (GDP) per capita is still low compared to European standards, but it places the country in the Upper Middle Income Category according to World Bank estimates.
- A growth rate of 57% was experienced since 2000, indicating Brazil's economic expansion in recent years. However, the average annual growth rate is not especially high compared to other transitional countries.
- Brazil's percentages of education spending and shares of education spending by level reveal figures that fall within the mid-range of countries also analysed in this paper. A relatively high share of education spending is devoted to secondary education.
- With a GINI coefficient of 57, Brazil shows uneven wealth distribution, closer to inequality than equality, and on the high end of the spectrum as compared to other Latin American countries.
- KEI: Brazil is listed as 54 out of 137 countries ranked. With the worldwide KEI ranging from 9.26 (Sweden) to 0.62 (Sierra Leone), Brazil places in the second quartile with an index of 5.50.
- Brazil's KEI is below the world's average, but above the overall average for Latin American countries. Additionally, Brazil surpassed the Latin American average for each index as well

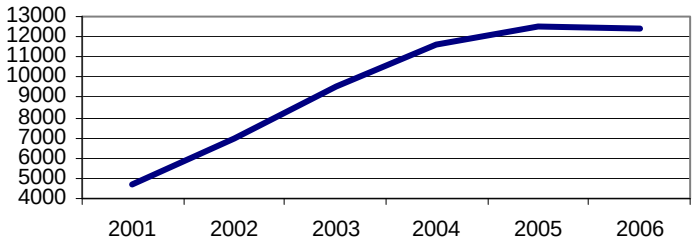
as the world's average Education Index.

Relevance:

- Compared to other Latin American countries, Brazil's above average KEI suggests its potential for market growth and knowledge development.
- A high GINI coefficient indicates that wealth is concentrated amongst a small portion of the population, suggesting that recruitment efforts with varying degrees of financial aid might be necessary.
- Offering financial aid to Brazilian students is necessary to attract certain groups; however, other services are often considered more important than financial aid.

Data related to Germany

Brazil: Development of *Bildungsausländer*



	Brazilian Students
2006	1,726
2005	1,552
2004	1,543
2003	1,407
2002	1,375
2001	1,308

- 0.9% of all foreign students (by nationality) in Germany are from Brazil.
- There was a 32% increase in Brazilian students from 2001 to 2006.
- According to UNESCO data, Germany is the No.2 destination for Brazilian students (behind the United States); however, it is not very far ahead of Portugal, France or the UK. The United States recruits about half of all Brazilian students studying abroad.

Relevance:

- Of note is the stable yet modest number of Brazilian students coming to Germany (compared to the overall number of students in Brazil - approximately 5.2 million according to DAAD information), as well as the existing interest of Brazilian students studying abroad to choose Germany as their first choice among European countries.

Enrolment Requirements

No direct enrolment is possible

- Need to present one of the two possible general secondary diplomas: *Segundo Grau* or *Ensino Medio* with the following conditions:
  - Access to all higher education institutions with the *Feststellungsprüfung* at the *Studienkolleg* for all core subjects*
  - Direct access for the respective core subject area if two years of successful studies can be proven

- Need to present the diploma for the *Titulo de Tecnico* or the *Habilitacao Profissional* with the following conditions:
  - Access to all higher education institutions with the *Feststellungsprüfung* at the *Studienkolleg* for all core subjects if the following subjects have been taken: native language (Portuguese), one foreign language, maths, one subject from the sciences, one subject from the social sciences
  - Access to all higher education institutions with the *Feststellungsprüfung* at the *Studienkolleg* for one respective core subject if the following subjects cannot be presented completely: native language (Portuguese), one foreign language, maths, one subject from the sciences, one subject from the social sciences
  - Direct access for the respective core subject area if two years of successful studies can be proven

**Feststellungsprüfung* – A course specific examination which can be taken at special pre-university institutions called *Studienkolleg*. One can enrol in all major subject courses allocated for the secondary education certificate.

Country Characteristics

Study Places

- There was just below 4.5 million students in 2006.
- There is a certain level of saturation in the market and the offer of study places exceeds the demand. More than 1 million study places were not occupied in Brazil and those that were existed primarily at private universities.
- There are many financial barriers to studying in Brazil. In 2006, for 112,000 students, part of the tuition fees were waived; however, sometimes even paying for living expenses is still too costly for many students, and stipends or grants are needed.
- The current president is against profit oriented universities; however, there is still the need for private universities to fill the demand for study places, since only 11% of the universities are public.

Reforms and Initiatives

- Brazil is interested in following the Korean and Indian success model. Following this model, Brazil would not only invest in tertiary education, but also in other education levels in order to increase overall quality. The government became aware of this issue when realizing their weak score for the United Nations Human Development Index due to problems in their basic education system. Brazil continuously stagnated at position 70 (of 177).
- A national plan for education has been developed stating that until 2011, 30% of the age group between 18 and 24 should partake in studies. However, this is illusory since only 11% of the age group currently studies, placing Brazil after Argentina and Chile.
- In a ranking of Latin American university research outcomes, Brazilian universities rank among the best. A national plan has been developed for post-graduates stating that the demand for highly qualified academics will not only increase at universities, but also in positions for state administration, and particularly in the industry sectors. Some universities are starting to build up technology parks in conjunction with partners in the industry sector.
- At private universities, academic staff has lower qualifications than their counterparts at public universities. There is a need to invest more in the qualification of academic staff at

these institutions.

Brazilians Abroad

- Many Brazilian universities have internationalisation on their priority list. The main focus is on sending their students abroad. Whereas formerly there was a concentration on sending students abroad for master's programmes, there is now a preference to send first degree seeking students abroad.
- Spain and France are very successful in attracting Brazilian students. Some examples include the *Grandes Ecoles* in France that have started co-operations with important engineering faculties in Brazil to create joint degree programmes. These programmes offer language classes for free and give scholarships for one to two years of study in France.
- An important aspect is how students are cared for in their new environment. Since 50% of all 18 to 29 year-old Brazilians still live with their parents, parents are particularly concerned when their child goes abroad. For example, for those parents who can afford to support study abroad, details such as who collects their child at the airport, proper clothing for the climate, and living conditions are often more important than financial aspects (the GINI coefficient supports this suggestion).

Sources: Annual DAAD report - http://www.daad.de/berichte/Rio.pdf; DAAD market analysis - http://www.daad.de/imperia/md/content/hochschulen/studienangebotedeutscherhochschulenimausland/marktstudien/brasilien_studie.pdf; DAAD 2008

Relevance:

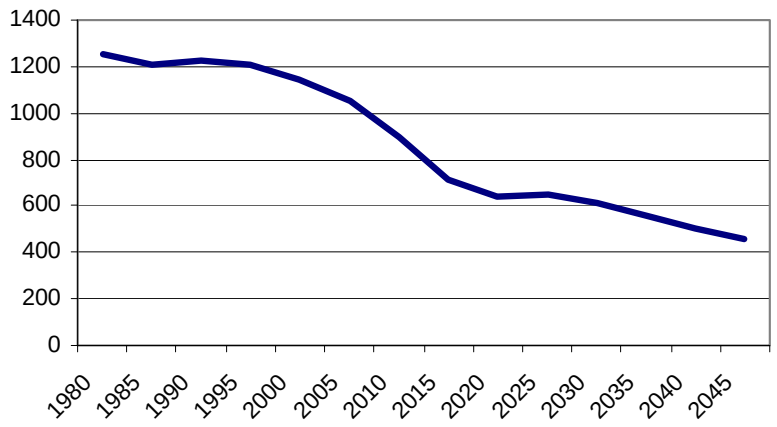
- German HEIs could target students interested in a professional career, as a German master's degree has a competitive advantage on the labour market (DAAD estimation).*
- German HEIs need to pay particular concern to the worries of potential students' parents and may need to devise a special relationship with both the student and the guardian. Offers for counselling, living situations, and administrative help may all be selling points for families sending their child abroad. Offering whole packages with more individualized attention may be more attractive than actual monetary sums.
- There is high potential for HEI strategies in regards to the present situation of only 11% of students with tertiary education and the national plan of attaining a 30% completion rate. German HEIs could play a role in meeting this demand.
- Stipends and grants and any other type of financial aid are likely to play a substantial role in the recruitment of Brazilian students.

*DAAD 2008

3.2.2.3 Bulgaria

Population

Bulgaria: Age Group Development 15-24



Year	in 1,000	(%)
1980	1,253	14.1
1985	1,212	13.5
1990	1,229	13.9
1995	1,208	14.5
2000	1,143	14.3
2005	1,054	13.6
2010	900	12.0
2015	710	9.9
2020	642	9.3
2025	648	9.9
2030	616	9.9
2035	559	9.5
2040	501	9.0
2045	456	8.7
2050	433	8.7

- Bulgaria's 15 to 24 year-old population has been decreasing drastically since 2000. This trend is anticipated to continue through 2030 and beyond.
- The percentage of this age group compared to the total population is also worrisome, accounting for 13.6% in 2005, below the world's average of 17.9% (a 4.3% difference).
- For 2030, the percentage of 15 to 24 year-olds making up the total population shows a dim picture, estimated to be 9.9% versus the world's 15.2% average (a 5.3% difference).

Relevance:

- The population decrease will likely prove to be a major challenge to German HEIs. It would not be surprising if Bulgarian universities seek to keep their students at home to fill their own university places.
- A lower demand for study places will likely lead to a lower demand for study abroad. German HEIs will need to appeal to the advantages of coming to Germany, for example, to be in a better position to work for a German company following studies or to be a part of a stronger economic market.

Education

Bulgaria: Participation Rate

	Upper secondary gross graduation ratio	Gross entry ratio to tertiary higher education
2003	68%	33%
2004	69%	36%

- In 2003 and 2004, Bulgaria was well above the world average for upper secondary graduation rates (almost 15% higher), but about 10% below the average for entry to tertiary education rates.
- The gap between upper secondary graduation ratios and entry to tertiary higher education ratios suggests that there may be a demand from students who are not able to gain a study place in higher education. This is not due to a deficit in study places but caused by the fact that only a limited number of students (those with the best secondary education results) are financially supported by the state of Bulgaria while the remaining students are required to pay tuition fees.*

* DAAD 2008

Tuition Fees

Foreign students must pay study fees. Concerning bilateral exchanges or mobility programmes, there is no set regulation. Each individual institution has different fees, but the average is between 100€ and 300€ per semester.

Bulgaria: Economic Data

GDP / Capita:	2000	1,555 US$
	2005	3,532 US$
	2006	4,091 US$
	163% (Growth Rate 2000-2006)	

Education Expenditure:	Public Education Spending: % of GDP	4.2%
	Public Education Spending: % of Government spending	10.9%
	Share of education spending by level: Secondary	44.6%
	Share of education spending by level: Tertiary	19.7%

Data are for the most recent years available in 2000-2005, World Bank

GINI Coefficient – (2007 World Development Indicators; data from 2003):							29.2
Knowledge Economy Index (KEI), 2007:							
Rank	compared to '95		KEI	EIR	IN	ED	ICT
41	**+6**	**Bulgaria**	**6.18**	**4.84**	**6.56**	**7.34**	**5.99**
15	**-1**	**Germany**	**8.54**	**8.38**	**8.93**	**8.08**	**8.79**
-	**-**	**World**	**5.93**	**5.11**	**8.00**	**4.21**	**6.38**
-	**-**	**Europe & Central Asia**	**6.30**	**5.19**	**6.93**	**6.81**	**6.28**

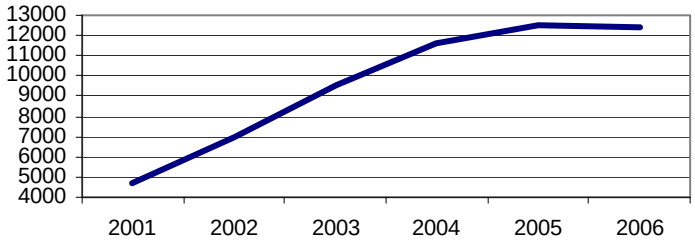
- The GDP per capita places Bulgaria in the World Bank's Upper Middle Income Category. A 163% growth rate from 2000 - 2006 is very high, more than three times the world average.
- Compared with other countries analysed in this section, Bulgaria earmarks a rather high portion of its share of education spending to the secondary level (nearly half), raising the potential that the education base is strong.
- The GINI coefficient is relatively low compared to other countries and is on par with many other European countries, such as Austria, Belarus, Croatia, also in the 29 GINI coefficient range. This suggests a wealth distribution that is closer to equality than to inequality.
- KEI: With the worldwide KEI ranging from 9.26 (Sweden) to .62 (Sierra Leone), Bulgaria places short of the top 25%. Above the world average in the overall KEI Index, it performs less well in the individual KEI indexes for EIR, IN and ICT. Its Education Index is by far the strongest, rising over 3 points above the world average.
- Compared to other European and Central Asian countries, Bulgaria places slightly lower than the average for the overall index and follows a similar trend as the world averages, again surpassing the average in the Education Index, but trailing in the remaining indexes.

Relevance:

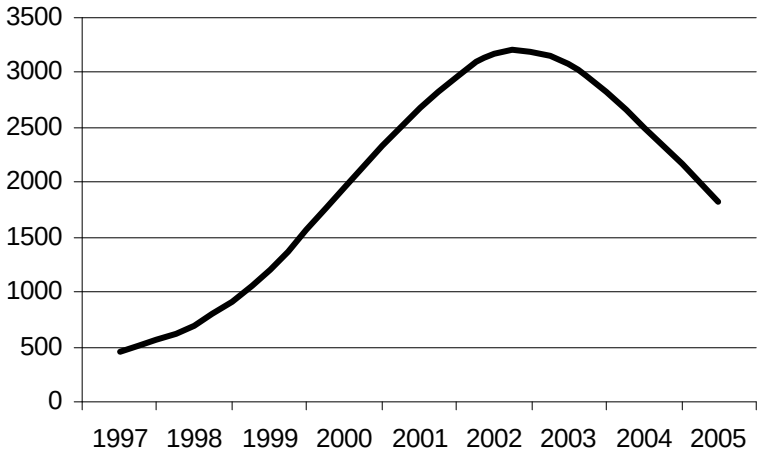
- An extremely high growth rate, low GINI coefficient rate, and strong Education Index all help to argue Bulgaria's case as an interesting opportunity for German HEIs. The geographic proximity with Germany adds to this attractiveness.

Data related to Germany

Bulgaria: Development of *Bildungsausländer*



Bulgarian Students	
2006	12,423
2005	12,467
2004	11,586
2003	9,499
2002	6,954
2001	4,699



First year student development	
1997	461
1998	698
1999	1,204
2000	1,945
2001	2,678
2002	3,172
2003	3,080
2004	2,489
2005	1,819

- 6.6% of all foreign students (by nationality) in Germany are from Bulgaria. This is an increase from 3.7% in 2001.
- After China, Bulgaria is the second most important resource country for international students in Germany.
- There is an over 250% increase since 2001 in overall numbers; however, new enrolments have decreased since 2002 by approximately 43%.
- Of the 24,619 Bulgarian students studying abroad in 2006, about half chose to come to Germany.
- This makes Germany the top destination for Bulgarian students studying abroad bar none, well above the 2nd most popular destination choice of the United States, with just over 3,700 Bulgarian students. (These figures are from UNESCO data and counts *Bildungsinländer* and -*ausländer*, but since the figures are close to DAAD data, we can assume there are not many Bulgarian *Bildungsinländer* in Germany).

Relevance:

- Given the strong interest of Bulgarian students to study in Germany as well as the quickly growing numbers, German HEIs might find this target group relatively open to recruitment.

Enrolment Requirements

Direct enrolment is possible to all German HEIs and for all subjects with diplomas from the following secondary institutions:

- *Gimnazija* / Grammar School
- *Sredno obstoobrazovatelno uciliste* / Secondary School (*Allgemeinbildende Mittelschule*) after 12 years
- *Gimnazija* and *Sredno obstoobrazovatelno uciliste* with a specialization in sports or art → direct access for the field of specialization / *Feststellungsprüfung* if a subject other than the specialization is chosen

Indirect enrolment:

- For all diplomas from vocational secondary schools (*Diploma za sredno obrazovanie*, *Profesionalna gimnazija*, *Sredno profesionalno-technicesko uciliste*, *Technikum*, *Diploma za sredno specialno obrazovanie*) the *Feststellungsprüfung* is required, or one year of successful studies in the subject area in order to gain access to all German HEIs

Country Characteristics

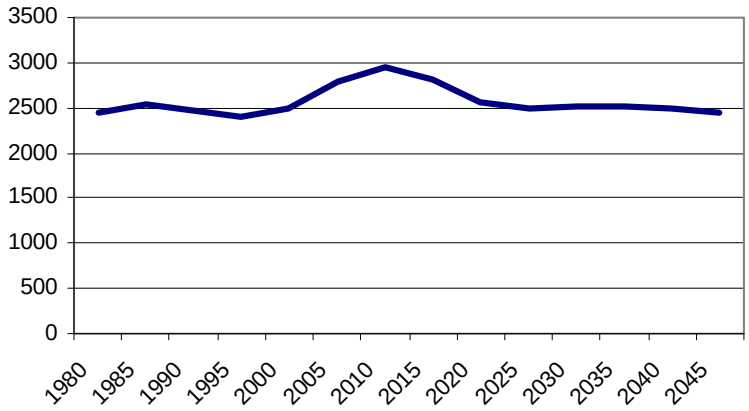
- Applicants from Bulgaria are considered to have strong school knowledge and a high level in foreign languages, mathematics, and the sciences. Their weaker characteristics include a low level to study independently and in the collection and processing of information.
- Owing to comparatively inexpensive tuition, German HEIs remain attractive. However, because of a lack of student loans/grants, students often have to rely on working possibilities to make ends meet. The willingness to take out loans has increased over the last two years. Nevertheless, working and studying are considered a great strain for many, eventually resulting in drop outs.
- English is the most popular first foreign language, therefore the number of English-taught study programmes is expected to increase. DaF (German as a Foreign Language) is visibly used as an alternative to DSH. There is a high demand for affordable German courses.
- Implementation of the Central University Entrance Qualification Examination is scheduled for June 2008. It is hoped that final grades allow for better comparison with German HEIs without insider information. Moreover, qualification exams issued by universities may cease to exist completely in the future. A number of universities already acknowledge the results of university entrance qualification exams and further admission exams may be omitted.
- Completion of internships prior to the start of study programmes present a serious obstacle are a great hindrance for Bulgarian applicants. Work and internship placements are rare and mostly offered by relatives or family friends who issue a certificate (sometimes even without the actual internship having taken place).
- It is recommended to find trustworthy local partners *in loco* who can carry out aptitude tests or interviews. Financing through examination fees may be possible.
- Bulgarian applicants often depend on their parents who take care of everything, often even including the choice of study programme.

DAAD 2008, Sofia Office

3.2.2.4 Chile

Population

Chile: Age Group Development 15-24



Year	in 1,000	(%)
1980	2,444	21.9
1985	2,537	21.0
1990	2,474	18.8
1995	2,411	16.7
2000	2,495	16.2
2005	2,785	17.1
2010	2,951	17.2
2015	2,817	15.7
2020	2,569	13.8
2025	2,490	12.9
2030	2,514	12.7
2035	2,515	12.5
2040	2,490	12.2
2045	2,445	11.9
2050	2,379	11.5

- Chile's population of 15 to 24 year-olds is expected to be very stable through 2050, with a slight rise and fall that started in 2000 and which is estimated to level off in 2020 at about 2.5 million youth.
- The percentage of 15 to 24 year-olds making up the Chilean population has been less than the world's average since 1990. It is estimated to follow this trend through 2050, coming within a half of a percent in 2010 to the world average.
- Chilean 15 to 24 year-olds represent less than 10% of Brazilians in the same age category.

Relevance:

- In consideration of population development, a stable number of 15 to 24 year-olds estimated for several decades into the future suggests that Chile is a less risky option for recruitment.

Education

Chile: Participation Rate

	Upper secondary gross graduation ratio	Gross entry ratio to tertiary higher education
2003	66%	54%
2004	66%	44%

- High upper secondary graduation exceeding the world averages in both 2003 and 2004 by over 10% suggests that Chile places high value on educating its youth.
- The ratio for entry to tertiary education that was almost 10% above the world average in 2003 and almost on par with the world average in 2004 also indicates high regard for higher education.
- One third of the age group attends universities, placing Chile in the upper ranks for tertiary participation rates compared to other Latin American countries. However, a high percentage of students do not complete their studies and only half of the students graduate within the standard period of study. In this respect, public universities perform better than private ones.

Relevance:

- The gap between upper secondary graduation and entry into higher tertiary education may offer opportunities to recruit students, although the Chilean government is heavily investing in higher education.*

*DAAD 2008

Tuition Fees

Since the state's share of financing HE is only one fourth to one third, tuition fees are a central component for financing universities. The fees are assessed individually by the universities depending on the subject. On average, the fees at private institutions are slightly higher than at public ones. In 2002, the average tuition fees for private universities were about 2,400€ compared to 1,955€ per year at public institutions. In addition, students have more access to substantial scholarships at public universities than they do at private universities. Studying law and medicine is particularly expensive and especially so at private HEIs. PhD candidates pay the most in tuition compared to all other degree levels.

Chile: Economic Data

GDP / Capita:	2000	4,883 US$
	2005	7,294 US$
	2006	8,836 US$
	81% (Growth Rate 2000-2006)	

Education Expenditure:	Public Education Spending: % of GDP	3.4%
	Public Education Spending: % of Government spending	18.5%
	Share of education spending by level: Secondary	39%
	Share of education spending by level: Tertiary	14%

Data are for the most recent years available in 2000-2005, World Bank

GINI Coefficient – (2007 World Development Indicators; data from 2003):							54.9
Knowledge Economy Index (KEI), 2007:							
Rank	compared to '95		KEI	EIR	IN	ED	ICT
39	**-2**	**Chile**	**6.74**	**7.74**	**6.84**	**6.26**	**6.12**
15	**-1**	**Germany**	**8.54**	**8.38**	**8.93**	**8.08**	**8.79**
-	**-**	**World**	**5.93**	**5.11**	**8.00**	**4.21**	**6.38**
-	**-**	**Latin America**	**5.06**	**4.49**	**5.99**	**4.56**	**5.20**

- An impressive upward economic progress can be seen between 2000 and 2006. In 2000, the Chilean GDP per capita was below the world average. By 2005, Chile's GDP was 4.2% above the world's average and just a year later, an astounding 19% above the average.
- An 81% growth rate between 2000 and 2006 was almost double that of the world's average growth rate of 41%.
- Although Chile's public education spending (as a percentage of government spending) and its share of secondary level education spending are relatively high figures as compared to other countries analysed in this section, its share of tertiary education spending is one of the lowest percentages (along with the Philippines). The lower level of investment in tertiary education may provide an opportunity for German HEIs to take advantage of what they can offer Chilean students versus what Chilean universities can offer.
- Chile still needs to make progress regarding the GINI coefficient, with the country's wealth distribution closer to inequality than equality.
- Nonetheless, in comparison to other Latin American countries, Chile is of similar standing - Argentina: 51.3; Bolivia: 60.1; Brazil: 57; Columbia: 58.6; Peru: 52; Uruguay: 44.9; Venezuela: 34.4.*
- Chile's KEI is well above the Latin American average KEI and surpasses the Latin American

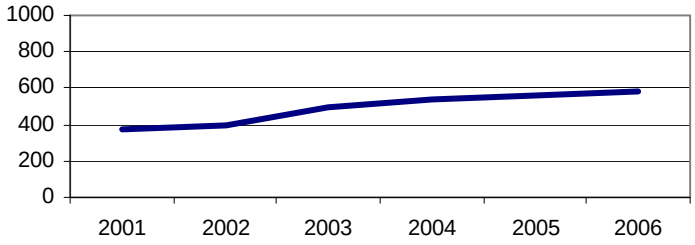
average in all indexes. Additionally, the country remains over ¾ of a point above the world's overall average, but falls short of the world's average for the Innovation and Information and Communication Technology Indexes.

- Chile places in the upper portion of the 2nd quartile of countries ranked, just a few positions short of the top 25%.

*Years data were collected vary from country to country: Bolivia (2002); Columbia, Peru, Uruguay and Venezuela (2003); Argentina and Brazil (2004).

Data related to Germany

Chile: Development of *Bildungsausländer*



Chilean Students	
2006	583
2005	563
2004	538
2003	500
2002	400
2001	376

- A steady increase in Chilean students can be seen from 2001 to 2006, despite the low numbers in general.
- A 55% increase in students demonstrates growing interest in studying in Germany.
- According to UNESCO, in 2004, 5,873 Chilean students studied abroad, accounting for 1% of the cohort.*
- Germany was the No.3 destination country in 2004, followed by the United States and Argentina. Next followed Germany, France and Spain to round out the top five destination countries.*

Relevance:

- It should be noted that Chilean students studying abroad choose Germany as their top European destination, despite linguistic, cultural, and historical bonds with Spain (Germany 624, France 512, Spain 427).

*Source: UNESCO Global Education Digest, 2006.

Enrolment Requirements

There are three secondary diplomas (*Licencia de Educacion Media Humanistico-Cientifica*, *Licencia de Ensenanza Media Cientifico-Humanista* and *Licencia de Educacion Media Tecnico-Profesional*) which can lead to tertiary access under the following conditions:

- Given a tertiary entrance examination (*Pruebas de Seleccion Universitaria*) with a score of at least 600 → direct access to all German HEIs for all subjects
- Given a tertiary entrance examination with a score of less than 600 → *Feststellungsprüfung* /

Studienkolleg for all HEIs
- Given a tertiary entrance with a score of less than 600 + one year of successful studies → access to all German HEIs in the respective field of study and related subjects

Country Characteristics

- Chile has the highest per capita income amongst all Latin American countries and is regarded as extremely stable in economics and politics.
- The HE system will play a key role in the country's modernization process since the developing industry has a high demand for qualified workers.

Cultural Ties
- 150,000 to 200,000 Chileans are German-speaking, a group having strong influence on the economic system, in politics and in the higher education sector.
- Many members of parliament have German ancestors, have studied in Germany, and/or lived there in exile during the military dictatorship.
- 19 schools in Chile offer German as a first foreign language. About 550 students pass the KMK's 'Sprachdiplom I' after the 10th grade; 450 pass the 'Sprachdiplom II' after the 12th grade.
- 16 Chilean universities offer German language classes for their students.

Study Place Issues
- Every year, 75% of students with a secondary degree participate in the national tertiary entrance examination; however, 45% of the participants do not obtain the necessary score. The Chilean HEI system in general offers a surplus of study places compared to the number of students who succeed in the entrance examinations.
- The number of students in postgraduate programmes (master's and PhD programmes) is rising continuously. With 18,000 graduate students in 2004, it has tripled since 1998.
- Another reason for growing demand is that an academic degree has a high value on the current job market. The market is not saturated, resulting in high entry salaries for young graduates.
- To meet the growing demand for study places, a law was passed in 1980 to allow for the foundation of private universities. However, some had to be closed due to a lack of quality.
- In 2004, 32 private universities were accredited. Private universities can not be profit-oriented and do not receive subsidies from the state.
- It is a designated goal to provide a study place for every second adult in the age group of 18 to 24 by 2012. With an estimated number of 2 million young adults, this would mean an increase in student numbers of about two-thirds, hence the reason for a high future demand for study places.
- Despite the high demand for study places, not all available study places in Chile could be filled in the past: 90% of the public study places were filled, whereas one-third of study places at private universities remained empty. The main reason for this is that private universities offer fewer possibilities to obtain scholarships.
- All democratic governments have agreed on the goal to enable all qualified students to proceed to university. Thus, the expenditures for scholarships have tripled from 1990 to 2002.

Quality Assurance

- On average, only one-third of university teachers have a master's degree or a PhD. Since universities want to further develop their research activities, a better qualification of their scholars is regarded as one of the key future challenges. As a result, technological innovation and the number of PhD programmes shall be increased.
- Another concern is to limit the growth of private universities with low quality standards and to improve the public information system on academic programmes.
- HEI quality assurance systems are in their initial stages. Attempts for HEI internationalisation have largely been unsuccessful. Few students spend a semester abroad and the curricula in Chile lack international topics. However, internationalisation is an important topic and the Bologna-process is observed closely.

Particulars of the system

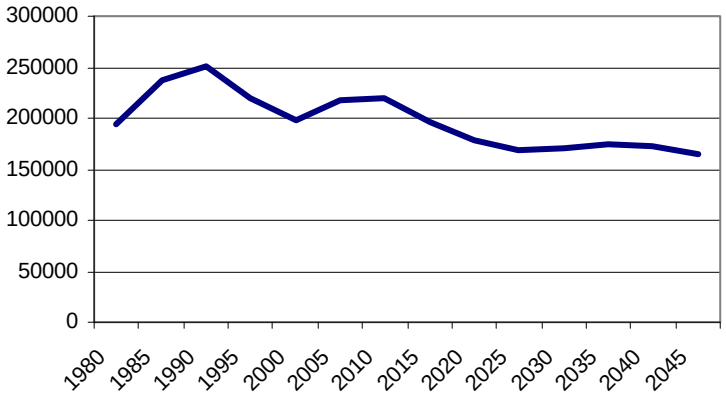
- Chilean universities provide many different kinds of diplomas. The most common are the bachelor's (Bachiller) after 2 years, the licentiate (Licenciado) after 4 to 7 years, followed by a 2-year master's (Magíster) and optionally the doctorate (Doctor). A PhD programme usually lasts 3 to 5 years.
- Changing to a different university or to a different subject is rather difficult, since HEIs have very individual structures. Only private universities have very lax requirements for recognizing other universities' credits.
- Governmental support programmes for the establishment of joint degree programmes with foreign universities exist.
- The majority of Chilean students in Germany in 2003/2004 were enrolled in philology and cultural sciences.
- There is a broad range of online study programmes with the most important providers coming from Spain, Israel, Canada and Mexico.

Sources: DAAD market analysis
http://www.daad.de/imperia/md/content/hochschulen/studienangebotedeutscherhochschulenimausland/marktstudien/chile_studie.pdf

3.2.2.5 China

Population

China: Age Group Development 15-24



Year	in 1,000	(%)
1980	195,049	19.5
1985	236,960	22.2
1990	251,916	21.9
1995	219,707	18.1
2000	197,747	15.6
2005	217,383	16.6
2010	218,974	16.2
2015	197,027	14.2
2020	178,829	12.6
2025	168,129	11.6
2030	170,804	11.7
2035	173,939	11.9
2040	171,583	11.8
2045	163,755	11.4
2050	153,170	10.9

- China's 15 to 24 year-old population is estimated to steadily decrease through 2030. The one-child policy will surely play a role in this population development.
- By 2030, there will be an estimated 170,804 million people in this age group, comprising 11.7% of the total population, compared to 16.6% in 2005 (217,383 million).
- Compared to the world's average decrease of 2.7%, China's 15-24 year-old population drop is larger (4.9%).
- The population is estimated to decrease; however, the sheer amount of people will still remain high. The number of 15-24 year-old Chinese will form the second largest group in this age category in the world (behind only India).

Relevance:

- Despite decreasing numbers of 15 to 24 year-old Chinese, they will still count as the *second most important* percentage of the youth in the world (13.5%).

Education

China: Participation Rate

	Upper secondary gross graduation ratio	Gross entry ratio to tertiary higher education
2003	18%	No data available
2004	17%	12%

- Well below the world average for both upper secondary graduation and entry to higher education rates.

Relevance:

- Despite the relatively low participation rates, compared to more developed countries, the sheer numbers of students makes China one of the most important source countries for German HEIs.
- A lower ratio of tertiary education entry vis-à-vis the upper secondary graduation ratio suggests a demand for higher education study places.

Tuition Fees

Chinese universities charge a study fee which varies from subject to subject and university to university. The range is from 1241€ to 6132€ per year.* According to current DAAD information (DAAD 2008) at many universities the tuitions start at about 600€.

*Calculation based on 1700 US$ and 8400 US$, converted into Euros using Oanda's historical currency exchange rate calculator for the 2007 year average (1 US$ = .73€).

China: Economic Data

GDP / Capita:	2000	923 US$
	2005	1,692 US$
	2006	2,000 US$
	116% (Growth Rate 2000-2006)	

Education Expenditure:	No data available

GINI Coefficient – (2007):						44.7	
Knowledge Economy Index (KEI), 2007:							
Rank	compared to '95		KEI	EIR	IN	ED	ICT
75	**+29**	**China**	**4.42**	**4.27**	**5.09**	**4.09**	**4.21**
15	**-1**	**Germany**	**8.54**	**8.38**	**8.93**	**8.08**	**8.79**
-	**-**	**World**	**5.93**	**5.11**	**8.00**	**4.21**	**6.38**
-	**-**	**East Asia & the Pacific**	**6.67**	**5.96**	**8.42**	**5.34**	**6.97**

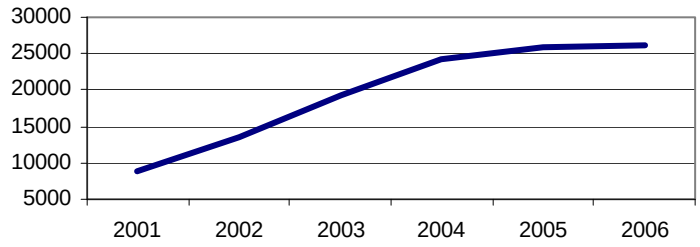
- Gross Domestic Product (GDP) per capita more than doubled from 2000 to 2006, reflected in a growth rate of about 116%.
- The GINI coefficient shows an uneven wealth distribution that is less equal than either India's or Russia's wealth distribution.
- KEI: With the worldwide KEI ranging from 9.26 (Sweden) to 0.62 (Sierra Leone), China, with an index of 4.42, places in the 3rd quartile of the 137 countries ranked.

Relevance:

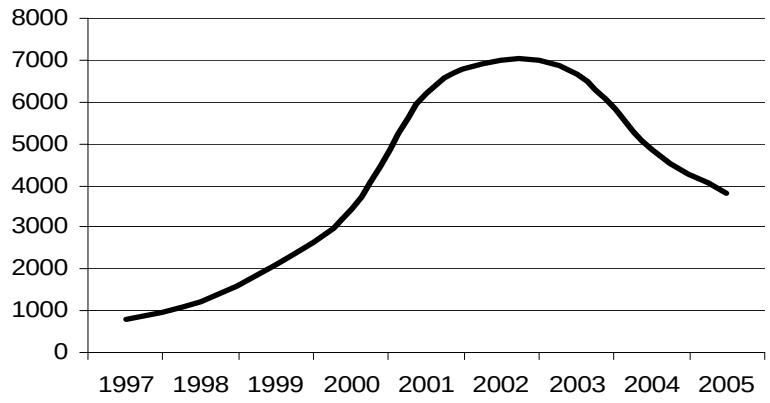
- German HEIs would likely need to find sources of funding for some Chinese students as the cost of living in Europe is high compared to China. A strong economy and a growing upper-class population may alleviate some of this need.
- Due to the uneven wealth distribution, different strategies for recruitment to target the wealthier population and the population with greater financial needs would be required.
- China has room for growth in utilizing education and innovation for economic growth.

Data related to Germany

China: Development of *Bildungsausländer*



Chinese Students	
2006	26,061
2005	25,987
2004	24,095
2003	19,374
2002	13,523
2001	8,745



First year student development	
1997	797
1998	1.204
1999	2.096
2000	3.451
2001	6.180
2002	6.985
2003	6.676
2004	4.852
2005	3.818

- Chinese students make up the single largest foreign student group in Germany, with a share of 14% of the total. They surpass all other foreign student groups by over 7%.
- In 2004, 1.8% of Chinese students studied abroad. This accounted for 343,126 million students. Of these, just over 26,000 came to Germany.
- Chinese students choose Germany as their top 5th destination country (preceded by the United States, Japan, the UK, and Australia).*
- The number of students studying in Germany has almost tripled since 2001. However, since 2002 the new enrolments have decreased by 45%.

Relevance:

- Given the current importance of Chinese students in Germany, the interest of Chinese students to come to Germany, and the sheer number of students, German HEIs should pay special attention to this source country.
- The serious reduction of new enrolments should be observed and the reasons analysed.
- Due to an absence of historical ties and to cultural as well as linguistic differences, it may be in the interest of German HEIs to consider how best to integrate this important group of international students.

* Source: UNESCO Global Education Digest, 2006.

Enrolment Requirements

No direct enrolment is possible*

- With the upper secondary examination obtained after 12 years plus a successful passing grade in the *Gaokao* (university entrance exam), several options are possible:
  - Plus one semester of successful studies in a 4-5 year programme at a 'key university' or '211-HEI' → direct enrolment
  - Plus three semesters of successful studies in a 4-5 year programme at a normal university accredited by the Chinese Ministry of Education → direct enrolment
  - Plus one or two semesters in a 4-5 year programme at a normal university accredited by the Chinese Ministry of Education → *Feststellungsprüfung*
  - Plus Diploma from a 3 year junior college programme → *Feststellungsprüfung*
- With the upper secondary examination obtained after 11 years plus successful passing of the *Gaokao*
  - Plus three semesters of successful studies in a 4-5 year programme at a 'key university' (or '211-HEI') or at least five semesters at a normal university accredited by the Chinese Ministry of Education → direct enrolment
  - Plus fewer semesters of study → *Feststellungsprüfung*

There are also special regulations for the fine arts. Some diplomas (e.g. from television universities) do not automatically allow entry into the German HE system but the APS** can be approached for individual case decisions.

Relevance: Recruitment of students might be easier when focusing on graduate students. For undergraduate students, offshore options might be a good solution.

*As the information from the Anabin database differs considerably from the DAAD information we are relying in this case on the DAAD information, based on http://www.aps.org.cn/zugang/zugang.html.
** The APS (*Akademische Prüfstelle*), or academic test centre, is a service facility of the German Embassy in Peking in co-operation with the German academic exchange service (DAAD). The APS is for Chinese study applicants the gate to study in Germany. The APS offers a certificate that is required as one of the conditions for permission to a German university and certifies that the submitted documents of the applicant are genuine and fulfil the conditions of study achievement in China. More information can be found at the German Embassy in Peking website:
http://www.peking.diplo.de/Vertretung/peking/de/06/Studieren__in__Deutschland/akadem__pr_C3_BCf__seite.html

Country Characteristics

- Despite increases in enrolment, access to higher education in China remains a very competitive endeavour because of the '*Gaokao*', the National College Entrance Exam (NCEE), which is described by the Chinese as 'thousands of troops on a single-log bridge' due to its low enrolment rate. In 2007, the Ministry of Education informed that a record 10.1 million people had applied for the exam and about 5.67 million would be able to enter college (approximately 56%).
- Based on OECD data, China's science and research expenditures have surpassed those of Japan in absolute numbers; now only the U.S. spends more on science. Assuming expenditures will grow 7% per year, in absolute numbers, expenditures will double by 2010.

- The last decade of higher education development in China was characterized by a huge growth process. The capacity of Chinese universities increased from 3 million to 17 million students in the last decade (regular full-time). A cap of 5 million places per study year is envisaged.
- The quota for number of study places is 20% for each cohort. In comparison with other transition countries, this is a high proportion of available places.
- Due to an increase in the number of graduates combined with a low attrition rate, it is forecasted that within 3 years, there will be 5 million graduates entering the job market.
- Currently, strong competition forces graduates to accept lower salaries, yet to fulfil more criteria than ever before. Those graduating from 3-year programmes rather than 4-year programmes have the greatest difficulty finding an employment. A lack of professionals with experience in the job market remains an issue.
- Due to job market concerns, there is also an increased interest in studying abroad. Demand for first degree programmes have decreased, whereas there is an increase in demand for master's programmes. In the case of Germany, the demand for master's programmes dominates, whereas other main destination countries attract Chinese students more for bachelor's programmes.
- To meet the increasing demand, the DAAD has offered interested German universities to send their staff members to Beijing, thus benefiting from an *in loco* strategy to attract Chinese students to Germany. The Chinese office is the second to be created. University offices already in Beijing include: the Freie Universität Berlin, RWTH Aachen, Technische Universität München, Universität Konstanz and the Universität Köln, along with other universities from North Rhein-Westfalia. Also included are the Universität Jena and the music conservatory Weimar Franz Liszt.

Sources: Annual DAAD report - www.daad.de/berichte/Peking.pdf;
Centre for Higher Education Development (CHE): *Higher Education in China*
www.che.de/downloads/Higher_Education_in_China_AP97.pdf

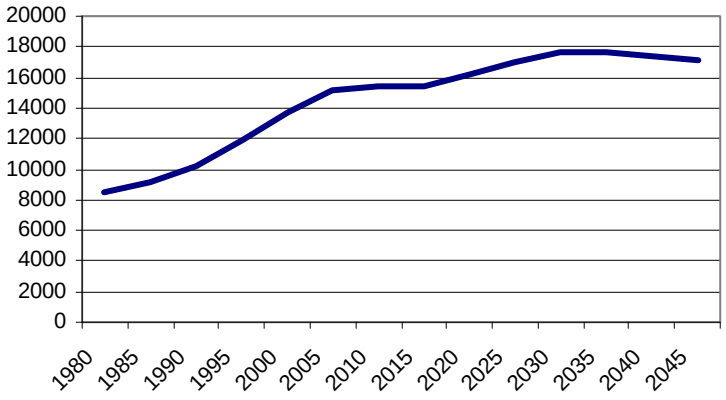
Relevance:

- Since education is greatly valued in Chinese culture, Chinese families may be willing to send their child abroad to gain a good education if they are unable to obtain a place in a Chinese university.
- Taking advantage of a lack of study places for Chinese students, German HEIs could appeal to demand and interest of Chinese students to obtain an education.
- A possible target group includes those students graduating from a 3-year programme interested in pursuing master's studies.

3.2.2.6 Egypt

Population

Egypt: Age Group Development 15-24



Year	in 1,000	(%)
1980	8,474	19.4
1985	9,199	18.7
1990	10,198	18.5
1995	11,866	19.6
2000	13,729	20.6
2005	15,150	20.8
2010	15,425	19.4
2015	15,378	17.8
2020	16,158	17.5
2025	17,034	17.3
2030	17,619	16.9
2035	17,684	16.2
2040	17,398	15.3
2045	17,165	14.6
2050	17,070	14.1

- Egypt's 15 to 24 year-old population is estimated to steadily increase through 2030.
- The share of the percentage of 15-24 year-olds as compared to the entire population has increased since 2005, but is expected to fall several percentage points in the future.
- The drop of 3.9% from 2005 to 2030 is greater than the world's average decrease of 2.7%. Nonetheless, the 15-24 year-old category has been above the world's average since at least 1980 and is estimated to continue to be above average through 2050.
- By 2030, there will be a total of 17,619 individuals in this age group, accounting for the 13th most important group in this age category in the world, ahead of Vietnam, but behind Mexico.

Relevance:

- An increasing population and large portion of the age group between 15 and 24 years suggests that Egypt would be seeking to educate this growing section of the population.

Education

Egypt: Participation Rate

	Upper secondary gross graduation ratio	Gross entry ratio to tertiary higher education
2003	22%	31%
2004	No data available	30%

Relevance:

- In 2003, Egypt attained less than half the world's average participation rate for upper secondary graduation. Entry to tertiary was still below the world's average, but was better than the upper secondary graduation rate.
- There was an almost 10% difference between the upper secondary graduation rate and the tertiary higher education entry rate in 2003. This suggests that there may be a demand for students who are obtaining their qualifications outside of the traditional secondary streams. Further investigation would be needed to unveil how a portion of the student population is bypassing the traditional system to continue on to higher education.

Tuition Fees

Foreign students must pay study fees. The fees depend on the course of studies, but are between 750€ and 2,500€ per year. Private foreign universities, such as the American University Cairo (AUC) have raised study fees up to 7,500€ per term.

Egypt: Economic Data

GDP / Capita:	2000	1,483 US$
	2005	1,212 US$
	2006	1,426 US$
	3.8% (Growth Rate 2000-2006)	

Education Expenditure:	Public Education Spending: % of GDP	No data available
	Public Education Spending: % of Government spending	8.0
	Share of education spending by level: Secondary	No data available
	Share of education spending by level: Tertiary	No data available

Data are for the most recent years available in 2000-2005, World Bank

GINI Coefficient – (2007 World Development Indicators; data from 1999-2000):							34.4
Knowledge Economy Index (KEI), 2007:							
Rank	compared to '95		KEI	EIR	IN	ED	ICT
83	**-2**	**Egypt**	**3.93**	**3.27**	**4.72**	**4.31**	**3.42**
15	**-1**	**Germany**	**8.54**	**8.38**	**8.93**	**8.08**	**8.79**
-	**-**	**World**	**5.93**	**5.11**	**8.00**	**4.21**	**6.38**
-	**-**	**Middle East & North Africa**	**5.30**	**4.33**	**7.27**	**3.78**	**5.82**

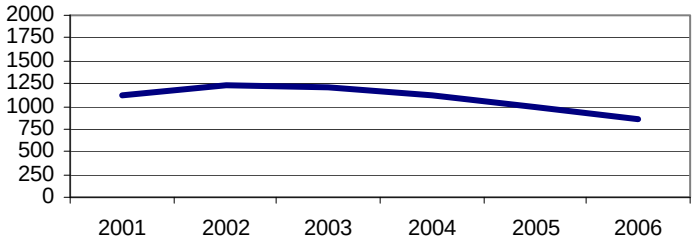
- A very stagnant GDP per capita could be cause for concern regarding the Egyptian market. A 3.8% growth rate is the lowest seen for all countries analysed for this paper.
- The GINI coefficient shows an uneven wealth distribution that is nonetheless on the lower end of the spectrum, closer to equality than inequality and is on par with many Western and Eastern European countries.
- KEI: With the worldwide KEI ranging from 9.26 (Sweden) to .62 (Sierra Leone), Egypt, with an index of 3.93, places in the 3rd quartile of the 137 countries ranked.
- Egypt is below both the world's average KEI and the average KEI for the Middle East and North Africa.
- Its strongest indicator is the Innovation Index, measuring researchers in R&D, granted patent applications, and scientific and technical journal articles.

Relevance:

- A combination of a weak growth rate and a lower than average KEI could be the greatest challenges when creating a recruitment strategy for this region. Financial support would likely be crucial in any endeavour.
- The strongest advantages lie in the rather good GINI coefficient and in the Innovation Index.

Data related to Germany

Egypt: Development of *Bildungsausländer*



Egyptian Students	
2006	859
2005	985
2004	1,124
2003	1,211
2002	1,222
2001	1,125

- The portion of Egyptian students coming to Germany has been slowly decreasing since about 2002.
- In 2006, Egyptian students represented 0.45% of all foreign students coming to Germany.
- Just over 6,500 Egyptian students studied abroad in 2004.*
- In this same year, Germany was the No.2 destination country for Egyptian students, followed by the United States and leading ahead of France, the U.K. and Saudi Arabia.*

Relevance:

- The low numbers of students from Egypt coming to Germany should not be disregarded since it is the top destination in Europe for Egyptian students, suggesting an interest in the university programmes that are in Germany.
- Given the geographic proximity to Europe, strategies for recruitment could focus on this advantage.
- The use of English in Egypt could be a selling point for German universities. English programmes and advertisement of the wide use of English in Germany could be considered.

* Source: UNESCO Global Education Digest, 2006.

Enrolment Requirements

No direct enrolment is possible

- There are two access options with the General Secondary Education Certificate, given that the score achieved is higher than 60%:
- *Feststellungsprüfung* for all HEIs
- In the case of one year of successful studies → direct access to all HEIs

Country Characteristics

- The topic of HE reform receives high attention in Egypt. It is, for instance, publicly discussed why Asian countries like China, which were at the same level of development 20 to 30 years ago, have now significantly progressed towards a knowledge economy, in comparison to Egypt.

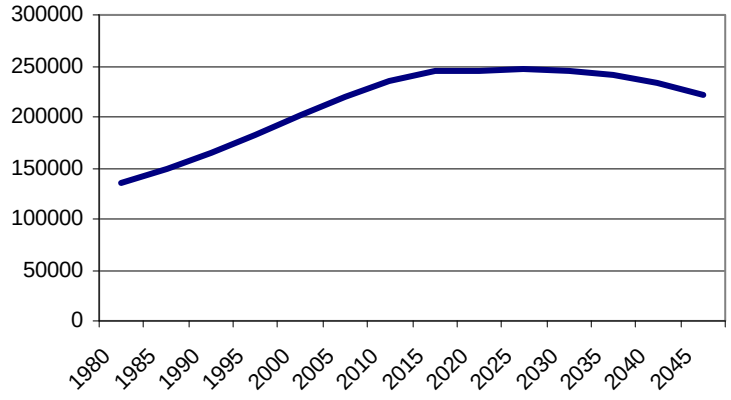
- Compared to the Knowledge Economy Index Data from 1995, Egypt shows a tendency to remain static; its performance even decreased in some of the indicators.
- There are four central challenges faced by the HE system:
  - Development of a quality management system (curricula modernization, improvement of teaching staff qualifications, stronger ties between university teaching and the job market)
  - Professionalization of HE management
  - Greater efficiency: reduction of administrative positions (accounting for 50% of the total)
  - Improvement of access to HE for poorer social classes
- Plans for the development of an independent *National Quality Assurance & Accreditation Agency* have been fully developed, however never implemented.
- According to the government, high priority must be given to increasing tertiary participation rates. A goal has been set to raise university attendance of 18-23 year-olds from 30% to 50% by 2022.
- In order to achieve this goal, colleges have been upgraded to become universities, and the foundation of private HEIs (with or without foreign partners) is encouraged by the government. A newly emerging type is called *specialized civil universities*, allowed to charge tuition fees but without making a profit.
- There is a general awareness that one of the presumptions of Egyptian science policy has to change. It has been assumed for too long that new technologies can be bought from abroad without investing in research at home. Changing this paradigm can result in an upsurge of international co-operations.
- The German University in Cairo has a total of 4,500 students enrolled with the number of applicants by far exceeding the number of study places. Unlike the two other foreign universities from Great Britain and Canada, the German University has started to build up its own research infrastructure derived from the German research university model.
- German as a foreign language has a long tradition and a high reputation in Egypt. There are three German schools and German language classes are offered at 700 public schools and twelve universities, accounting for more than 100,000 Egyptians learning German.
- Because of the average low income, study abroad is not an option for the majority of potential Egyptian students. The introduction of tuition fees furthermore decreased the attractiveness of studying in Germany.*

Source: Annual DAAD report http://www.daad.de/berichte/Kairo.pdf
* DAAD 2008

3.2.2.7 India

Population

India: Age Group Development 15-24



Year	in 1,000	(%)
1980	134,633	19.6
1985	148,780	19.3
1990	164,496	19.1
1995	182,673	19.1
2000	201,374	19.2
2005	218,738	19.3
2010	235,057	19.3
2015	244,120	18.7
2020	245,592	17.8
2025	246,215	17.0
2030	245,357	16.3
2035	241,233	15.5
2040	233,190	14.6
2045	221,960	13.6
2050	210,643	12.7

- India is expected to surpass China in terms of total population by about 2025 (India: 1.447 billion and China: 1.445 billion).
- By 2030, India's 15-25 year-old age group population is estimated to reach 245,357,000 - by far the largest group in this category in the world (only China will also have more than 100 million by 2030).
- India has *already* surpassed China concerning the relevant age group of 15-24 year-olds. In 2000, there were 197,747,000 Chinese youth (15.6% of the total Chinese population) compared with 201,374,000 Indian youth (19.2% of the total Indian population).
- India's 15-24 year-old age group is estimated to account for just under 20% of the world's total population in that age group category.

Relevance:

- India can be considered as the most valuable target country in terms of the population indicator.

Education

India: Participation Rate

	Upper secondary gross graduation ratio	Gross entry ratio to tertiary higher education
2003	20%	No data available
2004	19%	No data available

- Low ratios of upper secondary graduation that are less than half the world's averages.
- Comparisons to other countries for 2004 are the following: Germany: 34%; Australia: 68%; Indonesia: 28%; Philippines: 59%.

Relevance:

- Despite the low percentage of graduation, due to the large population, India will have an important group eligible for at least basic higher education, both for study abroad as well as offers *in loco*.

Tuition Fees

Tuition fees are generally charged but no ceiling is officially set. Fees can vary from HEI to HEI and study course to study course. No exact figures are provided by the DAAD report.
Foreign students are charged higher fees than national students. Fees are waived in formal partnership programmes.*

*DAAD 2008

India: Economic Data

GDP / Capita:	2000	460 US$
	2005	732 US$
	2006	824 US$
	79% (Growth Rate 2000-2006)	

Education Expenditure:	Public Education Spending: % of GDP	3.8%
	Public Education Spending: % of Government spending	10.7%
	Share of education spending by level: Secondary	37.5%
	Share of education spending by level: Tertiary	27.9%

Data are for the most recent years available in 2000-2005, World Bank

GINI Coefficient – (2007 World Development Indicators; data from 2004-2005):							36.8
Knowledge Economy Index (KEI), 2007:							
Rank	compared to '95		KEI	EIR	IN	ED	ICT
101	**-4**	**India**	**3.00**	**3.49**	**3.93**	**2.22**	**2.37**
15	**-1**	**Germany**	**8.54**	**8.38**	**8.93**	**8.08**	**8.79**
-	**-**	**World**	**5.93**	**5.11**	**8.00**	**4.21**	**6.38**
-	**-**	**South Asia**	**2.32**	**2.28**	**3.31**	**1.95**	**1.76**

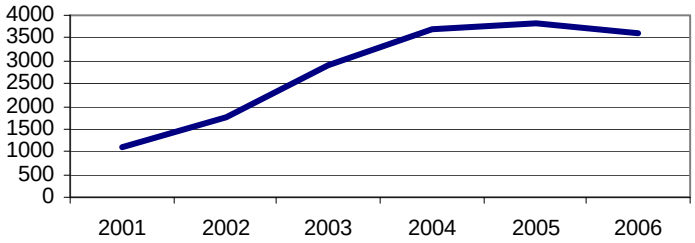
- Gross Domestic Product (GDP) per capita is very low, placing India in the World Bank's Low Income Category, which is shared only with Vietnam and Nigeria among the countries analysed for this paper. However, once it has reached the 876 US$ threshold, it will have passed into the Lower Middle Income Category.
- A high growth rate almost double the world average offers hope for an improved future GDP.
- A relatively moderate GINI coefficient that is on par with several European countries also with scores in the 36 range, such as Italy, the U.K., Azerbaijan, Lithuania, and Uzbekistan.
- KEI: Low and nearly 3 points below the world average, but still higher than the South Asian average. The Education Index is the weakest among the indexes. India is listed as 101 out of 137 countries ranked. With the worldwide KEI ranging from 9.26 (Sweden) to 0.62 (Sierra Leone), India places on the bottom rung of the 3rd quartile.

Relevance:

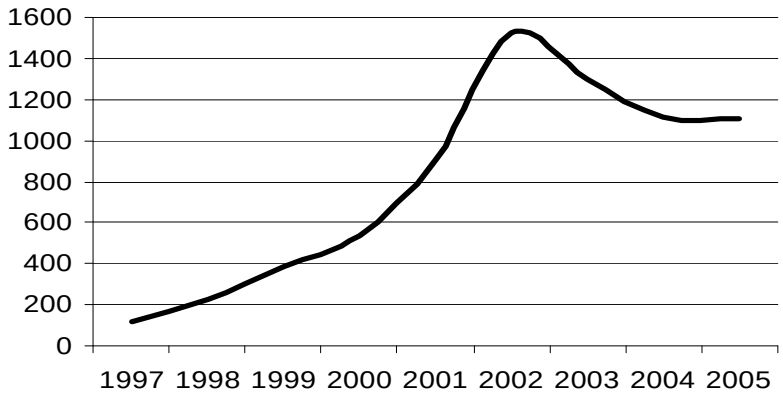
- German HEIs would likely need to find sources of funding for many Indian students
- Targeting the upper-class Indian population might be the best option for some HEIs.
- It could be said that India is not effectively using its potential. This leaves room for investment and market sharing for German HEIs.

Data related to Germany

India: Development of *Bildungsausländer*



Indian Students	
2006	3,583
2005	3,807
2004	3,697
2003	2,920
2002	1,745
2001	1,120



First year student development	
1997	115
1998	229
1999	388
2000	539
2001	902
2002	1,521
2003	1,298
2004	1,118
2005	1,104

- 1.9% of all foreign students (by nationality) in Germany are from India.
- This represents an increase greater than 200% since 2001 (0.9% of foreign students were Indian).
- Numbers tripled from 1,120 in 2001 to 3,583 in 2006.
- Germany is the No.4 destination for Indian students (behind the United States, Australia and the UK) and is the only non-MDEC (main destination English speaking country) in the top 5.

Enrolment Requirements

No direct enrolment is possible

- Need to present either the pre-university examination or the secondary education certificate (12 classes of school) with the following conditions:
- If the overall grade is at least at 50% of the maximal possible grade:
- *Feststellungsprüfung* taken at the special pre-university institutions called *Studienkolleg*; one can enrol for the major subject course which is offered as a specialisation in the secondary education certificate
- Direct enrolment in the current field of specialisation and neighbouring subjects if at least one year of successful study can be proven
- Providing proof for successfully passing the Joint Entrance Examination for the Indian Institutes of Technology leads to direct enrolment in Technology and Natural Sciences

Relevance:

- Recruitment of students might be easier when focusing on graduate students.

Country Characteristics

- There is a rigorous selection process to obtain a place at a university, leading to the result that not all young people are able to participate in higher education.
- Nonetheless, there is a need for more graduates than exist in the job market. The industry oriented sector supports the creation of private academic institutions to solve this dilemma.
- However, in the political sphere, there is a large amount of scepticism towards private institutions. It is thought that these institutions are only interested in monetary gain. The idea of making a profit from education contradicts the general cultural belief in India that because it is a common good, education should be free.
- It remains difficult for education providers to open an offshore campus in India. Tuitions fees can only be reinvested back into the educational system, and may not be obtained as profit outside of the system. Another concern of politicians is that only mediocre foreign institutions will open campuses in India, rather than more prestigious universities.
- If foreign universities open an offshore institution, they are required to obey the UGC (University Grants Commission) Act, committing to fulfil certain quality criteria in order to be recognized as a Deemed University. In addition, they are required to follow Indian laws regarding tuition fee structure and regarding the reservation of study places for the SC (Scheduled Caste), ST (Scheduled Tribes) and OBC (Other Backward Classes).
- At the European Higher Education Fair, approximately 10,000 Indian students registered, most of them stating that Germany and the United Kingdom are their most important destinations for study abroad.

Sources: Annual DAAD report - http://www.daad.de/berichte/NeuDelhi.pdf; and DAAD market analysis - http://www.daad.de/imperia/md/content/hochschulen/studienangebotedeutscherhochschulenimausland/marktstudien/indien_studie.pdf

Relevance:

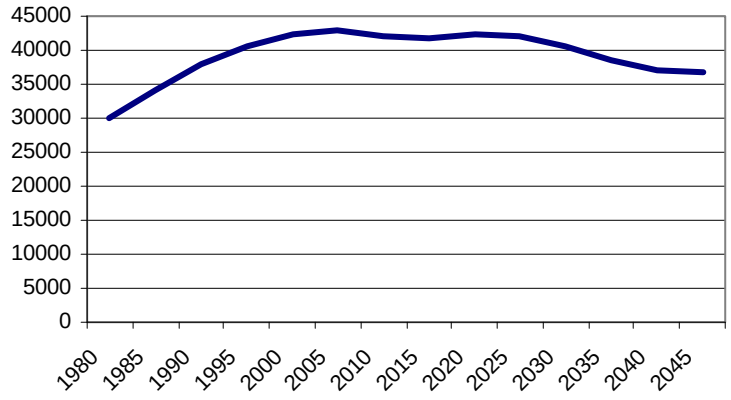
- As financial gain is not the primary goal of most German HEIs, they have a very good market position for offshore activities. However, they must have awareness and knowledge of the complex set of regulations and laws that are required to be followed.
- Education Fairs can be a major target for recruitment activities, but not the only one. Another option is recruitment through trustworthy alumni of German HEIs.*
- The DAAD started a new initiative together with the BMBF called “A New Passage to India” with a funding of 4.3 million € starting in 2009 (http://www.daad.de/portrait/presse/pressemitteilungen/2008/07954.de.html)

*DAAD 2008

3.2.2.8 Indonesia

Population

Indonesia: Age Group Development 15-24



Year	in 1,000	(%)
1980	30,146	20.0
1985	34,214	20.4
1990	37,926	20.7
1995	40,588	20.6
2000	42,481	20.1
2005	42,846	19.0
2010	42,184	17.6
2015	41,819	16.6
2020	42,255	16.1
2025	42,197	15.6
2030	40,641	14.5
2035	38,457	13.4
2040	37,056	12.7
2045	36,814	12.5
2050	36,640	12.3

- Indonesia's population prospects for their 15 to 24 year-olds show to be quite stable, decreasing only slightly from 2005 to 2030 (42.846 million to 40.641 million).
- This will nonetheless represent a 4.5% decrease in the share of 15 to 24 year-olds within the entire Indonesian population (all age groups combined), a greater decrease than the world's average decrease of 2.7% for the same group.
- By 2030, Indonesia's 15-25 year-old age group population is estimated to reach 40,641,000, placing it as the 6th most important in the world (behind India, China, the United States, Nigeria, and Pakistan).

Relevance:

- Indonesia's attributes for student recruitment include a stable population, important numbers in the 15 to 24 year-old category, and the potential to increase the numbers of its students studying abroad.

Education

Indonesia: Participation Rate

	Upper secondary gross graduation ratio	Gross entry ratio to tertiary higher education
2003	26%	14%
2004	28%	15%

- In 2003, Indonesia's ratios were less than half the world's average of 53.6 for upper secondary graduation rates, and less than a third of the world's average of 46.4 for gross entry to tertiary higher education.
- There is a gap between the moderately low upper secondary gross graduation ratio and the low entry ratio to tertiary higher education levels. The rate of upper secondary graduation is almost double that of the ratio of entry to tertiary education.

Relevance:

- The ratios indicate a potential for more upper secondary graduates to obtain a place in tertiary education. There may be a market for those students having graduated but not having obtained a place for further education. Financial concerns may play a role, thus, German HEIs may have to offer monetary compensation to attract students.

Tuition Fees

Foreign students with no scholarship for studies in Indonesia must pay tuition fees. Depending on the university, subject, and the number of semesters of study, the fees can amount to between 292€ and 438€ per term.* Medicine is always the most expensive field of study. With international university co-operations, these fees can be cancelled. Studying is virtually unaffordable for the children of the lower and middle classes if a sponsor is not found.
International courses in English are more expensive.**

*Calculation based on 400 US$ and 600 US$, converted into Euros using Oanda's historical currency exchange rate calculator for the 2007 year average (1 US$ = .73€).
** DAAD 2008

Indonesia: Economic Data

GDP / Capita:	2000	800 US$
	2005	1,300 US$
	2006	1,635 US$
	104% (Growth Rate 2000-2006)	

Education Expenditure:	Public Education Spending: % of GDP	1%
	Public Education Spending: % of Government spending	9%
	Share of education spending by level: Secondary	39.2%
	Share of education spending by level: Tertiary	23.2%

Data are for the most recent years available in 2000-2005, World Bank

GINI Coefficient (from 2007 World Development Indicators; data for 2002):							34.3
Knowledge Economy Index (KEI), 2007:							
Rank	compared to '95		KEI	EIR	IN	ED	ICT
91	**+1**	**Indonesia**	**3.29**	**3.20**	**3.38**	**3.69**	**2.87**
15	**-1**	**Germany**	**8.54**	**8.38**	**8.93**	**8.08**	**8.79**
-	**-**	**World**	**5.93**	**5.11**	**8.00**	**4.21**	**6.38**
-	**-**	**East Asia & the Pacific**	**6.67**	**5.96**	**8.42**	**5.34**	**6.97**

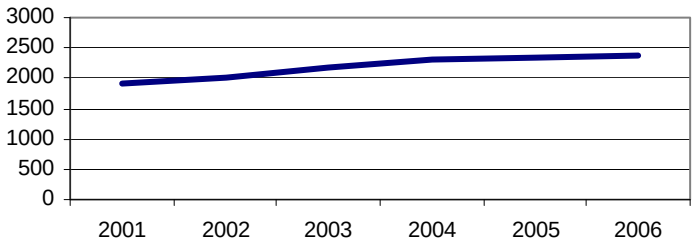
- Gross Domestic Product (GDP) per capita is still low despite an impressive growth rate of over 100% from 2000 to 2006. This was over double the world's average.
- According to World Bank terminology, Indonesia passed from a Low Income country to Lower Middle Income country between 2000 and 2006.
- Indonesia's percentages of public education spending are the lowest for all countries analysed in this section (for which data were available). Although a relatively high share of the government spending is devoted to secondary and tertiary education, the low GDP per capita results in low education spending per capita.
- A moderate GINI coefficient that is on par with several European countries. It shows an uneven wealth distribution that is nonetheless closer to equity than its neighbour, Papua New Guinea (50.9 in 1996) and slightly closer to equity than its developed economy neighbour, Australia (35.2 in 1994).
- KEI: Indonesia is listed as 91 out of 137 countries ranked. With the worldwide KEI ranging from 9.26 (Sweden) to 0.62 (Sierra Leone), Indonesia places in the bottom half with an index of 3.29.

Relevance:

- German HEIs would likely need to find sources of funding for many Indonesian students.
- Indonesia has room to improve in its economic development and wealth distribution. Due to its strong growth rate, interest in investing in this country is high.

Data related to Germany

Indonesia: Development of *Bildungsausländer*



Indonesian Students	
2006	2,376
2005	2,355
2004	2,311
2003	2,187
2002	2,016
2001	1,897

- 1.25% of all foreign students (by nationality) in Germany are from Indonesia.
- There was approximately a 25% increase in Indonesian student numbers in Germany from 2001 to 2006.
- Indonesian students are most drawn to Australia (over 10,000) and the U.S. (close to 9,000). The geographic proximity of Australia and the English speaking settings most likely contribute as reasons for these choices.
- Currently, just under 32,000 Indonesians study abroad, representing about 0.9% of Indonesian students.* Of these, 2,376 come to Germany to study, making it the 4th most important destination country for Indonesian students studying abroad (behind Australia, the United States and Malaysia), and the first in Europe.

Relevance:

- The numbers of Indonesian students studying abroad in Germany are on the rise and the potential for more Indonesian students to study outside of Indonesia is large, making this target group interesting for German HEIs.
- Greater consideration to include English language programmes to maintain interest and compete for students also interested in Australia and the United States could be taken into account.

*Source: UNESCO Global Digest, 2006

Enrolment Requirements

No direct enrolment is possible

- Need to present either the upper secondary examination or the Islamic secondary education certificate with the following conditions:
  - If the D-grade is at least 6.0 → *Feststellungsprüfung* at the *Studienkolleg*; one can enrol

for all major subject courses designated in the secondary education certificate.
    - If the D-grade is less than 6.0: after 1 year of successful studies in the major course of study → *Feststellungsprüfung* at the *Studienkolleg*.
- After 2 years of successful studies in the major course of study → direct access to all higher education institutions in the respective subject

Relevance:

- Recruitment of the most academically successful students is easiest in order to avoid longer study periods. Otherwise, focus on graduate students may be more feasible. For undergraduate students, offshore options might be a good solution.

Country Characteristics

Study Place Issues

- There is a national tertiary entry examination for which every year 450,000 secondary education graduates register, competing for one of the 75,000 study places offered at the public universities, which are affordable for the average family. The remaining 375,000 students (over 83%) determine if they can afford tertiary education at a private institution; otherwise, they often immediately start searching for employment.
- In 1975, there were 200,000 students, whereas in 1995, there were 2.5 million. Currently there are 3.5 million students. There are 86 public universities and 2,200 private universities because the enormous demand for study places could not be met by the public universities. However, private universities are thought to be of lower quality than public universities.

Quality Assurance Issues

- Indonesian universities are experiencing quality assurance issues, on which they are working to improve. Accreditation and evaluation of HEIs are in the initial phases and are a new focus of the Ministry of Education.
- Only 100,000 out of 1 million primary school teachers have a university degree. The majority without a university degree must obtain one in the upcoming years. The Ministry of Education will provide 170,000 scholarships for teachers to obtain a university degree.
- Until now, Indonesian HEIs have concentrated on the teaching side of academia versus on research, disseminating knowledge rather than generating new academic knowledge.
- Indonesian HEIs are interested in improving the quality of their teaching staff and foresee stronger spending in research. Since they are trying to increase the number of academics with a PhD, this will require more international cooperation. For example, at the Institut Teknologi Bandung (ITB), the plan is to increase the number of academic staff with a doctoral degree from 60% to 80% by 2010.

International Education Aspects

- Compared to all other Asian countries, Indonesia spends the least on its educational system.
- For those who gain entry to the university, studying abroad is very attractive, especially since there are numerous scholarships available. Countries with the most scholarships available are: The Netherlands, Japan, Australia, the United States, Canada, and Germany.
- For those who pay themselves, Germany is the top destination country in Europe.

- The Asian neighbours see a large potential future market in Indonesia. For example, in 2006, the Singapore Education Services Center offered their offshore services to Indonesia.
- Indonesia does not allow foreign education providers to open up a campus, but there are many joint degree programmes and international co-operations. A foreign education provider has to become accredited in Indonesia first before it can offer a joint degree with an Indonesian HEI.
- Indonesia students comprise of the 4th largest group of Asian students in Germany (after Chinese, Korean, and Indian students).
- The German language is taught at the secondary level.*

Sources: Annual DAAD report - http://www.daad.de/berichte/Jakarta.pdf; and DAAD market analysis - http://www.daad.de/imperia/md/content/hochschulen/studienangebotedeutscherhochschulenimausland/marktstudien/indonesien_studie.pdf
* DAAD 2008

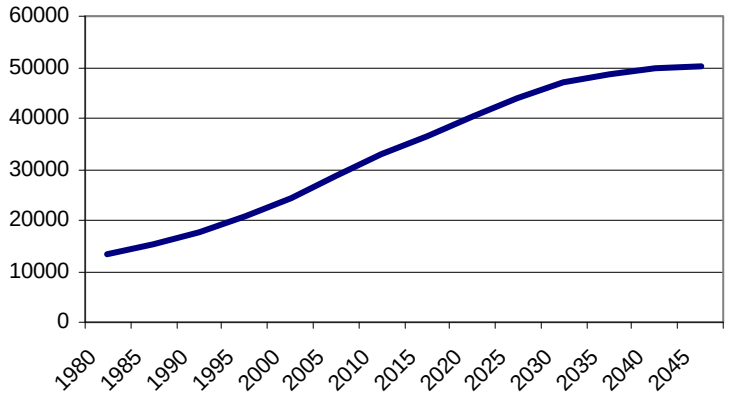
Relevance:

- German HEIs could target those teachers seeking a university degree, particularly if scholarships are awarded from the Indonesian government to supplement their studies abroad.
- German HEIs can stress their offer of quality, thereby attracting students who may be considering attending a lower quality private Indonesian university.
- Since Indonesian students value public university systems over private, this is an advantage for German HEIs, which comprise mostly of public institutions.
- For those 375,000 students that do not obtain a study place in one of the public universities, it would be interesting for German HEIs to target this group.
- German HEIs would likely need to offer financial support for the lower and middle class students, or choose a joint degree programme option.
- It is unlikely that German HEIs can choose a completely autonomous, offshore university scheme given the strict regulations regarding this kind of venture.
- Since other countries are also interested in Indonesia (particularly their Asian neighbours), German HEIs must have a very focused marketing plan to attract those students and convince them of the advantages to study in Europe.
- There is a need for an increase in Indonesian academic staff with a doctoral degree, a graduate level group that German HEIs could target.

3.2.2.9 Nigeria

Population

Nigeria: Age Group Development 15-24



Year	in 1,000	(%)
1980	13,504	19.0
1985	15,177	18.6
1990	17,572	18.6
1995	20,596	18.9
2000	24,500	19.6
2005	28,711	20.3
2010	32,774	20.7
2015	36,659	20.9
2020	40,481	21.0
2025	44,078	21.0
2030	46,888	20.7
2035	48,758	20.0
2040	49,705	19.2
2045	50,282	18.3
2050	50,880	17.6

- A steady and strong increase in Nigerian 15 to 24 year-olds indicates the rising importance of this country in terms of population.
- By 2030, Nigeria is expected to account for the 4th most important group for this age group in the world, following India, China, and the United States.
- The percentage of this age category vis-à-vis the entire population is also well above the world average and is estimated to continue to be so through 2030 and beyond.

Relevance:

- The strong population increase and portion of youth in this country make it a viable option for German HEIs to recruit students from this region.

Education

Nigeria: Participation Rate

	Upper secondary gross graduation ratio	Gross entry ratio to tertiary higher education
2003	No data available	No data available
2004	No data available	No data available

Tuition Fees

No DAAD information available.

Nigeria: Economic Data

GDP / Capita:	2000	369 US$
	2005	686 US$
	2006	793 US$
	115% (Growth Rate 2000-2006)	

Education Expenditure:	No data available

GINI Coefficient – (2007 World Development Indicators; data from 2003):							43.7
Knowledge Economy Index (KEI), 2007:							
Rank	compared to '95		KEI	EIR	IN	ED	ICT
115	**-3**	**Nigeria**	**1.84**	**1.02**	**2.61**	**1.85**	**1.87**
15	**-1**	**Germany**	**8.54**	**8.38**	**8.93**	**8.08**	**8.79**
-	**-**	**World**	**5.93**	**5.11**	**8.00**	**4.21**	**6.38**
-	**-**	**Africa**	**2.72**	**2.67**	**4.25**	**1.44**	**2.50**

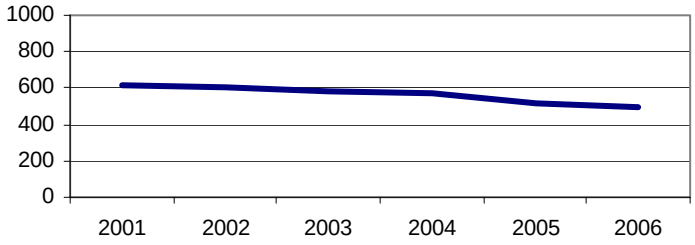
- The GDP per capita is low, placing Nigeria in the World Bank's Low Income Category.
- A very impressive growth rate, however, will soon help Nigeria to transition into a Lower Middle Income Category.
- GINI coefficient: Uneven wealth distribution that is close to the halfway point between equality and inequality. It is on par with many other sub-Saharan African countries.
- KEI: Very low (the lowest of all analysed for this paper). Well below the world's average and almost a point below the average for Africa. The weakest index is the Economic Index, but the largest gap compared with the world's average is displayed by the Innovation Index.

Relevance:

- There is economic opportunity in Nigeria, but the KEI indicates that the standards are rather low for the moment.

Data related to Germany

Nigeria: Development of *Bildungsausländer*



Nigerian Students	
2006	498
2005	516
2004	569
2003	577
2002	609
2001	613

- A slow decline of students coming to Germany has occurred since 2001.
- Germany is nonetheless the No.3 destination country for these students, preceded by the United States and the United Kingdom; however, the number of students coming to Germany is less than 10% the number of students studying in the U.S. and the U.K. (close to 6,000 for each).

Relevance:

- Given the strong population indicator, this could counter the currently weak numbers of Nigerians coming to Germany if this were made a priority for certain German HEIs.
- It should be noted that Nigerian students choose Germany as their top non-English speaking destination country.

Enrolment Requirements

Direct enrolment is possible

- If the Nigeria Certificate in Education is passed with one of the three best grades (A, B, C or credit, merit, distinction) → direct access to all HEIs for all subjects

Indirect enrolment:

- West African Senior School Certificate → *Feststellungsprüfung* at the *Studienkolleg*
- West African Senior School Certificate + 1 year of successful studies → direct access to all HEIs in the field of concentration and related subjects
- Higher Diploma (Higher Technician Diploma / Higher National Diploma) → direct access to all HEIs in the core subject
- Certificate proving the successful completion of the '100 Level' of a bachelor's programme → direct access to all HEIs in the respective field of concentration and related subjects

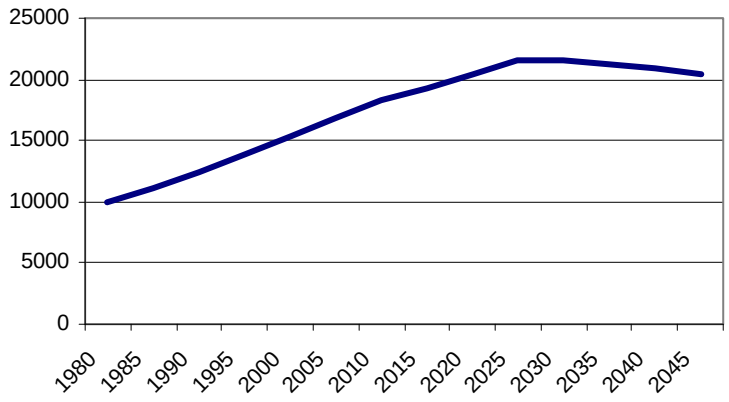
Country Characteristics

No DAAD information available.

3.2.2.10 Philippines

Population

Philippines Age Group Development 15-24



Year	in 1,000	(%)
1980	9,911	20.6
1985	11,163	20.5
1990	12,485	20.4
1995	13,955	20.3
2000	15,438	20.3
2005	16,869	19.9
2010	18,289	19.7
2015	19,278	19.1
2020	20,453	18.8
2025	21,538	18.6
2030	21,646	17.7
2035	21,320	16.6
2040	20,909	15.7
2045	20,421	14.9
2050	19,779	14.1

- The Philippines' 15 to 24 year-old category shows a rather steep and steady increase in population, anticipated through 2030.
- Since at least 1980, the percentage of this age category has been greater than the world average. This trend is expected to continue through 2030 and beyond.

Relevance:

- The quickly increasing numbers of 15 to 24 year-olds is a sign of the rising importance of the Philippines in terms of its population.
- By 2030, it will be amongst the top 15 countries with the largest 15 to 24 year-old groups in the world (placing 11th).
- The percentages accounting for this age category in 2015 (19.1%) and 2030 (17.7%) are of the strongest analysed for projections of countries considered for this paper. Only Nigeria surpasses the Philippines' numbers with 20.9% of the population expected to be between the ages of 15 and 24 in 2015 and 20.7% in 2030.

Education

Philippines: Participation Rate

	Upper secondary gross graduation ratio	Gross entry ratio to tertiary higher education
2003	62%	40%
2004	59%	45%

- Very high upper secondary participation rates, almost 10% above the world average in 2003.
- In contrast, the tertiary higher education rates are slightly below the world average – by about 6% in 2003 and 1% in 2004.
- There is a gap between graduation rates and entry rates representing an approximately 15 to 20% difference, suggesting that there is a surplus of graduates not entering higher education.

Tuition Fees

Tuition fees for international students range from 700-1,000€ per semester.* Data on tuition fees for national students not available.

* DAAD 2008

Philippines: Economic Data

GDP / Capita:	2000	1,001 US$
	2005	1,184 US$
	2006	1,382 US$
	38% (Growth Rate 2000-2006)	

Education Expenditure:	Public Education Spending: % of GDP	2.7%
	Public Education Spending: % of Government spending	16.4%
	Share of education spending by level: Secondary	25.8%
	Share of education spending by level: Tertiary	13.4%

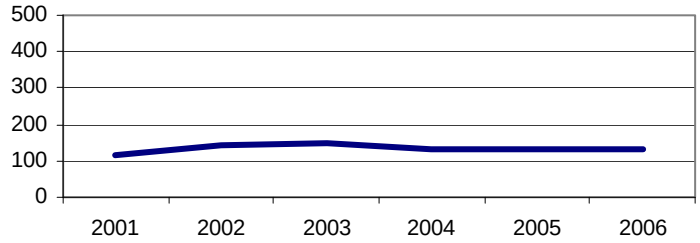
Data are for the most recent years available in 2000-2005, World Bank

GINI Coefficient – (2007 World Development Indicators; data from 2003):							44.5
Knowledge Economy Index (KEI), 2007:							
Rank	compared to '95		KEI	EIR	IN	ED	ICT
73	**-8**	**Philippines**	**4.48**	**5.37**	**3.76**	**5.12**	**3.67**
15	**-1**	**Germany**	**8.54**	**8.38**	**8.93**	**8.08**	**A8.79**
-	**-**	**World**	**5.93**	**5.11**	**8.00**	**4.21**	**6.38**
-	**-**	**East Asia & the Pacific**	**6.67**	**5.96**	**8.42**	**5.34**	**6.97**

- Gross Domestic Product (GDP) per capita places the Philippines in the World Bank's Lower Middle Income Category.
- GINI coefficient shows a wealth distribution that is approaching the mid-point between complete equality and complete inequality. It is closer to inequality than the European average.
- The public education expenditure of 2.7% of an already weak GDP per capita is one of the lowest of the countries analysed. In addition, a mid to low range for the share of education spending on secondary education and a low share of education spending on tertiary education translate to low averages for public education spending per capita.
- KEI: the Philippines lost 8 places since 1995 and ranks in the lower rung of countries. With the worldwide KEI ranging from 9.26 (Sweden) to 0.62 (Sierra Leone), the Philippines is below the world average and over 2 points below the regional average for East Asia and the Pacific.
- Its strongest is the Economic Index, obtaining about ¼ of a point higher than the world average, but still below the regional average. Its Education Index is also above the world average, but below the East Asia and Pacific average.

Data related to Germany

Philippines: Development of *Bildungsausländer*



Philippine Students	
2006	133
2005	133
2004	133
2003	149
2002	145
2001	117

- Very low numbers of students are coming to Germany, the lowest of all countries analysed.
- The number of Philippine students coming to Germany has remained relatively unchanged since 2001, particularly in the most recent years, with 133 students three years in a row.
- According to UNESCO, about 7,000 Philippine students studied abroad in 2004, about half of which headed to the United States. Of the remaining students abroad, the UK, Australia, and Japan were chosen as their top destinations, followed lastly by Germany.

Relevance:

- Despite the low numbers of students historically coming to Germany, the important population in this age group as well as a stable economy could offer the development of opportunities for German HEIs in this country.

Enrolment Requirements

No direct enrolment is possible

- High School Diploma (after 10 years) + transcript of records + 2 years of successful studies → *Feststellungsprüfung* at the *Studienkolleg*
- High School Diploma (after 10 years) + transcripts of records + 3 years of successful studies → direct access to all German HEIs for the core subject and related subjects

Country Characteristics

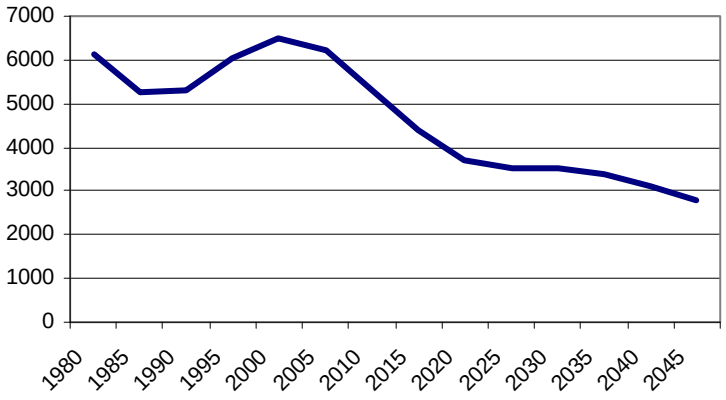
- Due to a system of only 10 years of secondary education, Philippine students face problems in obtaining admission to German HEIs, which require a longer study period prior to entry.
- Recruitment seems to be most promising and successful at the postgraduate or PhD level.
- Philippine universities are interesting for German students as courses are taught in English and demonstrate an adequate level of quality.*

* DAAD 2008

3.2.2.11 Poland

Population

Poland: Age Group Development 15-24



Year	in 1,000	(%)
1980	6,112	17.2
1985	5,259	14.1
1990	5,316	13.9
1995	6,042	15.7
2000	6,508	16.9
2005	6,220	16.3
2010	5,321	14.0
2015	4,404	11.7
2020	3,710	10.0
2025	3,508	9.7
2030	3,514	9.9
2035	3,393	9.9
2040	3,120	9.5
2045	2,799	8.9
2050	2,567	8.5

- Peaking in 2005, Poland's population of 15 to 24 year-olds is drastically decreasing, a worrisome trend echoed in several Eastern European countries.
- The percentage of this age category making up the entire Polish population is rapidly declining. The difference between the percentage of 15 to 24 year-old Polish youth and the world's average will be its greatest in 2020, with Poland 5.7% below the average.
- Between 2020 and 2025, the population decrease is estimated to be less dramatic, but will still continue to drop through 2050.

Relevance:

- The population indicator could present the biggest stumbling block for German HEIs in their recruitment efforts for Polish students.
- Based on sheer numbers, in 2030, the relevance of this age group will be between that of Chile (2,514) and Ukraine (4,004).

Education

Poland: Participation Rate

	Upper secondary gross graduation ratio	Gross entry ratio to tertiary higher education
2003	75%	68%
2004	87%	70%

- For 2004, Poland obtained one of the highest percentages in the world for the upper secondary graduation rate, behind only Israel and Ireland.*
- Upper secondary graduation in Poland was nearly 32% above the world average.
- Entry to tertiary education was also well above the world average for both 2003 and 2004.
- A 17% gap between upper secondary graduation and entry into tertiary education suggests a potential demand for university study places.

Relevance:

- German HEIs could benefit from the potential demand for university study places; however, time is of importance given the declining numbers of 15 to 24 year-olds. It is likely that as the population decreases, the gap between upper secondary graduation and tertiary education entrance rates will also decrease.

*Source: UNESCO Global Education Digest, 2006. This information is based on data available for the GED: Israel: 93% and Ireland: 91% (2003).

Tuition Fees

Since May 1, 2004, foreign European Union citizens have usually been exempt from study fees, since they are to be treated like Polish citizens, whom as full-time students at national universities, pay no fees. Foreign students must pay a unique registration fee of about 170€. At private universities and for the participation in foreign language courses of study, studying fees are required for both Polish and foreign students (4,000€ to 10,000€ per academic year).

Poland: Economic Data

GDP / Capita:	2000	4,449 US$
	2005	7,937 US$
	2006	8,890 US$
	100% (Growth Rate 2000-2006)	

Education Expenditure:	Public Education Spending: % of GDP	5.4%
	Public Education Spending: % of Government spending	12.7%
	Share of education spending by level: Secondary	36.4%
	Share of education spending by level: Tertiary	21.2%

Data are for the most recent years available in 2000-2005, World Bank

GINI Coefficient – (2007 World Development Indicators; data from 2002)	34.5

Knowledge Economy Index (KEI), 2007:

Rank	compared to '95		KEI	EIR	IN	ED	ICT
35	**+3**	**Poland**	**7.24**	**7.07**	**6.89**	**8.11**	**6.87**
15	**-1**	**Germany**	**8.54**	**8.38**	**8.93**	**8.08**	**8.79**
-	**-**	**World**	**5.93**	**5.11**	**8.00**	**4.21**	**6.38**
-	**-**	**Europe & Central Asia**	**6.30**	**5.19**	**6.93**	**6.81**	**6.28**

- The 100% growth rate is more than double the world average of 42%.
- In 2006, Poland belonged to the Upper Middle Income Category according to World Bank estimates. If the growth rate continues at the same rate, Poland will have entered into the High Income Category (above 10,725 US$ GNP per capita) within 2008.
- Poland places at the head of the countries analysed in terms of secondary and tertiary public education spending per capita. This can be attributed to one of the highest GDP's per capita presented in this section, as well as to the strong shares of spending on education in general and on both secondary and tertiary levels specifically.
- The GINI coefficient is closer to equality than inequality, but remains almost 10 points above the lowest coefficient. It is comparable to the other European countries of Greece, Ireland, Poland and Spain, all obtaining a score within the 34 coefficient range.*
- Poland's KEI is well above the world average and almost an entire point above the European and Central Asian average, but falls just below the latter's average for the Innovation Index.
- The Education index is Poland's strongest, even slightly surpassing Germany's index.

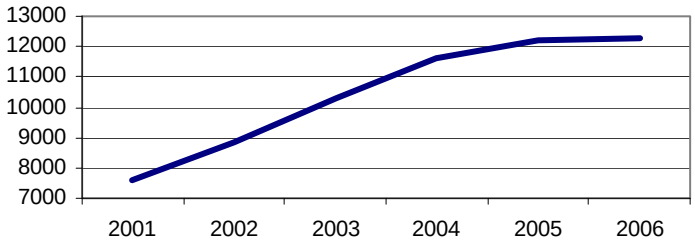
Relevance:

- An impressive growth rate attesting to Poland's transition from an Upper Middle Income country to a High Income country makes it an exciting recruitment possibility.
- In addition, a moderately low GINI coefficient and relatively strong KEI, particularly in comparison to countries of similar geographic location, suggest a positive outlook for Polish society.

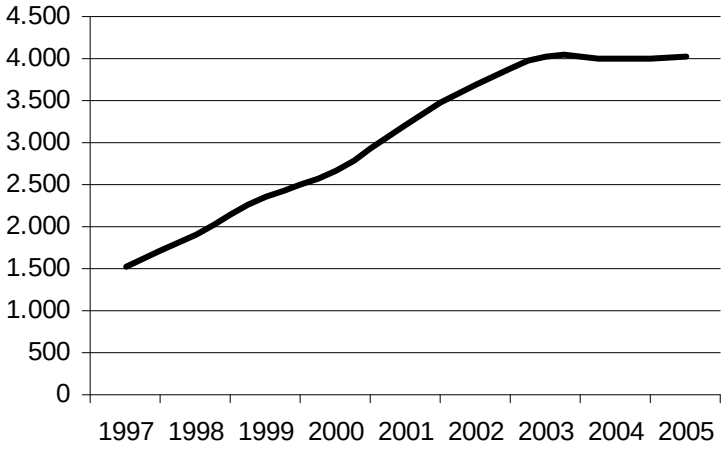
*Source: 2007 World Development Indicators. Years vary for each country: Greece (2000), Ireland (2000), Poland (2002), Spain (2000).

Data related to Germany

Poland: Development of *Bildungsausländer*



Polish Students	
2006	12,301
2005	12,209
2004	11,588
2003	10,284
2002	8,827
2001	7,586



First year student development	
1997	1,532
1998	1,898
1999	2,362
2000	2,660
2001	3,208
2002	3,699
2003	4,028
2004	4,004
2005	4,020

- A rather steep increase of Polish students coming to Germany is starting to level off at about 12,000.
- First year student enrolments are also starting to level off at about 4,000.
- In 2006, about 6.5% of students coming to Germany were from Poland, representing the third largest group of foreign students.*
- According to UNESCO, 28,786 Polish students study abroad, representing 1.5% of their cohort. Of these, about half come to Germany, making it the No.1 destination for Polish students, followed by France and the United States, both far behind with about 3,000 each of the share, and finally by Austria and Italy with around 1,000 each.**

Relevance:

- The fact that Germany is the top destination country and recruits the majority of Polish students is of particular importance for German HEIs interested in Eastern European countries.
- The geographic proximity and historical ties should also not be overlooked as selling points to attract Polish students.

*Source: UNESCO Global Education Digest, 2006. According to UNESCO, preceded by Turkey (27,582) and China (25,284). According to DAAD data, preceded by China (26,061) and Bulgaria (12,423). See detailed information in the 3.2 Country Analysis section on page 34 under "Data related to Germany: *Development of Bildungsausländer."*
**The UNESCO Digest lists Germany as welcoming 15,417 Polish students, but includes *Bildungsinländer*, thus slightly skewing the portion of Polish students actually coming to Germany for a study abroad experience.

Enrolment Requirements

- *Świadectwo dojrzałości* / Secondary education certificate (*Reifezeugnis*) + *Świadectwo ukończenia - Liceum ogólnokształcącego* / Secondary education certificate (*Abschlusszeugnis des Allgemeinbildenden Lyzeums*) → direct access for all subjects to all German HEIs
- *Świadectwo dojrzałości* / Secondary education certificate (*Reifezeugnis*) + *Świadectwo ukończenia - Liceum profilowanego lub Technicznego* / graduation certificate from a specialized / technical secondary school (*Abschlusszeugnis des Profillyzeums bzw. des Technischen Lyzeums*) → access to all German HEIs in the respective field of study / if a non-technical subject is chosen: *Feststellungsprüfung* / *Studienkolleg*
- *Świadectwo dojrzałości* / Secondary education certificate (*Reifezeugnis*) + *Świadectwo ukończenia - Liceum zawodowego* / graduation certificate from a professional school (*Abschlusszeugnis des Berufslyceums*) → direct access to all German HEIs in the field of secondary study and related subjects
- *Świadectwo dojrzałości* / Secondary education certificate (*Reifezeugnis*) + *Świadectwo ukończenia - Średniego studium zawodowego* / graduation certificate from a vocational training school (*Abschlusszeugnis der mittleren Berufsbildungsanstalt*) → *Feststellungsprüfung / Studienkolleg*
- *Świadectwo dojrzałości* / Secondary education certificate (*Reifezeugnis*) + *Świadectwo ukończenia - Średniego studium zawodowego* / graduation certificate from a vocational training school (*Abschlusszeugnis der mittleren Berufsbildungsanstalt*) + 2 successful years of studies on the tertiary level → direct access to all German HEIs in the respective subject

Country Characteristics

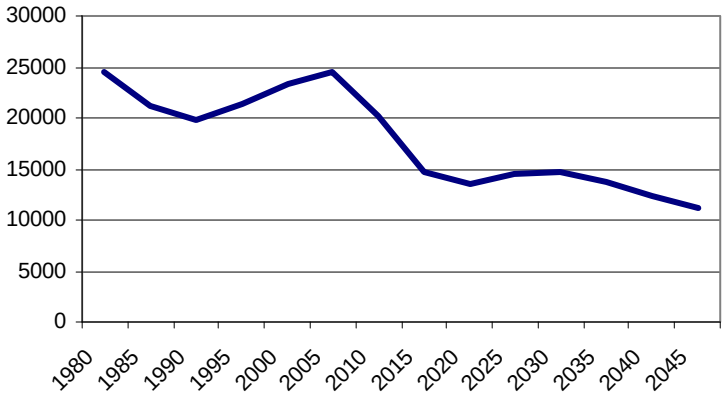
- The number of universities has risen during the academic year 2005/2006 from 430 to 445, which can be largely attributed to the foundation of private universities.
- Due to demographic developments, there will be an estimated 50% decrease in student numbers until 2020. The number of first-year students is assumed to be lower than the available number of study places at public universities in the upcoming years.
- Public universities are already complaining about the decrease of students enrolled in night school programmes or distance learning programmes. Since these two types of programmes are the only to charge fees (regular students do not have to pay tuition fees), universities face decreasing sources of revenue. Poland is therefore trying to attract students from abroad with the campaign “Study in Poland” which started in 2005.
- The situation is even more problematic for private universities. Estimates assume that out of 300 private universities, 100 are likely to close by 2009.
- Aside from the demographic development issue, student emigration poses another problem to Polish universities. This relates to both first-degree seeking students as well as graduates who try to find a better paid position abroad. Polish universities are increasingly worried about not having enough academics in the future. There is chronic insufficient funding in academics leading to the emigration of young scientists who often do not come back after having studied abroad.
- The most popular subject at Polish universities in 2006/2007 was pedagogy, followed by law, management, and computer sciences. The subject with the worst ratio of applicants to study places was psychology (15 applicants competing for one place) followed by journalism, cultural sciences, sociology and politics.
- German is the most taught language after English in secondary schools.
- In 2006, the funds allotted for research increased to 0.56% of the GDP. However, it is highly unlikely that Poland will reach the EU’s target of spending 3% of the GDP on academic research.
- The political tensions between Germany and Poland have so far not reached the sector of HE cooperation which has a very solid foundation established during recent years. The number of HE co-operations have risen 8% up to 739 programmes in 2006.
- The most popular subjects among polish students studying in Germany are philology, cultural sciences (4,530 students in 2005/2006), law, economic and social sciences (4,297 students), mathematics and the natural sciences (1,284 students) as well as engineering (1,098 students).

Source: Annual DAAD report - http://www.daad.de/berichte/Warschau.pdf

3.2.2.12 Russia

Population

Russia: Age Group Development 15-24



Year	in 1,000	(%)
1980	24,533	17.7
1985	21,100	14.7
1990	19,873	13.4
1995	21,319	14.3
2000	23,392	15.9
2005	24,530	17.0
2010	20,196	14.4
2015	14,662	10.7
2020	13,563	10.2
2025	14,508	11.3
2030	14,633	11.8
2035	13,680	11.4
2040	12,264	10.6
2045	11,166	10.0
2050	10,854	10.1

- Russia's 15 to 24 year-old population has passed its peak and a downward trend is expected through 2030 and beyond, with the initial chute presently taking place.
- By 2030, there will be an estimated 14.6 million Russians in this age group, comprising 11.8% of the total population, in comparison to 17% in 2005 (24.5 million).
- This drop in population coincides with the world trend of a decrease in the 15 to 24 age group category, but is a more drastic drop than the world average (a 2.7% world decrease versus Russia's 5.2% decrease).

Relevance:

- Prospects for the Russian 15 to 24 year-old population look dim; however, this group will still account for an important percentage of the youth in the world, estimated in 2030 to place 15th. In terms of recruitment, factors regarding population will be among the more difficult challenges for German HEIs to tackle.

Education

Russia: Participation Rate

	Upper secondary gross graduation ratio	Gross entry ratio to tertiary higher education
2003	54%	61%
2004	54%	63%

- For 2004, Russia's average was approximately the same as the world's average in upper secondary graduation rates and 17% higher than the world average for entry into higher education.
- In comparison to other countries for 2004 upper secondary graduation rates: Germany: 34%; the United States: 73%; Estonia: 69%; Poland: 87%.
- There is a high entry ratio to tertiary education.

Relevance:

- Given Russia's strong ratios for upper secondary graduation and entry to tertiary education, there should be no lack of qualified students. Russia will remain an interesting source country for German HEIs.

Tuition Fees

Higher education study fees have been continuously rising in recent years. There is no uniform regulation regarding how high the study fees can reach. The study fees vary substantially from university to university and even from subject to subject. The span ranges from 730€ up to 5840€ per academic year; the mean is about 1825€.*

*Calculation based Oanda's historical currency exchange rate calculator for the 2007 year average (1 US$ = .73€).

Russia: Economic Data

GDP / Capita:	2000	1,175 US$
	2005	5,342 US$
	2006	6,930 US$
	490% (Growth Rate 2000-2006)	

Education Expenditure:	Public Education Spending: % of GDP	3.5%
	Public Education Spending: % of Government spending	12.9%
	Share of education spending by level: Secondary	40.1%
	Share of education spending by level: Tertiary	18.3%

Data are for the most recent years available in 2000-2005, World Bank

GINI Coefficient – (2007 World Development Indicators; data from 2002):	39.9

Knowledge Economy Index (KEI), 2007:

Rank	compared to '95		KEI	EIR	IN	ED	ICT
47	**+8**	**Russian Federation**	**5.94**	**2.99**	**6.92**	**7.66**	**6.19**
15	**-1**	**Germany**	**8.54**	**8.38**	**8.93**	**8.08**	**8.79**
-	**-**	**World**	**5.93**	**5.11**	**8.00**	**4.21**	**6.38**
-	**-**	**Europe & Central Asia**	**6.30**	**5.19**	**6.93**	**6.81**	**6.28**

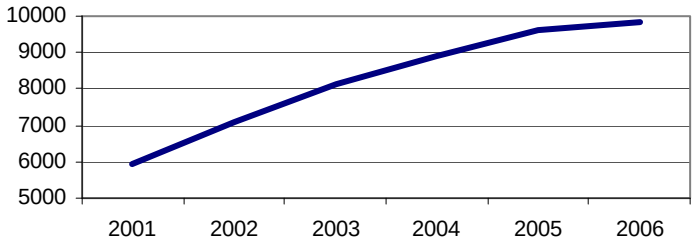
- Gross Domestic Product (GDP) per capita has seen an enormous growth rate of nearly 500% from 2000 to 2006, which is by far the greatest amount of any country analysed in this paper. Ukraine follows with a 258% growth rate for this same period.
- At 3.5% of the GDP, public education spending is in the lower range of countries analysed in this section. Russia invests a large portion of its public education spending on the secondary level, which equates to over double the amount spent per capita on tertiary education.
- The GINI coefficient shows uneven wealth distribution that is comparable to Israel (in 2001) or Macedonia (in 2003).
- KEI: Russia is listed as 47 out of 137 countries ranked. With the worldwide KEI ranging from 9.26 (Sweden) to 0.62 (Sierra Leone), Russia, with an index of 5.94, places in the upper half of countries.
- Improvement in this domain can be seen by the gain of 8 places since 1995.
- The Economic Index, just below 3.0, is relatively low compared to the other indexes, which hover closer to 6.0 and 7.0.

Relevance:

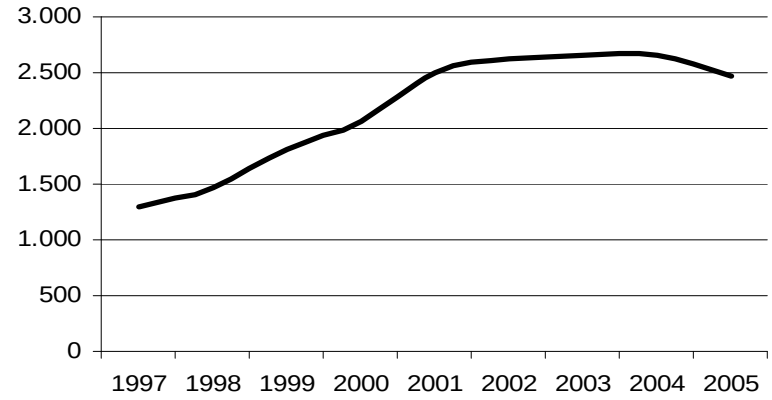
- German HEIs would likely need to find sources of funding for some Russian students, but this will probably decrease over time if the growth rate continues at the current pace.
- Targeting the upper-class Russian population could also be an option. Less financial aid will likely be required if the GINI coefficient increases.
- Russia has room for growth in utilizing education and innovation for economic growth. This would allow German HEIs to attract students to obtain a strong education and return to Russia to help with economic progress.

Data related to Germany

Russia: Development of *Bildungsausländer*



Russian Students	
2006	9,826
2005	9,594
2004	8,906
2003	8,113
2002	7,098
2001	5,955



First year student development	
1997	1,298
1998	1,466
1999	1,807
2000	2,070
2001	2,504
2002	2,627
2003	2,650
2004	2,654
2005	2,474

- In 2004, only 0.4% of Russian students studied abroad (34,473).*
- These students made up about 5.3% of all foreign students (by nationality) in Germany (calculated from DAAD data). This makes it the 4th largest group (after the Chinese, Bulgarians and Polish).*
- Russia chooses Germany as a top destination country (followed by the United States, France, Kazakhstan, and the UK).*
- Numbers of Russian students coming to Germany have almost doubled since 2001.
- Since 2003, the numbers of new enrolments have seemed to level off and in 2005, we see a first slight decrease.

Relevance:

- Given the high numbers of Russian students historically choosing Germany as a main

destination country, recruitment efforts may be less difficult than for countries with weaker ties to Germany.

*Source: UNESCO Global Digest, 2006

Enrolment Requirements

No direct enrolment is possible

- With a diploma Attestat *o srednem (polnom) obscem obrazovanii*, the student must have graduated from a state or private high school in the Russian Federation, or from another Russian affiliated country (*GUS: Gemeinschaft Unabhängiger Staaten*):
    - *Feststellungsprüfung* at the *Studienkolleg*; for main course of studies, proof of completion of one successful university year.
    - Direct enrolment in the current field of specialisation and neighbouring subjects if at least two years proof of successful university studies.
- With a diploma *Attestat o srednem (polnom) obscem obrazovanii* (with honours and/or a gold or silver medal) the student must have graduated from a state or private high school in the Russian Federation, or from another Russian affiliated country (GUS):
    - *Feststellungsprüfung*: For all main courses of study.
    - Direct enrolment in the current field of specialisation and neighbouring subjects if at least two years proof of successful university studies.
- With a diploma *srednee professional'no-techniceskoe ucilisce*:
    - Direct enrolment in the current field of specialisation and neighbouring subjects if at least two years proof of successful university studies.
- With a diploma *srednee special'noe ucebnoe zavedenie*:
    - *Feststellungsprüfung*: corresponding to past training in a field, proof of one successful year of university study.
    - Direct enrolment in the current field of specialisation and neighbouring subjects if at least two years proof of successful university studies.

Relevance:

- Recruitment of students might be easier when focusing on graduate students. For undergraduate students, offshore options might be a good solution.

Country Characteristics

- Initiatives to increase salaries for young talented researchers are currently in place to stop the brain drain. As the salary for those in research related professions has almost doubled in recent years, it is getting more attractive to stay in Russia than study and work abroad.
- The majority of higher education teaching staff is very critical about the B.A./M.A. system and prefers the diploma system. However, to not be isolated from the international academic community, this adoption is accepted.
- Russians are increasing aware of the need to offer seminars in English and German to attract foreign students; thus, teaching staff is in need of foreign language teaching

qualifications in the near future.

- German universities and *Fachhochschulen* have been for a very long time one of the most important partners for academic cooperation.
- DAAD has started an online project to allow German universities to place information about their bachelor's and master's programmes so that Russian students have access to this information.

Source: Annual DAAD report http://www.daad.de/berichte/Moskau.pdf and DAAD market analysis http://www.daad.de/imperia/md/content/hochschulen/studienangebotedeutscherhochschulenimausland/marktstudien/russland_studie.pdf

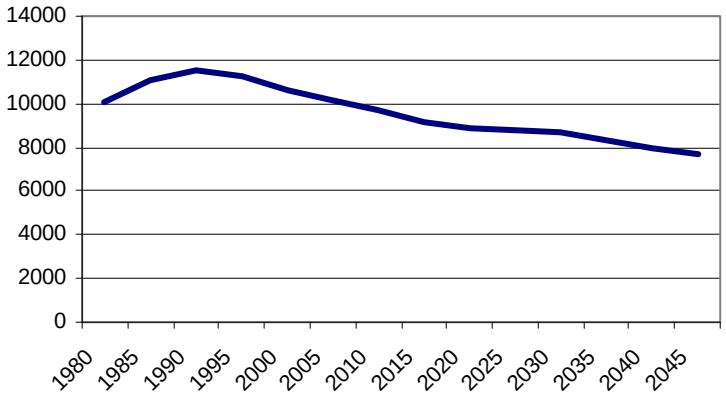
Relevance:

- German HEIs may have to entice students with monetary gains to attract the brightest individuals since Russia is also facing brain drain and a population decline.
- Learning German could be a main draw for Russian students, particularly for future teachers. HEIs could attract them by focusing on this benefit.
- There is a historic connection between Germany and Russia and close academic ties, which HEIs could utilize to further strengthen cooperation.

3.2.2.13 Thailand

Population

Thailand: Age Group Development 15-24



Year	in 1,000	(%)
1980	10,086	21.5
1985	11,033	21.7
1990	11,528	21.2
1995	11,266	19.6
2000	10,576	17.4
2005	10,115	16.1
2010	9,667	14.8
2015	9,150	13.7
2020	8,874	13.1
2025	8,819	12.8
2030	8,674	12.5
2035	8,334	12.0
2040	8,000	11.6
2045	7,732	11.3
2050	7,541	11.2

- Thailand's slight, yet steady decrease of 15 to 24 year-olds began between 1990 and 1995 and is estimated to continue through 2050.
- The share of this age category within the population as a whole is also decreasing and will be 2.7% lower than the world's average.
- Compared to the other Asian countries analysed in this paper, Thailand's population development fluctuates less than those of Vietnam or China, but follows a similar pattern of decreasing numbers.

Relevance:

- Despite decreasing numbers of 15 to 24 year-old Thai youth, the downward trend is less prominent than in other countries where this population group is dwindling (such as in Eastern Europe).

Education

Thailand: Participation Rate

	Upper secondary gross graduation ratio	Gross entry ratio to tertiary higher education
2003	29%	44%
2004	31%	41% (data for 2005)

- Thailand's upper secondary graduation rates are lower than the world's averages of 53.6% and 55.2% for 2003 and 2004 respectively.
- However, entry rates to higher tertiary education are not far below the world averages.

Relevance:

- Of note is the difference between graduation rates and entry rates, suggesting that students find alternative methods to obtain entry into higher education.

Tuition Fees

Fees for international programmes taught in English are higher than for programmes taught in Thai.* For a bachelor's programme, the fees are between 5475€ and 8760€ per year. A master's programme costs between 1971€ and 14,600€.** The amount of fees depends on the course of study and is not uniformly fixed.

*DAAD 2008

**Calculation based on 7,500 US$, US$ 12,000 US$, 2,700 US$, and 20,000 US$ converted into Euros using Oanda's historical currency exchange rate calculator for the 2007 year average (1 US$ = .73€).

Thailand: Economic Data

GDP / Capita:	2000	1,998 US$
	2005	2,745 US$
	2006	3,187 US$
	60% (Growth Rate 2000-2006)	

Education Expenditure:	Public Education Spending: % of GDP	4.2%
	Public Education Spending: % of Government spending	25%
	Share of education spending by level: Secondary	24.4%
	Share of education spending by level: Tertiary	21.7%

Data are for the most recent years available in 2000-2005, World Bank

GINI Coefficient – (2007 World Development Indicators; data for 2002):			42				
Knowledge Economy Index (KEI), 2007:							
Rank	compared to '95		KEI	EIR	IN	ED	ICT
56	**- 8**	**Thailand**	**5.41**	**5.77**	**5.95**	**5.19**	**4.71**
15	**-1**	**Germany**	**8.54**	**8.38**	**8.93**	**8.08**	**8.79**
-	**-**	**World**	**5.93**	**5.11**	**8.00**	**4.21**	**6.38**
-	**-**	**East Asia & the Pacific**	**6.67**	**5.96**	**8.42**	**5.34**	**6.97**

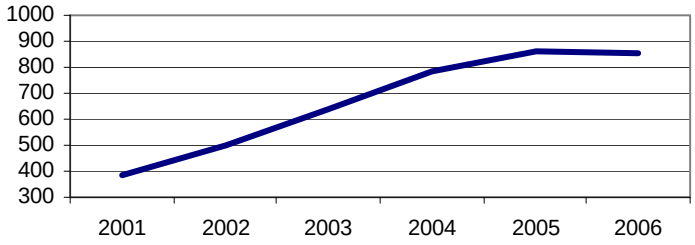
- Thailand places in the Lower Middle Income Category of countries. However, if the growth rate continues at the same level, Thailand is expected to pass into the Upper Middle Income Category in the following years.
- In 2006, Thailand's GDP per capita was slightly higher than that of Tunisia, with an over 10% stronger growth rate.
- Of the countries analysed for this section, the gap between the share of education spending on secondary and tertiary levels is the lowest in Thailand. Whereas many countries allocate up to twice the amount for secondary as for tertiary, Thailand's percentages are quite similar (24.4% and 21.7% for secondary and tertiary, respectively). The investment in tertiary education is accordingly comparatively high.
- The GINI coefficient favours equality more than inequality in wealth distribution, but still remains moderately high by European standards.
- KEI: With the worldwide KEI ranging from 9.26 (Sweden) to .62 (Sierra Leone), Thailand, with an index of 5.41, places 56th or in the 2rd quartile of the 137 countries ranked.
- Compared with other Asian countries analysed, Thailand is nearly one point ahead of China and 2¼ points ahead of Vietnam.
- Thailand's KEI is about half a point below the world's average and over 1¼ points below East Asia and the Pacific's average.
- The Education Development Index is almost one point ahead of the world average, despite still trailing behind the East Asian and Pacific average. The Information and Communication Technology Index is its weakest.

Relevance:

- Of note is Thailand's rising importance in its income category and the above average growth rate.

Data related to Germany

Thailand: Development of *Bildungsausländer*



Thai Students	
2006	856
2005	859
2004	782
2003	642
2002	498
2001	385

- Thai students are increasingly interested in Germany as a destination country, as indicated by the more than doubling of numbers since 2001.
- According to UNESCO data, just short of 24,000 Thai students studied abroad in 2004.
- In the same year, Germany was among the top five destination countries for Thai students, trailing behind the United States, Australia, the UK, and Japan.*

Relevance:

- The low number of current Thai students can be countered with the growing interest in Germany and the fact that Germany is the second most chosen European country for study abroad.
- Of note is the fact that despite linguistic barriers and long distance from Asia, Germany is among the top five destination countries.

* Source: UNESCO Global Education Digest, 2006.

Enrolment Requirements

Direct enrolment is possible

With the 'Higher Certificate of Education,' direct access to German universities is possible when studying for the teaching profession.

Indirect enrolment in the case of the 'Certificate of Vocational Education' (Grade 12) and the *Mathayom VI* (secondary diploma) :

- *Feststellungsprüfung* for the core subject area → subject-related access to all German HEIs
- 2 years of successful studies → subject-related access to all German HEIs

Country Characteristics

- Thailand's investment in HE is comparatively high.
- The former Ministry of University Affairs has a mission to increase the quality of higher education.
- A range of scholarship schemes (domestic and international) is available to young Thai scholars.

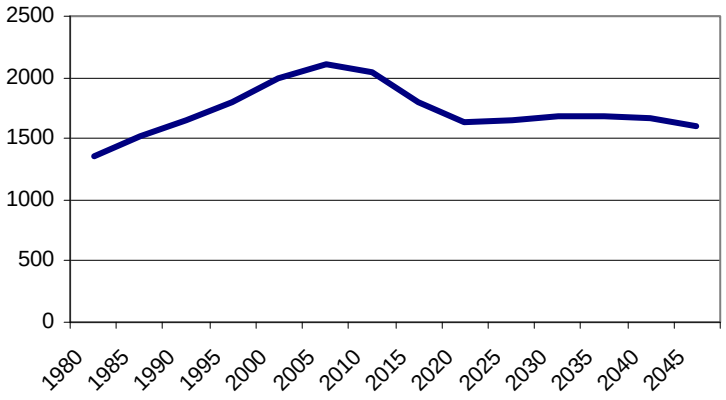
- The Thai competent authority OCSC (Office of the Civil Service Commission) organises annual recruitment fairs which are widely accepted and frequented. They are a good opportunity for recruitment activities.*

*Source: All information from DAAD 2008

3.2.2.14 Tunisia

Population

Tunisia: Age Group Development 15-24



Year	in 1,000	(%)
1980	1,362	21.1
1985	1,524	20.8
1990	1,649	20.1
1995	1,798	20.0
2000	1,991	20.8
2005	2,111	20.9
2010	2,050	19.2
2015	1,800	16.1
2020	1,635	14.0
2025	1,652	13.6
2030	1,689	13.5
2035	1,690	13.2
2040	1,667	12.8
2045	1,595	12.2
2050	1,504	11.4

- Tunisia's population of 15 to 24 year-olds steadily increased from 1980 onwards, peaking in 2005.
- The following years are estimated to show a sudden, but relatively small drop before levelling out in 2020, followed by slight increases in the next 15 years.
- Through 2015, the percentage of 15 to 24 year-olds making up the entire Tunisian population is estimated to be above the world's average.
- By 2030, however, this figure drops below the world's average of 15.2%. This trend continues through 2050.

Relevance:

- Except for the slight decrease in 15 to 24 year-olds in the next decade, this population group is shown as relatively stable and currently makes up a strong percentage of the entire Tunisian population.

Education

Tunisia: Participation Rate

	Upper secondary gross graduation ratio	Gross entry ratio to tertiary higher education
2003	37%	36%
2004	33%	34%

- Below the world's average of 55.2% in 2004 for upper secondary graduation rates as well as the 46% average ratio for entry into tertiary higher education, Tunisia has about a 1/3 success rate in educating its cohorts at these levels.

Relevance:

- The ratios suggest that virtually all those who graduate go on to tertiary education, however, it should be noted that other avenues into tertiary education aside from the traditional passages can not be seen in these figures.

Tuition Fees

No DAAD information available.

Tunisia: Economic Data

GDP / Capita:	2000	2,021 US$
	2005	2,870 US$
	2006	3,000 US$
	48% (Growth Rate 2000-2006)	

Education Expenditure:	Public Education Spending: % of GDP	7.3%
	Public Education Spending: % of Government spending	20.8%
	Share of education spending by level: Secondary	41.6%
	Share of education spending by level: Tertiary	24.1%

Data are for the most recent years available in 2000-2005, World Bank

GINI Coefficient (from 2007 World Development Indicators; data for 2000):							39.8
Knowledge Economy Index (KEI), 2007:							
Rank	compared to '95		KEI	EIR	IN	ED	ICT
71	**+5**	**Tunisia**	**4.52**	**4.73**	**4.58**	**3.94**	**4.82**
15	**-1**	**Germany**	**8.54**	**8.38**	**8.93**	**8.08**	**8.79**
-	**-**	**World**	**5.93**	**5.11**	**8.00**	**4.21**	**6.38**
-	**-**	**Middle East & North Africa**	**5.30**	**4.33**	**7.27**	**3.78**	**5.82**

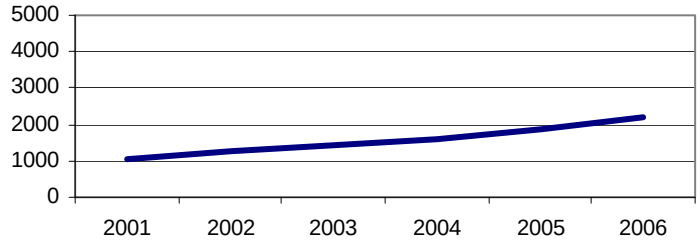
- The GDP per capita was less than half the world's average of 7,415 US$ in 2006.
- Just below 50% growth rate between 2000 and 2006 suggests a healthy development towards economic progress.
- With a 2,970 US$ GNI per capita (and a 2,870 US$ GDP per capita), Tunisia falls into the World Bank's Lower Middle Income Category.
- Tunisia offers a remarkable example of public education allocation policy. In terms of spending as percentages of GDP and government spending, it ranks among the highest countries analysed in this section (7.3% and 20.8%, respectively). In addition, Tunisia's share of education spending on secondary levels is also among the highest, and for tertiary, quite strong. Despite a lower GDP per capita than half of the other countries, it maintains a comparatively high position for both secondary and tertiary education spending per capita. It is likely that the government and Tunisian society prioritises and values education.
- The GINI coefficient shows uneven wealth distribution, the closest to inequality than the other North African countries (where data was available) and to Western European countries.
- Tunisia places just below the halfway point on the KEI scale, in the lower rung of countries ranked. With a score of 71, Tunisia nonetheless has increased by 5 places since 1995.
- Compared to other North African and Middle Eastern countries, Tunisia placed below most of the indicators, except for slightly better results in ED and in EIR.

Relevance:

- Tunisia's low GDP and mediocre KEI may be the largest stumbling blocks when trying to recruit students. However, the GINI coefficient which exhibits an uneven wealth distribution suggests that targeting upper class Tunisians may be more lucrative. The strong growth rate and assumed value place on education also suggests that further investment may make more opportunities available.

Data related to Germany

Tunisia: Development of *Bildungsausländer*



Tunisian Students	
2006	2,200
2005	1,845
2004	1,601
2003	1,430
2002	1,241
2001	1,063

- A steady increase in student numbers is represented in the graph above, showing a doubling of Tunisian students coming to Germany since 2001.
- According to UNESCO, just below 14,000 Tunisian students studied abroad in 2004, making Germany the No.2 destination country, followed by France with about 9,750 of those students. Canada, the United States, and Switzerland followed, all with less than 1,000 students.*
- For 2004, UNESCO also cites Tunisia as sending 5.3% of its students abroad, the second largest portion compared to other North African countries – Morocco: 15%; Algeria: 3.4%; Egypt: 0.3%.

Relevance:

- The combination of growing interest in Germany and the strong percentage of students that Tunisia sends abroad make this country an interesting source of recruitment.
- The geographic proximity to Germany can also be a point of attraction for those students hesitating between the United States and Canada or Europe. For those students seeking an experience abroad to improve their English language skills (i.e., not heading to France due to linguistic ties), German universities with English programmes can capitalize on this interest.

*Source: UNESCO Global Digest, 2006

Enrolment Requirements

Direct enrolment is possible:

- The *Baccalaureat de l'Enseignement Secondaire* provides access to all German HEIs for subjects related to the concentration chosen in secondary school.

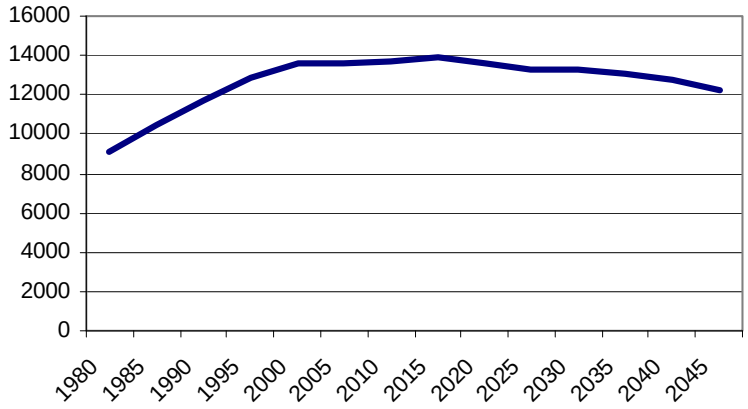
Country Characteristics

- The francophone tie directs student interest in study abroad mainly to French-speaking countries.

3.2.2.15 Turkey

Population

Turkey: Age Group Development 15-24



Year	in 1,000	(%)
1980	9,117	19.6
1985	10,450	20.0
1990	11,672	20.4
1995	12,907	20.6
2000	13,610	20.0
2005	13,604	18.6
2010	13,651	17.6
2015	13,930	17.0
2020	13,570	15.8
2025	13,280	14.8
2030	13,303	14.4
2035	13,089	13.8
2040	12,738	13.2
2045	12,285	12.5
2050	11,960	12.1

- With regard to its demography, Turkey offers relatively stable future prospects, which is remarkable when comparing it to other countries, e.g. Russia, where the relevant age group numbers are considerably decreasing.
- Particularly in the years that are interesting in relation to Germany's own population change (2015-2050), Turkey will prove to be a demographically strong resource country.

Education

Turkey: Participation Rate

	Upper secondary gross graduation ratio	Gross entry ratio to tertiary higher education
2003	37%	22%
2004	51%	25%

- Turkey's secondary gross graduation ratio compared fairly well in 2004 to the international average (55%). The improvement between 2003 and 2004 is particularly notable. However, there remains room for growth with the tertiary higher education entry ratio, with Turkey lying more than 20 percentage points below the global average.
- 800,000 high school graduates are trying to enter university but only 25% are able to do so due to a deficit of study places.*
- Between 2003 and 2007, the number of state universities has been increased from 53 to 85, but is still rather low.*

- Only 1% of the overall Gross National Product is spent on higher education.*

* DUZ 2008

Tuition Fees

Every year tuition fees are set according to the study subject and study duration at public HEIs. In the academic year 2003 to 2004, 375 million Turkish Lira (ca. 216€) were charged per year for medicine, the most expensive programme. Tuition fees for the least expensive programme at a distance learning institute accounted for 45 million Turkish Lira (ca. 26€). Foreign students pay the triple amount in tuition fees. Private universities charge between 2,920€ and 12,410€, depending on the university and the programme.*

*The last figures were calculated based on Oanda's historical exchange rate converter based on the average for 2007 (1 US$ = .73€). The original US$ amounts were 4,000 and 17,000.

Turkey: Economic Data

GDP / Capita:	2000	2,957 US$
	2005	5,040 US$
	2006	5,403 US$
	83% (Growth Rate 2000-2006)	

Education Expenditure:	Public Education Spending: % of GDP	4%
	Public Education Spending: % of Government spending	20.8%
	Share of education spending by level: Secondary	32.9%
	Share of education spending by level: Tertiary	27.9%

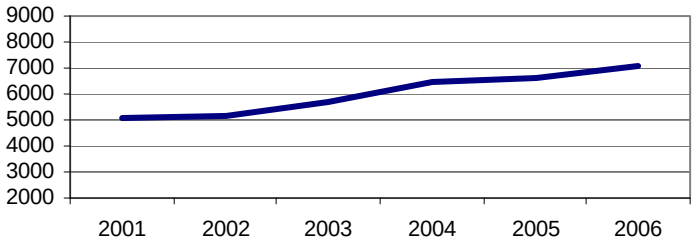
Data are for the most recent years available in 2000-2005, World Bank

GINI Coefficient (2007 World Development Indicators; data for 2003):						46.3	
Knowledge Economy Index (KEI), 2007:							
Rank	compared to '95		KEI	EIR	IN	ED	ICT
53	**+7**	**Turkey**	**5.56**	**6.37**	**5.71**	**4.40**	**5.77**
15	**-1**	**Germany**	**8.54**	**8.38**	**8.93**	**8.08**	**8.79**
-	**-**	**World**	**5.93**	**5.11**	**8.00**	**4.21**	**6.38**
-	**-**	**Europe & Central Asia**	**6.30**	**5.19**	**6.93**	**6.81**	**6.28**

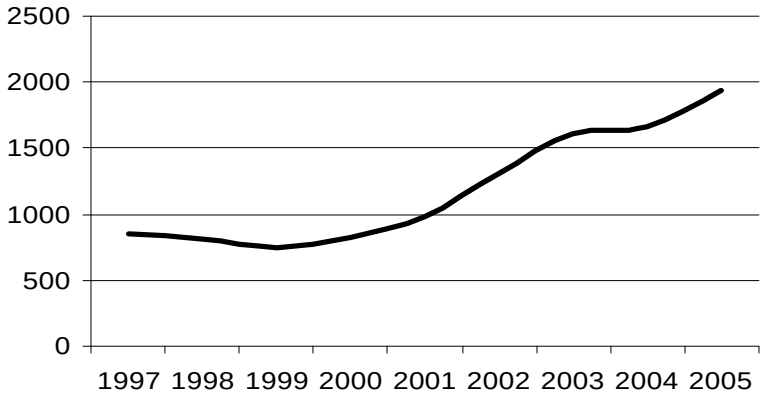
- Turkey has a very dynamic economic environment and its younger population, in particular, disposes of ever increasing amounts of money.
- At 27.9%, Turkey allocates the highest percentages (along with India) as a share of education spending (of the GDP) towards tertiary education (for the countries analysed for this section and where data were available).
- The relatively high GINI coefficient hints to the fact that there is still a large gap between richer families in the big cities in western Turkey versus eastern Turkey where poverty is still a greater issue. This difference points to varied recruiting strategies required for Turkey.
- The KEI shows that Turkey has a very friendly economic environment, but that in the field of education, it falls behind other countries with similar KEIs, such as Brazil or Argentina. Economic data suggest that there are financial sums available for educational investment and a high demand for well-qualified professionals, but that the educational system does not meet these criteria, leaving space and means for foreign education providers.

Data related to Germany

Turkey: Development of *Bildungsausländer*



Turkish Students	
2006	7,077
2005	6,587
2004	6,474
2003	5,728
2002	5,188
2001	5,104



First year student development	
1997	846
1998	809
1999	747
2000	825
2001	976
2002	1,310
2003	1,605
2004	1,666
2005	1,943

- Turkey has the 6th largest student population of all foreign student groups in Germany, close to Morocco, ranked 5th.
- Since 2001, the number of Turkish students in Germany has increased almost 40%.
- The number of new enrolments also shows a rather steep growth rate since 2001.
- According to the DAAD-Information Center (IC) in Istanbul, Germany is the top 3 destination

country, after the US and the UK when comparing the number of *Bildungsausländer* in the respective countries.

Enrolment Requirements

Direct enrolment is possible:

- Need to present the *Lise Diplomasi* after 12 years of secondary education together with a proof of success in the higher education entry examination → enrolment in the subject of the entry examination and related subjects to all German HEIs becomes possible if the entry examination has been passed with a score higher than 185,000.

Indirect access:

- *Lise Diplomasi* after 12 years+ successful entry examination (160,000 to 185,000 points) + 2 years of successful study → access to the core and related subjects to all German HEIs
- *Lise Diplomasi* after 12 years + entry examination (160,000 to 185,000) + 1 year of successful study + *Feststellungsprüfung / Studienkolleg* → access to the core and related subjects to all German HEIs
- *Lise Diplomasi* after 11 years + entry examination (score higher than 185,000) → *Feststellungsprüfung / Studienkolleg*
- *Lise Diplomasi* after 11 years + entry examination (score higher than 185,000) + 1 year of successful studies → direct access to the core and related subjects to all German HEIs
- *Lise Diplomasi* after 11 years + entry examination (160,000 to 180,000) + 2 years of successful studies → direct access to the core and related subjects to all German HEIs
- *Lise Diploma* after 11 or 12 years + entry examination (160,000 to 180,000) + *Önlisans Diplomasi* (= pre-bachelor studies) → direct access to the core subject area and related subjects

Country Characteristics

- Given the fact Turkey is joining the Bologna Process, this provides a good framework for European education providers to enter the market.
- The enormous demand for higher education can not be met by the existing universities.
- German universities have a very high reputation in Turkey.
- German is the second most common foreign language learned in Turkey.
- There are numerous German-language kindergartens and schools, including 26 *Gymnasien* (secondary schools). Starting programmes in German would allow interested parents to have their children entirely educated in German institutions.
- There is an East-West gap in higher education with most reputed universities in the West and a small number with little renown in the East. An interest to balance this out suggests that foreign education providers could engage in the eastern region.
- To obtain a study place, Turkish students have to take the national entrance examination (study abroad and at home). Only 1/3 are able to obtain a place. Of 1.5 million aiming for a place in a 4-year bachelor's programme, only 10% are assigned.

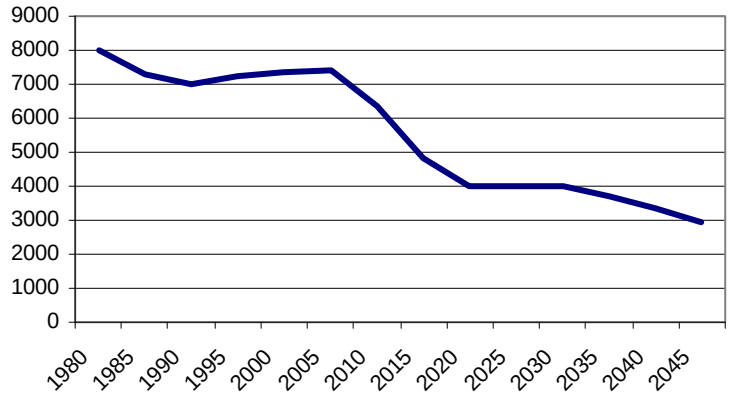
- There is not a sufficient amount of qualified academic staff. To counteract this fact, PhD candidates going abroad receive full funding from the government.
- The majority of Turkish students receive study loans from the *Higher Education Credit and Dormitories Institution* (Yurt-Kur). This could mean that German HE providers would have to invest less in scholarships to attract Turkish students.
- Private universities lawfully have to offer 10% of their students scholarships. Private universities are not allowed to work profit-oriented.
- The focus of public universities is clearly on teaching rather than research, thus mostly private universities do research, particularly in the field of applied sciences. Since the private universities are unaffordable for the majority of students, there is an option for German HE providers to market their strengths in basic research.
- An estimated 1% can afford private HE, equalling approximately 30,000 students.
- There is high demand for technical subjects, e.g. computer science and engineering. International relations and law are most popular in the social sciences.
- 60% of all Turkish students in the U.S. (the main destination country) are graduate students, demonstrating the importance of marketing for the post-graduate sector.
- For Germany, the number of first-degree seeking students is the highest in comparison to other destination countries.
- The joint degree programme model is increasingly gaining importance in Turkey. There are several running joint programmes, for example HU Berlin-METU Ankara (Social Sciences), U Oldenburg-Sakarya University (Economics) and U Hamburg-University Akdeniz Antalya (EU Studies).*
- Due to high inflation rates, it often seems more reasonable to parents to invest in the education of their children than to put money on the side.
- The most important local partner for foreign education providers is the HE council called YÖK, since the Ministry of Education does not have the executive powers in this respect. Cooperation with foreign education providers has to be approved by the YÖK and the Ministry of Foreign Affairs.

Sources: Internal report from the DAAD Information Centre (IC) Istanbul by Susanne Scheiter and DAAD market analysis
http://www.daad.de/imperia/md/content/hochschulen/studienangebotedeutscherhochschulenimausland/marktstudien/tuerkei_studie.pdf
* DAAD 2008

3.2.2.16 Ukraine

Population

Ukraine: Age Group Development 15-24



Year	in 1,000	(%)
1980	8,001	16.0
1985	7,307	14.4
1990	7,015	13.6
1995	7,218	14.1
2000	7,362	15.1
2005	7,395	15.8
2010	6,361	14.1
2015	4,843	11.2
2020	4,021	9.6
2025	3,995	10.0
2030	4,004	10.5
2035	3,734	10.3
2040	3,339	9.7
2045	2,968	9.1
2050	2,759	8.9

- Ukraine's 15 to 24 year-old population is rapidly decreasing, following the trend of other Eastern European countries.
- Starting soon after 2005, a sharp drop in population is estimated to continue through 2020 to level off for about a decade before continuing to decline.
- The percentage of 15 to 24 year-olds is also decreasing. In 2005, it was 2.1% below the world average and is estimated to be 4.7% lower than the world average by 2030.

Relevance:

- The population indicator presents perhaps the largest hindrance to student recruitment.

Education

Ukraine: Participation Rate

	Upper secondary gross graduation ratio	Gross entry ratio to tertiary higher education
2003	No data available	62%
2004	No data available	No data available

- An above average ratio in 2003 for entry into tertiary higher education indicates a strong interest in further learning opportunities.

Tuition Fees

International students must pay student fees, which vary depending on the course of study and location of study: 1,095€ and 7,300€ per year.* *The figures were calculated based on Oanda's historical exchange rate converter based on the average for 2007 (1 US$ = .73€). The original US$ amounts were 1,500 and 10,000.

Ukraine: Economic Data

GDP / Capita:	2000	636 US$
	2005	1,828 US$
	2006	2,277 US$
	258% (Growth Rate 2000-2006)	

Education Expenditure:	Public Education Spending: % of GDP	6.3%
	Public Education Spending: % of Government spending	19.3%
	Share of education spending by level: Secondary	32.6%
	Share of education spending by level: Tertiary	29.4%

Data are for the most recent years available in 2000-2005, World Bank

GINI Coefficient – (2007 World Development Indicators; data from 2003):	28.1

Knowledge Economy Index (KEI), 2007:

Rank	compared to '95		KEI	EIR	IN	ED	ICT
51	**+6**	**Ukraine**	**5.58**	**4.67**	**5.78**	**7.54**	**4.32**
15	**-1**	**Germany**	**8.54**	**8.38**	**8.93**	**8.08**	**8.79**
-	**-**	**World**	**5.93**	**5.11**	**8.00**	**4.21**	**6.38**
-	**-**	**Europe & Central Asia**	**6.30**	**5.19**	**6.93**	**6.81**	**6.28**

- Ukraine experienced an astounding 258% growth rate between 2000 and 2006 and transitioned from a Low Income country to a Lower Middle Income country.
- If the current growth rate is maintained, it can expect to transition a second time into the Upper Middle Income Category in 2008.
- Despite a high percentage of the GDP devoted to public education spending and a large percentage of that sum allocated towards tertiary education, spending per capita for this level falls about mid-range as compared to other countries analysed in this section.
- A rather low GINI coefficient indicates a wealth distribution closer to equality than inequality

and that is on par with Germany and Slovenia, both also in the 28 GINI coefficient range.

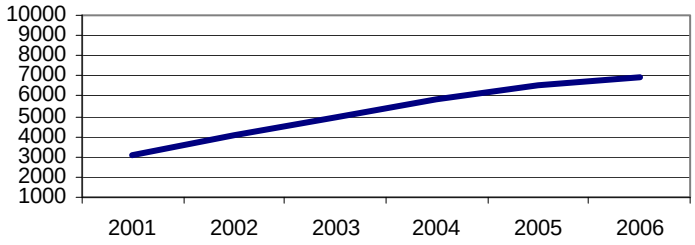
- KEI: Ukraine is listed as 51 out of 137 countries ranked. With the worldwide KEI ranging from 9.26 (Sweden) to 0.62 (Sierra Leone), Ukraine places in the top half with an index of 5.58.
- Slightly below the world average and even further below the European and Central Asian average, Ukraine is weakest in the Information and Communication Technology Index, but surpasses both averages with an impressive 7.54 in the Education Development Index.

Relevance:

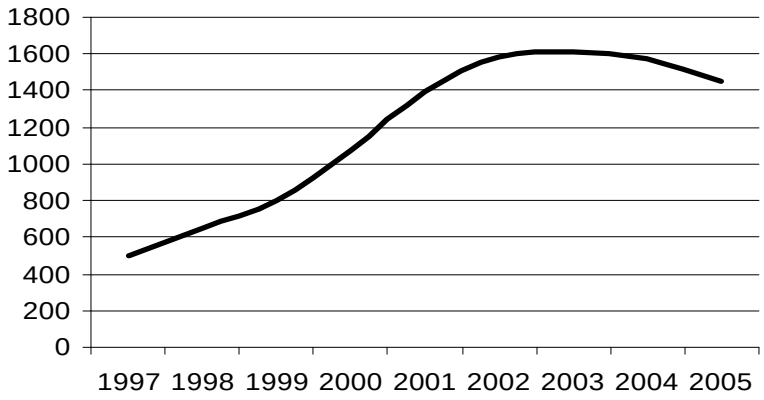
- Of note is the very impressive growth rate and quick transitions into ever higher income categories.
- Although the KEI indicators have room for improvement, the GINI coefficient attests to a society with a rather equal wealth distribution, as compared to other countries in the world.
- The GINI coefficient shows a wealth distribution that is closer to complete equality than inequality. This figure is among the lowest in the world (the lowest being Denmark with 24.7, followed by Japan with 24.9 and Sweden with 25).

Data related to Germany

Ukraine: Development of *Bildungsausländer*



Ukrainian Students	
2006	6,928
2005	6,532
2004	5,825
2003	4,975
2002	4,049
2001	3,067



First year student development	
1997	498
1998	654
1999	805
2000	1,077
2001	1,393
2002	1,583
2003	1,613
2004	1,573
2005	1,456

- A steady increase in Ukrainian students in Germany can be seen from 2001 through 2006. Student numbers more than doubled.
- However, the number of new enrolments peaked in 2003 and has shown a slight decrease ever since.
- According to UNESCO, Ukrainian students were the 8th most important group of foreign

students studying in Germany in 2004.
- Germany ranked as the No.1 destination country in the same year, ahead of Russia, the United States, Poland, and Hungary.*
- 1% of Ukrainian students study abroad.

Relevance:
- Germany as the top destination country should be noted, as well as the increasing interest to come to Germany to study.

*Source: UNESCO Global Education Digest, 2006.

Enrolment Requirements

No direct enrolment is possible
- Certificate for the complete secondary education level (*Attestat über die vollständige allgemeine mittlere Bildung*) with a gold or silver medal + *Feststellungsprüfung / Studienkolleg* → access to all core courses for all German HEIs
- When the certificate for the complete secondary education level (*Attestat über die vollständige allgemeine mittlere Bildung*), Diploma of a technical college (*einer Fachmittelschule*) or a secondary professional school (*mittlere berufstechnische Lehranstalt*) is provided:
- + 1 year of successful study in Ukraine + *Feststellungprüfung / Studienkolleg* for the core subject area → access to all German HEIs in the core subject area
- + 2 years of successful studies in Ukraine → access to all German HEIs in the core subject area and related subjects.

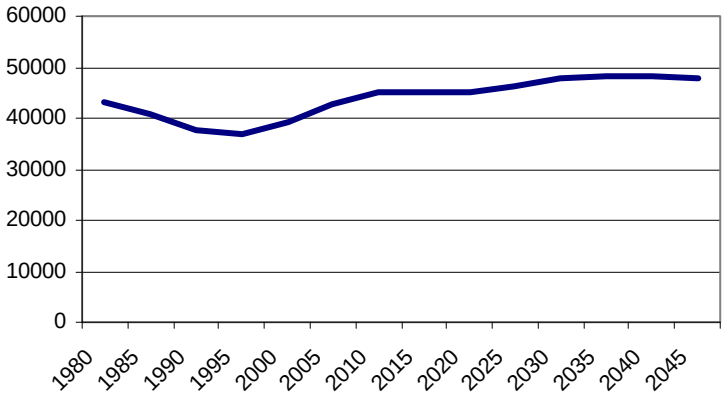
Country Characteristics

No DAAD information available.

3.2.2.17 United States of America

Population

United States of America: Age Group Development 15-24



Year	in 1,000	(%)
1980	42,979	18.6
1985	40,628	16.7
1990	37,455	14.6
1995	36,956	13.7
2000	39,234	13.8
2005	42,759	14.3
2010	45,137	14.3
2015	45,148	13.7
2020	45,021	13.1
2025	46,457	13.1
2030	47,835	13.1
2035	48,362	12.8
2040	48,096	12.5
2045	47,857	12.1
2050	48,260	12.0

- Currently the 3rd largest country population-wise (total population).
- Since the late 1990s and early 2000s, the United States' 15 to 24 year-old population has seen a slow but steady increase, continuing through today.
- The population of this age group is estimated to remain stable from 2010 through 2020, with slight increases per year through 2030.
- The population of 15 to 24 year-olds in the United States is expected to be the 3rd largest in this category in 2030, making it the only OECD country among the top 9 countries with the largest populations of this age group in the world.
- The 1.2% expected decrease in the percentage of American 15 to 24 year-olds from 2005 to 2030 is expected to be less than half of the world's average decrease of 2.7%.

Relevance:

- Given the large size of the target group in the United States and its stable population, it has the potential to be an important source country.

Education

United States of America: Participation Rate

	Upper secondary gross graduation ratio	Gross entry ratio to tertiary higher education
2003	72%	63%
2004	73%	no data available

- In 2003 and 2004, the United States was well above the world average for upper secondary graduation and entry to tertiary education ratios.
- An approximately 10% gap between graduation rates and tertiary entry rates could indicate a demand that exceeds places.

Tuition Fees

Tuition fees vary depending on study programme and length of programme, but range from 1460€ (community college) to over 24,090€ (4-year private college or university and/or graduate studies) per academic year. The average spectrum is, for example, between 8760€ and 11,680€.*

*Calculation based on 2000 US$; 33,000 US$; 12,000 US$; and 16,000 US$, converted into Euros using Oanda's historical currency exchange rate calculator for the 2007 year average (1 US$ = .73€).

United States of America: Economic Data

GDP / Capita:	2000	34,727 US$
	2005	41,835 US$
	2006	44,147 US$
	27% (Growth Rate 2000-2006)	

Education Expenditure* :	Expenditure on educational institutions as a percentage of GDP: Tertiary (2004)	2.9% (1% private sources 1.9% public sources)

*Data for the World Bank EdStats reports is not provided for high income countries. The above data derives from the OECD's 2007 report "Education at a Glance" (http://www.oecd.org/document/30/0,3343,en_2649_201185_39251550_1_1_1_1,00.html#toc)

GINI Coefficient – (2007 World Development Indicators; data from 2000):							40.8
Knowledge Economy Index (KEI), 2007:							
Rank	compared to '95		KEI	EIR	IN	ED	ICT
10	**-4**	**USA**	**8.80**	**8.45**	**9.44**	**8.35**	**8.95**
15	**-1**	**Germany**	**8.54**	**8.38**	**8.93**	**8.08**	**8.79**
-	**-**	**World**	**5.93**	**5.11**	**8.00**	**4.21**	**6.38**
-	**-**	**G7**	**8.74**	**8.62**	**9.15**	**8.46**	**8.73**

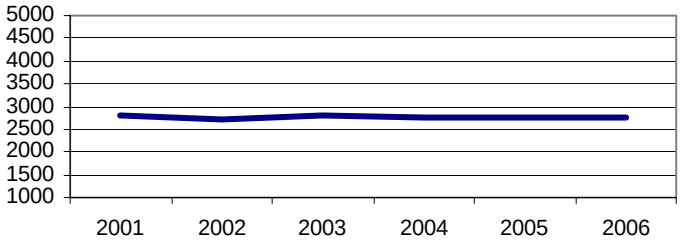
- Gross Domestic Product (GDP) per capita is very high, placing the United States in the World Bank's High Income Category. A below average 27% growth rate from 2000 to 2006 suggests that although there may be less room for opportunity than in many less developed countries, growth can still be seen.
- It is highly likely that German HEIs would need to find none to little sources of funding for most American students, given the high per capita and particularly due to the contrast between the high tuition fees in the U.S. versus the low fees in Germany.
- GINI coefficient shows an uneven wealth distribution, closer to 100 (absolute inequality) than similar economies of Europe, Australia, and Japan.
- KEI: The United States and Germany are relatively similar in their KEIs. The United States is listed as 10 out of 137 countries ranked. With the worldwide KEI ranging from 9.26 (Sweden) to 0.62 (Sierra Leone), the U.S. places in the top quartile with an index of 8.80, a few tenths of a point above Germany.
- Compared to other G7 countries, the Education and Economic Indexes are slightly below the average, whereas the Innovation and Information and Communication Technology Indexes are slightly above.

Relevance:

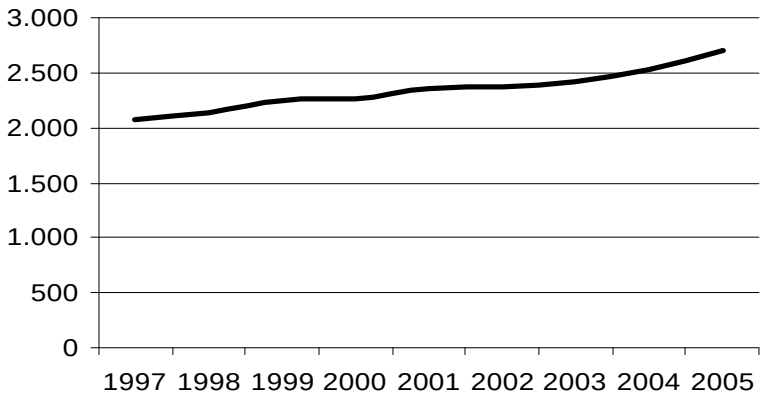
- In the case of the United States, with a high GDP per capita, there is not as much room for growth as in many transitional countries. There is also a well-established higher education structure, so offshore campuses and franchising are less likely than direct recruitment methods.
- A strong KEI makes this country interesting for recruitment to Germany, in that both knowledge economies share similar scores.

Data related to Germany

United States of America: Development of *Bildungsausländer*



US American Students	
2006	2,757
2005	2,765
2004	2,747
2003	2,796
2002	2,700
2001	2,784



First year student development	
1997	2,069
1998	2,134
1999	2,245
2000	2,268
2001	2,363
2002	2,366
2003	2,422
2004	2,532
2005	2,699

- A very low portion of US American students study abroad, only 0.2%, which is among the lowest worldwide.*
- 1.5% of all foreign students (by nationality) in Germany are American.
- The number of American students in Germany has remained very stable in the past 6 years, staying in the 2,700 range.
- The number of new enrolments has also remained stable with a slight positive development trend.
- Germany is the No.4 destination for American students (behind the UK, Canada and Australia, with France not far behind Germany to round out the top five).**
- Of note, Germany is the main non-MDEC (main destination English speaking country) for American students.**

Relevance:

- The data suggest that since there is a stable interest of American students to study in Germany, there may be potential for further growth in this domain.
- Due to the low percentage of US students studying abroad for a full degree, a campaign to convince students of the benefits of study abroad in Germany accompanying Germany-specific information could be more effective to attract students.

* Global Education Digest UNESCO 2006
** Outdated according to DAAD 2008 but kept because of consistency.

Enrolment Requirements

No direct enrolment is possible

- Only one upper secondary diploma can be obtained: High School Diploma.
- High School Diploma + cumulative grade point average (GPA) of 3.0 out of 4.0.
  → *Festellungsprüfung/Studienkolleg* (for all German HEIs).

Direct access for all subjects possible in the following conditions:

- High School Diploma + proof of 2 years successful university or college studies
- High School Diploma + an SAT (Scholastic Aptitude Test) score of 1300 out of 1600 in math and critical reading + cumulative GPA of 3.0
- High School Diploma + 1 150 SAT score + 1 year successful university or college studies
- High School Diploma + American College Test (ACT) composite score of 28 + cumulative GPA of 3.0
- High School Diploma + ACT composite score of 23 + 1 year of successful university or college studies
- High School Diploma + Associate's degree

- High School Diploma + 4 advanced placement tests (AP) of specific subjects (see Anabin database for more details) → direct access to the respective subject areas

Relevance:

- Recruitment of American students might be easier when focusing on graduate students.

Country Characteristics

- The efforts to fight against terrorism have indirectly led to a more open climate for the internationalisation of higher education in the United States. In order to cope with globalisation, both the need to receive foreign students and the interest in sending American students abroad has become increasingly mentioned.
- One of the main concerns among American citizens is the steadily rising costs of higher education: At public universities, tuition fees have increased 51% percent; at private universities there was an increase of 36%.
- Given these tremendous increases, the public is unsatisfied with the quality offered by higher education in the U.S. Only 31% of graduates are able to analyse a complex text and only 2/3 of students enrolled in 4-year bachelor's programmes obtain a diploma after six years.
- There are still many problems related to racial discrimination: 34% of the Caucasian student cohort (ranging from 25-29) obtains a bachelor's degree, whereas only 17% of the African-American cohort and 11% of the Hispanic cohort do so.
- The recent three core problems can best be described by the following key words: access to higher education, financing academic education and accountability of HE institutions.
- The number of Americans studying abroad has risen 7.7% in 2005 in comparison to the previous year. The increase of Americans studying in Germany was above average with 9.6%. However, half of American students abroad only spend a few weeks or months of summer in another country.
- The Senate drafted a bill in 2005 suggesting an increase in the number of American students

going abroad to one million within one decade.

- A success story from the German-American academic exchange is the programme RISE (Research Internships in Science and Engineering) which enables young Americans to conduct research together with German PhD candidates during the summer weeks in Germany. A total of 850 American students applied for 300 available positions.
- There is a high interest in joint study programmes in the sciences providing a 'transatlantic' diploma. In spring 2006, the HE programme developed by the EU and the USA started its call for proposals; various German universities were part of the allotted projects.
- 10 new summer study programmes in cooperation with U.S. partners have been announced by the DAAD. The aim is to help German HE institutions to establish themselves in the increasing market for specialized academic short-term programmes rather than leaving the field entirely to U.S. providers.

Sources: Annual DAAD report http://www.daad.de/berichte/NewYork.pdf and DAAD 2008

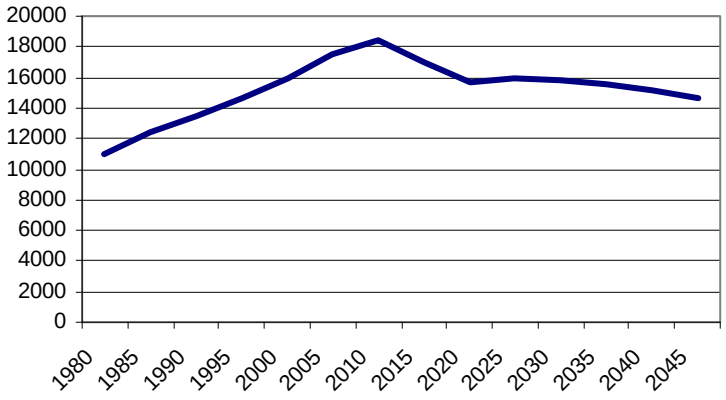
Relevance:

- Joint study programmes offer perhaps the best solution for German HEIs to gain a market share of U.S. students.
- The disappointment with the quality of higher education vis-à-vis the cost could help to convince some American families to consider programmes abroad.

3.2.2.18 Vietnam

Population

Vietnam: Age Group Development 15-24



Year	in 1,000	(%)
1980	10,947	20.7
1985	12,415	21.0
1990	13,491	20.4
1995	14,657	20.0
2000	15,932	20.1
2005	17,510	20.6
2010	18,422	20.3
2015	16,,940	17.6
2020	15,677	15.4
2025	15,888	14.9
2030	15,874	14.4
2035	15,604	13.7
2040	15,129	13.0
2045	14,607	12.3
2050	14,183	11.8

- A steady increase in the number of 15 to 24 year-olds is expected through 2010, followed by a short drop and levelling off in about 2020.
- Vietnam will place as the 14th most important country in terms of the number of 15 to 24 year-olds in 2030, ahead of Russia.
- The percentage of this age category as part of the entire Vietnamese population is currently higher than the world average by about 2.7%.
- Before 2020, this percentage is estimated to drop below the world's average.

Relevance:

- In terms of the population indicator, the recruitment of Vietnamese students is currently more interesting than after 2020, but Vietnam will still remain a viable consideration as a source country.

Education

Vietnam: Participation Rate

	Upper secondary gross graduation ratio	Gross entry ratio to tertiary education
2003	No data available	No data available
2004	No data available	No data available

Tuition Fees

No DAAD information available.

Vietnam: Economic Data

GDP / Capita:	2000	402 US$
	2005	637 US$
	2006	724 US$
	80% (Growth Rate 2000-2006)	

Education Expenditure:	No data available

GINI Coefficient – (2007):						34.4	
Knowledge Economy Index (KEI), 2007:							
Rank	compared to '95		KEI	EIR	IN	ED	ICT
97	**+12**	**Vietnam**	**3.10**	**2.29**	**2.79**	**3.98.**	**3.41**
15	**-1**	**Germany**	**8.54**	**8.38**	**8.93**	**8.08**	**8.79**
-	**-**	**World**	**5.93**	**5.11**	**8.00**	**4.21**	**6.38**
-	**-**	**East Asia & the Pacific**	**6.67**	**5.96**	**8.42**	**5.34**	**6.97**

- With a GDP of 724 US$, Vietnam places in the World Bank's Low Income Category, shared only with India and Nigeria among the countries analysed for this paper.
- However, maintaining the strong growth rate of 80%, nearly double the world's average, Vietnam will have transitioned into the Lower Middle Income Category by this year.
- Vietnam has a moderate GINI coefficient, comparable to some European countries such as

Spain, Greece and Poland.

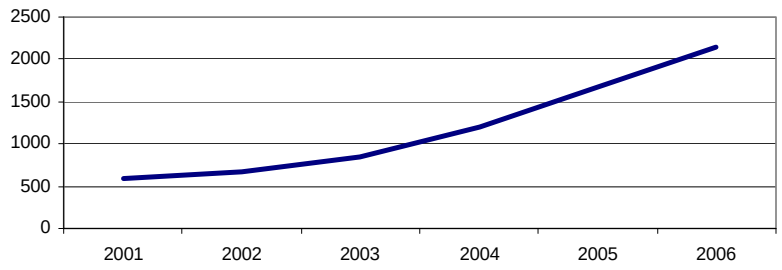
- KEI: A dramatic improvement since 1995, jumping 12 places to position 97.
- Despite this improvement, the overall KEI was 3.10 in 2007, well below the world average and less than half the average for East Asia and the Pacific. The largest gap is with the Innovation Index, showing a 5.63 difference.

Relevance:

- Of note is the strong growth rate and moderate GINI coefficient. However, attention should be paid to the low KEI indicators which could influence German HEI strategies.

Data related to Germany

Vietnam: Development of *Bildungsausländer*



Vietnamese Students	
2006	2,148
2005	1,668
2004	1,199
2003	850
2002	662
2001	582

- A rather sharp increase of Vietnamese students in Germany starting in 2003 can be seen in the graph above.
- There was a 270% increase in students coming to Germany from Vietnam between 2001 and 2006.
- According to UNESCO, Germany is the 4th most important destination country behind the United States, France, and Australia.*
- Of about 16,000 Vietnamese students studying abroad in 2004, all top five destination countries recruited each between about 1,000 and 3,000 students.*

Relevance:

- Although relatively small in sheer numbers, of note is the rapidly growing population of 15 to 24 year-olds as well as the reputation of Germany as a destination country for Vietnamese students.
- No single country recruits a significantly larger portion of Vietnamese students, suggesting that the market is rather flexible in garnering interest for Germany above the other main destination countries.

*Source: UNESCO's Global Education Digest, 2006

Enrolment Requirements

No direct enrolment is possible

- Need to present one of the following two secondary diplomas: the *Bang Tot Nghiep Pho Thong Trung Hoc* (e.g. *Giay Chung Nhan*) or the *Bang Trung Hoc Pho Thong* (e.g. *Giay Chung Nhan*) fulfilling the following conditions:
  - Successful entry examination + 0.5 years of successful studies in a four-year bachelor's programme → *Feststellungsprüfung* in the core subject.
  - Successful entry examination + 1.5 years of successful studies in a four-year bachelor's programme → direct access to all German HEIs for the core subject and related subjects.

Country Characteristics

- Vietnam follows China's economic growth pattern, having the second largest growth rate (8%) in Asia (followed by India and Laos).
- Neither the quality nor the quantity of education in Vietnam corresponds to the demands in this rapidly growing country.
- The 10-year plan for the National Education Development Strategy claimed to build up 100 new HEIs by 2010; however, the achievement of this goal is highly unrealistic despite the foundation of numerous new universities.
- In addition, quality issues have to be solved. There is a lack of well qualified academic teaching staff as well as a lack of curricula and didactic concepts. Only 13% of college and university teachers have obtained a PhD and 25% do not even have a bachelor's degree. Most have a master's degree.
- While access to HEIs is very restricted due to high requirements, once accepted, these students nearly always obtain their degree. However, this system of *Tough Entrance – Easy Exit* does not stir motivation on a high level.
- A new type of HEI is emerging which is half public and half private. Due to the weak reputation of these HEIs and their high tuition fees, there is a relatively low interest on the student demand side.
- Many newly founded universities face severe difficulties in recruiting academic staff. Vietnam has a high demand for academics which is not met within the Vietnamese population.
- Foreign Education Providers have to overcome many bureaucratic obstacles in the tertiary sector. Approval from the Ministry for Planning and Investment is required to open a private university, which has to have a minimum seed capital of 1 million US$ (or 730,000€ at the time of this report).
- At the time of this report, there is only one foreign private university: The Royal Melbourne Institute of Technology. The French Centre offers 2-year master's programmes in cooperation with the two national universities in Hanoi and Ho Chi Minh City for a 5,000 US$ (3560€) tuition fee. German HEIs also offer a number of joint master's programmes together with Vietnamese partner institutions.
- It is very attractive for Vietnamese HEIs to offer a joint study programme based on the German curriculum because it allows them to charge higher tuition fees.
- A double diploma, i.e. a degree signed by both the German and Vietnamese HEI, has only

been implemented in one master's programme. The Vietnamese show a strong interest in double diplomas. However, German HEIs have to look carefully at the contract because Vietnamese universities have been known to lower entry requirements and receive a greater amount of tuition fees.

- Another model for cooperating in the educational sector is to offer preparatory classes in Vietnam for students interested in studying in Germany. The universities of Hannover and Greifswald are already offering such courses in the fields of ecology and engineering.
- German HEIs have a high reputation in Vietnam. Although the interest in studying in Germany seems to be decreasing, the demand for English-language programmes offered by German providers together with Vietnamese HEIs is very high and also actively supported by the respective ministries in Vietnam.
- In 2006 an *Akademische Prüfstelle* / APS (academic test centre) was set up in Hanoi in cooperation with the DAAD. The APS checks if Vietnamese applicants fulfil the entry requirements for German tertiary education defined by the *Kultusministerkonferenz* / KMK (the Standing Conference of the Ministers of Education and Cultural Affairs of the German *Länder*). If a Vietnamese candidate obtains the certificate of the APS, he or she automatically receives admission to a German university as well as a visa. For the first year of the ASP, there were an estimated 600 applicants. Students receiving a scholarship from the DAAD, the Vietnamese government or other German institutions do not apply to the ASP.
- MoET (Ministry of Education and Training) provides scholarships for postgraduates and doctorate courses abroad.*

Source: Annual DAAD report - http://www.daad.de/berichte/Hanoi.pdf; and DAAD market analysis - http://www.daad.de/imperia/md/content/hochschulen/studienangebotedeutscherhochschulenimausland/marktstudien/vietnam_studie.pdf

* DAAD 2008

Relevance:

- The strong reputation of German HEIs and support from the government of German sponsored programmes (particularly in English) should be noted.
- Given the need for qualified academic staff, recruitment for PhD programmes could prove a worthwhile aim to pursue.
- Joint study programmes may also be an option due to the advantage this offers to Vietnamese HEIs to charge higher fees.
- The current system offered by the DAAD to facilitate entry into German HEIs is an added advantage to support recruitment from Vietnam.

4. Instruments for marketing higher education globally

In the following chapter, we will present different methods by which the international student market can be approached. Before doing so, however, it is necessary to say a few words about the implementation of such recruitment activities within the institution. It seems to be a foreseeable risk that HEIs will make two basic mistakes:

1. Waiting to consider a recruitment strategy when the student numbers have already started to decrease. Action is often spurred by the urgent feel of an existing or closely pending deficiency. If HEIs act in this manner, they will be underestimating the enormous time and effort necessary to invest in developing a coherent strategy, testing it and refining it. In addition, those who start after 2015 will enter a market which has been taken by others.
2. When the time has come for them to act, it is very likely that many will jump to ad hoc solutions, taking what is left over and using methods which are easiest to acquire. In many cases, the recruitment activities will stand alone without an overall internationalisation strategy in which to implement them. It is likely they will also tend to sidestep proper market research.

Both mistakes will be fatal. Even today, as we will see later, the market is already occupied to some extent and Germans are not the ones who rule the game. In education, as in any other niche, branding plays an enormous role. HEIs have to develop sufficient time frames to place themselves and their name and reputations in the relevant market. This can not be done over night. Therefore, planning has to start now.

However, planning without an overall strategy does not make sense. Recruitment just for its own sake will not produce any sustainable results if the HEI is looking for more than just filling study places. Recruitment could (and maybe should) be part of a more complex internationalisation process as described in another working paper from the CHE:

a. definition of the internationalisation targets
b. development of a coherent internationalisation strategy
c. market research
d. compilation of a catalogue of short, medium and long-term measures ensuring the implementation and realisation of the internationalisation strategy
e. development of a quality management system that:
   - effectively accompanies the implementation of the measures and adjusts the measures, if necessary.
   - documents and analyses its influence on the strategy targets. (Brandenburg et al. 2007).

The recruitment strategy would then be part of step ‘d’ in the process. An analysis of internationalisation strategies of German HEIs is under way while this paper is being written. The first pre-results indicate that only a small minority of German HEIs have implemented a full strategy. Some plan to implement a strategy, some have what might be called ‘organised chaos’ (i.e. individual instruments of internationalisation but no coherence), and most have no strategy whatsoever. It is, however, difficult to start a useful recruitment exercise if the framework conditions

in the medium and long term are not defined. In this case, there is still a large amount of pre-work to accomplish.

Some universities such as the IEP Paris (Institut d'études politiques / Sciences Po) or Coventry University have done an impressive job in developing coherent approaches, particularly concerning international student recruitment and strategy building. Based on experience from an EAIE workshop in Barcelona in March 2008, we recommend contacting Andy Nicol, Director of the International Office at Coventry University in England, for more information on a concrete example of a successful implementation strategy. His office managed a total strategy turn around within 18 months (http://www.coventry.ac.uk/cu/international).

We now turn to more specific concerns, such as what could be useful strategies to apply when intending to raise the numbers of the international student body. Various models exist ranging from traditional recruitment to the establishment of campuses abroad.

4.1 Offshore

Offshore activities can be defined as initiatives in which an HEI establishes a branch campus in another country (though under its own jurisdiction), or a joint offer together with a local university. In the first case, the campus abides by national laws and regulations that address questions of liability; in the latter case, local rules apply. It is basically the opposite model to a franchising project where only the product (a designed study course) moves from the franchising HEI to the receiving HEI.

Offshore activities are rather new initiatives for Germany, but not necessarily for all HEIs worldwide. Other countries have shown activity in the field for quite some time, notably Australia, the UK and the USA. It is enlightening how dominant, in particular, Australian universities are in this field. According to Harman, in 2006, Australia was in third standing for the number of commercially exported higher education services in the world, after the United States and the United Kingdom. Of particular interest, he notes:

> *In recent years, the balance between in-country enrollments and offshore enrollments of international students has changed, with a marked increase in the proportion of offshore. About two-thirds of international students study on university campuses within Australia, while the remainder are enrolled offshore with partner institutions, at institutions that offer Australian courses on a franchised basis, at overseas Australian university campuses, and as independent distance education students.*
>
> (Harman 2006)

Indeed, according to a statement obtained by *The Chronicle of Higher Education* from the deputy director of the *Observatory on Borderless Higher Education*, of the 39 Australian government-approved universities, all except for one have an overseas programme or branch campus (Bollag 2006). Australian universities claiming to run offshore programmes include: Victoria University, La Trobe University, Edith Cowan University, Curtlin University of Technology, James Cook University, University of Western Australia, Flinders University and many more. Perhaps the best known example is Monash University, having the largest enrolment numbers (17,077 as of 2004)

and a member of the Group of Eight, a club formed by the eight strongest research universities in Australia: University of Adelaide, Australian National University, University of Melbourne, Monash University, University of New South Wales, University of Queensland, University of Sydney, and University of Western Australia (Harman 2006; Group of Eight 2007). Monash established its first offshore campus in Malaysia in 1998. The initiative came from the Malaysian government and the university was under the financial auspices of the Sunway group (Sunway 2007). It is worthwhile to note that the first contact was made on February 23rd, 1998, and the first group of nearly 300 students started in July of the same year. In Germany, a typical decision-making progress for such an investment would require a substantially longer time[8]. Currently, this campus hosts 3,300 students and a new campus was opened in Malaysia in 2007. However, this was merely the beginning. In 2001, a new offshore campus was created in South Africa (Monash 2007). No figures are given on the website, but to the knowledge of the authors, this campus now hosts around 1,000 students.

UK universities are also very active. Currently, China hosts 77 UK HEIs with a total of 346 programmes. It is also estimated (as no official data seems to be available) that by 2007, about 40,000 Chinese students were enrolled in such programmes. However, this may also include franchising programmes as only students in UK programmes in China were counted (Doorbar/Bateman 2008). Singapore (148 programmes provided by UK institutions), Malaysia (30,000 students enrolled) and Hong Kong (43,000 students enrolled in 568 (!) programmes) are the leading markets for UK universities. Interestingly, India only shows a comparatively meagre number of 15,000 students in so-called transnational education programmes (TNE) (Doorbar/Bateman 2008).

American universities often head to Europe, such as Webster University, for example. Founded in 1915 in Missouri, Webster University went global with its 'Webster University Worldwide,' opening its Dutch campus in 1983. It is quite successful in that so far, 1,600 students have graduated from this campus. It does not only focus on undergraduate education, but also provides graduate programmes and in 2007, started a new global MBA programme. Webster is running campuses in Austria, China, Netherlands, Switzerland, Thailand and the UK, sometimes as individual entities, sometimes in cooperation with a local university (Webster 2007). However, American examples are not just limited to Europe. In fact, the interest in setting up shop outside of European borders is expanding. New York University, for example, is planning a campus in the United Arab Emirates, thanks in part to a 50 million US$ donation (Stanford 2008). *The Chronicle for Higher Education* states that in 2003, the State University of New York at Buffalo opened a branch campus in Singapore. At that time, 250 bachelor's and master's students were enrolled in business and communications programmes. In addition, the university has signed on with an Indian HEI in Bangalore to run master's programmes in information technology. Possible branches in the United Arab Emirates and China are also on the horizon (Bollag 2006).

There are also German examples of importance. Most of them have been created through the initiative of the German Academic Exchange Service (DAAD) in the programme 'Studienangebote deutscher Hochschulen im Ausland.' Two examples are highlighted here. The first, the University of Heidelberg, opened its Heidelberg Latin America Centre for postgraduate study and further

[8] Estimation is based on over a decade of experience in a university by one of the authors and also on extensive experiences drawn from consulting projects.

training in Santiago de Chile in 2002. At this centre, courses are offered either by the University of Heidelberg alone or in cooperation with the University of Chile and the Pontificia Catholic University of Chile (Heidelberg 2007). After the first master's programme was slow to attract students due to a missing market analysis (according to information by Dr. Eckel, the Executive Director, at the EAIE conference 2007), current programmes have indeed been very successful. Besides the LLM (*Master Legum*) programme, language courses and cultural courses are offered. It should be mentioned that Heidelberg chose the location carefully and the two dominant assets informing the decision of location likely included the enormous number of alumni originating from Latin America (combined with an excellent alumni database and a coherent alumni strategy), as well as the remarkable reputation which the University of Heidelberg carries in the region. However, this example shows that even a high level HEI such as Heidelberg (recently nominated as one of the Excellence Universities[9] in Germany) cannot expect to have an offshore investment flourish just based on its reputation. Market research and customer-designed offers together with a clear and indicator-based decision on the target country and region are relevant.

Another project is the German Jordanian University, based on a university of applied sciences model. Today enrolling about 900 students, it is envisioned to grow its student base to several thousand in the next years. Many of these students are spending one of their years in Germany and it is expected that many graduates will then come to Germany for a master's degree. The university will also offer a number of double degrees. The German University Cairo is perhaps the best known example. The campus of the RWTH Aachen in Oman is a newer development in which the RWTH Aachen is 100% responsible for quality assurance while investment is 100% Omani (DAAD 2008).[10] The following table presents programmes funded by the DAAD in 2007.

[9] The German Wissenschaftsrat ran an elaborate selection procedure to define a group of universities which, besides excelling in new research clusters and graduate schools, also stand out in terms of their future vision of research and of the promotion of young researchers in their institution. Selected HEIs included: TU München, LMU München, FU Berlin, U Konstanz, U Heidelberg, U Karlsruhe, U Göttingen, RWTH Aachen, U Freiburg (http://www.wissenschaftsrat.de/texte/exini_karte_2006_2007.pdf).

[10] For further information or contact partners you may contact Referat 223 at the DAAD, Mr. Werner or Mr. Thimme.

Programmes currently funded by the DAAD (2007)

Baltic States	FernUniversität in Hagen TU Riga, University of Tallinn, VMU Kaunas	German Study Centre for the Baltic States
Brasil	Technische Universität Braunschweig Pontificia Universidade Católica de Rio de Janeiro	Master course in sustainable settlement and infrastructural planning
Brasil	Universität Stuttgart Federal University of Paraná (UFPR)	German study course in technical environment protection in Brasil – EDUBRAS
Chile	Universität Heidelberg Universidad de Chile	Master of Law in International Law (LL.M.Int.)
Chile	Hochschule Offenburg UTFSM and Heidelberg Center in Santiago de Chile	Master-Programm "Energy Economics" MPEE
China	Universität der Künste Berlin China Academy of Arts	Master of Arts
China	Fachhochschule des Mittelstands (FHM) Bielefeld University of Suzhou B6	Sino-German Institute for Small and Medium-Sized Industry (DCMI)
China	Hochschule für Bankwirtschaft, Frankfurt/Main Shanghai University of Finance and Economics	MBA in Finance
China	Fachhochschule Furtwangen Northwest University Xi'an	Master of Business Administration
China	Hochschule für Angewandte Wissenschaften Hamburg University of Shanghai for Science and Technology	Centre for Technology and Economy
China	Fachhochschule Lübeck East China University of Science and Technology	Sino-German co-operative Study Model
China	Fachhochschule Osnabrück Shanghai Institute of Foreign Trade	International Event Management Shanghai (IEMS)
China	Universität Paderborn University of Science and Technology	Sino-German Faculty of Technology (CDTF)
Egypt	Universität Ulm / Universität Stuttgart	German University in Cairo
India	FH Ludwigshafen Indian Institute of Social Welfare & Business	Management Master of Business Administration 'International Management Consulting' (MBA-IMC®)
Iran	Fachhochschule Aachen, Abteilung Jülich Sharif University of Technology	German-Iranian Cooperation: Akquisition of German FH diplomas
Japan	Fachhochschule Trier, Institut für angewandtes Stoffstrommanagement Ritsumeikan Asia Pacific University, Beppu	Master in International Material Flow Management (IMAT)
Jordania	Hochschule Magdeburg-Stendal und Partner	Development of a German-Jordanian Higher Education Institution
Korea	Hochschule für Musik Franz Liszt Weimar Kangnam University, Yongin	German School of Music Weimar
Russia	Universität Bremen with the Association of Northern German Universities State University St. Petersburg	Applied Polar and Marine Sciences (POMOR)
Russia	Universität Hamburg State University for Economics and Finances, St.	Master of International Business Administration; MiBA
Russia	Technische Universität Ilmenau Institute of Energetics Moscow	German language-based Computer Sciences Education
Singapur	Technische Universität München National University of Singapore & Nanyang Technological	German Institute of Science and Technology (GIST)
South Africa	Ruhr-Universität Bochum University of the Western Cape, Bellville (Kapstadt)	Bochum Programme of Development Management
Syria	Otto-von-Guericke-Universität Magdeburg Wadi German Syrian University	Wadi German Syrian University
Thailand	RWTH Aachen King Mongkut's Institute of Technology North Bangkok	Sirindhorn International Thai-German Graduate School of Engineering (TGGS)
Vietnam	Technische Universität Dresden Technische Universität Hanoi	Vietnamese-German Institute for Education and Research (VDAFI)

Programmes formerly funded by the DAAD but still running (2007)

Indonesia and Malaysia	Universität Duisburg-Essen Universitas Indonesia, Jakarta and Universiti Kebangsaan Malaysia, Kuala Lumpur	Development of joint study programmes in the field of "computer engineering in Southeast Asia
Vietnam	Universität Greifswald Hanoi University of Science	Joint Educational Training Center "Hanoi–Greifswald"
South Africa	Fachhochschule Kiel University of Pretoria	Establishment of an Institute for Women and Gender studies
Kasakhstan, Ukraine and Russia	Fachhochschule Weihenstephan Kazakhian State Agricultural University Almaty, National Agricultural University of Ukraine/Kiew, National State Agricultural University Sumy, State Agricultural University	International Master course in Agricultural management (Business Administration in Agriculture; MBA)

Source: DAAD Offshore 2007

A further example is the European Overseas Campus (EOC) of the University of Flensburg, a small-sized HEI in the north of Germany with about 4,000 students. The EOC is located in Bali / Indonesia. It was founded in 2005. Tuition fees are in the range of 3,500€ per semester (DDP 2007). Two courses per semester are offered with dominance in the management sector. There was no information available concerning the number of students at the EOC. The centre emphasises that it has a strong interest in co-operating with other HEIs in the region or from Germany (EOC 2007).

Despite these relatively successful examples of offshore campuses, not all universities are joining the race to create a campus abroad, primarily due to the potentially high level of financial risk, management difficulties, and challenges in quality assurance (Harman 2006). Such an example can be found in Stanford University's recent declaration of not having an interest in creating a Stanford campus abroad, despite requests, specifically due to "costliness and obstacles to maintaining the quality of the Stanford experience abroad" (Stanford 2008). It is thus important for each individual HEIs to weigh the advantages and disadvantages, as well as consider their own aims and philosophies before embarking on such an endeavor. Other institutions are also reminded of the over 30 American colleges that opened branches in Japan during the 1980s, only to have most of the doors close shut nearly a decade later (Bollag 2006). Nowadays, a careful calculation of risk and resource management is crucial to any endeavor

Legal aspects as well as investment risks and the issue of quality assurance, particularly in the teaching segment, should be carefully addressed when entering the field of offshore activities. It is advisable to look at publications such as McBurnie or Blickem/Shackleford on quality assurance, Debowski on planning and management and Hicks/Jarrett on staff development issues in transnational teaching (McBurnie 2008, Blickem/Shackleford 2008, Debowski 2008, Hicks/Jarrett 2008).

The OECD recently published a report on cross-border tertiary education, a term does not exactly cover the same initiatives summarised under our offshore section, but is rather more extensive. Nonetheless, the information is very detailed and covers a broad spectrum of situations of a similar nature (OECD 2008).

4.2 Participation in Education Cities: Education City Qatar / Bahrain

The concept of an education city is a rather new model, first established in Qatar. In 1995, the Qatar Foundation for Education, Science and Community Development was founded. In 2001, they started the Academic Bridge Program, designed to prepare students from the region for their studies predominantly in the U.S. One year later, the education city concept took ground when the Medical College from Cornell University started its programmes. The project then took up speed and in 2003, Texas A&M and RAND Policy Institute began their own programmes, followed by the Carnegie Mellon University and in 2005, Georgetown University with its famous School of Foreign Policy programme (QATAR 2007). At the NAFSA conference in 2007, the project was also presented. It was reported that currently around 500 students are enrolled in various programmes. The concept is unique in both its setting and the quality of the invited HEIs. Other countries such as Malaysia are also known to try to recruit foreign university departments for joint HEIs, but usually in those cases, an investor's group is running the business and it has the character of an

offshore activity. The education city concept is different because, as is in this case, the state of Qatar is the initiator, whereas a state institution, the Qatar Foundation for Education, Science and Community Development, is supervising the project. In other words, the HEIs which are present are not independent from the state in which they are located, nor from its authorities. It is perhaps comparable to the concept of a mall where the shops are rented to companies under certain conditions and the right to be present is based on contracts that can be withdrawn if the performance is insufficient. However, this concept is also highly attractive for institutions involved as it provides high visibility, a good return-on-investment and a liaison with HEIs of the same quality. Another speciality of the education city is its life-long learning approach which also ensures long-term customer relations.

Bahrain is intending to follow the Qatar example. In 2010, an education city shall be opened in cooperation with a U.S. university (no details were provided at this point in time). The project includes laboratories, an international centre for research, and a specialist academy. The aims are high: Hassan Abdel Aal Moawad, a former president of Alexandria's Mubarak City for Scientific Research and Technology Applications in Egypt, stated: "This will promote technological and scientific development and establish Bahrain — the winner of the 2006 title 'Middle East City of the Future' — as the science and technology hub of the region" (Moawad 2007). In this case, it is worth noting that Bahrain also has a political agenda to pursue. It sees the project as a means to stop the considerable brain drain of Arab scientists to Europe and North America. A study from the Gulf Centre for Strategic Studies (GCSS) states that nearly half of a million highly qualified Arabs (450,000) are emigrating to Western countries. The study comes to the conclusion that only by heavily investing into higher education and research could the Arab countries counter the brain drain successfully. It recommends increasing investment by eleven times the current percentage, an understandable recommendation considering that around 0.2% of the overall GDP in the Arab region is spent on scientific research, which is about less than 10% of the investment in Japan, the U.S. or other OECD countries (GCSS 2004). The education cities are obviously a first step in this direction. Another aspect may be that both Qatar and Bahrain are not among the Gulf countries with the biggest oil and gas reserves. For example, Dubai, another emirate with very limited oil resources, has managed to change into a main hub for airlines and a major market place in the region, a position that Bahrain and Qatar would have difficulties challenging. This leaves education as a new market niche, particularly considering the high potential of female high school leavers in the region, including from Kuwait and Saudi Arabia. For cultural reasons, female students from these countries are normally not allowed to study in Europe or North America, though many of their parents are still eager to provide them with a first class education. Education cities might be a feasible and a less cost intensive way to achieve some of these goals. In addition, they provide excellent opportunities for German universities if these HEIs manage to get a footing in the region.

Dubai is not only relying on its usual business activities, fairs, and the airport. In 2003, it launched the Dubai Knowledge Village. The concept here is broader than the former examples, involving more than 350 partners. It has special regulations which benefit foreign investors, such as 100% foreign ownership (in other countries, it is not seldom that ownership either exclusively belongs to a native citizen, such as in Saudi Arabia, or that it is required to be a joint venture with a national HEI, such as in China), 100% freedom from taxes, 100% repatriation of assets and profits, and effortless visa issuance procedures. Among all different types of education providers, high level international universities from the UK, India, Russia, Australia, and others, are also involved (Dubai 2007).

4.3 Franchising academic degree programmes

The idea of academic programme franchising stems from the business world. Franchising is defined as a business model where the franchisor authorises a franchisee to produce and sell a product designed according to the blue prints and other regulations of the franchisor, who also always holds the copyright. In addition, the franchisor receives a percentage of the sales or other profits made from these products. Often the franchisor is in charge of the marketing and usually carries out on-the-spot inspections to guarantee quality. The right as a franchisee can be revoked if the inspections are unsatisfactory. Franchising has become very common in most business areas, particularly in the fast food and electronics sectors. Franchising dates back to the 19th century. The first and best known examples are Singer (sewing machines) and Coca Cola.

This general description also holds some truth for the franchising of degree programmes in the academic world, a rather new development. UK universities are particularly active in this field. Universities UK estimated in 1999 that by then, 140,000 students were enrolled in franchised UK courses worldwide, generating £250 million per year (approximately 350 million €) (Universities UK 1999). Current figures from the British Council estimate 200,000 students in franchised programmes abroad (British Council 2007). An example is the University of Sheffield. In 1993, it signed a cooperation agreement with the City College Thessaloniki in Greece in which it was agreed that the City College would run a number of academic programmes on behalf of the University of Sheffield. Currently, this cooperation stretches over four different departments (City College 2007). Data on students and financial flows were not available, as in general, the field of franchising degree programmes is characterised by a rather high level of camouflage. The programmes are usually not aggressively or even openly advertised or presented on the university homepage (but normally on those of the franchisee). It is indeed difficult to find any information on these programmes. De Montford University, for example, provides a very coherent handbook for programme developers in which franchised programmes are part of the overall scheme of programme types; however, on its own website, it is indeed very difficult to find more information on the franchised degree programmes (De Montford 2007). Franchising is a very lucrative business but also does not seem to carry the same reputation as other forms of education exporting (such as offshore campuses). However, according to Andy Nicol from Coventry University, franchising in the UK is showing a diminishing trend and the hopes for financial benefits have not come true for many HEIs (Nicol 2008).

4.4 Distance learning

Distance learning is not a very new concept but with the tremendously exploding opportunities on the web, the old-fashioned paper-based distance education is more and more substituted by web-based real time applications combined with often, but not always, high level academic programmes. The most famous example for distance learning is certainly the Open University London (OU) with more than 180,000 students, 30,000 of them in postgraduate programmes and 25,000 of them living outside the UK.[11] Their focus is clearly on employed individuals seeking additional education and qualifications (Open University 2007).

[11] An interesting side aspect is that while most universities are normally proud to show how their student bodies comprise only the top 10% of a cohort of school leavers, the OU proudly announces that one third of their students have entry qualifications considerably lower than usually demanded by UK universities. Education of the underprivileged seems to be a positive aspect in the UK, whereas it still seems to be of no or little real concern in Germany.

Another example is the University of Phoenix, a rather young HEI founded in 1976. According to its own information, it is now the largest private university in the U.S. with 200 campus sites in the country and online delivery to almost all countries worldwide. It offers a large range of programmes (more than 100), up to doctoral degrees (Phoenix 2007). It is also an example of how different instruments can be merged, given that the University of Phoenix operates its distance learning tools and is an active partner in the Dubai Knowledge Centre (Dubai 2007).

A less known example is the FH Lübeck which is offering courses in cooperation with a consortium of Central and Eastern European universities.

For approaching the new student markets, concepts like the OU or Phoenix will most likely be of considerable importance as they become accepted virtually everywhere with rather little investment and without the need to provide *in loco* quality assurance, such as site visits and curricula development with partner institutions. Given the growing development of online communities, it is easy to envision that in 20 years, a large percentage of students will prefer rather less expensive online education to expensive education abroad along with costly travel and change of home expenses. This is not to say that physical mobility does not carry many advantages and that offshore activities are not of tremendous value for branding and reputation building, but it should be accepted that online life and education is beginning to be a very relevant factor for many current and potential students, and will certainly be immensely important in the coming decades.

4.5 Second campus at home country with international profile

The Ritsumeikan University in Japan, a very well reputed university officially established in 1922 but dating back to the 19th century, developed the idea of a second university with a specific international scope instead of a branch campus abroad. Consequently, in cooperation with Oita Prefecture, Beppu City, and the Ritsumeikan Academy, Ritsumeikan University opened the Ritsumeikan Asia Pacific University (APU) in 2000 (Ritsumeikan 2007).[12] Currently, 2,300 international students from 78 countries work together with 3,000 Japanese students (APU1 2007). One of its specialisations is community outreach, with more than 1,000 APU students engaged in projects in the prefectures and more than 130 families as members in the home-stay programme for international students. This is therefore a very special concept: creating an international campus in the home country of the HEI itself, but with a profile designed for the needs of international students, while at the same time creating links with the local society, an issue often absent in HEIs where international student recruitment is merely based on financial interests. This is perhaps not a concept viable for mass application, but it offers some charm in certain settings and under certain conditions.

4.6 Direct Recruitment for study at the host country

Direct recruitment is multi-faceted, made of concrete strategies that vary amongst institutions but often include: direct market research, niche marketing, publicity programmes, media campaigns,

[12] Note: In contrast to the franchising of academic programmes, this concept seems to be considered very prestigious. For example, on the homepage of the Ritsumeikan University, you can find a link to the APU directly at the top of the page.

brand and reputation building, educational fairs, exhibitions, and road shows, education agents, and travel to countries.

Market research: This strategy is a key aspect to obtain specific knowledge about a university's standing and most promising target groups. This research often includes analyses of emerging market trends, analysis of competition from other countries, analyses of hindrances to student recruitment, cultural, social, and political patterns of a country, new market areas and student sourcing patterns (Gecenok & Trayte 2008). The data and advice compiled offer a more focused plan and help to avoid costly recruitment mistakes.

Niche marketing: Targeting specific groups of students can be an effective way to tap into a market that is not fully exploited. As part of an international recruitment strategy, a university may decide to focus on alternative pathway programmes, for example. As was recognized from the AUIDF benchmarking report (Mackintosh & Olsen 2005), 14.1% of international students were recruited through university pathway programmes, such as the TAFE Institute (Technical and Further Education), similar to a vocational school, community college, or polytechnic institute. As a training provider including language skill enhancement, these diploma-to-degree institutes provide alternative entry routes into higher education institutions in Australia (TAFE 2008). An example of interest in such a niche market can be found in the Charles Sturt University's Division of Marketing webpage which states an intention to capture a portion of the student market through university pathway programmes, ultimately super-ceding the focus on more traditional international student recruitment methods:

> *The University is moving away from extensive marketing missions and participation in (…) trade shows/education exhibitions and is focusing on utilising articulation pathways and identifying niche markets globally. This does not mean that in some markets these events are not fruitful for Australian universities; however, they are expensive and to be successful in recruiting at these events universities must invest heavily in building brand awareness in country leading up to the proposed marketing mission.*
>
> (Charles Sturt University 2008)

In this case, a focus on a specific kind of student versus a 'catch-all' method is considered to better meet the needs of the university's marketing campaign, at least in part due to financial considerations.

Publicity programmes / media campaigns / brand and reputation: An awareness of what is acceptable and works best for product packaging (i.e., the university degree) in different cultures is crucial when creating publicity programmes. Accurate translation of recruitment materials and a formatting style which appeals to a particular culture can help to transmit the desired message and prevent an embarrassing cultural faux-pas. Effective publicity and media campaigns also help contribute to the brand development and the reputation of an HEI, emphasizing the university's image as an attractive option.

One campaign that has drawn relative attention is an innovative U.S. marketing programme to target Chinese students through catchy television commercials and a 'one-stop-shopping web portal' (135,000 hits per month) offering general information and procedures to follow in Chinese

(www.liuxueusa.cn). Planned to be expanded to other countries, such as India, the website and commercials show American campuses and conversations with, in this case, Chinese foreign students.

International student fairs / exhibitions / road shows: Although this strategy for international recruitment can be costly, international student fairs are appealing for several reasons: they increase the visibility of an HEI, they provide an opportunity for university representatives to speak one-on-one with students, and they offer the university a chance to present an image of their institution in the manner they desire, also helping to build the brand. Depending on the level of recruitment of a university, a strategic decision must be made as to how often a university appears at these fairs. A university with a high level of reputation may choose to only attend key student fairs whereas it may be in the best interests of a lesser known institution to attend as many as feasible.

Education agents: These *in loco* service providers play an important role in international student recruitment. For example, the AUIDF Benchmarking report states that over 50% of international students were recruited through agents (Mackintosh & Olsen 2005). Third-party representatives specializing in student recruitment offer universities the advantages of having someone who is directly linked to the country and culture of the home student and of saving costs through travel expenses incurred by university officers travelling abroad. Education agents offer invaluable services that include, but are not limited to, the submission of university applications, advice on visas, recommendations for accommodation, and the best university choices for the student. Based on a survey of Australian international students, 88% admitted that having an agent was "extremely to quite useful" (JWT Education 2006).

Travel to country: From the AUIDF report combining data from 16 universities in 2004 for a sample of about 35,000 international students, 31.3% were recruited from the home-base of Australia and 68.7% recruited from overseas (Mackintosh & Olsen 2005). The importance of one-on-one contact with someone with the university (or with a representative as with an education agent), can not be underestimated. Making students feel like they are and will be treated with personalized attention secures the interest and trust of a student considering study abroad, as well as the trust of their parents or guardians. In addition, university delegations also play an important role in fostering connections with universities abroad, which can lead to exchange programme agreements and a stronger presence within a region. In "Cornell Courts a Subcontinent," this is presented, referring to Cornell's efforts to recruit Indian students, optimize ventures, and lay the groundwork for joint degree programmes or offshore campuses (Selingo 2007). This instrument is also very successfully engaged in Australia and the UK. *The International Focus* of January 18, 2008 informed that the number of international students in UK HEIs rose by 7% in 2007, with 240,000 international students enrolled in the academic year until 2007. This coincides with stagnation in national UK student numbers thus demonstrates how important direct recruitment is for the higher education sector in the UK. A total of 20% of all degrees awarded in 2007 went to non-UK students, altogether 125,000 graduates (bachelor's and master's degrees). However, one will need to see to what degree the new tax law might affect the UK market (non-domestic students are required to pay either taxes on their worldwide income or will face a 50,000€ fee) (International Focus 2008).

4.7 Vertical Recruitment / Cooperation

This is a very new approach, at least the authors do not know of any existing partnerships based on this idea. The concept is to establish a contract-based partnership with a college that awards a bachelor's degree only (3 or 4 years) in a target country, i.e. a country which profile fits the specific interests of a German HEI for recruitment. The main idea of the partnership is that a defined percentage of a cohort (e.g. the top 10%) finishing the college course of study in a certain subject area is granted direct access to the German HEI master's programme. Such a scheme requires some conditions.

One of the basic conditions *sine qua non* is that a bachelor's degree from this country can be recognised as 'more or less' comparable to a European bachelor's degree. The degree is not required to be 100% comparable as enrolment for master's programmes is much more to the individual decision of the enrolling HEI than first degree enrolments were formerly.

Secondly, the academic programmes of both partners have to be inspected and accepted by the other. Possibly, the curricula have to be developed together over time. The German HEI enrolling the graduates with a bachelor's degree from the partner institution has to ensure that the academic results of the college programme are sufficient to allow the students to pursue the master's degree programme directly. In addition, the 4-year college needs to have the impression that the programme to which they release their students is of high academic value.

Language is another important issue. Clearly, it is easier to start such a cooperation based on the English language, but there may be some special marketing value to also establish a programme where, for example, the college is based in a Spanish speaking country and the master's programme is in Spanish and German, focusing on Spanish-speaking labour markets (e.g. courses in environmental studies, oil industry engineering, or similar such region specific specialisations). Considering the tremendous importance of the Chinese economy, also Sino-German projects are to be relevant.

This is perhaps one of the most promising concepts for the future as it ensures an influx based on qualitative decisions. The 'influx' can be physical in terms of physically mobile students, but also virtual through distance learning or offers *in loco*. In the case of real mobility, the issue of travel grants and stipends for living expenses has to be solved. A solid budget based on general donations from a foundation or individual grants from donors should be established to ensure that only the qualitative aspects are relevant for the decision-making process.

5. Bringing together the interests, country specifications and strategies: Which way to go?

5.1 Method

We have seen that there are different needs, demands and interests on the side of German HEIs in line with a variety of resource country types. In addition, we see that there are various models available for targeting the prospective students. We have also realised that in many cases, German HEIs are either not present at all or do not use their options to the full potential. This chapter therefore aims at bringing together the different findings and will try to formulate some strategies and ideas, allowing the individual HEI to develop an idea regarding to where the road might lead. However, it should be mentioned that the recommendations are necessarily on a meta-level and that each individual case needs a custom-made strategy that takes into account the specifications and characteristics of the HEI in question, its surroundings, conditions, restrictions and stipulations.

In order to analyse the countries and the applicability of certain instruments and strategies, we created a matrix combining the different interests as described in chapter 2 along with the instruments laid out in chapter 4. We allocate to each instrument a certain capacity to support the respective interest using a rating system: (+) = most likely a positive effect; (Ø) = most likely neutral; (-) = counter-effect possible. This feature is not based on empirical data but rather the expertise and professional experience of the authors themselves.

Instruments	**Interests / Gains**					
	Quantitative		***Qualitative***			
	Return on invest-ment	Student Numbers	Student Performance	Diversity	Political Aspects	Repu-tation
Offshore campus	+	- [1]	Ø	Ø [2]	+	+
Education city	+	- [1]	Ø	Ø [2]	+	+
Franchising degrees	+	-	- [8]	Ø	Ø	-
Distance learning	Ø	Ø	Ø	Ø	+	+
Second campus at home	Ø [3]	+ [4]	+ [9]	+	+	+
Direct recruitment	Ø [6]	+	+	+	+	+
Vertical recruitment	Ø [3]	+	+	+	+	+

[1] Depending on whether the students abroad count in the overall student capacity of the HEI
[2] Only if combined with exchange projects with the home campus
[3] Depending on tuition fee level for non-national and non-EU students
[4] If these students count for the overall capacity
[5] If immersion with national and local students is ensured
[6] Depending on tuition fee level and type of direct recruitment strategy
[8] High risk of losing control over quality assurance
[9] If exchange with the original campus community is ensured

Offshore campus activities will usually be designed in a way that ensures they have a positive return on investment (ROI) rather than a negative one. On the other hand, they will not directly increase the number of students of the original HEI except if these students are counted within the overall student capacity. Offshore activities might even have a negative effect if students then

choose to stay at the offshore institution rather than travelling to the home country of the offshore education providing HEI. It most likely will not have an impact, neither on the student performance at home nor on the diversity element, at least if the students are not visiting the home campus through exchange programmes. However, offshore activities can be very effective in achieving political goals such as increasing participation rate or improving access equity by specially designed programmes and procedures. It is also likely that they support the reputation of the home HEI, given that the quality of the programmes is well-received.

Participation in **education cities** is likely to have the same effect as other offshore activities. In contrast, **franchising of academic degree programmes** shares the positive ROI effect while certainly not being helpful in the quantitative aspect of student numbers. It can also be assumed that franchising degrees will carry a rather high risk of losing control over the quality assurance of academic programmes, possibly hampering the reputation of the HEI. In terms of political factors, franchising seems to be rather neutral as it usually focuses on well-off clients and therefore, the social elite in a country. Thus, it is likely that it will not directly influence issues such as access equity.

Distance learning may be considered to have no susceptible effect on ROI, student numbers, student performance or diversity as it will normally not comprise aspects of integration with local on-campus students at the providing HEI. However, it can support political interests such as increasing knowledge in other societies and supporting the reputation of the providing HEI. If the system is designed following the example of the Open University in London, even financial benefits are possible.

A **second campus at home** can have a positive financial effect but only if the tuition fees for non-domestic students (and in our case non-EU students) are substantially higher than the tuition fees for normal students. This is because a second campus means a substantial amount of additional financial investment. Given that students enrolled at this campus also count for the overall student body of the HEI, this concept can have a positive effect on the student number problem. It can also support the idea of enhanced student performance if a continuous exchange with the home campus is guaranteed. In addition, the diversity aspect is directly tackled. Even political aspects for certain countries can be addressed, such as the improvement of knowledge, since the project would not focus on permanent brain drain, but rather brain circulation. The reputation of the home HEI will usually benefit substantially from such an activity. The advantages are numerous, but once again, it should be highlighted that a second campus at home typically requires a large and long-term financial backing.

Direct recruitment, however, still looks like the tool of the day. Considering its immense variety of applicable sub-instruments, it is difficult to imagine one interest or gain which it may not serve. The most obvious is the ROI as this heavily depends on the relation between the sub-instrument applied and the revenues from this activity. It seems that not always all sub-instruments are carefully monitored and audited so that ‘fashions of the day,’ such as recruitment through education agents, might be a lot less beneficial in financial terms than direct recruitment trips (or vice versa, if e.g. these trips are poorly organised and prepared). Usually, one can expect that direct recruitment has very positive effects for the student performance issue, diversity, political interests and also the reputation of the HEI, as every single successful graduate from abroad can be turned into a highly efficient ambassador of the institution.

Vertical Recruitment is in its assumable effects comparable to direct recruitment in general. It may even be an easier tactic, as does not directly target the recruitment of students in competition with HEIs of the region, but rather builds on cooperation with HEIs or schools in the country. This cooperative approach might make it even easier to achieve political goals, for example.

All of these aforementioned activities come at a price which has to be set in relation to the power of achievement each instrument carries. The price attached is a purely financial consideration of the investment necessary to carry out certain instruments. Using a rating method to describe the level of investment necessary (€€€ = high investment, €€ = medium level investment, € = low investment) both in terms of staff time and financial resources, the following table emerges:

Instruments	**Investment costs**	
	Financial	***Staff time***
Offshore campus	€€€	€€€
Education city	€€€	€€€
Franchising degrees	€	€€
Distance learning	€€	€€
Second campus at home	€€€	€€€
Direct recruitment[1]	€ - €€€	€ - €€€
Vertical recruitment	€€	€€

[1] A wide range possible depending on the sub-instrument used and the intensity of the activities

Every HEI will have to correlate the two dimensions of each instrument (interest and investment) and decide which is most applicable and justifiable according to their set of needs and interests.

Secondly, related to price and investment, the question of quality monitoring emerges. Although there is no worldwide agreement upon a single definition of quality, for the purposes of this section, we define quality according to the Dakar Framework for Action's agenda as setting the foundation for "desirable characteristics of learners (healthy, motivated students), processes (competent teachers using active pedagogies), content (relevant curricula) and systems (good governance and equitable resource allocation)" (p.29, UNESCO 2005). Each instrument detailed above also carries with it a certain degree of ability to monitor quality. Naturally, this also depends on how this instrument is used and the level of effectiveness with which it is utilised; nonetheless, it can be suggested that direct or vertical recruitment strategies may allow for greater control of quality (at least in regards to students) than franchising degrees, for example. *If* quality inputs and/or outputs are priorities of an HEI, attention must be paid to the instrument that would best serve these purposes.

Moreover, we now would like to apply this matrix directly and take a look at five of the countries analysed which might qualify as prime target countries for future recruitment and immersion strategies. We place emphasis on the question of which of the instruments and strategies might correspond and which might not, depending on the respective country's strengths and challenges. In some cases, the quantitative data based on the indicators described in chapter 3 will not carry enough explanatory power and thus, the additional country specific qualitative information such as country characteristics has to be taken into account. The countries we will consider are chosen in order to represent the different types outlined in the third chapter as well as certain regions of the world. Considering the differences between Type B institutions, they are more strongly

represented. Type D and below are not considered for a case study as they are of lesser relevance or explanatory power. The countries chosen include: Brazil (Latin America, top10 population-wise - Type B), China (no.1 in most criteria - Type A), Poland (traditional resource country - Type C), Turkey (against the trend with traditionally more *Bildungsinländer* than *Bildungsausländer* - Type B), and the United States (the world's most potent science economy, traditionally the *recruiter* rather than a resource country - Type B).

However, the case studies more than anything will also show the need for very individualised approaches and are far from being recipes for approaching a country. They are meant more to highlight some issues and questions. One of the most crucial issues is for each HEI interested particularly in entering a foreign country (be it with an offshore activity or other more direct recruitment measures) to carefully check the legal framework conditions which could not be analysed in this paper. Thus, the authors strongly recommend relying on the extensive expertise of the DAAD and its branch offices as partners for any start-up venture.

5.2 Case 1: Brazil

The population development of Brazil supports all student recruitment instruments due to 1) the large age group and 2) the education indicators, indicating the existence of a market due to high secondary graduates and a low percentage of the possible market entering into tertiary higher education levels. A rough analysis estimates 30% remaining (based on participation rate), suggesting a considerable market even though many secondary education graduates choose vocational training over higher education in order to ensure early labour market entry (DAAD 2008). The combination of a low GDP, a high GINI coefficient, and a low KEI suggests that Brazil does not invest enough yet, but shows a high growth rate. The unequal wealth spread (GINI) which, combined with relatively low GDP per capita, means less opportunities for academically strong, but not necessarily wealthy students. This no doubt partly accounts for the transition rate figures. In Brazil, you will thus have to attract and address different student types. In general, the Brazilian data regarding Germany suggests that Germany is in the moment very attractive for Brazilian students; however, there remains an enrolment obstacle because of the current enrolment criteria as well as financial stipulations.

Offshore

The offshore approach may not work predominantly because of the assumed ‘saturation’ level as stated in the DAAD annual report. However, just because study places are not taken does not mean there is not a need for certain education. Even if the overall saturation is achieved, this does not necessarily pertain to all subject areas. However, a subject based analysis is beyond the scope of this paper. There could be opportunities available if a highly individualized approach for certain institutions were executed in order to determine the exact situation.

An additional hindrance for offshore activities might be that a direct enrolment option is required, not yet in existence according to the regulations mentioned. Otherwise, the students would not be students of the original home university as they would not fulfil the basic requirements formally.

A feasible strategy might be to address bright but not well-off students, as all data available (transition rate, economic factors) indicate that there should be a substantial target group, though it would be strongly preferred to have more dependable data. This could be tackled with an offshore initiative, but perhaps not with a focus on financial benefits, particularly as many federal universities have more than 50% students from public secondary schools and considering that many bright students with low socio-economic statuses are addressed by grant schemes such as ProUni (DAAD 2008). Thus, tuition fees under the typical private HEI threshold might be applicable for those students not covered by special funding programmes but who have some financial backup from home. An alternative would be to focus on increases in student numbers if these students counted as part of the overall student capacity (as normal students within the home university). This more or less eliminates return on investment and still requires some negotiation with the enrolment requirements issue. However, any such approach will call for some sort of strategy to determine student performance. Diversity is obviously an important issue which could be an argument for addressing this clientele, as could be political aspects (such as broader education or development policies) which could facilitate raising funds to cover tuition fees. For this target group of less well-off students, the GDP, GINI and KEI are the main points that favour interests such as student numbers, student performance, diversity, and political factors over return on investment and reputation.

One major aspect is the accreditation issue. According to the DAAD, universities and study courses have to be accredited by the Ministry of Education in the case of undergraduate programmes and the CAPEs in the case of postgraduate programmes. In the past, both agencies seem to have been rather reluctant to accredit offshore activities; however, there are hints that this policy seems to be opening up towards more of these kinds of opportunities (DAAD 2008). In conclusion, offshore activities can be applied if the legal conditions are taken care of and tuition fees are low, providing additional funding, assuming that the strategic focus is on student numbers. This means these students would need to count for the overall capacity, or that the reason behind the endeavour stems from predominantly political aspects. An excellent overview of the legal aspects and conditions is provided by Futao Huang (Huang 2008).

One issue to take into consideration is the analysis of the DAAD, which states that private universities in Brazil do not flourish and seem to have quality problems. Thus, the foundation of a private HEI might be a less advisable step than a co-operation with one of the public institutions. Here also the saturation issue applies, since the DAAD states that more study places are not needed. However, the DAAD also argues that although there is a surplus on the offer side, there is still quite some demand for high quality courses. Nonetheless, this is addressed by the Brazilian government through a new programme called REUNI that intends to double the number of study places at federal universities (DAAD 2008). In any case, the importance of discussing with experts and partner universities *in loco* to determine which subjects and curriculum to promote should not be underestimated. Also, more risk is inherently involved when one considers establishing a private HEI because you would enter into competition with the public HEIs holding a traditionally higher esteem in the public's eye.

Offshore activities directed at the well-off students might be difficult, as those might be saturated in the country. However, a joint venture might develop a different product and might therefore be interesting because it is *different.* It might be advisable to offer a package: e.g. a dual-language programme with two years of study in Brazil, followed by acceptance to a Germany institution for the following two years, thus circumventing the enrolment requirements issue. Internships in Germany could also be applied. The tuition fee issue does not apply to this group.

Overall, offshore activities do not seem to be impossible, but they are neither the easiest nor the most advisable approach on a broad scale if not implemented as a joint venture with a Brazilian HEI.

Education cities: Usually these are based on a state initiative, so an HEI could step in to focus on its preferred subject area. In the case of Brazil, the saturation level indicates a low probability of any such state initiative. So it does not seem relevant for neither the less well-off students (because, if at all, these education cities tend to charge considerable tuition) nor the well-off. Still, if there is an activity from the government's side, it might be worth scrutiny.

Franchising: Brazilian HE has a good reputation nationally and thus there seems to be no obvious need for franchising (different from countries with a low reputation of the national HE). For the HEI, franchising is primarily focused on creating revenues and it therefore does not seem viable in the Brazilian setting, at least not on a large scale. The only exception could be for very specific niche programmes provided by high-profile HEIs. Well-off students are also not likely to be successfully

targeted for the known reasons, except possibly for specific subjects with high repute, such as German engineering programmes.

The primary obstacle is the remnants of a negative experience that Brazil endured concerning franchising. According to the DAAD, offers by Spanish universities about a decade ago did not go well and were finally abolished (DAAD 2008). This created a very suspicious and negative climate for franchising activities and thus, it does not seem very advisable to pursue this opportunity.

Distance Learning: This could be a viable option if in partnership with a local university. The characteristic of being online resolves the travel problems and indirectly address the financial problems of potential students, as the transportation infrastructure is not optimal combined with huge distances. Since education would come to them, distance learning could be a good alternative. However, since German HEIs know neither the needs nor special markets niches, cooperation with local universities is advisable, particularly when considering Brazil's extremely economically, socially and educationally diverse regions. A lower level of tuition fees would be possible in this respect, and still be profitable, so even the revenue aspect can be addressed. Well-off students have options to study in Brazil as well as abroad, and as it might be more interesting to have the cultural experience abroad, this clientele is not likely to be addressed through distance learning. According to the DAAD, Brazilian HEIs are considerably more advanced than the German competitors so it is rather doubtful that it will be easy to get a foothold in this market niche (DAAD 2008).

2nd campus at home – This instrument does not seem viable for either the well-off or the less well-off target groups. It needs substantial extra investment and students have to travel and pay many more fees. It can only be a side aspect to try to recruit some Brazilian students for diversity purposes if such a campus is already in existence (as in the case of Ritsumeikan University).

Direct recruitment – This instrument will need to primarily address the current general feeling of saturation. If students are not aware they need higher education or that there is no need to go abroad, road shows (such as those organised expertly by GATE Germany) are an excellent tool to advertise directly, as is participation in student fairs. For all group events, GATE Germany seems to be the number one partner to consider**,** particularly for smaller and medium-sized HEIs with rather restricted budgets. But it could also be a logistics partner for large HEIs, e.g. if they form special groups (the 'excellence universities' (based on the initiative for excellence), or the group of technical universities (TU9). A different approach, and the typical U.S. method, would be to travel as an individual HEI to the country with an expert team. This can only be recommended if the HEI knows exactly where to go, knows why it is necessary, and has experience in the country. Considering the overall conditions, it might be advisable, particularly when addressing the bright but possibly less well-off students, to actively and aggressively advertise options for stipends and funding (from companies or foundations in certain subjects). An example would be to set a target to recruit students specifically for engineering and solicit companies that have a genuine interest in such a target group, e.g. because of large investments in production in Brazil. Well-off students are much more likely to go abroad (for the international experience, or as an add-on to a CV, for example), but will look for the right offers. It can also be expected that parents will demonstrate more interest in the quality of support as they will usually be the ones to pay the bills. Thus, it will be pivotal to explain clearly how the HEI caters to the students. It might also be an option to partner with education agents, but this needs a national expert as an advisor in order to find the

right partners. Quality is the predominant criteria when approaching this target group (plus the fun factor), referring to the setting as much as the education itself.

Vertical recruitment – This could be a useful instrument to target bright but poor students. The difficulty might be with the enrolment requirements, so in this case, recruitment from a partner institution granting a bachelor's degree or master's degree seems more promising for two reasons: Firstly, the HEI circumvents the enrolment issue and secondly, additional funding – a prerequisite for this target group – is much easier to obtain (e.g. ERASMUS MUNDUS, or companies and foundations), as the quality of the students is a given and the applicability is much more lucent. Well-off students could be recruited, e.g., directly from German schools where strong higher level secondary education is provided and the clientele is usually from the upper end of the social system. HEIs which are providing degrees only or predominantly below the master's level are also likely to be interested in considering a partnership with an international partner in order to increase their reputation without extra investment. Public HEIs who would like to have an extra spice of option might also be a good partner even if they provide all degree levels.

5.3 Case 2: China

China has been linked to Germany on the educational level for 30 years through the Sino-German agreement on cooperation in science and technology. This link is considered very important and just in April 2008, the German Federal Minster for Education and Science together with the Berlin Senator for Education and Science travelled to China to discuss the further advancement of this cooperation (Tagesspiegel 2008).

The population for the relevant age group in China is slightly decreasing, but it will still be the 2nd largest by 2030. Thus, China remains to be one of the dominant markets for students. The indicators concerning education show a mixed picture. On the one hand, enrolment in secondary and tertiary education is still comparatively low, despite many efforts taken by the Chinese government (Brandenburg/Zhu 2007). On the other hand, the transfer rate from secondary to tertiary education is rather high, though only 50% of those taking the *gaokao* actually enter into HE. Thus a considerable demand is highly likely. Tuition fees are also high compared to the GDP per capita (up to 4 times the amount). The GINI coefficient is not very high, suggesting a rather uneven spread of wealth and two main and very distinct target groups: 1) well-off students and 2) less well-off, bright students. The KEI is revealed to be on the lower spectrum compared to the world and regional averages. All these factors combined hint towards an eminent target group in the less well-off segment. However, controversial developments can be observed, including reduced enrolment rates of Chinese students in Germany (about a 30% reduction) and considerable labour market problems and less employment opportunities for HE graduates (ibidem); this can be a drawback for education providers. In other words, Germany is becoming less attractive to Chinese students, even though they are among the most important for Germany's recruitment numbers. Adding to this new challenge is the reality that HE is no longer a guarantee for employment in China.

China is therefore an example of a country that: firstly, has to be a prime target country; secondly, has a huge demand; thirdly, is still the main country in terms of *Bildungsausländer;* and fourthly, is losing interest in Germany. In this specific case, any strategy has to be first and foremost concerned with keeping the market grip – although the seriousness of the development currently seems mostly unknown to key German players. The Chinese student market is large and diverse enough to cater to all interests mentioned in the matrix. Political aspects are also there, such as interest in German industry. Reputation is a serious issue for two reasons. Firstly, Germany is not among the most famous countries for education in China, positions currently taken by the U.S. and Australia, the latter due to its aggressive marketing and the development of programmes specifically addressing Asian students in general and Chinese students in particular. Secondly, obviously German HE is losing ground when considering HE enrolment from China, assuming that reputation is one of the key factors for a Chinese student to decide on a study destination. Fields in which Germany still seems to have a rather firm grip are engineering and the fine arts; therefore, these areas should be addressed more aggressively and also used as entry points for other subject areas. Return on investment will, due to the GINI coefficient and related economic data, only play a role if targeting the affluent students, which can be located in certain areas of China, such as Shanghai. These areas will need specially targeted programmes, as here German HEIs are in direct competition with U.S., Australian and UK institutions and increasingly so with top

Chinese universities in the 985 and 211 projects.[13] Experience from the last decade concerning applications from China for German HEIs tells us that the interest in student performance can be tackled, but that it can also be an issue if the selection process is not taken seriously. Diversity is more easily a problem than it is an opportunity, as HEIs might be more tempted by large scale recruitment efforts in China and thus can even counteract real diversity politics by relying too much on one target group. Experience in Australia indicates that this kind of recruitment strategy can even lead to a decrease in second language learning capacity among Chinese students rather than an increase. Due to less integration in the local student community and a tendency to form Chinese student social clusters, the opportunities to learn English were not as frequent as they could have been. To ensure the diversity issue, a mixing of or a relation to other regional foci seems essential.

Offshore – As shown in Brandenburg/Zhu 2007, there exists various offshore initiatives. Due to Chinese regulations, these are never individual initiatives but joint ventures with a local partner HEI, as a foreign institution can not start an offshore campus independently (ibidem). The potential is there. However, given the indications that enrolment in private institutions seems to be stagnating or even decreasing, it is difficult to predict the correct development in this segment. It seems likely that high-reputation co-operations will still have some promise as would special niche offers. It is, however, less likely that a general approach carries much potential of success, neither in the well-off student segment, nor in the less well-off and bright student segment.

Education Cities – To the knowledge of the authors, this strategy is thus far not an option pursued by the Chinese government. Considering the age group development and the heavy investment in elite institutions, as well as the new initiatives for increased education of the masses, it does not seem likely that this trend will be reversed. However, if at any point in time China follows the trends of countries such as Malaysia in taking up this option, it would be highly recommended to consider participation, as this is a more or less a more pointed version of an offshore investment. Both target groups (less well-off and well-off) could then be addressed with different offers depending on the overall governmental strategies.

Franchising degrees – This indeed can be an option if working with a Chinese partner. Logical conditions seem to be to choose carefully a subject field which shows demand and where the reputation of German HEIs still overpowers the Chinese counterparts (i.e. in the fine arts, music, and to some extent engineering), and to calculate tuition fees with the sensibility to stay below the rather high British standards. In this case, the pure German language-based offers seem not to be feasible, but English taught or bilingual German-Chinese offers are to be preferred. Given the huge market (in absolute terms), many niches will be available if carefully addressed, selected, and appropriately packaged.

Distance Learning – This is definitely an interesting option if the approach is also a joint venture with large or regionally important Chinese HEIs (regionally important because the size of China might even allow for segmented online approaches). The language issue applies again, but solutions could be similar to those in the franchising approach. An aspect for concern is, at least to date, the very strict control of the internet by the Chinese government which might hinder the free flow of information. Since German HEIs do not currently have a high reputation in the distance

[13] For a more detailed discussion of the 985 and 211 projects, see: Brandenburg/Zhu 2007

learning market, institutions such as the Open University London or the University of Phoenix are and will, in the next decade, most likely be the ruling figures in this domain. It should also be taken into account that distance learning does not have a very high reputation, so one might not attract the very best students. However, the large market should leave room for leverage.

2nd campus at home – Clearly, this is not a prime issue, but it may be an add-on as it could be marketed to a certain group of Chinese students, e.g. those looking for an international experience in an international setting and thus, not worried about integration issues. Usually, experience tells that Chinese students are very concerned about quality and about looking at content and results provided by a programme. Therefore, a second campus project purely based on altruistic aspects, intercultural experience, and a purely liberal arts idea will only appeal to a minor (but maybe still large enough given the overall potential) group, whereas a more focused offer which simply includes these aspects as add-ons could be quite attractive. Clearly, there is a tremendous and ongoing shift in the Chinese economy, from a classical communist planning system to a very neo-liberal market economy under a communist regime[14]. Combined with the one-child policy which leaves a whole generation with up to 6 adults investing in one child and no siblings to learn sharing and compromises (Brandenburg/Zhu), this economy supports the development of a very career and competition-oriented society. This logically calls for increased participation in studies traditionally linked to these interests such as business management, law, or engineering. Applicable knowledge will arguably carry more attractiveness than general knowledge acquisition. This is not to judge which kind of knowledge is better or worse, but it plays a role when defining useful tools to address the student markets needs. In a country with a considerably smaller age group (in absolute numbers, not in percentages) this could mean concentrating investments just in these segments, and thus being in competition with institutions that carry a much higher prestige in Asia in these subjects than most of the German HEIs (notably from the U.S., but also UK, Australian, and some French HEIs). Again, however, the tremendously large number of individuals in this age group also means that there will be enough interest for niche offers. As most internationally active HEIs can be expected to focus on the obvious target groups and the mainstream groups, it might be indeed highly recommendable to choose a different path and offer programmes addressing other topics, such as on ecological questions or alternative energy sources. In this respect, for example, Germany is definitely a worldwide leading expert country in terms of technology and engineering and is likely to stay in this league in the upcoming two decades. In addition, more socially concerned approaches will certainly find their interested parties and in this way, political interests can also be pursued successfully. One always should remember that when defined politically, both broad education and higher education carry a huge value to the people. Thus, programmes specifically addressed towards the less well-off but bright students could be a very successful instrument which then could address interests such as increased student numbers combined with student performance.

Direct Recruitment – When considering China as a resource country for students, direct enrolment is the instrument of the day for most HEIs. However, the data for Germany, as explained before, indicates that a serious focus shift is taking place, drawing Chinese students away from Germany. In addition, more Chinese students prefer to study at top Chinese HEIs instead of going

[14] One sometimes tends to overlook the fact that such a model as currently run by the Chinese government was considered to be impossible some 10-15 years ago. The belief at that time being that there can either exist a communist regime and thus a clear-cut planning economy, or a capitalist economy with free market structures. China, however, is trying to achieve the squaring of the circle and so far it looks as if it is successful from the Chinese perspective.

abroad. This is one of the remarkable successes of the projects 211 and 985 (Brandenburg/Zhu 2007). Nevertheless, this is still one of the best options if an HEI is not relying – as in the past – on the fact that enough Chinese students will apply anyway regardless of information policies, contents, quality assurance and marketing measures. In our view, German HEIs have to change their attitude towards Chinese students drastically. In the past, it was not an exception that Chinese students were considered the mass, with low qualification status, likely to forge applications and in general, difficult to integrate. It is essential that the HEIs wanting to address the Chinese student market realise that Chinese students are very aware of their own quality and carry a substantial and founded self-esteem often combined with considerable financial options. This clientele needs a far more customer-oriented approach than many – but by far not all – German HEIs applied in the past. It can only be recommended to take the prospective candidates seriously and to address their needs of quality, profile, and focus. This will only increase with China (the same will be true for India) as it moves into an outstanding position in 2030. Taking into account the country specific tradition of parents having huge influence on their child, a feature of Chinese society not likely to change soon, an approach including road show and student fairs is possibly also more successful if involving alumni from China, a stronger immersion into Chinese society, and knowing about the intricacies of the culture. The direct enrolment strategy will have to face the financial issue, less in terms of tuition fees and more in terms of subsistence costs. The bright but less well-off candidates are not to be expected to be able to finance their stay in Germany entirely on their own. This might call for subject-specific approaches where external grants, e.g. from industry, come into the game. The well-off candidates will be substantially harder to win as any German HEI will be in direct competition with the Chinese HEIs, particularly the highly reputed ones, as well as the U.S., British and Australian HEIs. In any case, one has to devise a very carefully designed strategy in terms of which specific instruments of direct recruitment are used. Agents, for instance, are of crucial importance in the Chinese setting.

Vertical Recruitment – For entry to bachelor's programmes, this approach might prove difficult as long as no direct enrolment is possible. As these requirements change virtually by the year, with more and more countries becoming eligible for direct enrolment, this is not unlikely to be different by 2020. Under the given conditions, however, students need to have some experience. Therefore, this instrument might better market the master's level, or be used in a relationship with a Chinese HEI. A model could be to have an integrated quality-monitored agreement with an HEI allowing the top 10% of a class (or a cohort defined by other means) to change over to the master's programme at the German HEI. This will address those students looking for a more prestigious degree or an additional international experience and it would be strongly supported through advocacy by the Chinese partner HEI.

Interestingly enough, no official analysis is known to the authors explaining the dramatic drop (-45%) in new enrolments of Chinese students in Germany within a three years period, though according to the DAAD, since two years the numbers have again been on the rise (DAAD 2008). It seems as if the German HE systems take such a market development as destiny and a fact not able to be changed. In any business, such a dramatic loss in customers would result in hectic problem analysis and solution searches. If anything seems to support the idea that German HEIs do not truly feel a part of a worldwide competition (and neither does the government) or that the international students do not contribute to the financial well-being of the university, than this is a strong indicator. It is questionable whether German HEIs can profit from the tremendous options China (or India) offers in various directions as long as the need to do so is not realised. A total of

50% of the future world-market for internationally mobile students is therefore currently left to accidental developments rather than strategies based on clear SWOT analyses, in order to evaluate the Strengths, Weaknesses, Opportunities and Threats in a project. It should be mentioned here that this only refers to the individual university level. On the general level, DAAD and other actors are extremely active in addressing China (and India), but it is at the institutional level where market awareness is still able to be better optimised.

5.4 Case 3: Poland

Poland is traditionally a highly important student resource country for Germany. In 2007, it overtook China by becoming number one in terms of *Bildungsausländer*. Though this seems like a positive development, it was only achieved because of a dramatic drop in Chinese students enrolling in German HEIs over the last years. The number of Polish students is not currently increasing but stagnating. This is a serious concern as, in general, Polish high school graduates have problems to find study places and thus it would be a logical assumption that many will find their way into German HEIs, given the close distance and the long experience of educational exchange between both countries. As this is obviously not the case (DAAD 2007), the political interest in increasing the number of Polish students should be highlighted.

However, there is another factor complicating the problem: Polish demographics. Although many countries in the world do not show a positive development of the relevant age group until 2050 (often tending to stagnate at the 2030 level at best), Poland will have an even more serious population problem: the relevant age group will drastically decrease and by 2020, it is expected that 50% less students will enrol in HE than today. This will exacerbate the aforementioned fact of stagnating interest in German HE. However, considering the economic development of Poland and its role within the EU, the existing very high level of graduation and tertiary entry rates is not likely to decrease, but rather increase even further, possibly helping to maintain an interested student market. Given that currently, many high school graduates seem not to find options for entry into higher education, an interesting request-offer situation is created.[15] Whereas one obstacle might be that, in particular, private institutions are not flourishing (1/3 are expected to close after 2009), it certainly helps that Polish HEIs are trying to increase their international settings and therefore are recruiting more international students.

Despite all negative or stagnating developments, Germany is still a highly attractive destination for Polish students. In addition, tuition fees are quite high outside public education, which often only offers a restricted number of university places. English programmes and many master's programmes at public HEIs, as well as education at private HEIs, can be very expensive. Due to an increasing GDP per capita, financial options are available for study abroad as well as at home. Whatever instruments for recruitment are applied, the dominant strategy has to focus on doing whatever is possible to maintain the market share of today.

Offshore – The economic data (solid GDP and acceptable GINI coefficient) would suggest that offshore activities are a definite option. However, the observation by the DAAD that a third of the private institutions are likely to shut down by the end of 2009 makes this option look much less

[15] Polish Conference: Perspektywy Foundation is running very effective international education fairs to help place students in international universities (http://www.perspektywy.pl).

promising. It seems advisable to await the upcoming developments and decide about long term investments with this instrument after 2009.

Education Cities – It appears unlikely that this is or will ever be a large-scale option for Poland. It is possible that in some areas the government might look for pilot schemes, but in general, the deserved high esteem by both the government and by students for the Polish HE system makes such a development improbable.

Franchising degrees – This may be an option for HEIs which are specialising in very specific fields for which a German degree holds a high reputation among the Polish public. Engineering is the most obvious choice here, particularly ecologically oriented sub-fields. As there is not a distance problem, it seems more likely that less well-off students could be targeted. This, however, creates a slight interest conflict as franchising is usually concerned with generating revenues, a goal harder to attain with the target group in mind.

Distance Learning – This does not look very promising due to the drop in the age group combined with the likelihood that Polish students would be more inclined to attend one of their own institutions. In addition, there is more logic for German HEIs to recruit Polish students to come to Germany rather than partake in a distance learning programme.

2nd campus at home – This also does not look like a feasible option as Polish students integrate easily and will have no conceivable interest to work in a separated environment.

Direct Recruitment – This might remain the dominant instrument in the future. Poland is a very different type of country compared to, e.g., India, Nigeria or Brazil, as it is not about opening new markets, but rather keeping a standing in the market. HEIs have to ask themselves: What can we do to retain the impact factor? What could be activities to keep a flow of Polish students coming rather than opting out? Direct enrolment is, in this case, addressing the obvious interests such as student numbers, but it also addresses student performance. Experience of the authors indicates that Polish students tend to study very well and play an important role in terms of student performance interests. Recommended activities include the use of traditional instruments, such as presence at Polish fairs and the inclusion of alumni to strategically spread to potential students the advantages of studying in Germany. Students coming home to Poland could be engaged for road shows or employed as ambassadors of the German HEI.

Vertical Recruitment – One of the more promising instruments. As German is the most taught language in school and enrolment is not an issue, it seems recommendable to circumvent the problems of decreasing interest, lower study rates etc. by directly cooperating with Polish high schools. If the language immersion programmes are established early enough and partnerships are created over time, it could be easily envisioned that graduates from these schools – or certain cohorts – are offered university places using contingent policies. With the increasing autonomy of HEIs in choosing their students, this would not pose too many problems. In addition, it would be highly cost-effective if done correctly, i.e. using alumni, including summer programmes, and relying on high quality professors *in loco*.

5.5 Case 4: Turkey

By definition, Turkey is a highly important country for Germany, not only in relation to higher education. In the education sector in general, Turkey is first and foremost thought of in relation to the large number of *Bildungsinländer* (those who successfully completed the *Abitur*). However, for the purposes of this paper, we are interested in looking at Turkey as a viable option as a target country for student recruitment as *Bildungsausländer*. As a future resource market, Turkey can and should be relevant because of a relatively stable and high population forecast. Education-wise, Turkey shows a fairly good upper secondary and medium-level tertiary entrance quota, however, only 50% obtain a study place for tertiary education (2004 figures). From this perspective, there certainly is an important market. These indicators are supported by economic evidence of a rather strong GDP per capita and a medium level KEI, indicating that there is potential for investment. The high reputation of Germany in general and for German HE in particular, combined with the high number of high schools offering German and the vast number of families with links to Germany, leads to the conclusion that the market is prepared for a relatively easy access. In addition, direct enrolment is possible, unlike many countries where regulations to direct entry impede easy access to German HE.

Student numbers are an additional factor to consider, given the large age group size. Currently, the need for university places can not be met by the existing Turkish system, which even sends its prospective professors abroad for doctoral studies because of serious deficiencies in numbers in this segment. Student performance and diversity are also issues. Political aspects are perhaps involved to a certain degree, as German-Turkish relations are always under special scrutiny. Therefore, any activities within Turkey, rather than those which may foster the tendencies of brain drain, will help. The idea of a German-Turkish University in Istanbul is in the works (see below) and a relevant government agreement has been paraphrased on December 6th, 2007 (DAAD 2008). The dominating aspect in relation to Turkey, however, is the high reputation German HEIs possess in the Turkish context, as stated by the DAAD Information Centre Istanbul. Another important advantage is the language tie. German is the 2nd most taught foreign language, with many schools offering it, some as early as kindergarten. It is not to be neglected that funding is not a large issue as Turkish students are eligible for Turkish government grants.

A main factor is that only 25% of Turkish high school graduates (currently 800,000) can find a study place at a university despite the fact that the government increased the number of universities from 53 to 85. Moreover, the Turkish HE system is heavily underfunded with only 1% of the GNP being invested in it. This in return will have serious repercussions for the newly founded universities as they have to share the budget with the existing HEIs. On the other hand, the strongly booming Turkish economy yearns for highly qualified work force (DUZ 2008). So in effect, this opens room for both regional investments as well as all types of recruitment if the special interests and needs are taken into consideration when designing the strategies.

For any joint venture, it might be useful to consider the 25 private foundation universities which are charging considerable tuition fees, are normally run based on US models and apply rigorous quality assurance systems. This is also important as many state universities, and in particular the new ones, are facing a shortage of well-educated teachers and professors (DUZ 2008).

Offshore – Due to the very high tuition fees for private education and very low tuition fees for public institutions, there is room for investment if considering well-off students. Options for investment also might exist for cooperative initiatives with public research-oriented universities, as many private ones are too expensive for the majority of students (only 1% can afford private education). Thus, these kinds of initiatives would target the bright but less well-off students. If a private offshore activity could aim at a tuition fee level below the current threshold of about 3000€, this could be a promising endeavour. However, it is necessary to consider that Turkish law requires such institutions to cater 10% of the students with stipends, according to the DAAD Information Centre Istanbul report. Curiously enough, and contrary to the tendency in many countries, research is predominantly carried out by private HEIs. This offers an excellent entry point, as German HEIs could design programmes based on the Humboldtian principle and offer research immersion on a much lower end of the tuition fee scale than private Turkish HEIs could. The high reputation of German HE would also help this effort. In addition, the Turkish grant scheme could even out some social wrinkles concerning equal access.

Turkey is seeking membership to the European Union. As a part of this integration into the system, Turkey is also part of the Bologna Process. This will translate to a softening of many regulations; however, Turkish students will at one point then be considered as EU students and no substantial extra fees can be collected. This point addresses the return on investment aspect of any future offshore recruitment activities.

An excellent example of a German offshore activity is the newly founded German-Turkish University (DTU) in Istanbul. With a co-investment of 40 million €, the German government is helping to establish four faculties designed for up to 5,000 students with a focus on research and graduate education (DUZ 2008). This is in line with the overall initiative for education by the Turkish government. A focus is placed on the lesser developed eastern regions of Turkey.

The mentioned tremendous deficit in the HE system suggests that investments (also in terms of joint ventures) can be very useful.

Education Cities – This does not seem to be an option presently. There is also no indication of a push in this direction.

Franchising degrees – This seems to be a definite option due to the strong German HE reputation and student fee factors, since such an offer could easily stay below the private university fee scheme. In addition, due to the high esteem for German HE, it may be relatively easy to find Turkish HEIs that are willing to cooperate on such a project. Given the additional student resources for education, there are people willing to pay for a German education and at the same time save travel costs.

Distance Learning – Also possible for similar arguments, particularly in Eastern Turkey because of the East-West gap in HE, as stated by DAAD in the annual report (see page 113). In this case, as it holds true for offshore activities and alike, one has to take into account that the mindset of target groups in Eastern Turkey and in Western Turkey might differ. Also, access to the internet might be an issue as could be other aspects of technical infrastructure, as well as the ceilings of household incomes, and the investments in technology necessary for distance learning. However, a large advantage would be that many Turkish families residing in Germany or having adopted

German citizenship originate from Eastern Turkey more than from Western Turkey. Thus, the perception of German HE might be particularly positive in this area. Given the fact that distance learning programmes can be offered on the lower end of the tuition fee scale, this seems to be a viable option that has not yet been explored to any considerable amount by German HEIs (to the knowledge of the authors).

2nd campus at home – This is an instrument which does not seem to make sense in the Turkish case. Diversity is not as relevant an issue when addressing this target group, as Turkey ranks No.6 just when counting the *Bildungsausländer*, a trend that is not expected to reverse.

Direct Recruitment – With the instrument of direct recruitment, the politically-charged issue of fundamentalism may be addressed. Germans with migrant backgrounds are known to be less likely to study and immerse themselves with people from Turkey who have opened their minds to a different definition of their country and to Turkish identity. This interaction may make more locals interested in studying. A sub-aspect of this mixture could be extended to encounters between Western Turkish and Eastern Turkish students. In this way, Germany could be a place of encounter for East meets West in the Turkish context, an opportunity outside of the country to foster better understanding and cooperation between the regions and differing identities linked with the world cultures of the Middle East and the West.

The serious shortage in study places leaves Turkey as a pre-eminent target market given the close ties between both countries. With this instrument, the financial backing also exists, as it would more focus on well-off students who can afford to travel to and live in Germany. Since the German is often taught in school, the language entrance requirements are not as much of a problem. One potential stumbling block may be that Turkish media covers German media very well, so racist incidents in parts of Germany are widely reported and communicated. HEIs located in areas with negative regions may have to work harder on efforts for positive publicity.

Recruitment days at schools might be one option to spread an HEI's message, as well as the use of graduates as promoters and ambassadors. Education agents could also be employed, as well as sent as representatives to the numerous student fairs.

Vertical Recruitment – If there exists a model country for trying to implement vertical recruitment as an idea of a new instrument, Turkey may be that model. The mediocre education situation in Turkey combined with the facility for direct enrolment offers an ideal situation which should be explored. Among all options, the approach of establishing German partnership schools is likely one of the most promising.

5.6 Case 5: The United States of America

At first glance, it seems perhaps misplaced to consider targeting a country as a potential resource area which is (a) the most successful recruiting country itself and (b) is not known for a high percentage of mobile students. However, this study is also aimed at showing that besides the well-known mainstream options, there are paths worth exploring due to population numbers and other features.

Due to a large and stable population which will be the 3rd largest for 15 to 24 year-olds by 2030, along with high education figures (high upper secondary graduation and entry to tertiary), the U.S. qualifies as a potential resource country. Although, the U.S. historically does not send a large percentage of students abroad and is more focused on recruiting students to study in the U.S.[16], there is a certain potential simply due to size for direct recruitment as well as for certain other activities within the country's boundaries. A main reason to consider the U.S. is return on investment. Given the high GDP per capita and the willingness of many families to pay high prices for quality education, there is an opening for German HEIs, particularly if one stays below the average tuition fee threshold. Almost all relevant interests mentioned in the matrix can be addressed, be it student numbers, student performance or student diversity. Political aspects might apply less, but reputation is an important aspect, and a presence in the U.S. market will possibly also support other activities. In addition, registration as a non-profit organization (equivalent to the German *Gemeinnützigkeit*) will allow for access to U.S. based funds from foundations.

The charm of any initiative in the U.S. is certainly that it acts against the accepted trends and mainstream, that the surprise factor is on the HEI's side, and that the U.S. market is only partially prepared for such entries. Up until now, UK and Canadian universities are active on the US market and for Canadian universities the US market with about 8,000 students is the second most important resource country after China (DAAD New York 2008). However, Canada is the neighbouring country and the UK universities have a huge traditional attractiveness for US students; in addition, both are English speaking countries. German universities however would enter the market as a real outsider but also with niche potential. So if German HEIs do not intend to compete with Canadian and UK HEIs for the same type of students – an endeavour which seems to be doomed for failure – they nevertheless could have the advantage of surprise and little competition from comparable countries.

Offshore – Based on the remarks above, setting up an offshore campus in the United States is plausible. In addition, there are limited hindrances in creating a university on American soil. The main challenge may be to compete with the large number of HE institutions in existence. According to the National Center for Education Statistics, in 2005, there were a total of about 6,383 Postsecondary Institutions (Title IV). Of these, about 2,500 were 4-year degree-granting public and private institutions (NCES 2006). A particularly strong variation could be a co-operation with another U.S. university, so that regulations are more easily surmounted and competition exchanged for cooperation, as being a 'new' university may be looked upon suspiciously and the

[16] According to the DAAD New York, the percentage is around 50% of the German mobility rate (which is comparable with the German standard in the 1980s) growing by about 10% annually and with a more or less official goal of 1 million students in ten years, equivalent to about a third of an annual graduate cohort. As it is well known, US students are –if going abroad at all – predominantly spending a limited time in a foreign country, often only a couple weeks, and in many cases in the context of summer programmes organised by their own or an affiliated university with its own teaching staff (island programmes) (DAAD New York 2008).

insider knowledge can be highly invaluable. In addition, the degree programme would need to be recognized by the U.S. Department of Education (DOE) and depending on the subject, accreditation through the relevant bodies has to be achieved. According to the DAAD New York, the DOE "automatically recognizes institutions (for their students to be eligible for federal student aid) if they are accredited by an agency that is in turn recognized by the DOE" (DAAD New York 2008).

If the HEI can offer a programme that is less expensive than the average costs affiliated with the notoriously expensive U.S. education, there may be options to recruit the bright but less well-off students, particularly if at least some funding is offered. And in this case, one does not have to focus on the decreasing target group of heritage seekers (i.e. students with a German family background). It is more or less understood that any offer on U.S. soil will have to be based on English as the language of instruction, however there could be room for some niche programmes in the German language. A strong add-on could be an internship with a German company and possibly even grants from companies investing heavily in the U.S. Moreover, to our knowledge, new ground could be explored in a joint venture with a U.S. and a Spanish speaking HEI, i.e. from Spain. Creating innovative tri-country oriented programmes with an applicable global labour market focus (i.e. in communication, media, business, or management) could attract both the traditional U.S. student group and also those students with a Latin American background. Well-off students can definitely be a target group, particularly if the offshore campus can offer an additional 'bonus,' such as a dual German-English programme or specific expertise in certain areas known in Germany (engineering). With this target group, the return on investment interest strongly applies. The main problem for German HEIs would be that they are neither prepared for the amount of service expected in this market segment, nor do they have experience with the aspect of liability. Therefore, particularly relating to the well-off clientele, a cooperative venture seems to be strongly advisable.

Education Cities – This instrument could likely not be applied to the U.S. given the current saturation level of HEIs.

Franchising degrees – This also does not seem to be a viable strategy. The reputation of a U.S. degree is well established and it is even a challenge for any international provider to overcome this evaluation of the own national HE system. In addition, foreign degrees are often not easily recognized.

Distance Learning – This could be an option, as Americans are reluctant to go abroad for education and e-learning is currently quite popular. Offers need to be in English (or in niches) and programmes should be linked to reputation. One has to be familiar with the largest U.S. based provider, the University of Phoenix. Due to some discussions about the quality of distance learning programmes, this is not an easy market and thus far, no German HEI seems to be prepared programme-wise and service-wise (including the expected technology) to enter the market successfully. However, this option carries a considerable potential for the future, predominantly when focusing on the lower middle or middle class group in general and particularly on those who are employed or trying to upgrade their skills. Obviously, the well-off students are not a likely clientele as they can afford to go abroad if they choose. In fact, study abroad is often considered a way of upgrading their academic portfolio and adding an extra feather to their degree.

2nd campus at home – Whereas this is not an option for the bright but less well-off students, it could attract those with financial strength, as well as those with a highly international family setting or those with a German background. To increase the attractiveness of this kind of initiative and set it apart form other HEIs, a joint 'European Campus' might be an option. Effectively, this could be a counter-model to the island programmes set up by U.S. universities in Europe. Programmes could be instructed in English with compulsory German language training. Some endeavours of a similar kind, even though they are not 'clean' second campus programmes, have been undertaken, notably the ECLA (European College of Liberal Arts, Berlin). This institute was founded as a European project with the intention to be closely affiliated to one or more German HEIs (www.ecla.de). However, today it is under the guidance of a U.S. foundation and there is not yet any affiliation with a German HEI known to the authors. It also does not award any academic degree and does not have the recognition of the German HE system. Nonetheless, it runs certificate programmes for specific target groups and does so very successfully, linking up with Bard College in New York State. For any German initiative, it would be suggested – for recognition issues mainly - to follow the example and link up with a highly reputed U.S. HEI in the relevant academic field in order to ensure the transfer of credits. Through this, one can not only attract normal student for study programmes in Germany, but also ensure that the credits are valid for the U.S., avoiding the complication of passing through a credential evaluation agency.

Direct Recruitment – Except for the Erasmus Mundus programme (with large stipends and thus attractive to the bright but less well-off students, though only focusing on graduate studies), the main target group will be the well-off students. Considering that this tool is usually used for normal first degree studies, focusing on those who can afford it, which is a rather limited middle class, this market is highly sensitive to overall macroeconomic developments, such as decreasing dollar rates or recessions. These kinds of changes could be directly damaging to the financial abilities of the main target group. The middle class might tighten their wallets and going abroad might be less plausible for their children. The very well-off might, in fact, just stay home to attend the best U.S. HEIs or go to Cambridge or Oxford, as for many Americans, these are perhaps the most well-known foreign universities. In addition, the obstacles of enrolment in a German university after high school suggests that looking to the master's segment would produce better results[17].

Many US graduates tend to work for some time before starting a master's programme. Thus it is very normal to change the university. And European master's programmes in general and German ones in particular offer very high quality at a very reasonable prize. Of course, some issues (such as degree recognition and language barriers) would have to be overcome. To circumvent problems of recognition, there could be links with a U.S. degree. Playing with the stereotype of the modern civilization, Europe has a certain prestige and sophisticated attractiveness, particularly to the well off. Combined with the proper programmes (such as liberal arts) and proper networks, this could be an interesting approach for richer groups interested in humanities or arts centred programmes. The reputation of Europe as the 'crêche de la civilisation' could be highlighted. Even if not focusing on life long learning, this could be pertinent to those students in an advanced stage of life. With both direct recruitment and vertical recruitment, the aspect of education quality can be pivotal, as

[17] A side aspect which is not directly increasing regular student numbers but could increase opportunities for direct marketing of master's programmes could be a more intensive use of summer universities – individually or in cooperation with US partner institutions (DAAD New York 2008). An excellent example of German summer universities that attract large numbers of US students is FUBiS, the international summer school of the Freie Universität Berlin (http://www.fubis.org).

within the large number of HEIs in the U.S., many are not providing the education expected by students, particularly for the price tag that is attached. In fact, most HEIs have to hunt for students, whereas only a very small percentage is able to truly select their students. If German HEIs offer top level master's programmes in English in crucial subject areas (such as engineering) where the German reputation is eminent, there should be a very large potential on the US market.

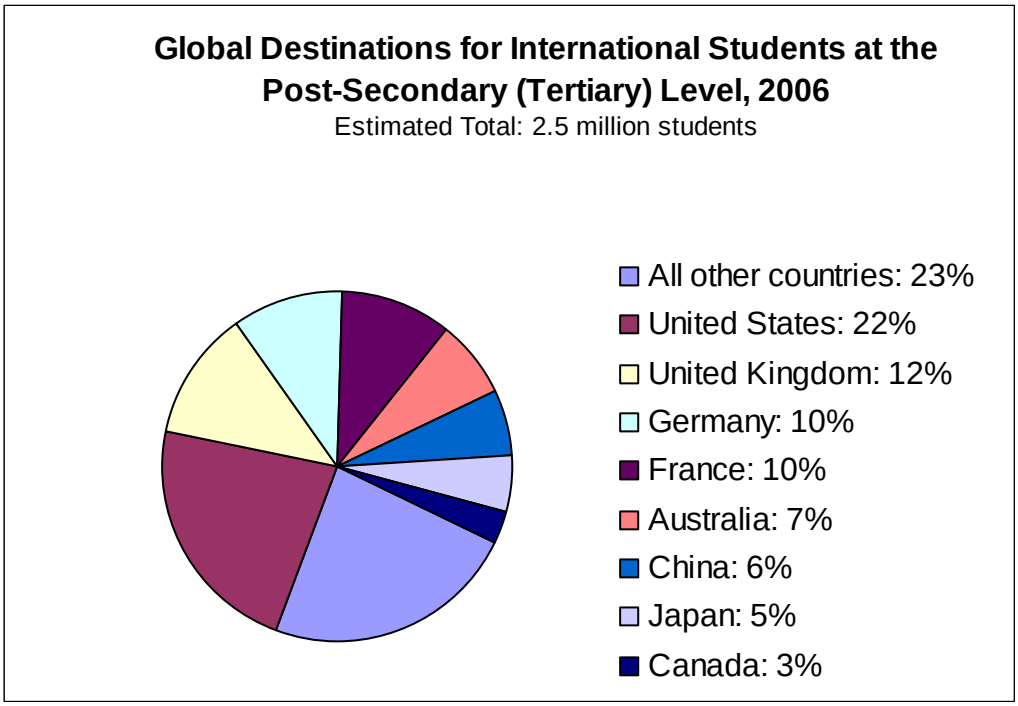
Vertical Recruitment – This is considered by the authors to be promising**.** For the less well-off clientele, a focus could be on community colleges although most of those colleges are not very international. It might help to get in contact with NAFSA (particularly the regional chapters) in order to look for interested partners. Given the size of the system, chances are that some community colleges are indeed interested in such an initiative. The idea would be to possibly link up the project to an *in loco* summer programme after the first year in order to make the students familiar with the HEI in question (possibly including a 1-3 week stay in Germany). Recruitment of the top 10% in certain subjects could be arranged based on the community college agreements. This strategy would require additional funds for grants and investments, particularly for marketing activities; however, they could easily pay off regarding student numbers, student performance, and diversity. Language issues would need to be considered, with either the community college setting up a track for gifted, financially challenged students to provide German language classes and/or offer programmes in English, or to offer a normal associate's degree with German as an add-on.

A second target for this instrument could be students from 4-year colleges for recruitment into master's programmes, as long as the institution is comparable to the partner institution's level. This would not consider any exchange, but rather, a blind admission (top 10% of students from the partner institution combined with industry grants). The amount of effort necessary will depend on the prestige of the college, its willingness or eagerness to cooperate, and the set-up between the partners. Benefits have to be clearly mutual. A master's programme costing less would be highly interesting to this clientele, but it would have to be clear that such an approach would not address the financial return on investment. Well-off students could also be targeted by addressing a high school with a German language programme or an internationally focused curriculum, for example. Obstacles in terms of enrolment requirements are likely to diminish in the coming years as Germany will undoubtedly no longer be able to maintain a policy based on thirteen years of schooling once the average of twelve years is in place. Reforms being realised and taking effect during this decade will play a major role in this development.

6. The United States: Examples of recruitment from a first choice destination country

We have dared to discuss the U.S. as a resource country for students, certainly an approach which is seldom taken. It is more common understanding that the American HEIs are among the world-leading institutions when it comes to student recruitment. Therefore, it seems logical to add a small section trying to understand better the U.S. case and having a look at what German HEIs could learn.

The United States presents an interesting case in regards to foreign study, having sent only 0.2% of its students abroad in 2004, but recruiting the largest portion of international students than any other single country (UNESCO Global Education Digest 2006). As can be seen in Chart X below, *Global Destinations for International Students at the Post-Secondary (Tertiary) Level,* of the 2.5 million students studying abroad, 22% choose the United States for their study abroad experience. Next in importance for student choice is the United Kingdom, with 12% of the total, and Germany and France tied for 3rd with 10% each of the global share of international students. International student recruitment is serious business and foreign students are important "clients" to the United States, bringing 14.5 billion US$ to the economy (Open Doors Report 2006). Therefore, as can be understood, there is great motivation in maintaining and increasing student recruitment from abroad.



Based on data from IIE Open Doors Report, 2007

6.1 Why the United States?

Why the United States has been successful in being first among countries to recruit the most students is related to a number of factors. The history of student recruitment likely plays a role, particularly in comparison to countries that have just started efforts in recent years. The first major increase in international student recruitment numbers can be seen in the 1960s, when international

education began to be more public-service and research-oriented (McMurtrie, March 2007). Slight increases have been achieved over the decades, leading to the figures for the beginning of the 21st century (see table 1 in the annex for more detailed figures). As can be seen in the table below, the percentage of international students has hovered around 4% of total enrolment since 2000, peaking in the 2002-2003 academic year.

Trends of international and total U.S. enrolment
(2000-2006)

Year	International Student Enrolment	Annual % Change	Total Enrolment	% International Students
2000/01	547.867	6,4	14.046.659	3,9
2001/02	582.996	6,4	13.511.149	4,3
2002/03	586.323	0,6	12.853.627	4,6
2003/04	572.509	-2,4	13.383.553	4,3
2004/05	565.039	-1,3	13.994.869	4
2005/06	564.766	-0,05	**14,528,728	3,9

**College Board Annual Survey of Colleges data on U.S. higher education enrolment
Source: 2006 Open Doors Report on International Educational Exchange, IIE

The reasons for international student interest in American HEIs are diverse. Among the rather circumstantial ones is language. In a time of accelerating globalisation, the importance of being able to communicate well in English is a determining factor regarding a student's choice to study in the United States. It is clear that the advantage of learning English in a native English speaking country can not be underestimated. This is also true for Australia and the United Kingdom, for example. In addition, the strong reputation of American HEIs worldwide is also reinforced by rankings such as *Newsweek's* "Top 100 Global Universities," even though somewhat less favourably by rankings of *THES* "QS World University Rankings" (published by *Times Higher Education Supplement* and Quacquarelli Symonds)[18] or by the "Academic Ranking of World Universities" compiled by Shanghai Jiao Tong University.[19] Nonetheless, the Shanghai ranking still counts eight U.S. universities of the top ten and over half as U.S. universities in the top 100. The possible increase of chances to be recruited or hired by an American company after graduation can also be a consideration of international students when prospecting for an American university education.

Besides circumstantial reasons, the attraction to American HEIs is also due to their recruitment efforts, which include how to increase interest among potential international students. It is evident that overall, they are successful at least in quantitative terms (whereas the qualitative aspects would be difficult to unearth). According to the American Council on Education's "Measuring Internationalization at Research Universities" by Madeleine Green (Green 2005), 87% of institutions support international students and student programmes by helping to fund ongoing campus international activities, the most widely used strategy. Other interesting dimensions commonly integrated into HEI strategies include the fact that 78% of highly active research universities provide a space for students to discuss international topics, 60% provide scholarships

[18] www.topuniversities.com/worlduniversityrankings/results/2007/overall_rankings/top_400_universities/
[19] http://ed.sjtu.edu.cn/rank/2007/ranking2007.htm

for international students, and 59% direct funds to international offices for foreign travel in the aim of student recruitment. A casual glimpse would indicate that these are not aspects which are all direct recruitment strategies; however, on-campus techniques, for example, are worthy to mention, having an indirect influence on recruitment and on 'internationalisation' missions. First, we must lay the background to better understand the details regarding student choices, such as geographic preferences and student origins.

6.2 Where do U.S.-bound international students study and where do they come from?

The table below lists the leading 5 U.S. institutions hosting international students from 2005 to 2006, in sheer numbers. The University of Southern California has taken first place for international student recruitment for the past six years.

Leading 5 U.S. Institutions Hosting International Students, 2005/06*
(in sheer numbers)

Institution	State	International Students	Total Enrolment
University of Southern California	CA	6,881	32,836
Columbia University	NY	5,575	24,343
Purdue University, Main Campus	IN	5,540	38,712
New York University	NY	5,502	53,215
University of Texas at Austin	TX	5,395	49,696

*The leading 25 institutions can be found at the end of the report
Source: Open Doors 2006, Report on International Educational Exchange - The Institute for International Education (http://opendoors.iienetwork.org/?p=89196)

The higher education scene in the United States is multifaceted and vastly diverse. It does not just include the big name research universities. Another important and growing sector within the higher education arena concerns community colleges, which typically are 2-year institutions awarding vocational type degrees or associate's degrees. The requirements and competition for entry are less strict than at the 4-year institutions, but students often transfer after a year (or upon completion of their degree) into a 4-year degree programme. Community colleges are gaining prominence in their abilities to attract international students, particularly given the low tuition fees attached to these institutions. Table 3 in the annex provides details on the top four community colleges in the United States for hosting international students. International student enrolment as compared to total enrolment for 2005/06 is less significant both in terms of sheer numbers and as a percentage than the data for 4-year institutions. Nonetheless, the top community colleges for hosting international students account for about 2,000 to 3,000 students each, a sum which represents a healthy portion of all international students studying in the United States.

In regards to student geographic preferences, California, New York, and Texas are the states that welcome the most international students. New York City is the metropolis that the most international students call home (IIE Open Doors Report, 2007).

Indian students make up the largest portion of international students coming to American HEIs. Approximately 84,000 came in 2006/07, which represented an impressive 10% increase from the previous year. China follows as the second most important country, with about 67,000 students, up 8% from 2005/2006. Korea follows not far behind with over 62,000 (a 6% increase), Japan next with a bit over 35,000 (and down 9%), and finally Taiwan rounding out the top five international student groups with almost 30,000 students coming to the U.S., a 4% increase from the previous year. The remaining top 10, in order of significance according to sheer numbers, include Canada, Mexico, Turkey, Thailand, and Germany.

Students coming to the United States chose Business and Management as the most popular field of study, followed by Engineering (18% and 15%, respectively) (IIE Open Doors Report, 2007).

6.3 What are the Americans doing to attract and retain students?

For most HEIs (in the United States and elsewhere), international student recruitment goes hand-in-hand with on-campus efforts for 'internationalisation.' Naturally, direct student recruitment is the key method to fill study places, and the person-to-person approach is still considered the most successful (Donovan 1999). A briefly description of direct recruitment methods is provided in Chapter 4, pages 137-139 and include market research, niche marketing, publicity programmes, media campaigns, brand and reputation development, international student fairs, exhibitions or road shows, education agents, and travel to the country of interest. However, according to one recent qualitative study on the return on investment in international recruitment, the most effective recruitment activities were a combination of direct recruitment and effective infrastructure aspects: merit scholarships, international brochures, interviews, articulation agreements, express mail of acceptance letters, independent, small group and tour travel in the fall, and information sessions (Yam, Darrup-Boychuck, and McKown 2007).

These strategies are crucial to any successful campaign for bringing foreign students to American campuses; however, many American higher education institutions go much further than just employing these direct recruitment strategies. They understand that the experience an international student has abroad is something the individual takes back with them to their home country, providing first-hand descriptions of the university, their successes, and (possibly) their failures.

In this vain, universities are keen to support infrastructure development to promote 'internationalisation' and consider these efforts a key aspect of university strategies to fulfil their mission statements and stay in the competitive higher education race.

An important aspect of the relationship between American HEIs and their international students is the focus on the *student experience* at the time of the student's stay abroad as well as for pre-departure and during the post-experience. This is, in fact, a kind of recruitment, since its goals is to build a positive image and experience for the student. The time, money, and human resources

invested in these three time periods help to build up and contribute to the reputation of the country since students arriving back in their home country speak with their friends, younger siblings, and family about their experiences.

What will the student talk about when she arrives back home? The services offered by a university contribute to the overall impression the student has and to the endorsement by the students. Examples of services offered at different universities include the following:

- International student orientation – Special consideration to arrive in advance of other students and become acclimated, receive more intense one-on-one support from advisors, as well as have a chance to discover the campus and services.
- International student website – Providing specific information about studying in the United States, legal issues, work permits, accommodation, and information on culture shock.
- International student host family contacts – Links with the outside community and a family to go to during special holidays when regular students often return home.
- Student services support – Office with staff members specifically oriented to the international student experience
- International student fairs – Efforts to create bonding experiences with other students and promote diversity and appreciation of different cultures on campus.
- International student organizations - Offering weekly and/or monthly events, such as coffee hour, field trips, and other activities.
- International student housing and/or centre – A space specially designed for the interests of international students, often offering extra computers, advice, bulletin boards with opportunities.
- International student meals – Mealtime is often an important part of the day in many cultures. A set meal with others promotes the feeling of family and may reduce feelings of homesickness.
- Special summer programmes – Travel or academic study programmes catered to international student needs and interests.
- English language or cultural immersion classes – Opportunities to hone language skills and foster contact with others with similar experiences.
- Networking opportunities - For both students and their spouses, which may include meetings with political, business, and community leaders.

Post-Study Abroad:

- May receive newsletter updates, magazines, or emails from the university, reminding them that they were an “alumni” of the HEI.
- Depending on the institution, offers of alumni gatherings in cities around the world.
- May be asked to act as the university “ambassador” to facilitate communication between potential students from the same country and the university.

Clearly, this list just touches upon some of the programmes and methods universities initiate for their international students. Innovative ways to strengthen and harness the potential for bonds between a foreign student and her host institution are constantly being created. And ultimately, these must be complemented by both an infrastructure that is committed to international student

recruitment and retention as well as direct recruitment activities and marketing. As can be supported by the findings of the international recruitment return on investment study, characteristics of successful international recruitment programmes include aspects at all three levels: an institutional commitment / mission, an organizational infrastructure, travel (overseas and domestic), an emphasis on both recruitment and yield activities to complement each other, an emphasis on long term prospects, the provision of financial aid and merit scholarships, the prudent use of agents, the exploration of emerging markets, and research on quality and quantity returns (Yam, Darrup-Boychuck, and McKown 2007).

6.4 What are some key approaches of American HEIs?

In the following paragraphs, the strategies employed by some American HEIs are more closely described and specific examples are provided. They include techniques used by a small private liberal arts college (Earlham), a large public research university (Montana State University), a public state university (North Carolina University-Chapel Hill), and a Canadian HEI (University of British Columbia) which is being looked at by the major American based Association of International Educators (NAFSA).

Approach No# 1: The Personal Touch

Typical strategies include recruitment travel. Earlham College in Indiana runs a distinguished recruitment travel strategy with an emphasis on non-mainstream markets. Looking for prospective students “off the beaten track” is an important aspect of Earlham’s strategy for building a diverse international community. When planning a recruitment trip, a strategy to go independent from the frequent group tours arranged for international admissions officers. This shows the student the genuine interest of the college and assures a better chance of undivided attention. Treating each individual potential student “with the royal treatment” is an important aspect of Earlham’s recruitment strategies. Individualized attention is key in making a first impression last so that this college more than any other is remembered by the student (Burke 2004).

Other HEIs lean on international alumni to promote the university’s recruitment efforts. An example is the Alumni Office approach of Suffolk University in Boston, Massachusetts. Based on the idea alumni, current students, and their parents would endorse the university, Suffolk created a programme to utilize the positive experiences of these people to promote the institution on an international level. Named the “Country Ambassador Program” and established in 2001, its purpose was to bolster international recruitment efforts. The original 40 ambassadors reached out to prospective and admitted students in their home countries, shared their own experiences as international students, and gave advice on living in the Boston area. Today, the programme has grown to more than 250 volunteers who welcome university representatives to their home countries, serve as interpreters at recruitment fairs, and assist current students with career development. Even the parents of alumni get involved by welcoming new families to the Suffolk University community, communicating with prospective and current students, and providing recommendations to the university on which local institutions have the potential to serve as feeder schools (Suffolk 2007).

Finally, many HEIs strongly believe in creating and maintaining long-term relationships with university partners, secondary schools, and study abroad agencies.

Approach No# 2: The student-to-university keystone

Montana State University recognizes the crucial role of their international student office and has created a series of guidelines to promote international student recruitment. For example, they request faculty and others affiliated with the university who are travelling abroad for research purposes or a conference to assist in international recruitment efforts. They provide materials, helpful information and guidelines, and contacts for these individuals to distribute (MSU 2007). As mentioned in the study on investment return for international student recruitment, this organisational structure is a key characteristic of successful student recruitment programmes (Yam, Darrup-Boychuck, and McKown 2007).

In addition, to facilitate recruitment, the Office of International Programs offers several resources:

- Useful website providing a great amount of useful information and links for prospective students.
- Publication of a Montana State University brochure for prospective international students that is available on request to any MSU department to use in their recruitment efforts.
- Library of up-to-date resources on worldwide educational systems and institutions.
- List of professional contacts that can be useful in verifying documents and academic programmes.
- Contacts with various organizations that place sponsored international students on U.S. university campuses (MSU, 2007).

These services and resources combine marketing and publicity techniques with strategies to show the added value of attending Montana State University if you are an international student. In this way, offering these bonus services are a type of recruitment activity and help to sell the university to the student.

The office also works in various ways to promote communication and marketing techniques:

- All contacts are handled quickly and email is used as a first and immediate response to inquiries.
- Requests for English language training or specific graduate programmes are forwarded to the appropriate department.
- An information and application packet is mailed in response to all undergraduate or non-degree graduate inquiries.
- Catalogues are sent to approximately 500 advising centres worldwide. When further requests are made, an information packet is sent.
- MSU creates and places ads and listings in guides and on websites that provide information to prospective international students.
- When finances allow for it, an office representative attends U.S. university fairs overseas to promote MSU and its programmes and makes visits to key schools and institutions abroad (MSU 2007).

These implicit and explicit methods for student recruitment revolve around publicity and marketing, but also include service features designed to leave a positive impression on the prospective student when she is interacting with the university. Other universities also create strategies to show what sets apart University A from University B in efforts to convince a student that her experience will be richer at University A, even if this proves not to be the case (Michigan State University, 2004). In these cases, emphasis on the *quality* of recruitment methods from a student's perspective is being closely considered.

Approach No# 3: Seeing what's missing (Assessing recruitment infrastructure needs)

At the University of North Carolina – Chapel Hill, the recognition for the need to commit to an International Student Recruitment Plan was the first step in ensuring the university would remain "a part of the game" in international student recruitment. Given the increasing competitiveness of attracting international students, both from other American HEIs as well as from rising HEIs around the world, this step by the UNC administration demonstrated the relevance of keeping pace with other universities searching for foreign students (IIE Open Doors Report 2007; Donavan 1999). First, leaders from UNC decided to expand the budget to create position within the university responsible for leading the efforts in international student recruitment. The individual, required to be a strong expert in the area of international recruitment, would be expected to develop a strong network of host countries and programmes, capitalizing on university partnerships (UNC 2007). In this respect, UNC succeeded in mirroring on of the key characteristics of a successful international recruitment programme: institutional commitment / mission (Yam, Darrup-Boychuck, and McKown 2007).

Most interestingly, UNC also tied in key members of the campus community to support the renewed efforts for recruitment, including Admissions, athletic faculty, international faculty, domestic faculty who travel abroad frequently, international students, study abroad participants, alums, and ESL programme affiliates (UNC 2007). This capacity to look within one's own university and identify where efforts can be placed to enhance opportunities reflects a second characteristic of a successful programme: organisational structure (Yam, Darrup-Boychuck, and McKown 2007). Tapping into the wealth of resources within a university can reveal hidden potential and offer a chance for community strengthening. If the Athletic department works with admissions to identify a foreign athlete interested in the university, one can easily imagine how the university's study abroad programme in that student's home country could invite the student to meet current students, fostering a greater interest and bond with the university, and improving the chances for that student to choose the institution. The possibilities are numerous and UNC certainly recognized this potential very clearly.

Lastly, additional strategies employed by UNC included finding ways that the UNC system could play a bigger role in "assisting the campuses not 'naturally' desired for enrolment by international students." This could vary between publicity programmes, media campaigns, and effective marketing, but it could also include perks and benefits offered to the student if attending a less popular UNC campus. The importance of an international house or events could not be underestimated in this case.

Approach No# 4: Looking towards others

Many American HEIs do not just consider policies and strategies currently being used in the United States. Examples from other countries are also considered (Smith 2003; Michigan State University 2004; NAFSA & Indiana University 2005). This brings about an important point when determining best practices for international student recruitment: know your competition. In this increasingly competitive market where the saturation point of certain student target groups is being reached, being aware of how other countries appeal to students to study in their country is important. For example, the United States, spearheaded by NAFSA, the National Association of International Educators, is also considering policies of a nature similar to that of Canada's University of British Columbia. In the instance of this university, the streamlining of the application and the admissions process is a top priority. The endeavour includes marketing and operational strategies that facilitate the process for international students to obtain both undergraduate and graduate degrees at UBC. In addition, language requirement standards have been reappraised and strategies to increase international student recruitment parallel Canada's recent immigration policy changes and the softening of restrictions on employment. These policy changes are anticipated to increase international student enrolment by as much as 20,000. Other policies adopted mimic systems in place in Europe (the UK and Germany) including a point-based immigration high-demand fields of engineering, computer sciences, and hard system that is favourable to highly skilled professionals or the granting of permanent residency to professionals in designated sciences (UBC 2008). In several documents, NAFSA has called for the need to create a national web-based system to help potential international students sort out the complex choices offered in the United States higher educational system, the reformation of immigration laws, and helping to make employment more of a possibility for international students. In addition, both the United States and Canada are considering ways to increase enrolment due to their language advantage of English speaking countries. This attribute is known to attract students who know that it is the language most used in international communications and global business (NAFSA & Indiana University 2005; NAFSA 2003; NAFSA 2006).

6.5 Conclusion: What is Relevant for Germany?

In conclusion, it can be seen that although the United States has been rather successful thus far in recruiting international students, competition is increasing. For German HEIs to stay a leader in recruitment efforts, strategies to attract students need to become more diverse and more innovative. In the case of the United States, the advantage of courses taught in English means that convincing reasons must be conveyed to the potential student if he or she is to keep Germany as a serious option. Thus, either offering English programmes as well, emphasizing the strengths in a certain discipline superior to that of American instruction or training, or highlighting the advantage of learning German can be potential arguments offering added value to an experience abroad.

A substantial American of HEIs are very organized in their strategies for international recruitment efforts, while others rely more on reputation and branding. Campus efforts to promote 'internationalisation' reinforce the importance attached to diversity and foreign student numbers, in such that the statistics are often advertised when incoming freshman numbers are analysed and presented. It is often considered a bragging point to mention the X percentage of foreign students coming from X number of countries around the world, and this is addressed during opening

ceremonies, during graduations, on websites, and in newsletters to students and parents, so that they may be 'proud' of the university's success in attaining a higher level of diversity. Each year, there is an effort to increase these numbers and quotas are set whereby entry requirements may be decreased to allow for greater diversity. More money may also be invested into recruiting a student from a country that is poorly represented than in a student coming from a country well represented (NAFSA 2005).

Structured activities exist in many 4-year colleges and universities in order to bring together other international students with each other as well as international students with American students. Integration combined with a respect for diversity and the expression of one's country is a key feature of international student programmes. Examples of this include the international fairs where students dress in their traditional country outfits, dance their country's dances, and cook foods from their homelands (Stanford 2006; Hamilton 2008, Purdue 2007). Stanford University has been organizing annual events such as the I-Fest, or International Festival for over 25 years, for example (Stanford 2004).

The focus of some institutions to involve the entire college or university community (and in some cases the town community as well) in having a role in the international students' experiences suggests that there is an interest in not just influencing the student's academic experience, but also the cultural experience of the individual. Recruitment efforts are reinforced by this more personalised on-campus attention. Alumni return to their home countries and recruit other students by word-of-mouth, may consider returning abroad for more advanced study, and help to maintain a bond between the United States and the student's culture, ultimately offering greater potential for exchanges to be made and partnerships to be fostered, particularly if the alumni office at the school is strong.

Although these features of student recruitment and on-campus internationalisation may not historically be common in German HEIs, it may be interesting in certain cases to make adaptations fitting the German context and relevant to German higher education needs. Cross-cultural comparisons such as this are important for the vitality and growth of an institution to implement new ideas and stay competitive in the global race towards recruitment outside of a country's own borders.

7. Conclusions and Recommendations

Before summarising the experiences from this report, one rightful question asked by the DAAD when reviewing the paper shall be addressed: Is Western Europe no longer a market for German HEIs if today 70% of the exchanges are taking place here (DAAD 2008)? The authors think that for several reasons, indeed Western Europe (and explicitly not Central and Eastern Europe!) will not be of the same unique importance as a recruitment base in the upcoming decades when discussing the recruitment of international degree seeking students. Firstly, Western Europe is strong today considering mobility but much less considering full time studies. Secondly, all Western European countries will face or even now face a dramatic ageing effect reducing the relevant target group. Thirdly, it is hoped that in 20 years time, Western Europe at least (if not the entire EU) will be considered much more domestic than international. Fourthly, Germany as a country must have a strong interest to be better placed as an education provider in future economic markets of relevance to an export-dependent country. Fifthly, a focus of this paper on new markets does not mean that old markets should be left unguided. As we tried to show with the Polish example – and the same statement could be made for Russia - traditional markets pose specific challenges. The authors believe that activities within Western Europe will and must have their place in a diversified recruitment strategy, but the real music has to be played somewhere else if Germany does not want to lose more grip than it already has (regarding the decrease in countries such as Iran or China).

How to proceed then? The country analyses as well as the discussion of instruments and strategies focusing on five very diverse target countries showed that there is no universal ‘one-size-fits-all’ strategic approach to international student recruitment. Indeed, every country is different, every HEI has different needs, and every instrument serves different purposes. The daunting task for a German HEI is to develop a coherent strategy based on a clear knowledge of what its current situation is, what the looming problems or challenges are, which goals it wants to pursue and why, and how this approach is to be applied concretely to a specific country. The authors conceive of three basic pillars on which the global positioning of an education provider rests: interests/needs, instruments, and country analyses. However, all are even by themselves more complex than the pages allotted for this paper could show. If starting from the interest/need perspective, every HEI might come up with a set of interests which asks for indicators different from those presented here. The task would then be to find reliable data, a rather difficult endeavour. Moreover, we think that the presented instruments represent the most relevant options, however it might well be that we overlooked instruments which have possibly been applied in other contexts. Finally, the analysis of the applicability of certain instruments also shows that many things are possible, but the decision has to be based on a primary factor: the interests and needs of the HEI in question.

At this juncture, one may wonder which path to take. A major challenge in the beginning is to answer some crucial questions. What are the products my HEI wants to market (courses, BA or MA or PhD, other)? What are my strengths and what are my weaknesses? If I go for an offshore activity, what are the legal implications? What are the issues with quality assurance in the case of franchising or offshore activities? How does the issue of accreditation and recognition of academic merits apply in the home country of the prospective students; are German credits and degrees accepted or do I need a local partner? What are specific subject niches which I could fill and do

they coincide with my strengths? Do we want to specialise in professional master's programmes or do we focus on PhD candidates? Is it worthwhile to cooperate with a local partner, i.e. in terms of double or joint degrees? As the case studies have shown, there is not a one-size-fits-all approach for one country. Considering that HEIs are also diverse in terms of type, mission, strengths, location and USPs (unique selling propositions), this means that a highly individualised approach is needed. If these questions are answered, then how is one to proceed?

The crucial point is that the development of any marketing strategy has to be based on sound market research; otherwise, failure is a high probability. This kind of market research is a quite intensive and elaborate activity with many different instruments which can be applied (among others: surveys, alumni interviews, focus group interviews, etc.). Some institutions specialise in providing specific services in this field of expertise, such as i-graduate (http://www.i-graduate.org/). There are also consultancy agencies which are specialising in developing market specific entry modes such as mjd consultancy (http://www.mjdconsultancy.com/), though focusing on UK institutions). The workshops offered by ICEF to contact education agents might also be a worthwhile activity (http://www.icef.com). Some useful information might also be drawn from the work of Maurits van Rooijen for the EAIE (Rooijen 2008).

Basically, two options seem to be both likely and recommendable. Firstly, an HEI possessing the necessary man and woman power, as well as the facilities to do so, might decide to run all necessary processes on its own. Secondly, HEIs which are lacking the staff potential might opt for the consulting approach cooperating with an external institution which is providing them with the necessary information, research, analysis and suggestions for actions. Whichever option is chosen, one item is a given: there exists no free lunch when it comes to student recruitment. Any HEI seriously looking into this option, for whatever reasons, has to be willing to invest. Recruitment at no cost is a hopeless dream and will stay a dream, though it sometimes appears as if it is frequently considered nonetheless.

8. Annex: Additional Tables

Trends of International Student and Total U.S. Enrolment *(1954-2006)*

Year	International Student Enrolment	Annual % Change	Total Enrolment	% International Students
1954/55	34.232	-	2.499.800	1,4
1959/60	48.486	2,6	3.402.300	1,4
1964/65	82.045	9,7	5.320.000	1,5
1969/70	134.959	11,2	7.978.400	1,7
1974/75	154.580	2,3	10.321.500	1,5
1979/80	286.343	8,5	11.707.000	2,4
1984/85	342.113	0,9	12.467.700	2,7
1989/90	386.851	5,6	13.824.592	2,8
1994/95	452.635	0,6	14.554.016	3,1
1999/00	514.723	4,8	*13.584.998	3,8
2000/01	547.867	6,4	14.046.659	3,9
2001/02	582.996	6,4	13.511.149	4,3
2002/03	586.323	0,6	12.853.627	4,6
2003/04	572.509	-2,4	13.383.553	4,3
2004/05	565.039	-1,3	13.994.869	4
2005/06	564.766	-0,05	**14,528,728	3,9

*In 1997 The College Board had changed its data collection process.
**College Board Annual Survey of Colleges data on U.S. Higher Education enrolment

Source: 2006 Open Doors Report on International Educational Exchange - The Institute for International Education (IIE) (http://opendoors.iienetwork.org/?p=89196)

Leading 25 Institutions Hosting International Students, 2005/06*

Rank	Institution	State	International Students	Total Enrolment
1	University of Southern California California	CA	6,881	32,836
2	Columbia University	NY	5,575	24,343
3	Purdue University, Main Campus	IN	5,540	38,712
4	New York University	NY	5,502	53,215
5	University of Texas at Austin	TX	5,395	49,696
6	University of Illinois at Urbana-Champaign	IL	4,904	41,323
7	University of Michigan - Ann Arbor	MI	4,649	39,533
8	Boston University	MA	4,542	30,957
9	The Ohio State University, Main Campus	OH	4,476	50,504
10	SUNY - University at Buffalo	NY	4,072	27,220
11	University of California - Los Angeles	CA	3,979	37,221
12	University of Florida	FL	3,749	49,650
13	Cornell University	NY	3,697	19,447
14	University of Pennsylvania	PA	3,689	23,305
15	Harvard University	MA	3,669	19,779
16	Texas A&M University	TX	3,589	44,578
17	Indiana University at Bloomington	IN	3,540	37,958
18	University of Maryland College Park	MD	3,476	35,369
19	University of Houston	TX	3,413	35,096
20	University of Minnesota - Twin Cities	MN	3,384	51,175
21	University of Wisconsin - Madison	WI	3,381	41,480
22	Michigan State University	MI	3,293	45,166
23	Stanford University	CA	3,200	15,567
24	Penn State University - University Park	PA	3,199	41,289
25	University of Arizona	AZ	3,023	37,036

*Based on sheer numbers

Source: Open Doors 2006, Report on International Educational Exchange - The Institute for International Education (IIE) (http://opendoors.iienetwork.org/?p=89196)

Top Associate's Degree Hosting Institutions

Rank	Community College	State	International Student Enrolment	2005/06 Enrolment
1	Houston Community College	TX	3,227	55,000
2	Santa Monica College	CA	2,658	29,312
3	Montgomery College	CA	2,658	22,263
4	De Anza College	CA	2,112	23,963

Source: Open Doors 2006, Report on International Educational Exchange - The Institute for International Education (http://opendoors.iienetwork.org/?p=89196)

New International U.S. Student Enrolment, 2004/05 and 2005/06

	2005/06 Numbers	2005/06 Percent	2004/05 Numbers	2004/05 Percent	Change – Numbers	Change - Percent
Total	131,945	23.4%	142,923	25.3%	10,978	8.3%
Undergrad	59,943	45.4%	61,342	42.9%	1,399	2.3%
Graduate	61,350	46.5%	64,235	44.9%	2,885	4.7%
Other	10,653	8.1%	17,346	12.2%	6,693	62.8%

Source: 2006 Open Doors Report on International Educational Exchange, IIE

9. Sources

ACE 2006:
Students on the Move: The Future of International Students in the United States, ACE Issue Brief, October 2006:
www.acenet.edu/AM/Template.cfm?Section=InfoCenter&CONTENTID=18573&TEMPLATE=/CM/ContentDisplay.cfm - last retrieval August 8, 2007

APU1 2007:
www.apu.ac.jp/home/modules/keytopics/index.php?id=200, last retrieval December 17, 2007

Beine et al. 2001:
Beine, Michel; Docquier, Frédéric; Rapoport, Hillel: Brain drain and economic growth: theory and evidence; in: Journal of Development Economics, Vol.64 (2001), pp.275-289

Blickem/Shackleford 2008:
Blickem, Chelsea; Shackleford, Nick: Opportunities and Challenges: Managing Program Quality and Institutional Partnership in a Transnational Educational Context, in: Teaching in Transnational Higher Education. Enhancing Learning for Offshore International Students, edited by Lee Dunn and Michelle Wallace, New York / London 2008, pp. 216-226

Bolag 2006:
Burton, Bollag: America's Hot New Export: Higher Education. The Chronicle for Higher Education, International, February 17, 2006,
http://www.buffalo.edu/news/pdf/Feb06/ChronicleDunnettIntlPrograms.pdf, last retrieval May 9, 2008

Brandenburg et al.:
Brandenburg, Uwe; Federkeil, Gero: How to measure internationality and internationalisation of higher education institutions! Indicators and key figures, Gütersloh 2007, Arbeitspapier 92, 42 pages

Brandenburg/Zhu 2007:
Brandenburg, Uwe; Zhu, Jiani: Higher Education in China in the light of massification and demographic change, Gütersloh 2007, Arbeitspapier 97, 59 pages

British Council 2004:
Böhm, Anthony; Follari, Marcelo; Hewett, Andrew; Jones, Sarah; Kemp, Neil; Meares, Denis; Pearce, David; Van Cauter, Kevin: Vision 2020. Forecasting international student mobility - A UK perspective, British Council, London 2004

British Council 2007:
www.britishcouncil.org/eumd-information-research-tne-student-decision-making.htm, last retrieval December 17, 2007

Burke 2007:
Burke, Kevin. International Enrolment Swells on Earlham Campus This Fall, Earlham College

Online Publications, July 26, 2004:
www.earlham.edu/publicaffairs/content/pressroom/archive/2004/july/040726f-international.php - last retrieval July 15, 2007

City College 2007:
www.city.academic.gr/city/index.asp?pn=index, last retrieval December 14, 2007

CSU 2008:
Charles Sturt University, Division of Marketing, www.csu.edu.au/division/marketing/about_int.html, last retrieval January 16, 2008

DAAD 2007:
Deutscher Akademischer Austauschdienst (DAAD): Wissenschaft Weltoffen 2007. Facts and Figures on the International Nature of Studies and Research in Germany, Bielefeld 2007

DAAD 2008:
Feedback in a review loop with the DAAD, headed by Dr. Siegbert Wuttig but involving feedbacks from many experts at the DAAD, April 7, 2008

DAAD New York 2008:
Feedback information from the head of the DAAD office in New York, Ulrich Grothus, April 9, 2008

DAAD Offshore 2007:
www.daad.de/hochschulen/studienangebote-ausland/studienangebote-deutscher-hochschulen-im-ausland/05110.de.html, last retrieval February 2008

DDP 2007:
www.ddp-direkt.de/portal/details.php?id=24194, last retrieval December 14, 2007

Debowski 2008:
Debowski, Shelda: Risky Business: Effective Planning and Management of Transnational Teaching, in: Teaching in Transnational Higher Education. Enhancing Learning for Offshore International Students, edited by Lee Dunn and Michelle Wallace, New York / London 2008, pp. 204-215

De Montford 2007:
www.dmu.ac.uk/Images/DAQ%20Guide%208%20-%20Validations_tcm6-905.pdf, particularly p. 4 and 9, last retrieval December 17, 2007

Dilworth 2007:
Dilworth, Michael: Brain Drain, University of Western Ontario, www.lib.uwo.ca/business/braindrain.html, last retrieval December 23, 2007

Donova 1999:
Donovan, Patricia. International Office Recruits Students in 15 Countries, University of Buffalo Reporter, v.30, n.31: www.buffalo.edu/reporter/vol30/vol30n31/n1.html - last retrieval, January 24, 2008

Doorbar/Bateman 2008:
Doorbar, Alison; Bateman, Christine: The Growth of Transnational Higher Education. The UK perspective, in: Teaching in Transnational Higher Education. Enhancing Learning for Offshore International Students, edited by Lee Dunn and Michelle Wallace, New York / London 2008, pp. 14-22

Dubai 2007:
http://kv.ae/en/, last retrieval February 5, 2008

DUZ 2008:
DUZ Magazin 3/08, April 11, 2008, http://www.duz.de/docs/artikel/n_03_08tuerkei.html, last retrieval April 11, 2008

EOC 2007:
www.overseas-campus.info/index.htm, last retrieval December 14, 2007

GCSS 2004:
www.middle-east-online.com/Default.pl?id=23701 (in Arabic), last retrieval December 18, 2007

Gecenok & Trayte 2008:
Gecenok, Louis & Trayte, Kathleen. Developing a Marketing and Recruiting Plan, National

Association of International Educators (NAFSA):
www.nafsa.org/knowledge_community_network.sec/recruitment_admissions/recruiting_and_marketing/practice_resources_2/planning/developing, last retrieval January 16, 2008

Green 2005:
Green, Madeleine. Measuring Internationalization at Research Universities, American Council on Education, 2005

Group of Eight 2007:
www.go8.edu.au/, last retrieval December 14, 2007

GTU 2007:
German Federal Foreign Office, “German-Turkish University: first step taken towards foundation”, 06.12.07: http://www.auswaertiges-amt.de/diplo/en/Infoservice/Presse/Meldungen/2007/071206-Dt-Tuerk-Uni.html, last retrieval March 6, 2008

Guardian 2007:
Meikle, James: The Guardian, September 13, 2007, http://education.guardian.co.uk/higher/news/story/0,,2167838,00.html, last retrieval December 3, 2007

Guhr 2007:
Guhr, Daniel J. What works and what doesn't in international student recruiting: A discussion of trends, innovation, and competition, AIEC Annual Conference 2007. Powerpoint presentation: www.international.ac.uk/resources/(icg)%20aiec%20international%20recruiting%20final%20-%2007%2010%20121.pdf – last retrieval January 30, 2008

Hamilton 2008:
Culture Festival website, Hamilton College 2008:
www.hamilton.edu/college/multicultural_affairs/culture.html - last retrieval January 30, 2008

Harman 2006:
Harman, Grant. Australia as an Higher Education Exporter, International Higher Education, Number 42, Winter 2006, The Boston College Center for International Higher Education, Boston, Massachusettes: http://www.bc.edu/bc_org/avp/soe/cihe/newsletter/Number42/p14_Harman.htm - last retrieval February 29, 2008

Heidelberg 2007:
www.rzuser.uni-heidelberg.de/~p00/english/, last retrieval December 14, 2007

Hicks/Jarrett 2008:
Hicks, Margeret; Jarrett, Kylie: Providing Instruction, Orientation and Professional Development for All Staff Involved in Transnational Teaching, in: Teaching in Transnational Higher Education. Enhancing Learning for Offshore International Students, edited by Lee Dunn and Michelle Wallace, New York / London 2008, pp. 238-248

Huang 2008:
Huang, Futao: Regulation and Practice of Transnational Higher Education in China, in: Teaching in Transnational Higher Education. Enhancing Learning for Offshore International Students, edited by Lee Dunn and Michelle Wallace, New York / London 2008, pp. 23-33

IDP 2002:
Böhm, A.; Davis, D.; Meares, D., Pearce, D.: Global Student Mobility 2025. Forecast of the Global Demand for International Higher Education, IDP Education Australia, Sydney 2002

IIE 2007:
Institute of International Exchange (IIE), http://opendoors.iienetwork.org/page/113142/, last retrieval November 29, 2007

International Focus 2008:
www.international.ac.uk/resources/International%20Focus%20Issue%2016.01.08%20final.pdf, last retrieval February 5, 2008

Johnson/Reget 1998:
Johnson, Jean M.; Regets, Mark C.: International Mobility of Scientists and Engineers to the United States – Brain Drain or Brain Circulation?; National Science Foundation, Division of Science Resources Studies, Collected Works, Serials (022), SRS Issue Brief, June 22, 1998, pp. 3-6

JWT Education 2006:
J. Walter Thompson Education (JWT Education). The International Student of 2005, AIEC Conference 2006

Liverpool John Moores University 2008:
Guidelines for Recruitment of International Students, Liverpool John Moores University. www.ljmu.ac.uk/RGSO/RGSO_Docs/international.pdf, last retrieval January 17, 2008

McBurnie 2008:
McBurnie, Grant: Quality Assurance for Transnational Education: International, National and Institutional Approaches, in: Teaching in Transnational Higher Education. Enhancing Learning for Offshore International Students, edited by Lee Dunn and Michelle Wallace, New York / London 2008, pp. 193-203

Mackintosh & Olsen 2005:
Mackintosh, Dr. Bruce, The University of Western Australia & Olsen, Alan, Strategy Policy and Research in Education Limited, Hong Kong, Benchmarking 2004: Australian Universities International Director's Forum (AUIDF), 2005, www.idp.com/aiec/program/Mackintosh%20&%20Olsen%202004.pdf, last retrieval December 28, 2007

McMurtie March 2007:
McMurtie, Beth. The Global Campus: American Colleges Connect with the Broader World, Chronicle of Higher Education, V53, n26, pA37, March 2007

McMcurtie April 2007:
McMurtie, Beth. U.S. Campaign Advertises American Higher Education in China, Chronicle of Higher Education, v53, n32, p. A42, April 2007

Michigan State University 2004:
Strategic Plan for Undergraduate International Recruitment, Michigan State University, 2004: http://accreditation2006.msu.edu/internationalization/documents/International_recruitment_000.pdf - last retrieval January 28, 2008

Miyagiwa 1991:
Miyagiwa, Kaz: Scale Economies in Education and the Brain Drain Problem, in: International Economic Review, Vol.32, No.3, August 1991, pp. 743-759

Monash 2007:
www.monash.edu.au/about/overview/brief-history.html, last retrieval December 14, 2007

Moawad 2007:
www.scidev.net/News/index.cfm?fuseaction=readNews&itemid=3317&language=1, last retrieval December 17, 2007

MSU 2007:
Bringing international education to the core of academic and cultural life at MSU, Montana State University International Student Website: www.montana.edu/international - last retrieval July 14, 2007

NAFSA 2003:
In America's Interest: Welcoming International Students: Report of the Strategic Task Force on International Student Access, NAFSA January 2003:
www.nafsa.org/_/Document/_/in_america_s_interest.pdf - last retrieval July 15, 2007

NAFSA 2006:
Restoring U.S. Competitiveness for International Students and Scholars, NAFSA June 2006:
www.nafsa.org/_/Document/_/restoring_u.s.pdf - last retrieval July 10, 2007

NAFSA & Indiana University 2005:
In America's Interest: Welcoming International Students – The Role of Higher Education, NAFSA & Indiana University Symposium Overview, April 2005:
www.cic.uiuc.edu/groups/InternationalStudentAndScholarServicesDirectors/archive/ConferenceSummary/White_PaperNn.pdf - last retrieval January 17, 2008

NCES 2006:
National Center for Education Statistics, *Digest of Education Statistics, 2006.* Institute of Education Sciences, U.S. Department of Education, Washington, D.C. Data from Table 5: "Number of educational institutions, by level and control of institution: Selected years, 1980–81 through 2004–05": http://nces.ed.gov/programs/digest/d06/tables/dt06_005.asp?referrer=list – last retrieval March 14, 2008

Nicol 2008:
Feedback by Reviewer Andy Nicol, Coventry University, on April 11, 2008

OECD 2007
Education at a Glance 2007, OECD, Paris 2007.
http://www.oecd.org/document/30/0,3343,en_2649_201185_39251550_1_1_1_1,00.html#toc

OECD 2008:
OECD: Cross-Border Tertiary Education. A way towards capacity development, OECD, Paris 2007

O'Hara, Raftus & Stedman 2006:
Marie O'Hara, Karen Raftus, Joann Stedman, Editors. Nafsa's Guide to International Student Recruitment, 2006

Open University 2007:
www.open.ac.uk/about/ou/, last retrieval December 17, 2007

Phoenix 2007:
www.open.ac.uk/about/ou/, last retrieval December 17, 2007

Purdue 2007:
Purdue International Festival, Purdue University International Students and Scholars homepage, 2007: www.iss.purdue.edu/IAW/ - last retrieval January 30, 2008

Qatar 2007:
www.qf.edu.qa/output/page294.asp, last retrieval December 17, 2007

Ramsden 2007:
Ramsden, Brian: Patterns of higher education institutions in the UK: Seventh report. A report by Professor Brian Ramsden on behalf of the Longer Term Strategy Group of Universities UK, Universities UK, London 2007

Ritsumeikan 2007:
www.ritsumei.ac.jp/eng/profile/history/index.shtml, last retrieval December 17, 2007

Rooijen 2008:
Rooijen, Maurits van: Marketing your institution internationally, EAIE Professional Development Series for International Educators, EAIE Amsterdam 2008

SciDevNet 2007:
www.scidev.net/news/index.cfm?fuseaction=readnews&itemid=1410&language=1, last retrieval December 18, 2007

Selingo 2007:
Selingo, Jeffrey. Cornell Courts a Subcontinent, Chronicle of Higher Education, v53, n26, pA38, March 2007

Smith 2003:
Smith, Marjorie S. International Student Recruitment Since 9/11, WENR – World Education News & Reviews, v16, Issue 3, May/June 2003: http://www.wes.org/ewenr/03May/Feature.htm - last retrieval January 27, 2008

Stanford 2004:
Vitero, Erin. Dancing, Food, Fashion at I-Fest, The Stanford Daily, Stanford University, May 7, 2004:
http://daily.stanford.edu/article/2004/5/7/dancingFoodFashionAtIfest - last retrieval January 30, 2008

Stanford 2006:
Jean-Baptist, Francois. International Gala Extravaganza, The Stanford Daily, Stanford University, February 28, 2006: http://daily.stanford.edu/article/2006/2/28/internationalGalaExtravaganza - last retrieval January 30, 2008

Stanford 2008:
Cox, Katherine. Overseas Campuses not Likely, The Stanford Daily Online,
February 25, 2008: http://daily.stanford.org/article/2008/2/25/overseasCampusesNotLikely , last retrieval February 26, 2008

Straubhaar 2000:
Thomas Straubhaar, International Mobility of the Highly Skilled: Brain Gain, Brain Drain or Brain Exchange, HWWA DISCUSSION PAPER 88, Hamburgisches Welt-Wirtschafts-Archiv (HWWA), Hamburg Institute of International Economics 2000

Stromquist 2007:
Stromquist, Nelly. Internationalization as a Response to Globalization: Radical Shifts in University Environments, Higher Education: The International Journal of Higher Education and Educational Planning, v53, n1, p 81-105, January 2007

Suffolk 2007:
Suffolk University, Country Ambassadors website: http://www.suffolk.edu/4822.html - last retrieval, July 18, 2007

Sunway 2007:
www.sunway.com.my/, last retrieval December 14, 2007

Tafawa 2007:
Tafawa, Vilma. Bunker Hill Community College: Strategies for Successful International Student Recruitment and Pathways to Success, Powerpoint Presentation, March 2007:
http://handouts.aacrao.org/am07/finished/T0130p_V_Tafawa.pdf - last retrieval July 15, 2007

TAFE 2008:
Technical and Further Education (TAFE) website.
www.detinternational.nsw.edu/au/tafe/index.html, last retrieval January 17, 2008

Tagesspiegel 2008:
Der Tagesspiegel, April 11, 2008: http://www.tagesspiegel.de/magazin/wissen/;art304,2510766, last retrieval April 11, 2008

UBC 2008:
Go Global, University of British Columbia: www.students.ubc.ca/global/incoming/ - last retrieval July 15, 2007

UN 2007:
www.un.org/millenniumgoals/, last retrieval February 5, 2008

UNC 2007:
Notes from the International Student Recruitment, retention, and Alumni services Committee Meeting, University of North Carolina – Chapel Hill, January 24, 2007:
www.international.appstate.edu/about/documents/1.24.07meeting.pdf - last retrieval August 8, 2007

UNESCO 2005:
UNESCO EFA Global Monitoring Report, 2005.
www.unesco.org/education/gmr_download/chapter1.pdf, last retrieval February 6, 2008

UNESCO 2006/07:
UNESCO: World Data on Education, CD Rom, 2007

Universities UK 1999:
www.universitiesuk.ac.uk/speeches/show.asp?sp=21, last retrieval December 17, 2007

Vickers/Bekhradnia 2007:
Vickers, Phil; Bahram Bekhradnia, The Economic Costs and Benefits of International Students, Higher Education Policy Institute, July 2007

Vision 2020:
Böhm, Anthony; Follari, marcelo; Hewett, Andrew; Jones, Sarah; Kemp, Nell; Meares, Denis; Pearce, David; van Cauter, Kevin: Vision 2020. Forecasting international student mobility. A UK perspective, British Council / Universities UK / IDP Education Australia, London 2004

Webster 2007:
www.webster.nl/index.jsp?USMID=91208, last retrieval February 5, 2007

Wissenschaft-Weltoffen 2007:
Deutscher Akademischer Austauschdienst (DAAD), www.wissenschaft-weltoffen.de/daten/1/2/1, last retrieval December 5, 2007

World Bank 2007:
The World Bank Knowledge Assessment Methodology: www.worldbank.org/kam, last retrieval January 11, 2008

World Bank 2008:
World Bank EdStats - Country Profiles “education at a glance”
http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTEDUCATION/EXTDATASTATISTICS/EXTEDSTATS/0,,contentMDK:21605891~menuPK:3409559~pagePK:64168445~piPK:64168309~theSitePK:3232764,00.html, last retrievals May 7, 2008

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