



Financing the Mobility of Students
in European Higher Education

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Executive summary¹

This working paper provides an overview of the importance and tendencies of financing higher education and students' mobility. The analysis investigates problems stemming from unequal access to financing of education and mobility associated costs. It underlines the necessity of public help to correct market failures. It also shows that the establishment of an EU Student Loan Facility for cross-border mobility as a policy measure on EU level would have added value in order to contribute to the objective to increase the mobility of higher education students.

Mobility in Higher Education students

- Enrolment in tertiary education has increased in recent years, especially in new EU member countries. The importance of education has been raised by the EU, as knowledge and skills are key drivers of productivity growth in advanced economies.
- The earning premiums for people with higher education are significant. Returns to tertiary education in the EU can reach 98%.
- Together with high education, the importance of mobility is reflected in the EU policy. In the Bologna process² agreement, the mobility of at least 20% of higher-educated students should complete some of their studies in another country by 2020. Currently, only 10% of higher-educated students are mobile.

Costs and income sources

- Study- and mobility-related costs are diversified across countries and across fields of studies. For example, university fees are very different from one country to another, ranging from countries where nobody pays fees to countries where everybody pays fees. Costs of living also significantly vary between countries.
- Existing sources - such as family resources, grants, self-financing and loans - carry many discriminatory factors. The main problem of these sources is that they are not equally accessible to all students.

European Added Value

- Benefits from higher education are observed to be large enough to incentivize students to invest in their education by taking loans. However, existing loan schemes are not well-tailored to *mobile* students and they are not equally accessible to all students.
- Financial intermediaries cannot transform easily their existing schemes to loan schemes that are more suitable for mobile master students. Heterogeneity of borrowers in terms of their financial background, countries of studies, or future employment, makes the price of loans prohibitive for students.

¹ This paper benefited from comments by/contributions from Antonella Calvia-Götz, David González Martín, Helmut Kraemer-Eis, Frank Lang, Dariusz Zwierzynski and Julie Fionda. All errors are of the author.

² The Bologna Process is named after the Bologna Declaration. It is an important process of harmonizing various systems of European higher education in order to increase its international competitiveness. The Bologna Process is designed to insure comparability and transferability of higher education qualifications between European countries.

- European added value: EU help by offering a guarantee scheme could help to incentivize intermediaries to provide affordable loan conditions.
- In addition to economic advantages, it can be assumed that increasing the mobility of higher education students would lead to significant social returns.

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1 Introduction

The European Commission (EC) identified a market gap with respect to the availability of financial support for full-programme cross-border studies, notably at masters-level. The existence of the gap was supported by a feasibility study of the London School of Economics (LSE). The study was conducted during 2010 and forms an important input to this paper. It also proposed mechanisms which form the background to the proposed EIF guarantees model for master students' loans (LSE, 2009).

In 2011, the discussion of the concrete design of the facility intensified, and the proposal of the Erasmus + programme, which has been negotiated by the European Commission with the European Parliament and the Council of Member States, included a potential Guarantee scheme for Student Loans to cross-border students undertaking master studies. EIF and EIB have been actively involved in advising the European Commission on this scheme. They also performed the market tests with selected financial intermediaries (banks, guarantee institutions) which are already experienced (or could be interested to start it) in providing student loans and guarantees for loans at national level. The feedback was positive, and the issues raised during the market test have fed into the further process of defining concrete product proposals. In 2012, it was agreed that the EIB Group would proceed with further work in the design and market-testing of this guarantee facility.

The Erasmus Master Student Loan Guarantee Facility, targeting mobile master students, is part of the new 'ERASMUS+' Programme. It is foreseen that the scheme is going to encourage banks and other financial institutions to start, or extend, their activities to finance mobile master students within the EU. The support mechanism, currently under discussion, would consist of two parts provided by EIB and EIF: the EIF intends to provide credit guarantees/counter-guarantees via financial intermediaries. If requested, the EIB may additionally provide the intermediaries with extra funding resources, on a case by case basis, with the condition that they pass on the benefit of EIB funding to the students. EIB has had extensive experience in financing education and training for over a decade, and had earmarked EUR 23,693 billion of loans to education and training over 2000-2011. To date, EIB has financed several student loan operations in Europe: one in Italy with two loans, three in Germany, and one in Hungary (with three loans), totalling EUR 825 million of EIB loans.

Against this background, and in order to explain the rationale for the current initiative, this paper is organized as follows: section 2 sets out the importance of mobility in higher education and its role in the formation of a productive labour force and a better society. Study and mobility related costs are discussed in section 3. The same section emphasises inequality associated with existing means of financing. Finally, section 4 raises the importance of EU help in providing equal opportunities to students. That section explains the EU added value and the design of the new loan facility scheme.

2 Role of education and mobility

This section describes the importance of mobility and higher education. More precisely, subsection 2.1 outlines the role of education in employment, especially during crises, and discusses the returns to education, both private and social. Subsection 2.2 looks at statistics on student mobility across countries and focuses on potential gains from mobility.

2.1 Why higher education?

The importance of education was underlined by the 2005 mid-term review of the Lisbon Strategy: “In advanced economies such as the EU, knowledge, meaning R&D, innovation and education, is a key driver of productivity growth. Knowledge is a critical factor with which Europe can ensure competitiveness in a global world where others compete with cheap labour or primary resources” (European Commission, 2005).

Education and training are important for development, productivity and economic growth. Especially now, during financial and economic crisis, more effort must be put into higher education to help young people avoid unemployment. Moreover, the demand for education during crises tends to increase. When making decisions on whether to participate in workforce or in education, individuals decide to invest more in education when unemployment rates are higher. Moreover, education is an important tool not only for tackling the present economic crisis, but also for developing a more sustainable, adaptive and creative society.

Enrolment in higher education is not only postponed participation in workforce, but also an opportunity to acquire knowledge and skills, which will be beneficial in future. At the UNESCO World Conference on Higher Education in July 2009, it was stated that: “At no time in history has it been more important to invest in higher education as a major force in building an inclusive and diverse knowledge society and to advance research, innovation and creativity” (UNESCO, 2009).

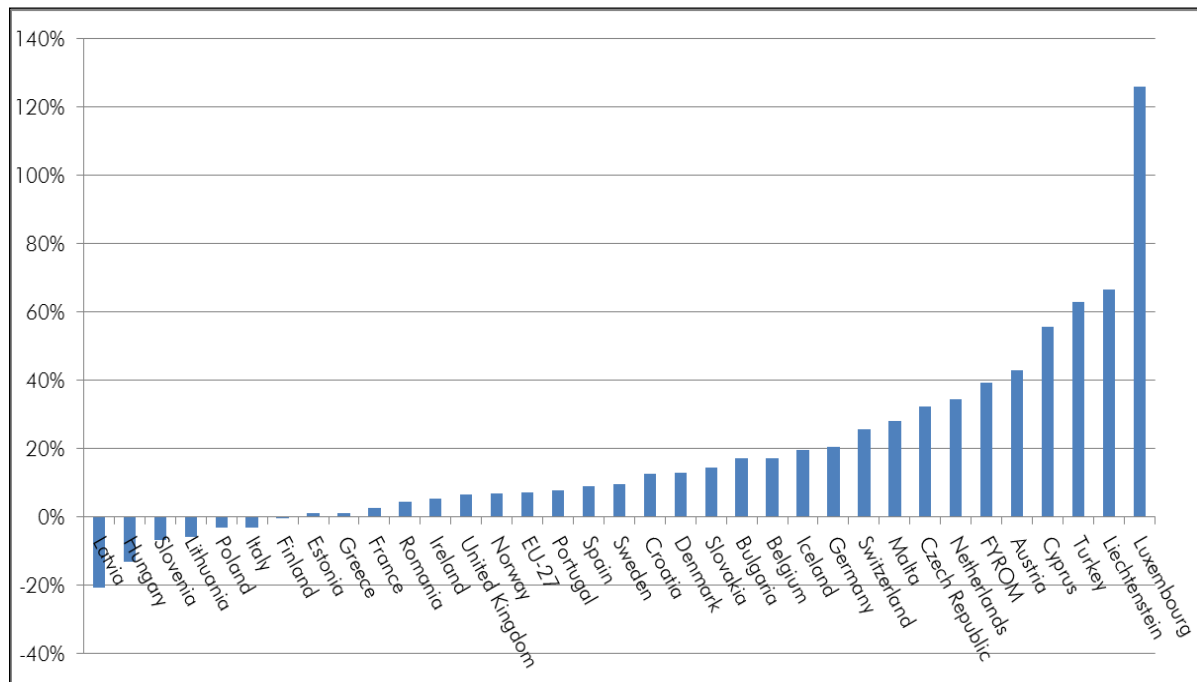
Increased enrolment in higher education is related to rising demand for skills and knowledge on the global market. Return on higher education (Box 1) is significant not only at the level of individuals, but also at social level. Educated and skilled labour force enhances not only the sense of own well-being, but contributes to the productivity of co-workers and to the welfare of the society as a whole.

Figure 1 below represents changes in tertiary education³ participation in European countries from 2006 until 2011. In most of the countries listed in the figure, the number of students involved in tertiary education has increased. Changes in higher-education participation are significant mostly in the Central and Eastern European (CEECs) countries. In Turkey, over 2006-2011, the number of students enrolled in tertiary education increased by 63%. Several CEEC EU member countries, such as Bulgaria, Czech Republic and Slovakia, recorded significant increases in higher-education enrolment. By contrast, Latvia and Hungary experienced falls in the number of tertiary-education students.

³ Tertiary education means level 5 and 6. For more details, see Annex 1.

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Figure 1: Change in number of students in tertiary education participation between 2006 and 2011



Source: Eurostat

Private benefit

The main incentives for individuals to invest time and money in higher education are a higher probability of employment and an increase in the expected salary.

Employment. According to Eurostat, in half of the Bologna countries, the unemployment rate of people with low level of education is higher than 16%. This contrasts with the people with medium and high level of education, whose unemployment rates are 10% and 6%, respectively (Eurostat, 2009). In OECD countries, a highly educated person has a greater chance of being employed. Specifically, on average, employment rates are 28 percentage points (pp) higher for individuals with a tertiary education, and 18 pp higher for those with an upper secondary education⁴, compared to individuals with incomplete upper secondary education. Individuals without an upper

⁴ See Annex 1 for a definition of education levels.

secondary education have been hit hardest by unemployment since the global recession in 2008. Unemployment rates among those without an upper secondary education rose by 3.8 pp between 2008 and 2010, whereas for individuals with an upper secondary education and tertiary education, the unemployment rate increased by 2.7 pp and 1.4 pp, respectively (OECD, 2012).

Income. Various empirical studies show that the rate of return on a year of education ranges between 7% and 9%, and has increased over the past twenty years (Ashenfelter et al, 1999; Vikesh, 2011). In 2010, the median income of employees with tertiary education in the EHEA (European Higher Education Area) countries was double than that of those who only completed lower education, and 60 % higher than that of those with only upper secondary education (European Commission, 2012)

Box 1: Estimating returns on education

The financial returns on education can be private or public, and they can be defined as follows:

- Private return: The estimation based on investment theory follows the typical cost-benefit analysis over time. The discount rate can be estimated by equalizing it to: (1) the internal rate of return that is the rate at which financial benefits equal costs, or (2) the rate that takes into consideration the investment-associated risk, which is then a net present value calculation, with the gains expressed in monetary units.
A higher private return on education in a certain sector or country means a stronger incentive for individuals to proceed with further education in this sector or country.
- Public return: Like individual return, public return expresses revenues for the government from additional education as a percentage return on the cost of that education borne by the government. Neutrality rule of government policy suggests that the rate at which revenues from additional education are taxed should be equal to the rate at which government covers the education costs. The private/public investment incentives become clearer when a more precise estimation of the private/public return is made, Furthermore, building cost-sharing mechanisms between individuals and governments becomes easier.

Source: OECD (2012, 2013)

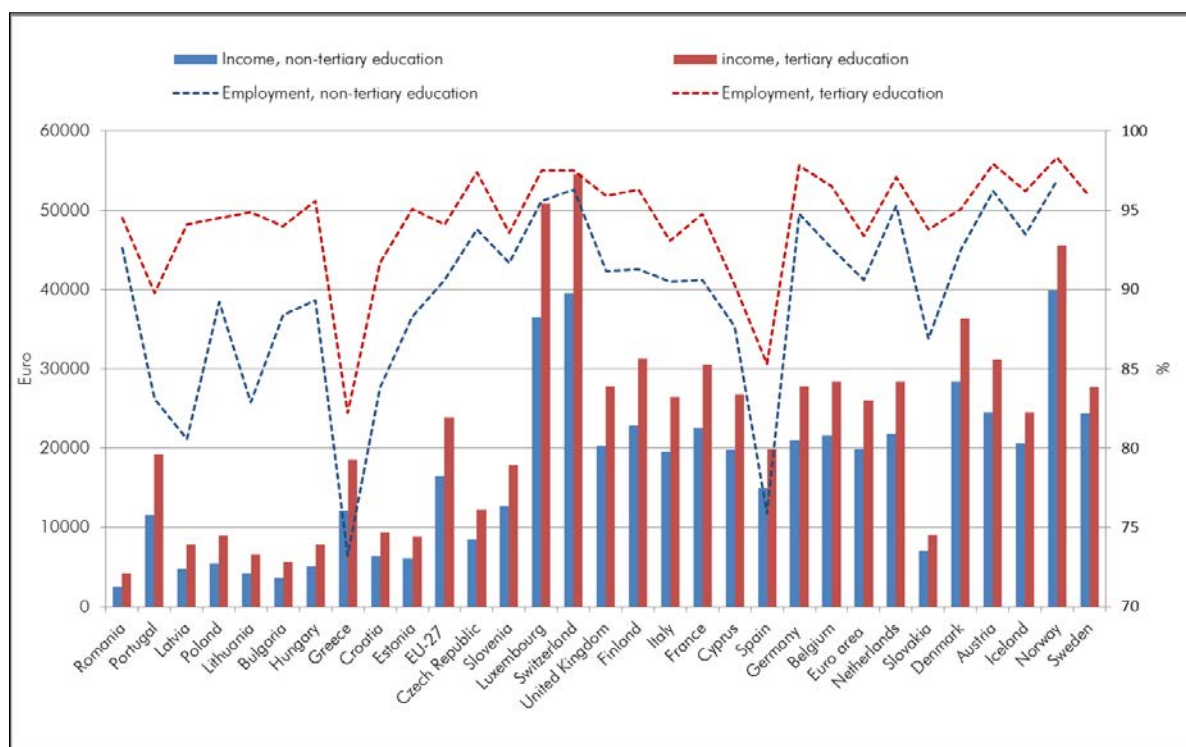
According to the Eurostat database, highly educated EU workers earn significantly more compared to workers with medium or low level of education (see Figure 2).

The earning premiums for people with higher education can be significant. Returns on tertiary education in the EU range from 21% in Sweden to 98% in Portugal. Slovenia, Hungary, Lithuania and Portugal belong to the countries with very high returns on tertiary education. Shortage of highly-skilled labour supply, and skill-based technological changes, may partially explain these results. Lowest returns on higher education are observed in the Scandinavian countries (Badescu et al., 2011).

Returns on tertiary education are high across OECD countries, where, on average, a person with a tertiary degree can expect to earn 55% more than a person with an upper-secondary or post-secondary non-tertiary education (OECD, 2012).

Fields of studies. The decision to be enrolled in higher education is complex. When making cost-benefit analysis, it is important to choose a compatible and winning discipline, as not all disciplines have the same economic benefits. This decision does not only depend on whether the individual's skills are compatible with a certain field, but also on what a yield from the field is. Some disciplines offer a higher likelihood of employment, and some disciplines of an expected higher salary. For example, a degree in healthcare, business or science increases the probability of employment and the expected salary, while graduates from fields such as social work and education expect to be employed but with lower income (Carnavale, 2012).

Figure 2: Median yearly income and unemployment rate by education level, 2011



Source: Eurostat

Unemployment rates also differ by the field of studies. For example, salaries of the graduates of the top global MBA courses almost doubled after graduation. Students often show foresighted behaviour in cost-benefit analysis of taking up loans. Students, graduated in business or managerial studies, often take a relatively large loan to cover their tuition fees and other expenses as they expect high income shortly after graduation (Financial Times, 2010). On the other hand, students avoid enrolment in the sciences, including engineering, as they can be extremely demanding academically. To promote these disciplines, it was shown that abolishing tuition fees might increase enrolment by up to 7% (Felsö et al., 2000).

Life expectancy. Education is an important tool for making more rational life choices. Education influences life expectancy. On average, among 15 OECD countries, a 30 year-old male with a

tertiary education is expected to live for another 51 years; by contrast, a 30 year-old man without a completed upper-secondary education is expected to live only 43 years more. The differences in life expectations are more remarkable in the Central European countries. On average, a 30 year-old highly-educated Czech male expects to live 17 years longer than a similar person without higher education (OECD, 2012).

Social benefits

Higher education provides not only individual benefits, but also those to the entire society. Higher education helps to develop a better society. It stimulates economic growth, increases life expectancy, and reduces crime. The EU priority to promote higher education is strongly linked to providing opportunity to participate in it to all members of society (OECD, 2012).

Moreover, education enhances life satisfaction. Educated people gain various skills, participate in many social activities, and are more rational in making choices. Educated societies create more social and moral values. In all the OECD countries, students with higher levels of civic competencies, which include knowledge and understanding of the concepts of citizenship, also showed higher levels of support for equality to ethnic minorities (OECD, 2012).

Economic benefits

Education stimulates economic growth. Educated society enhances productivity. High education and skills are becoming more and more important to labour markets. "Those that ensure that access to, participation in and outcomes of tertiary education are based only on individuals' innate ability and study effort. They ensure that the achievement of education potential at tertiary level is not the result of personal and social circumstances, including of factors such as socio-economic status, gender, ethnic origin, immigrant status, place of residence, age, or disability" (OECD, 2008b).

Across the OECD countries, the net public return on public investment for a man in tertiary education is almost three times higher than that investment, and is around EUR 73,600⁵ (USD 100,000). For a woman, the public return is almost twice the amount of public investment in that woman's education, and is around EUR 44,190 (USD 60,000) (OECD, 2013).

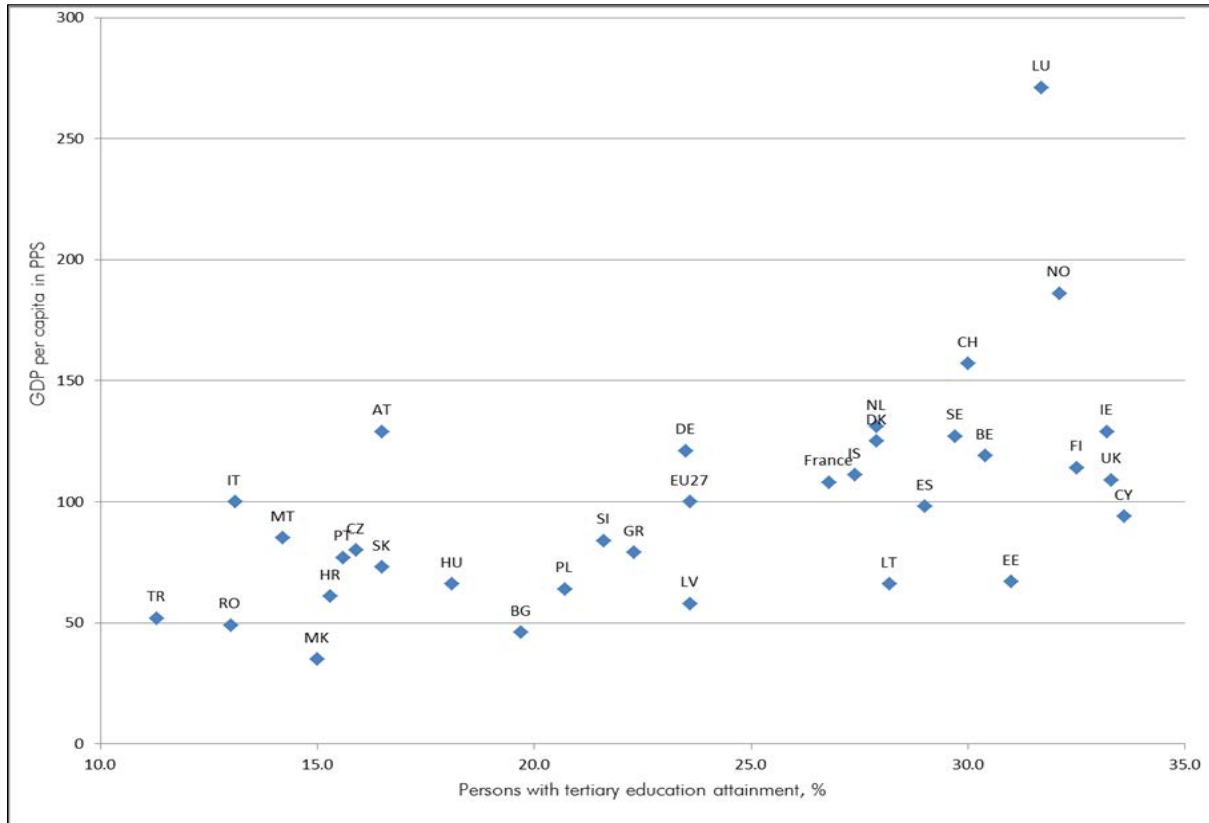
Several recent studies show that the presence of more educated workers in a team can also make co-workers more productive (Standard & Poor's, 2012). This "knowledge spillover" effect can also have a positive effect on wages. Some studies found that a one-percentage point increase in the employment of college graduates in a workplace can raise wages for high school dropouts employed in the same workplace by 1.9%, for high school graduates by 1.6%, and for other college graduates by 0.4% (Lange and Tope, 2006; Huang et al., 2009).

Figure 3 shows countries with an increasing trend in education and GDP per capita. Countries with the highest GDP, such as Luxembourg, Norway or Switzerland, also have the highest shares

⁵ Exchange rates were taken from the European Central Bank's homepage (2014-01-15)

of tertiary-educated people. In the countries with relatively low GDP per capita, such as Romania, Hungary, Italy or Portugal, the enrolment in higher education is respectively lower.

Figure 3: GDP per capita and educational level in 2011



Source: Eurostat

Democracy / electoral

Education changes people's behaviour as voters. Educated voters make more rational choices and they are less easy to manipulate. Education stimulates participation in elections: there are significant differences in voting behaviour among individuals with different educational levels. On average, in the OECD countries, the voting rate of 25-64 year-old adults with high levels of education is 14.8 percentage points higher than the rate of those with the same age group with low levels of education. This gap is even more significant (26.8 percentage points) among younger adults (25-34 years old). Moreover, for younger adults in Germany, the gap reaches 49.6 percentage points (OECD, 2012).

2.2 Why mobility?

One of the main objectives of the EU was to create an institutional framework where all European citizens would have the same rights, and where integration and knowledge or cultural exchange is promoted. In this respect, mobility plays an important role, especially students' mobility. Together with higher education, the importance of student mobility is reflected in the EU policy. Mobility has always been the objective of the Bologna Process, and it is a key instrument to develop the European Higher Education Area. Mobility of students and academic and administrative staff is seen as crucial for the academic and cultural, as well as political, social and economic, spheres (Berlin Communiqué, 2003). In the Bologna process agreement, mobility of at least 20% of higher-level educated students is targeted by 2020 (LSE, 2009).

Mobility helps students to develop skills necessary for generating new ideas, being creative, and adapting to a different culture. Mobility of higher-level educated students, and especially researchers, creates positive spillover effects. Collaboration and knowledge, or experience exchange, all enhance productivity. Students acquire new skills, new languages and the ability to assimilate in new environments; mobility prepares students for a more globalised world. Mobility also increases competition among educational institutions. To attract high quality students, institutions of education simplify access to practical information, create a welcoming atmosphere for newcomers, improve the quality of educational programs and attract international professors. Mobility gives students the possibility to choose the country and institution that best matches their preferences.

Transferability of knowledge is an important precondition for the proper functioning of this mechanism. Therefore, the Bologna agreement established common standards within the participating countries. Credits granted to a student in one Bologna country are recognized in another member country (European Commission, 2012).

Competition between universities became fiercer through the transferability of credits. Universities compete for bright students by offering them more professional atmosphere and more courses in foreign languages. Choosing a university is very important; an obtained degree reflects the future benefits, where quality of the studies and reputation of the university determines the level of a graduate's success (LSE, 2009). Technological changes and development of the modern labour market require more and more diversified specializations. Universities anticipate the demand and increase the number of subjects taught. It is sometimes hard for students to find local universities where they can get desirable specialization.

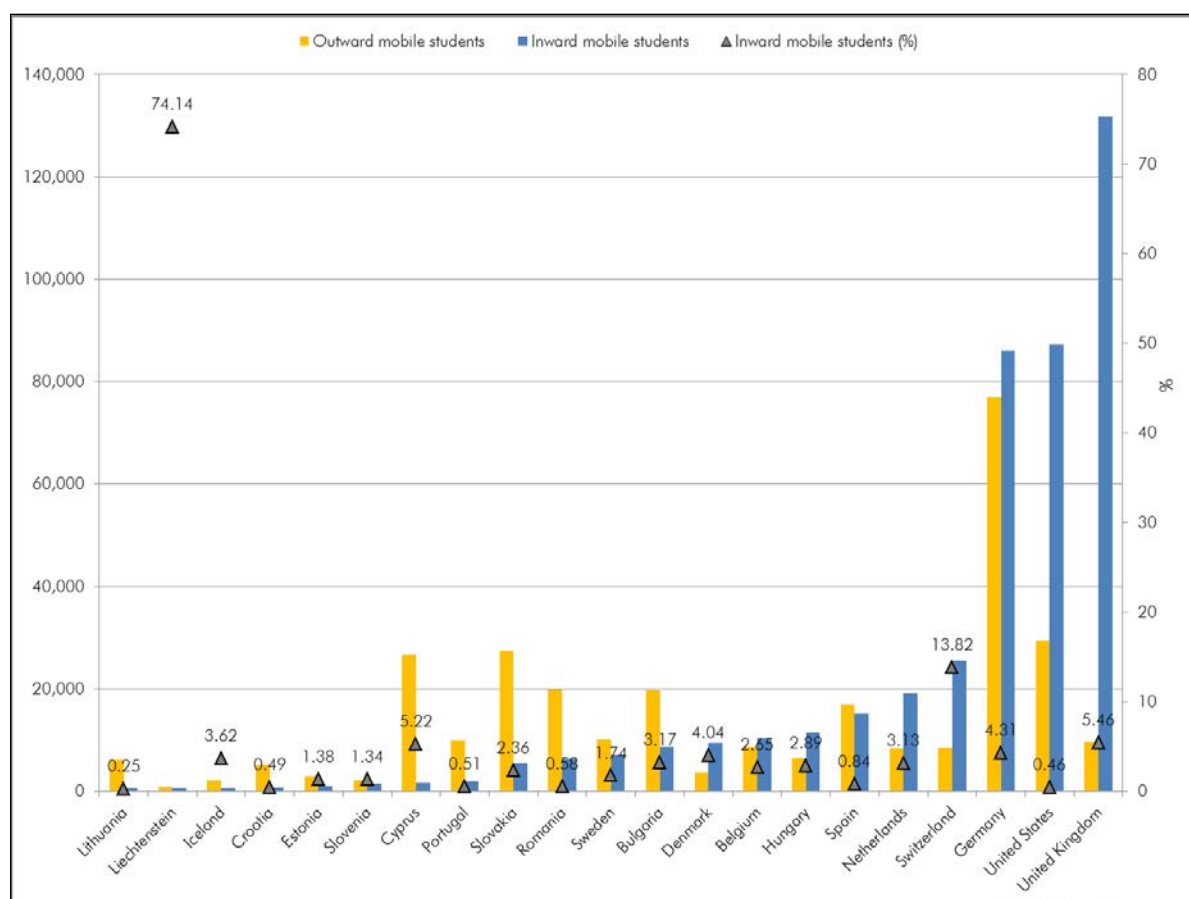
There are countries where inward as well as outward mobility is very low, especially low-income countries. Outward mobility is restricted because of the insufficient funding required to migrate and study in a richer country. A low level of inward mobility can typically be explained by the absence of an international environment, a poor availability of studies in English, or other European languages, and a poor provision of study facilities, or by simply unsatisfactory living standards.

Figure 4 below represents mobility of students from and to the European Higher Education Area. The United Kingdom is the most popular destination for master's and doctoral students. Country

with a low population, such as Liechtenstein and Switzerland, are leading in hosting a high proportion of foreign students. Low-income countries, such as Portugal, Slovakia, Romania, and Bulgaria, have higher numbers of nationals going abroad for higher education than incoming foreign students. Germany is distinguished not only by inward but also outward student mobility. One of the main criteria for students in choosing countries of destination is the availability of studies in English or other popular European languages, such as German, French or Spanish.

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Figure 4: Student mobility from and to EHEA countries, first and second stage of tertiary education, 2009



Source: Eurostat

The feasibility study conducted by LSE enterprise states that in order to achieve 20% of mobility by 2020, the total number of students studying abroad should have been be four times higher in 2012 than it was in 2007, which means that more than (additional) two million students per year ought to become mobile (LSE, 2009). As it was stated at the 2009 UNESCO Conference on Higher Education, “[i]nstitutions of higher education worldwide have a social responsibility to help

bridge the development gap by increasing the transfer of knowledge across borders, especially towards developing countries, and working to find common solutions to foster brain circulation and alleviate the negative impact of brain drain” (UNESCO, 2009).

Post graduation, three main scenarios are possible:

(1) *graduates return to their home countries;*

(2) *they temporarily stay in their host countries and return after gaining some experience;*

(3) *they stay in their host countries, at least for longer periods.*

- *Return.* The probability of return and the level of education are highly correlated. Immigrants with higher education are more likely to return than those with an intermediate level of education (OECD, 2008a). In case graduates decide to return, they bring skills, education, experience, and new ideas they accumulated while they stayed abroad. If a student graduates in a developed country and returns to a developing country, his degree is much appreciated. A foreign degree gives a signal to employers that the applicant speaks at least one foreign language, is mobile, adaptive and flexible (LSE, 2009). Moreover, most of the returned high skilled immigrants are economically active in their home countries, and they and they engage in entrepreneurial activities and help to create jobs (Dustmann and Kirchkamp, 2001).
- *Temporary stay - brain circulation:* Talent circulation encourages knowledge transfer, increases competitiveness and induces the income gap to decrease between poorer and richer countries. Education and mobility prepares students for the global labour market. When returning home, individuals contribute to new ideas and approaches thanks to the foreign experience in education and work (LSE, 2009).
- *Permanent stay - brain drain or brain bank:* The emigration of highly educated (innovators, researchers) individuals clearly has negative direct impact on the domestic market, as the most productive people leave. However, the indirect effects are not this clear. On the one hand the local labour market loses talented people. On the other hand, it might open new access to the knowledge from a country where innovator-emigrants establish a diaspora. The stronger the diaspora and the connection to the home country, the easier the communication, exchange of information and even movement of labour between home and host institutions (Agrawal et al., 2008). Almost 47% of the foreign-born self-employed population holds tertiary education (compared to 40% of the self-employed native born population). Mobility of tertiary educated individuals and their entrepreneurial activity widens the range of occupations and sectors. Especially immigrant entrepreneurs, due to their ties, can foster trade between their home country and countries where they were educated or employed (OECD, 2013).

Thus, mobility may induce “brain drain” which, however, may turn to “brain circulation” if individuals decide to return. But even if they stay abroad, they create networks, which facilitate an access to information for future students or graduates.

3 Means of financing education and mobility

This section presents the statistics about students' expenditures and sources of income across countries. Subsection 3.1 sets out an overall picture of study related costs and existing public sources of finance. It emphasizes the inequality associated with students' financial situations. Subsection 3.2 lists the main means of financing and subsection 3.3 shows how expenditures on higher education change in times of economic crisis.

3.1 Costs of education and public sources of finance

Costs of education and mobility vary across countries. Overall, expenses are composed by tuition fees, living costs and other costs including insurance or supplementary material for studies. As costs of living are different across the EU, students from low income countries are financially worse off by moving to richer countries. For example, students from Estonia, Poland and Portugal reported problems in meeting living expenses abroad, while only few students from Luxembourg and Finland reported similar problems (ESU, 2010).

In some countries, such as Norway, Sweden and Finland, students do not pay tuition fees at state universities. In Denmark, students pay tuition fees only if they follow a part-time programme. In Austria and Slovakia, only students that do not finish within a certain period of time are charged tuition fees, but there is no discrimination in the level of these fees.

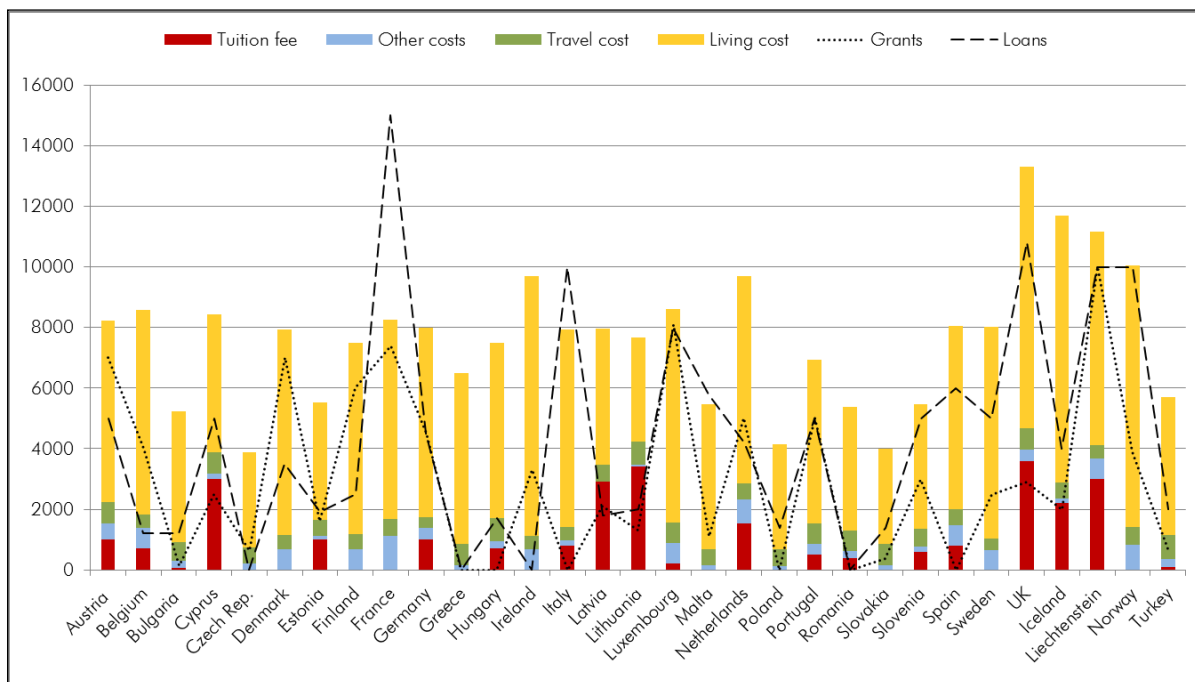
In other countries, the level of tuition fees depends on various criteria. For example, in Hungary, Estonia, Latvia, Lithuania, Slovenia, it depends on academic performance. In France, fees vary, the most common is EUR 550 per year and in some universities, fees can reach up to EUR 10,000 per year, depending on cost related to specific services. However, some students who receive a grant are exempted from fees (grants are awarded to students on the basis of their financial background). In Spain and Latvia, a level of tuition fees depends on the type of studies. In Turkey, every student pays tuition fees and the level is based on the field of study. Finally, the following countries do not differentiate in determining the level of tuition fees: the Netherlands, Belgium (German-speaking Community), Iceland and Liechtenstein. In these countries, all students pay and pay the same amount (European Commission, 2012).

The situation in the United Kingdom is complex. In England, students from the UK and the EU pay the maximum fee of GBP 9,000 (EUR 10,870). Welsh students may pay less due to a fee grant from the Welsh Government. In Scotland, only Scottish and EU (Non-UK) students are exempted from paying tuition fees; Students from England, Wales and Northern Ireland are required to pay fees to study at universities in Scotland (Eurydice, 2013).

Figure 5 shows costs and means of funding estimated by LSE. Tuition fees represent here typical values at state universities. Fees at private universities are often much higher. Other costs include book expenses, social insurance and administrative fees. Living costs are estimated according to the prices of student dormitories in a capital city. Finally, travel costs are taken from internet sources which reflects transportation costs from the capital city of a home country to the capital city of the host country.

In order to give a complete picture of students' financial situation at state universities, Figure 5 also presents public sources to finance education: grants and loans. The size of a grant usually depends on its purpose. Grants covering living costs are often means tested⁶, while the size of grants covering tuition-fees depend on the size of the fees. Because of the variety of grants and their eligibility criteria, not everybody is entitled to obtain a grant that is potentially available. The sizes of loans are typically calculated according to the highest value of student loan allowance available in the corresponding country. Sometimes, eligibility rules and the sizes of available loans vary by region (e.g. in Germany), but often there is no requirement indicating the maximum size of a loan a student may take (LSE, 2009).

Figure 5: Estimated annual costs and supports of master students (in EUR)



Source: Eurydice, LSE (2009)

Potential students from various EU Member States have unequal opportunities to cover various costs associated with studies. Figure 5 shows that in countries such as Greece, Hungary, Italy, Romania and Spain state grants are not available at all. In Italy, Spain and Hungary an alternative source of financing is offered by national loans. In Greece and Romania neither grants nor loans are available for students. By contrast, in high-income countries like Finland, Denmark and Luxembourg, on average almost all studying costs are covered by grants, although in those countries grants are supplemented by loans. In the UK, which is a highly popular country for higher education (see Figure 1), the main means of financing education is to take a national loan. Even though loans are available in the UK for immigrants, students from low-income countries find it difficult to obtain loans and pay them off in case of return to their home countries.

⁶ Means tested is a criterion that qualifies an individual or family for help from government based on the individual's or family's income and wealth.

3.2 Sources of Finance

There are several ways of financing education and financing students' mobility. All students in the EU should have freedom of education and mobility (European Commission, 2012). Absence or lack of financing strongly restricts this freedom. Financing sources are:

- **Family resources:** Most students are from poorer backgrounds, and their families' means to provide support are limited. Especially it is hard for a student coming from a poor country to get education in a richer country because their family cannot afford to cover all costs (LSE, 2009)
- **Own earnings while being a student:** Usually students' earnings are not sufficient to cover all costs, and time devoted to work is taken from studying time. The German promotional bank KfW stated that among its student borrowers only a small share is working. On average, the student borrowers work fewer hours, they earn less and they rely less on their income than other students in Germany (KfW, 2012).
- **Employers:** Sometimes companies invest in training students and pay for their studies. Nevertheless, it is hard to imagine that employers would finance students' mobility for a year or more. Companies have incentives to finance education only if employees stay with them for a certain period. However, as labour market requires mobility, companies' interest to invest is low (LSE, 2009).
- **Grants and loans:** Grants are a common system to promote education and mobility. Grants can be dedicated to cover some or all of the living costs, mobility costs or tuition fees. The EU funds include several grant programmes to support its policy for higher education, for example Erasmus. But again these grants are often not sufficient, and in the main are for short-term mobility, such as one semester. The size of existing grants cannot support the Bologna process benchmark of at least 20% mobile students by 2020. At national or regional level, the existence and size of grants and loans schemes for higher education students varies considerably.

Providing grants often depends on many criteria. These criteria are mainly based on financial need, academic performance and field of study. In Denmark, Finland and Sweden grants are universal and they require only minimum performance of students in their studies. Estonia requires students to perform well in particular courses or fields of studies. In Greece, only excellent students are granted financial support, although the level of the support depends on their financial need. In other countries (Belgium, Ireland, Netherlands, Finland, the United Kingdom and Liechtenstein) providing grants depends only on financial needs, but in case a prolongation of studies is requested, successful academic performance may be taken into account. In the Netherlands, financial support is granted and it remains a grant if students graduate within 10 years of the first disbursement, otherwise the support is transformed into an interest-bearing loan (European Commission, 2011a).

In Germany, a regular study period is financed by loans and grants. If a student fails to complete studies or pass examination within that period, an additional bank loan can be provided within one extra year. In the Baltic countries the finance of studies is based on a voucher system, although disbursement of the vouchers is conditional. In Lithuania vouchers are distributed to

students of those specialised disciplines that are currently in high demand in the country. Besides, the distribution is based on their academic performance. Latvia promotes education and gives opportunity to unemployed people to obtain a degree within three years. In both countries vouchers are used to cover tuition fees (European Commission, 2011a).

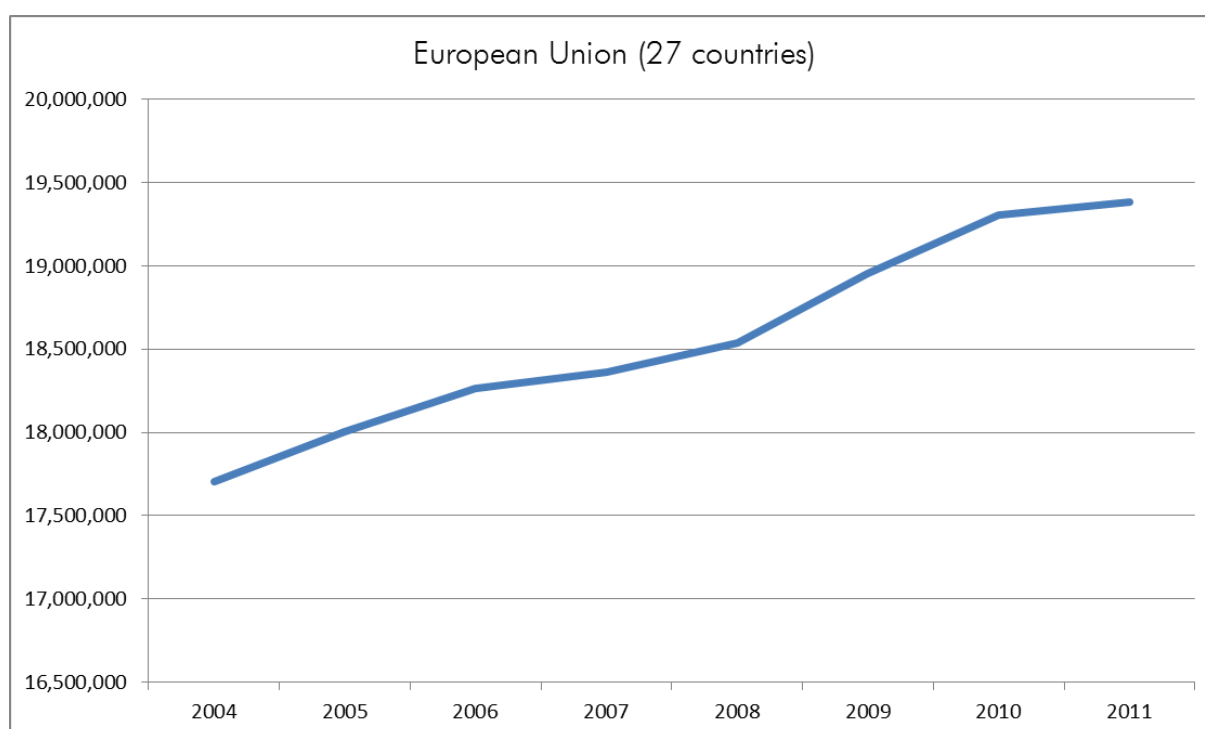
Universal loans are available to all students in ten national systems (Belgium (the German-speaking community), Denmark, France, Lithuania, Hungary, the Netherlands, Slovakia, Finland, Sweden, and Norway). Similar to grants, study disciplines may be considered when granting loans (for example in Bulgaria, Estonia, Spain, the United Kingdom and Iceland). In Estonia and Slovakia, only full-time students are eligible for student loans, while in the United Kingdom state-sponsored loans are provided to undergraduate students only (European Commission, 2011a).

Moreover, while some loans and grants exist, they might not be available to students studying abroad. Most of the grants and loans are not portable, and often portability is allowed only in exceptional cases (for more details please see Annex 2), (Eurydice, 2013).

3.3 Economic crisis

An economic crisis affects students' choice to invest in education, but the direction of this effect is not clear. During an economic crisis, people tend to devote their time to studies, as forgone income is less than in a more stable economy. On the other hand, funding (family resources, own earnings and sometimes grants) to finance education is scarce in times of economic crises. However, the overall picture shows an upward trend in the number of students enrolled in higher education from 2004 to 2011 (see Figure 6).

Figure 6: Number of students in tertiary education participation between 2006 and 2011



Source: Eurostat

Europe needs qualified and skilled people in order to recover from the current crises. Higher education, innovation and knowledge transfer have to be fostered. However, in the time of crisis, public expenditure in Europe is under great pressure. Authorities are using all possible ways to reduce government expenditure without harming the sectors essential to growth. Investing in education, however, is perceived as a priority and governments try to avoid reducing public spending on education, and more precisely on higher education (European Commission, 2013).

Many governments have introduced stimulus packages during the current crisis. In the short term, such initiatives help unemployed people to enter or re-enter education when unemployment is high. In the long run, this should produce a better-educated population, which could help societies to recover from crises. Many governments recognized the crucial role of education, and especially higher education, in the globalised world. This realisation might result in the expansion of higher education systems globally, and – by extension – in a larger share of public outlay on higher education despite the crisis (UNESCO, 2012).

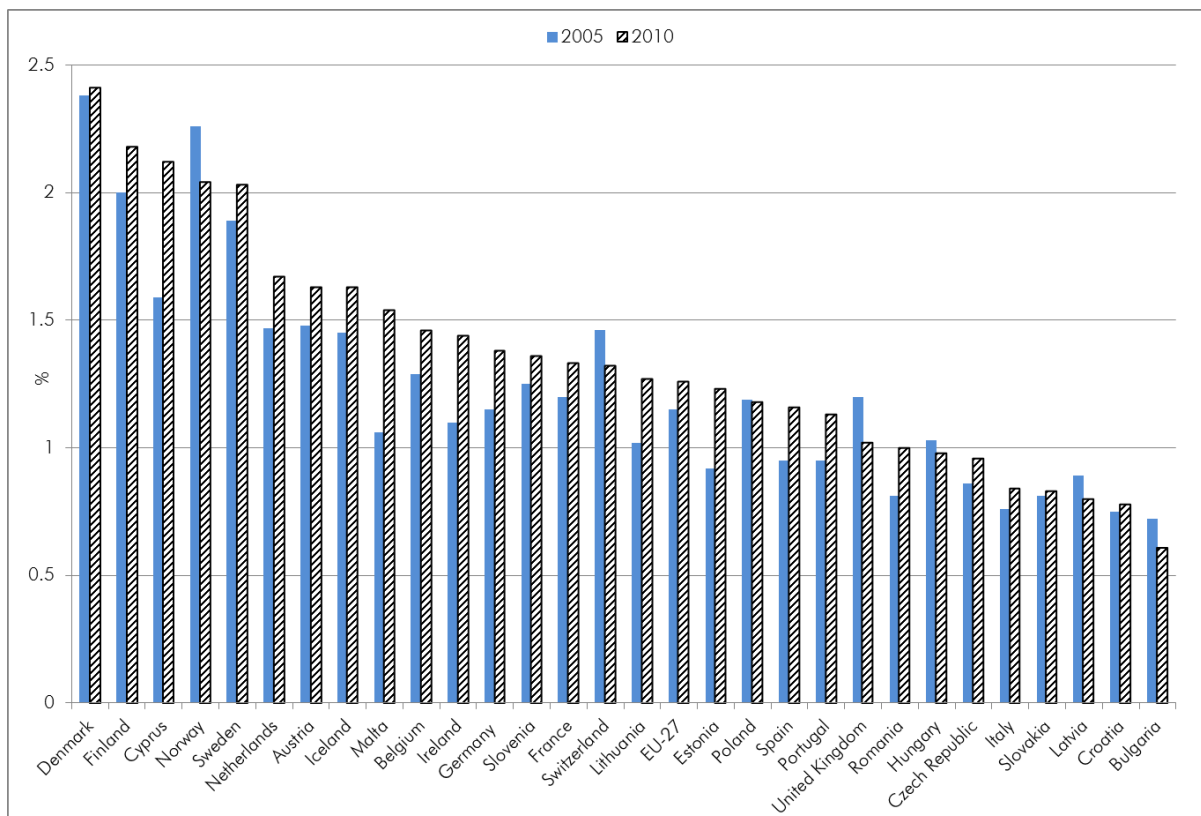
All European countries acknowledged a high priority of education. Since 2007, they have maintained existing public expenditure on education as a share of GDP. However, it is worth noting that the relative spending on education increased in those countries that suffered from the recession the most. However, this might be based on authorities' decisions to avoid reducing the budget for education, or because the GDP decreased at a faster pace than spending on education (European Commission, 2013).

When comparing expenditures on education in absolute terms, we get a different picture. Countries reacted differently by increasing or decreasing their spending on education. For example, countries, such as Greece, Lithuania and Portugal, cut their national education budgets by more than 5% in 2011 and 2012. By contrast, public budgets for education were increased in 2012 in Austria, Denmark, Luxembourg, Malta, Romania, and Slovakia (European Commission, 2013).

Countries were found to be more protective towards budgets for higher education. A common policy priority for future budgets was to prepare young people for the labour market. Higher education, vocational teaching, research and innovation were highly promoted. For example, in Germany additional funds have been dedicated to fostering enrolment in higher education, including special grants for highly talented students and young scientists. In Bulgaria, state universities will be granted additional funds to match the skills required by the labour market. In Latvia, based on evaluations, only tertiary education programmes with recognized quality will be financed by the state (European Commission, 2013).

Relative increases in expenditure on higher education were observed in many countries in 2010 compared to 2005 (see Figure 7). Clearly, many governments showed their intention to encourage higher education.

Figure 7: Expenditure on higher education as % of GDP or public expenditure



Source: Eurostat

Higher education is a priority of the European Member States and it was subjected to the lowest budgetary cuts. This sector, however, cannot be immune from austerity measures, especially in those countries that suffered the most from the crisis, and where higher education, research and innovation are essential to the recovery (European Commission, 2013).

Box 2: Are loans the right tool to finance higher education and mobility?

Higher education has private returns and social benefits. Public benefits from higher education incentivise governments to use public sources in order to promote education. Public investment does not necessarily mean full coverage of study costs. Moreover, full public coverage would be against fairness, as taxpayers would be charged for helping the highly educated, ergo the future potential high earners. Additionally, full coverage of tuition fees discourages students from putting more effort into succeeding in their studies (LSE, 2009). When students invest in higher education by taking loans, they might feel more committed and their success rate is higher. However, existing student loans are often neither flexible nor affordable to all students. From this point of view, public help is clearly needed to correct for inequality.

The market for higher education nowadays is very different from the market fifty years ago. Then it was assumed that all universities offered the same quality. Therefore, state financing was rational behaviour. Technological advance has driven up the demand for new skills and led to greater diversity of subjects and forms of studies. Even the richest European countries

found financing all the new education schemes difficult and complicated. Financing all the education needs became not only financially unfeasible, but also unfair, as disparities in private returns on education have increased significantly. The complication of the public financing system and the increased private incentives led to the development of various cost-sharing schemes between governments and students (Barr, 2003; Cedefop, 2009).

Various cost-sharing mechanisms were created by the government support with an attempt to correct market failures. Those market failures were caused by information asymmetries and other market imperfections, including capital, labour and education market imperfections. "For example, the State can help alleviate credit constraints on those who lack the resources to finance learning, by guaranteeing or providing preferential loans or offering alternative ways of funding such as grants." Cedefop (2009).

A student's decision whether to enrol in higher education is based on a maximisation of their utility over time. Expected benefits from higher education often outweigh costs and risks associated with loans. Moreover, expenses for higher education should not be viewed as costs but rather as an investment with potentially life-long high returns. Highly educated individuals are qualified for international markets, and are more resistant to economic or labour market upheavals than poorly educated individuals. However, when making a cost-benefit analysis, students consider not only their expected successes, but also the affordability of a loan they would like to take. A well designed and financially sustainable lending scheme gives benefits not only to lenders and borrowers, but it also has positive external effects on society, as more educated people contribute more to the overall productivity.

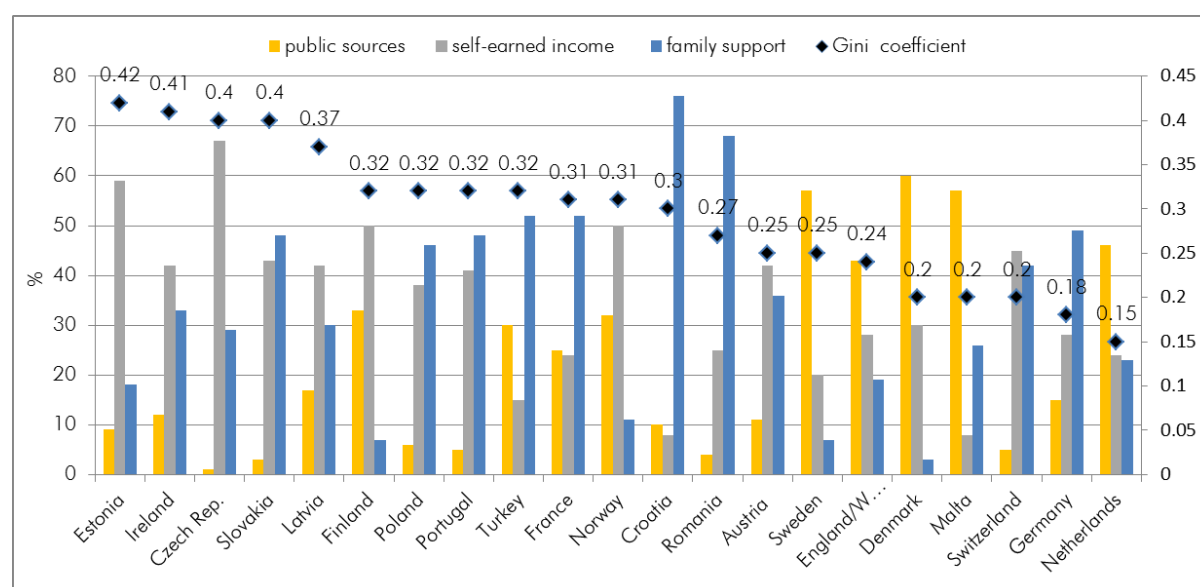
Equality

Equal opportunities have become a political priority since the Treaty of Amsterdam (1997). Equal opportunities to access higher education primarily mean equal access to financial sources. The possibility of obtaining EU-supported student loans with minimum requirements gives all potential students the same chance to get desirable education in a desirable country with almost the same terms. Inequality is not only a problem within a country, but as well across countries in the EU. Not all countries can afford to finance education, neither by grants nor by loans. Moreover, the returns on education depend not only on individual skills, educational level or field, but also on the country of employment.

Students' income may differ within the same country. In order to view the distribution of total income between students in each country, the Eurostudent Survey (2010) analyses the levels of income disparity, using the Gini coefficient (see Figure 8). According to the calculation, in the Netherlands, Germany, Malta, Denmark and Sweden, resources are distributed relatively evenly among the student population. On the other hand, in Estonia, Ireland, the Czech Republic, the Slovak Republic and Latvia, the concentration of income is quite high. It is difficult to have a complete explanation why in some countries the coefficient is low, and high in others. One of the possibilities is to look at the composition of students' income that depends on the availability of different sources of income. The importance of public sources (grants and loans) for students' income appears to be positively correlated to income balance.

For example, in the Netherlands, the national loan system is well-developed and gives equal opportunity to all students despite their social or economic backgrounds or educational performance. Dutch students rely relatively less on their family resources. Whereas in Estonia, the Czech Republic or the Slovak Republic student loans are almost not available, and student financing strongly depends on parental support. This explains the high disparity in total income that is strongly correlated to the overall income disparity in a country.

Figure 8: Gini coefficient and the composition of the total monthly income (%)



Source: EUROSTUDENT (2010)

4 Why does a pure private solution to finance students' mobility not work?

The preceding sections explained the advantages of higher education and related mobility for students and for the society at large – but the question remains of why there are market weaknesses in financing the mobility of students in European Higher Education. An answer to this question is offered below. It seeks out to explain how an ideal system would look like and why public support is needed. It also explains the added value of such support offered on EU level. Finally, a student loan guarantee scheme is suggested to mitigate the main market weaknesses.

4.1 How would an effective student loan system look like?

The research conducted by the LSE suggested the following indicative product characteristics for an optimal student loan system; the main aspects are (for more details see LSE, 2009):

Eligibility criteria: A student must be EU resident; they must have completed their undergraduate studies (bachelor or equivalent qualifications), and must have been accepted to a recognized master program in another country. Mobility is one of the crucial requirements here. The scheme should target the most skilled, open-minded, and risk-taking students. The mobility eligibility criterion does not aim at discouraging students from getting education at home, but rather attempts to encourage them to apply for national loans.

Visibility / Obtaining Loans: Students must be aware of the possibility of obtaining funding, even prior to their enrolment. Information can be provided via two channels: personal consultants and relevant information on webpages. This enables the students to make a cost-benefit analysis by choosing a place of residence, a university, a field of study and the size of the loan the student is going to obtain, which is very important.

Master's students are typically not experienced in taking loans, hence, personal consultancies should help them to understand that it is very important to plan borrowing strategically. All students should be charged the same interest rates. Risk premiums depend on the applicant's age, fields of studies, country of origin and other socio-economic factors. The typical tenor of the loans is suggested to be 30-40 years. The size of the loan must be upper-bounded. It should reflect all study and living related costs. It would be limited to EUR 10,000-12,000 during one or two years.

The process should start from universities. They would check the original documents provided by students as part of the admission process, and issue an eligibility certificate upon request. The reverse side of the application form would be devoted to terms and conditions where an applicant would be fully informed about all commitments they were going to make. The student must state in their application the desired amount and purpose of the loan: whether the loan is going to cover living costs, studying fees or both. If part of the loans is to cover the tuition fees, then the amount must be paid directly to the university.

Repayment rules / flexibility: The loan scheme should include a flexible repayment model. Borrowers should be ensured against repayment difficulties when their income is low, and should pay according to their earnings.

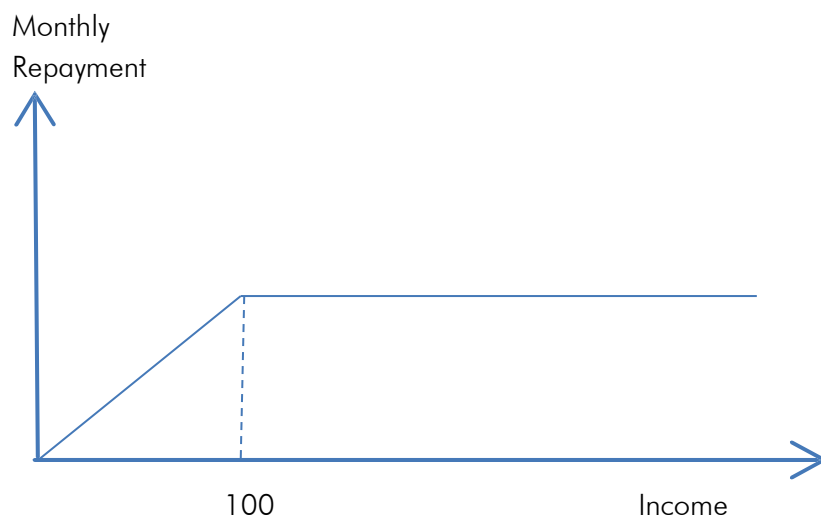
After graduating, an applicant would have to inform the financial intermediary about their employment status. Loan repayment would only be due if and when the loan recipient commenced full-time employment. Voluntary early repayment is allowed. The LSE research group proposed several repayment rules:

1. *Fixed monthly repayments* are not calculated according to the salary a graduate earns. This is the simplest form of repayment, which is quite well spread in practice. It is also possible to agree on fixed but increasing instalments in order to diminish the repayment burden in the first years. With an indexed loan, instalments can be adjusted by average incomes in a country. This repayment rule is designed for an average borrower's ability to pay, even during recession.
2. *Delayed income-contingent* loan repayments are calculated according to the borrower's income declared in their last tax return. Typically this form of repayments has a two-year lag. As in the previous form, a *fully income-contingent loan scheme* depends on the person's current income, and takes the form of a payroll deduction, similarly to other deductions as personal income tax or social insurance contributions. This is the case in the British, Australian and New Zealand schemes.

A final element of flexibility is to allow *voluntary early repayments* without a penalty. Based on the proposed repayment rules, an indicative repayment model is designed and presented below (see

Figure 9). The model is based on three income-contingent elements. Firstly, income is evaluated on an individual basis. Secondly, the fixed monthly repayments are updated every year according to changes in individual earnings. Lastly, the timing and the size depend on individual income.

Figure 9: Hybrid model with income-contingent repayments for low earners



Source: LSE (2009)

The model is well-adjusted to low-income countries. Low-earners are protected against high repayments. If a graduate has higher income than the threshold (here 100, but may change according a country profile), then the income test is not needed, and so an extra burden of administrative costs is reduced. Lowering the threshold can also reduce the administrative costs (fewer people need to be evaluated).

The model combines the fixed monthly repayment and income contingent schemes; it is designed for all types of borrowers:

- High earners pay a fixed amount, which saves a lot of administration cost;
- Low earners are insured against repayment difficulties.

A graduate pays a fixed amount, set at the national level, but if the graduate regards themselves as a low-earner, they may apply for reduced repayments.

Interest rates: Students from all Member States should be able to borrow on the same conditions. Subsidies or partial forgiveness should be allowed, depending on objectives not only at EU but also at national levels. For example, if a low-income country wants to promote brain circulation, more advantageous conditions might be offered in order to stimulate return of graduates. The pricing of loans should rely on a mechanism which deters students from reinvesting somewhere else. For example, in the Netherlands, students took an advantage of the availability of free-interest loans and put large amounts in private saving accounts to gain interest. This behaviour has changed significantly when the government decided to charge interest in 1992. The number of student-borrowers declined by around 40% to ca.15%. Instead of taking loans, students preferred to take part-time jobs or borrow from their parents (Vos and Fontein, 1998).

4.2 Market failure

The optimal system, explained above, does not exist in reality, as it is not attractive to private lenders. For them, such a scheme would be too risky and too far from current banking practice. In general, economic literature often suggests that in different areas of access to finance a market imperfection/failure is not only present during times of crisis, but also on an on-going basis as a fundamental structural issue. The reasons for the market failure relate both to insufficient supply of capital and inadequacies on the demand side. This market failure is mainly based on asymmetric information (in the case of debt: an information gap between lender and borrower), combined with uncertainty, which causes agency problems that affect debt providers' behaviour (see Akerlof, 1970 and Arrow, 1985).⁷ This applies to the field of student loans as well – and we can only touch the surface of the problem here:

In case of lending, information asymmetry could be reduced via three ways: the borrower's ability to signal credit worthiness (incl. the provision of collateral), a strong relationship between lender and borrower, and through due diligence/lenders examination (screening). However, this means that students who are "by nature" without regular income, and whose future income stream is uncertain, have a high degree of difficulty accessing debt capital to finance their studies. Students by definition have no business- or lending-track record, no or very limited collateral, and no long-standing relationship with lenders. This means that the signalling approach typically does not work for students. On the other hand, the borrowers' possibilities to assess the lenders' potential to repay the loan(s) in future, is also very limited. There is high uncertainty over the outcome of the borrowers studies (i.e. future income), and hence the repayment capabilities of the borrower.

All in all, the market mechanisms cannot work properly to mitigate the negative effects of information asymmetries (i.e. credit rationing) in the field of student loans via signalling and screening – and this is the reason for market failure/market weakness in this segment. The problem is even more severe if *mobility* is financed, as this might further increase the lenders' uncertainty and their ability to check and monitor information provided by (mobile) borrowers. Driven by increased risk aversion on the supply side (banks), the impact of the current crisis might further increase the market weakness and decrease the incentives for private student loan schemes. Moreover, high unemployment rates (i.e. for young people) in many European countries only increase the uncertainty if they should have a sufficiently high-income post graduation to afford loan repayment.

Consequently, it becomes clear that neither signalling nor screening could work to alleviate market weaknesses and, hence, public help is needed. In addition to the fundamental structural problems of the student loan sector in Europe, public help could also be justified and substantiated with positive externalities. In addition to potential economic inclusion and returns, education, including international, supports social inclusion in the long term, and – consequently – produces attractive social returns.

⁷ Agency theory/the principal-agent approach is often applied in economics literature for the analysis of relationships between lenders and borrowers (e.g. contract design, selection processes, credit constraints, etc.).

4.3 Limitations of existing national loan schemes for higher education

The reasons for market weaknesses, explained in the previous chapter, are mirrored in the existing schemes to support students. Not only are those private solutions rare, but national public support mechanisms also show heterogeneity in their approaches and conditions offered. Loan conditions and eligibility criteria of existing schemes differ not only across countries, but also within a country. National loan schemes are characterized by various eligibility criteria and limitations (see LSE, 2009).

Availability: Student loans do not exist in many countries. For example, loans are not available in the Czech Republic, Ireland and Romania. Sometimes local loans are not available to foreign students, or have additional technical barriers, such as a residency requirement or additional collateral. National loan schemes, if they exist, are often not well-tailored to foreign students. One of the main problems is that students are often not well informed about loan conditions. Especially foreign students find it difficult to access this information, which is often provided in local languages only.

Eligibility: National loan schemes often require collateral as a guarantee against default. Typically, students do not have any collateral, and so this requirement restricts their access to loans. Another limitation is the selection of universities. Certain banks provide loans only to students enrolled in selected universities (selected universities are seen as “guarantors” for their students’ success). Restriction of universities and their intervention in employment of their graduates is against a free market.

Portability: In some countries, national loan schemes work successfully, but they are often not portable, or if they are, they are limited by their size. Many of the loans have limitations. For example, some loans are given only for partial studies, and some of them are given only for studies with a particular length (for more details please see Annex 2).

Size: Sometimes, the potential size of a loan is calculated according to the cost of living (or studying) and does not reflect mobility-related costs. Especially, if a student receives a loan from a low-income home country, it is often not sufficient to cover the study expenses when moving to a richer country. For example: the Hungarian bank Diakhitel finances Hungarian nationals for their studies abroad, but the loan amount is limited to around EUR 1,700 per year. This amount is calculated based on the Hungarian cost of living and would probably not support living and studying costs in higher-income countries.

Risks: The repayment system is often not flexible and does not depend on the graduates’ income. For example, in Portugal the repayment period starts one year after graduation, and its duration is limited to two times the study period independently from the borrower’s employment status. This factor makes students’ decision whether to take a loan difficult, especially for those with poor economic backgrounds, as they tend to be debt-averse (Gordon et al, 1972; Friend and Blume, 1975). High perception of risk among poor students is also caused by cultural factors and lack of information. The latter can be changed by providing detailed information on loans, emphasizing benefits of investing in higher education, and proposing income-contingent repayment schemes that ensure the student against repayment difficulties.

Not only do borrowers face risks, but lenders do so, too. National loan repayment systems often imply moral hazard of graduates and carry high risks. It is difficult to check what students do after graduation, especially when they leave the host country. For example, the UK loan system forgives debt after 25 years, if it is not completely paid back. Yet, for a Bulgarian student who had obtained a loan and graduated in the UK, and then returned to Bulgaria, it would be hard to repay the loan within 25 years, as wages are currently lower in Bulgaria than in the UK (LSE, 2009).

Inequality: As shown above, the panorama of financial circumstances faced by students is quite wide, as well as is the structure of the existing fees: the size of the fees differs across countries and across fields of studies (see also Box 3). The current financial support mechanisms do not counterbalance the inequality associated with university fees or with other costs (for more details see Figure 5 before).

Box 3: Two extreme examples - Norway versus Romania

To make the differences more visible, the system of a high income country (Norway) is compared with that of a low income country (Romania):

A Norwegian student does not pay study fees and is entitled to loans and grants from the State Educational Loan Fund (NSELF), amounting up to NOK 87,600 (EUR 10,425). The support is initially given as a loan, and 40% of the loan may be converted to a grant if students live apart from their parents. A travel grant is also available. Financial support is fully portable. Additionally, students with children can get a grant. Only 10% of students' total income comes from families, even if Norway is one of the richest countries in Europe.

Student fees in Romania can amount to RON 21,304 (EUR 4,687). The average amount is RON 7,481 (EUR 1,645), whereas the maximum grant for a high-achieving student is RON 600 (EUR 132) per month. Almost 70% of students' income comes from parental support in Romania, which is one of the lowest-income countries of the EU (European Commission, 2011a).

4.4 Proposal for a student loan guarantee facility with clear European Added Value

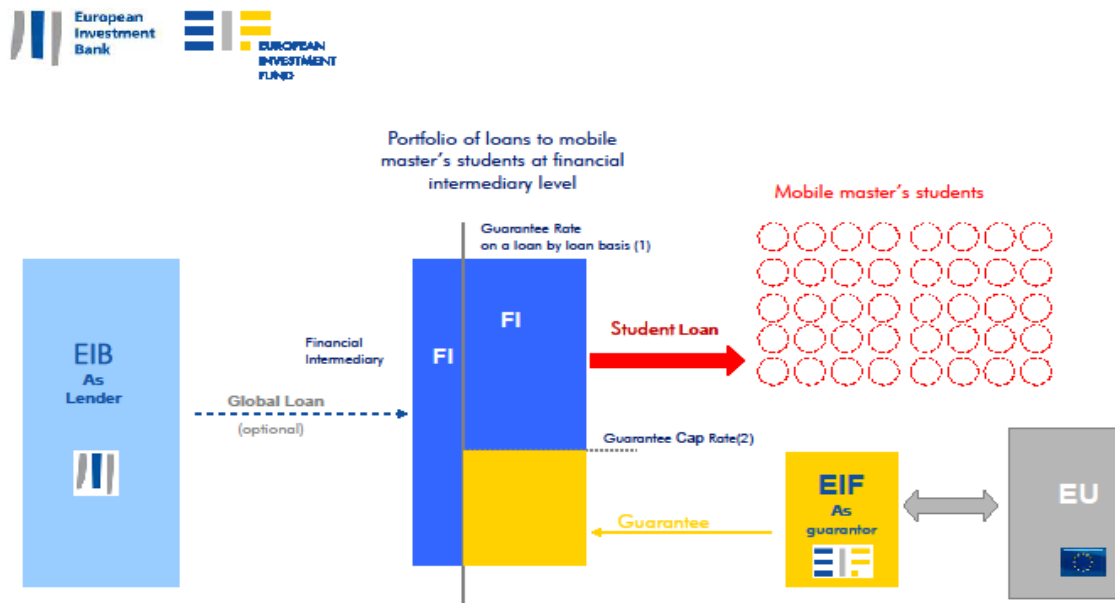
The Europe 2020 strategy provides the overarching policy framework for a European student loan strategy. Formally adopted at the European Council in June 2010 (European Commission, 2011b), the political and economic objective of Europe 2020 is to deliver "smart, sustainable and inclusive growth" for the EU as a response to the crisis and as a means to maintain and strengthen Europe's competitiveness in the global economic order. "Education" is key to achieve these objectives. Well-educated people form the basis for all of the three growth pillars, mentioned above against the background of the proven advantages of students' mobility. Support for student loans on European level could underpin the delivery of the expected results.

Proposed EU Student Loan Guarantee Facility

The previous sections discussed the market weaknesses as rationale for public help. It was also mentioned that some public support mechanisms available on national level lead to a suboptimal situation with regard to the mobility of students. In order to improve this situation, an EU Student Loan Guarantee Facility is proposed. The facility aims to incentivize financial intermediaries (banks, guarantee institutions or equivalent) to expand target market of borrowers and cover the market of mobile master's students. The facility would provide significant economic risk cover on portfolios of student loans built by financial intermediaries. The first losses from any non-repayment of loans would be covered partially by the EU budget. Sharing risk for the losses encourages financial intermediaries to put more effort into tracking and collecting repayments (alignment of interests).

Product description. In the Erasmus Master Student Loan Guarantee Facility, EIF through EC support would be providing credit risk protection through capped financial guarantees and counter-guarantees (to financial intermediaries building portfolios of student loans) to cross-border mobile students.

Figure 10: Student Loan Guarantee Facility (guarantee model)



- (1) Guarantee Rate: Percentage which determines the risk-sharing of losses on a loan-per-loan basis between the financial intermediary and the Student Loan Guarantee Facility
- (2) Guarantee Cap Rate: percentage which is used to determine the maximum amount of losses (cap amount) on the portfolio of student loans to be covered by the Student Loan Guarantee Facility

Source: EIF internal sources

Financial intermediaries would receive an EIF guarantee for each of their loans according to a Guarantee Rate of [90%]⁸ and up to a Guarantee Cap Rate of [18%], providing a [6,17x] leverage. Banks would build the portfolio of student loans by using their standard credit and underwriting procedures. The Erasmus Master Student Loan Guarantee Facility would function on a delegated management basis between EIF and the financial intermediaries, based on the eligibility criteria for students, studies and loans characteristics.

Guarantees deployed under the Erasmus Master Student Loan Guarantee Facility would provide significant economic risk cover and potentially capital relief for participating financial intermediaries. According to the EC Directorate General of Education and Culture (“DG EAC”), the Erasmus Master Student Loan Guarantee Facility will count on a budget allocation of approx. EUR 600m. This amount would be committed in approximately 28 guarantee/counter-guarantee transactions (ideally one financial intermediary per country) in the course of the 7 years of the Programming Period 2014-2020, and would translate into approximately EUR 3.7bn in student loans for over 200,000 students benefiting from them.

Requirements for intermediaries. The EU student loan facility project does not intend to build a new scheme of student lending, or to change the already existing practices. The fixed cost of setting up a system would be too high for the EU budget. Moreover, financial intermediaries would find a modification of their lending strategies difficult. Only a limited number of common criteria should be set at EU level. The main requirements are common eligibility criteria for students (enrolment in master’s programs and mobility), no collateral, and prices in line with the credit risk protection provided.

Selection of intermediaries. Financial intermediaries will be selected from EU-27 countries. Preferred intermediaries will be those that have (or are willing to have) the best practice in lending to mobile master’s students and offering the most favourable loan conditions according to the standards proposed above (subsection 4.1).

If appropriate, financial intermediaries could, in addition to the credit risk protection provided by the EIF, use an EIB student loan alongside their funding sources to build up the portfolios of student loans. The supplementary EIB student loan would improve access to cheaper funding and pass on a lower interest rate to the borrower (Figure 10 above).

EU Added Value

From an EU policy standpoint, public help has to be made conditional upon ensuring “additionality”, i.e. not crowding out private or public activities in the same market, but rather serving as a catalyst for the entry of private capital, or at least of national public capital, to mitigate market failure. The following aspects substantiate the strong European Added Value of a central support measure for the European student loan sector:

⁸ The figures can be subject to change.

Complementarity: European student loan support can be complementary to national support measures, and can have a positive influence on measures adopted at national levels. There are many national loan schemes, but typically they avoid the financing of mobility. A European student loan facility would encourage intermediaries to exploit new practices by reducing the risks related to financing mobile students. Therefore, the EU loan facility would not compete with national loan schemes, but would complement them. Moreover, the European student loan scheme is not intended to finance undergraduate students, as these are typically less mobile than master's, hence this market segment can be solely served by national lending schemes (see also Box 4).

Critical mass and effectiveness: Support via a risk-sharing guarantee structure would allow the multiplication of limited EU budgetary resources to enhance the impact on the targeted final beneficiaries (students). A European level-based support approach is expected to trigger the necessary critical mass for a more forceful market impact, characterised by stronger outreach across a broad range of financial intermediaries. Moreover, from a risk perspective, the support via a Europe-wide guarantee structure would create a diversified portfolio of student loans. This degree of risk diversification would not be possible on national level only.

Box 4: Why only master's students?

National student loan schemes tend to focus on the undergraduate level. Students from socially and economically disadvantaged backgrounds who wish to do mobile master's studies are thus potentially more disadvantaged, as their parents are less likely to be guarantors for private loans. In addition, master's students are more determined in choosing professions, as they have already obtained undergraduate degrees. They offer the highest private return on investment (increased graduate salary), thus they are in a better position to repay the loan.

Master's students stimulate brain circulation. Durations of master's studies are typically shorter than those of undergraduate or PhD studies. Master's students perform better at the job market than undergraduate students. Therefore, it is less risky to invest in their education.

Standardisation/economies of scale: In order to provide attractive interest rates, risk and administrative cost must be reduced, and subsidies possibly provided. This is not possible without public help. Administrative costs will be on average smaller when building a new student loan guarantee platform for the whole EU rather than at national levels (economies of scale).

5 Conclusion

The foregoing sections showed the importance of students' mobility for higher education, and explained the rationale for the proposal of an EU student loan facility. This project helps to promote education and mobility as part of the EU policy of education and equality. The existing private solutions and public support measures are not sufficient to achieve the desired level of mobility. Hence, more financial support is needed.

This project does not intend to change or replace the existing national schemes. Rather, it intends to build a new guarantee/counter-guarantee system on top of existing national and private schemes. A new EU student loan guarantee facility would finance the major part of the first losses.

All public or private institutions that are already experienced in providing students loan can apply an open call and benefit from the free guarantee. The benefit would be passed on to students by offering them favourable loan conditions, including affordable prices and no collateral.

If intermediaries need to expand their funding resources, they can apply to the EIB for an additional cheaper loan with a condition that the benefit would be passed on to the student-borrowers through an interest rate rebate on the student loan.

The loans will be available to all students from the EU Member States. An equal availability of financing higher education and mobility is particularly important to the EU's lower-income countries. Those countries gain a more educated population may benefit from improved access to education finance, which might ultimately contribute to raising living standards.

The EU student loan facility would be part of the forthcoming Multiannual Financial Framework and of a Single Programme for Education, Training and Youth. The facility would contribute to the Europe's target to achieve the mobility of 20% students in higher education by 2020.

International competitiveness of modern markets requires free mobility not only of labour but of students too. Students should go where their skills and talents can be developed in the best way, and where they could benefit from a higher education course/programme that would best suit their needs. For those students who could not otherwise afford to finance their education, the availability of a new EU student loan would be definitely encouraging.

Finally, the most independent, creative, open-minded and risk-taking upper 20% of students in higher education could contribute to the EU objectives. This segment of the labour force has not only the highest employment prospects, but also all the necessary skills to become entrepreneurs and even create additional jobs. In the time of economic crisis, it is critical for the EU to have such skilled graduates who would foster economic growth and employment.

ANNEX

Annex 1: International Standard Classification of Education (ISCED 1997)

The International Standard Classification of Education (ISCED) was designed by UNESCO in the 1970s and aims to establish international norms and definitions in order to facilitate comparison of education statistics across countries. The current version is from 1997 and a new version was agreed upon in 2011.

ISCED 97 levels are as follows:

- ***ISCED 0: Pre-primary education***
This level is designed for children aged at least 3 years and it is defined as the initial stage of organised instruction. Pre-primary education can be school or centre-based.
- ***ISCED 1: Primary education***
Primary education is compulsory in all countries, it begins for children between 5 and 7 years of age and the duration is 4-6 years.
- ***ISCED 2: Lower secondary education***
Teaching at lower secondary is typically more subject-focused and the end of this level coincides with the end of compulsory education.
- ***ISCED 3: Upper secondary education***
This level generally is a continuation of compulsory education. The typical age of students is 15 or 16 years. Enrolment in upper secondary education usually requires entrance qualifications and the typical duration is 2-5 years. Instruction at this level is often more subject-oriented than at the previous level.
- ***ISCED 4: Post-secondary non-tertiary education***
This level is a bridge between upper secondary and tertiary education. It serves to broaden the knowledge of level 3 graduates and to prepare for studies at level 5. The level ISCED 4 may also be designed to prepare graduates for labour markets.
- ***ISCED 5: Tertiary education (first stage)***
The first stage of tertiary education programmes is designed to deepen theoretical background obtained at the levels 3 or 4 and prepares students for doctoral programmes at level 6 (ISCED 5A). Additionally, this level includes tertiary programmes that concentrate on an occupational orientation and are designed for entry to the employment market (ISCED 5B).
- ***ISCED 6: Tertiary education (second stage)***
The second level of tertiary education includes tertiary programmes that focus on an advanced research qualification (e.g. a doctorate).

Source: European Commission (2012)

Annex 2: Portability of grants and loans

Country (loan scheme)	Portability of grants	Portability of publicly-subsidised loans
Austria	No	No
Belgium, French speaking Community	No, grants and loans are portable in exceptional circumstances (no equivalent programme is available in the home country).	No, Grants and loans are portable in exceptional circumstances (no equivalent programme is available in the home country).
Bulgaria	No	No
Croatia	No	No
Cyprus	Yes	Yes
Czech Republic	Yes, Doctoral scholarships and need-based scholarships are portable. However, accommodation support is non-portable.	No
Denmark	Yes, no limitations.	Yes
Estonia	No, only basic allowance is portable.	Yes
Finland	Yes	Yes
Former Yugoslav Republic of Macedonia	No	No
France	Yes	No
Germany	Yes, The need-based (BAföG) support is a combined grants/loans.	Yes, The need-based (BAföG) support is a combined grants/loans system.
Greece	No	No
Hungary	Yes	Yes, The all-purpose loan is portable.
Iceland	No	Yes
Ireland	Yes	No

Italy	No	No
Latvia	No	No
Liechtenstein	Yes	Yes, combined grants/loans system.
Lithuania	No	No
Luxembourg	Yes	Yes, combined grants/loans system.
Malta	No	No
Netherlands	Yes	Yes
Norway	Yes	Yes
Poland	No	No
Portugal	No, only the social scholarship is portable.	No, banks specify the conditions for loans.
Slovakia	No	Yes, but only in programmes approved by the Ministry of higher education.
Slovenia	Yes	Yes, no limitations.
Spain	No	Yes, no limitations.
Sweden	Yes	Yes, only for Catalan residents.
United Kingdom	No, Grants are portable for credit mobility in the 1st cycle. Grants are portable only for Erasmus students. For other students, grants are portable only for a period of mobility that forms an integral part of the programme.	No, Loans are portable for credit mobility in the 1st cycle. Loans are portable only for Erasmus students. For other students, loans are portable only for a period of mobility that forms an integral part of the programme.

Source: Eurydice (2013)

Annex 3: List of acronyms

- DG EAC: Directorate-General Education and Culture
- EC: European Commission
- EHEA: European High Education Area
- EIB: European Investment Bank
- EIF: European Investment Fund
- ESU: European Students' Union
- EU: European Union
- EU27: the 27 EU Member States
- FYROM: The Former Yugoslav Republic of Macedonia
- GDP: Gross Domestic Product
- ISCED: International Standard Classification of Education
- KfW: Kreditanstalt für Wiederaufbau
- LSE: London School of Economics
- MBA: Master of Business Administration
- OECD: Organisation for Economic Co-Operation and Development
- PJ-INCO: Projects-Innovation and Competitiveness
- PPS: Purchase Parity Standards
- R&D: Research and Development
- UNESCO: United Nations Educational, Scientific and Cultural Organization

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