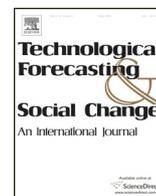




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# Enlarging the social basis of higher education: Lessons learned from extending a social support system with a risk-sharing loan scheme in Portugal

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## ABSTRACT

The challenge of enlarging the social basis of higher education during a period of recession and economic and budgetary problems is discussed with particular reference to Portugal in terms of extending a social support system for low-income students through a risk-sharing loan scheme introduced in 2007. The social support system in Portugal, which was significantly enlarged until 2010 to cover more than 20% of the total higher education population (i.e., about 70 thousand students), has been considered a rather successful and relevant policy tool for opening up access to higher education. On the other hand, in its initial years of operation, the new system of student loans was characterized by a low penetration rate, with a total of about 21 thousand student loans being issued in the period 2007–2014. However, it has been very relevant because it has facilitated the introduction of a “new culture” of investment in higher education. The new system involves a risk-sharing scheme with a mutual guarantee underwritten by the State involving the banking industry. It follows the practice of mortgage-type student loans in other countries but includes an innovative element of mutuality, which was key to making use of private finance at a time when a further extension of public funds was impossible. It complements existing social support grants, rather than replacing them, and hence improves equity in access to higher education by extending students' options. Its low take-up rate can be attributed to: i) the relatively large penetration and number of advantages of the public social support system; ii) student and family concerns over defaults; and iii) restrictions by the lending institutions in association with the financial crisis, which have had particularly large implications for the banking industry.

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## 1. Introduction

The underlying assumptions of this article are that students matter and that the foremost purpose of government increases in funding for tertiary education is to increase participation rates and extend its recruitment base (Barr, 2004, Heitor, 2008; Phelps, 2013). Consequently, student support mechanisms aimed at the diversification of student income sources are critical in fostering student participation in tertiary education and contributing to the qualification of the labor force (Kallison and Cohen, 2010). The question to be addressed is, how can different incentives and funding mechanisms developed in modern financial markets during the last decade be adapted and used to attract more people to tertiary education?

There are two key interrelated issues. The first relates to the diversification of income sources for students. It also refers to efforts to increase

and balance the offer of loans and grants and their use by students. The second is associated with the development of innovative loan systems and their combination with flexible legislation to foster student income. This article addresses both issues and is motivated by the need to expand the social basis of tertiary education students in times of increasing uncertainty. It examines the introduction of student loans in Portugal aimed at complementing the relatively large existing support program of social grants and in a context of severe public budget constraints.

Nicholas Barr (2008), among other scholars, argues that it is important to guarantee that graduates (not students) share the costs of education. Although this argument merits praise for promoting access to tertiary education, the long-term benefits – or constraints – of such a policy are contingent on the developmental stages of higher education systems, the social and economic backgrounds of graduates, and post-graduation employment and earning prospects (Chapman and Liu, 2013; Chapman et al., 2010). Still, the main issue is that the correct cost-balance to be shared between taxpayers, graduates, and other private sources, has still to be determined, with well-known consequences for the most economically disadvantaged (Barr and Crawford, 2005). Additionally, the current trend in mass and universal higher education systems is one of the

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decreasing investments by the state – unable to cope with the costs – vis a vis the investment of families and students (Sanyal and Johnstone, 2011). In this context, students in many economic contexts are being asked to raise financial resources to respond better to all the challenges and costs of their academic life (including indirect costs), namely through loan systems, preferably without being over-burdened by loan repayment after graduation (Rothstein and Rouse, 2011).

Taking this into account, the OECD, in its Review of Portugal's Higher Education Policy carried out in 2007, underlined the need to foster student participation in tertiary education, and to introduce a student loan system that took into account national fiscal circumstances. It also called attention to an overall situation of constrained public finances incompatible with solely publicly funded loans which involve large sums of public financing, both for loan funding, management and institutional support (Johnstone, 2004).

These circumstances led to an alternative approach followed by the Portuguese government in the fall of 2007, consisting of two complementary actions: first, enlarging the social support system in order to cover at least 20% of the total tertiary education population (i.e., about 70 thousand students); and second, introducing a mortgage-type student loan scheme with mutual guarantees underwritten by the State, aimed at complementing rather than substituting the system of student social grants. By the end of the 2013–14 academic year, a total of 20,922 loans had been contracted through the banking system, complementing the on-going grant programs. Although this may be considered an extraordinarily low take-up of the system, this article argues that it represents an important achievement in a country with no tradition of student loans and with middle-class families under severe financial restrictions. In addition, the default ratio is low: only 5% (yearly average) of the total loaned value was not repaid within five years (with a highest value of 9.33% relating loans contracted in 2007–08).

This article examines the complementing nature of the two schemes used, drawing on data from national public sources, the literature, and international organizations to characterize the Portuguese situation before and after the scheme was launched. The following section summarizes the relevant information about the conditions associated with enrolment in tertiary education in Portugal to frame the discussion in the context of the need to diversify student income sources and open up access to tertiary education. Section 3 briefly describes the different options and experiences involved in the adoption of student support schemes worldwide and presents the specific characteristics of the loan system involving a mutual guarantee scheme being implemented in Portugal. Section 4 discusses the lessons learned from the Portuguese experience in adopting a loan system, with the aim to shed light on perspectives for its evolution. Section 5 concludes our analysis.

## 2. Building capacity and nurturing talent: why do we need student support schemes?

### 2.1. Striving towards skilled human capital

The number of students enrolled in tertiary education determines, in part, a country's future competitiveness in terms of its ability to create, transform, and use knowledge in innovative ways (Fagerberg et al., 2007). According to data for 2005 and 2012, an average of about 4 students per 100 population were enrolled in tertiary educational programs in European Union countries in the first decade of this century. Although the figure varies significantly between countries (in Greece, Lithuania and Finland, around 6 students per 100 inhabitants were enrolled, and in Italy and Malta, around 3), Portugal follows the average. Nevertheless, because of adjustments for the demographic situation across countries, the most important statistics are those with reference to enrolment rates in tertiary education for youth cohorts (Fig. 1). These figures are relevant because Portugal is below the average, with only about one third of youth aged 20–24 enrolled in tertiary education.

From a simple estimate of the number of young people aged 20–24 who are currently engaged in tertiary education, in addition to those who already hold an advanced academic degree, and given the current tertiary education completion rates, one can assume that by 2020, 30% of the 20–24 age group in Portugal and most European regions will be graduates. Consequently, in order to meet the European Strategy 2020 goals, which entails 40% of that population group graduating from tertiary education by 2020, many more thousands of the 20–24 age group all over Europe will need to complete their graduate studies. This applies to Portugal, where tertiary education graduates comprised only 29% of the 20–24 age group in 2013 (while 37% is the European average).

In this context, the role of tertiary education as a promoter of social mobility should be highlighted, as measured, for example, through the number of tertiary education students with parents with formal tertiary education levels (Costa et al., 2009). While in 1999, the percentage of students in tertiary education in Portugal with one parent holding a tertiary level degree was only 28%, this figure rose to 35% in 2007. On the other hand, the opportunity of access to tertiary education by students with a parent with a tertiary education degree in 1999 was 14 times that of students whose parents had only received compulsory education or less. In 2007, this ratio decreased by a factor of 10. However, it should also be noted that, as a consequence of the impact of the financial crisis of recent years, the aforementioned number decreased in 2012 to values around those of 2007, and this has been associated with the reduction in public expenditure including direct social support for students

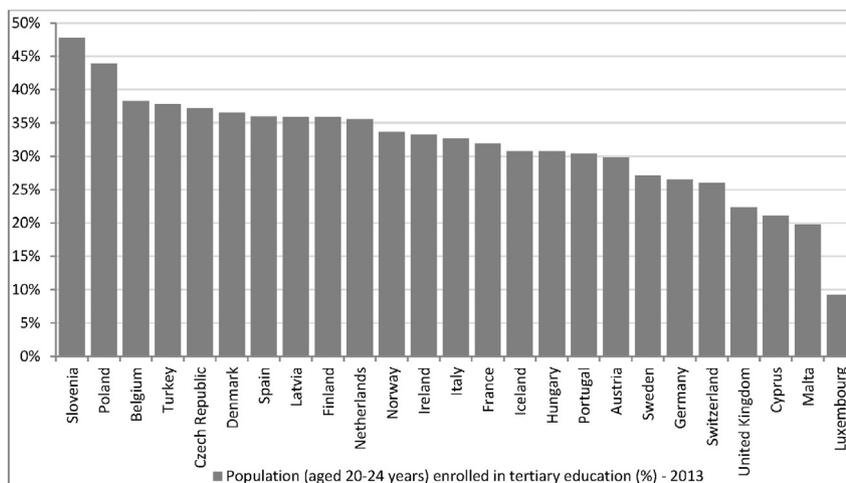


Fig. 1. Enrolment rates in tertiary education for youth cohorts (20–24 years old), 2013. Source: Eurostat.

(Rodrigues and Heitor, 2015). In other words, equity in tertiary education has improved considerably in recent decades in Portugal, and tertiary education has promoted social mobility, but the vulnerability of the social landscape today is still dependent on social support schemes for students.

Success in widening access to tertiary education, in which innovation must be considered together with competence building and advanced education, calls for complex interactions between formal and informal qualifications (Helpman, 2004). This requires continuing major efforts at a wide European level to broaden the social basis of knowledge-based activities. If one attempts to develop further the implications of this argument and the terms which must drive the formulation of national public policies across Europe, three vital issues must be addressed: a) scale, which relates to the need to increase public funding in education and science; b) diversification, which concerns the need to recognize varied education paths and mobility across them; and c) time, which refers to the need to support a continued effort in advanced education. The analytical focus of this article is on public policies fostering access to tertiary education through time.

Although differences between countries are path-dependent on their social, cultural and economic contexts, they are also associated with comparatively large differences in the total expenditure on tertiary education institutions as a percentage of GDP. The average OECD expenditure (from public and private sources) is about 1.63% of GDP, and only those countries with large private sources of income to cover education costs have been able to sustain overall expenditures on tertiary education institutions at higher rates than that average (these include the United States, Canada, South Korea, Chile and Colombia; Japan is an exception since, although its private funding for education is large, the total expenditure is below the OECD average). Countries such as Portugal and Spain, among many other European countries in which funding of tertiary education institutions is overwhelmingly public, tend to be slightly below the OECD average. This discussion needs also to account that participation in tertiary education leads to increasing private returns to education upon graduation (especially when skilled unemployment or underemployment is low; see Holzner and Launov, 2010). This is the case everywhere, in particular in countries such as Portugal, where employees with a tertiary education degree have the highest wage premium and a lower risk of being unemployed (OECD, 2007).

## 2.2. The Portuguese case

Fig. 2 quantifies the time evolution of the average monthly earnings of employees in Portugal as a function of qualification level, showing that those with tertiary education degrees have an average salary that

is at least double that of employees with only a secondary degree. In Portugal, the difference between investment in tertiary education and earned income in a lifetime is USD174,000 for a woman and USD196,000 for a man, when compared to women and men holding an upper secondary or post-secondary non-tertiary education degree as their highest educational level (OECD, 2014). In other words, for both women and men in Portugal, the net value of investment in tertiary education is above both the OECD average and the European Union average. These figures justify the argument that taxpayers and graduates should share the cost of education, with the sharing to be done with graduates because students generally cannot afford to pay, whereas graduates can (Barr, 2009). Thus, finding ways for students to access tertiary education for free (or at a very low cost), allowing them to repay the costs of (investments in) education after they have graduated, is of critical importance. This can be done through loans, but this article argues that they must be properly combined with a social support system.

It is well known that the benefits of investing in tertiary education surpass the costs by far in all countries, but the net investment of Portugal, which is above the OECD and EU averages, may be context-specific. The country is known for exhibiting dual characteristics concerning educational qualifications (Rodrigues and Heitor, 2015), having an active workforce with relatively low educational levels co-existing with a qualified youth. This has evolved over time through a reduction in a chronic scientific and technological backwardness, although the country's growing scientific and technological capacity is now increasingly vulnerable as a result of the increasing international competition for qualified human resources (Heitor, 2015). In addition, analyses of levels of economic diversification and sophistication across Europe suggest that there is a need to insist on qualification and institutional strengthening, together with continuous requirements in order to increase the retention rates and reduce the dropout rates in secondary education (e.g. Dias, 2014). Until recently, Portugal had the highest premature school dropout rate of the European Union, specifically, of individuals aged 18–24 who left school before completing upper secondary education. Their premature integration into the labor market, with low qualification levels, makes this population very vulnerable to unemployment (including long term unemployment) in periods of economic stagnation or slowdown (DePrince, Jr. and Morris, 2008).

The rise in the qualification levels of Portuguese youth is associated with the fact that the Portuguese higher education system grew rapidly in the 1980s and 1990s and opened up to young people from diverse social classes, rising from 60,000 students in the 1960s, to nearly 400,000 students at the end of the 20th century (Fig. 3). The higher education system evolved from an “elite” to a “mass” higher education system in less than 30 years, but with a stagnant or even decreasing evolution

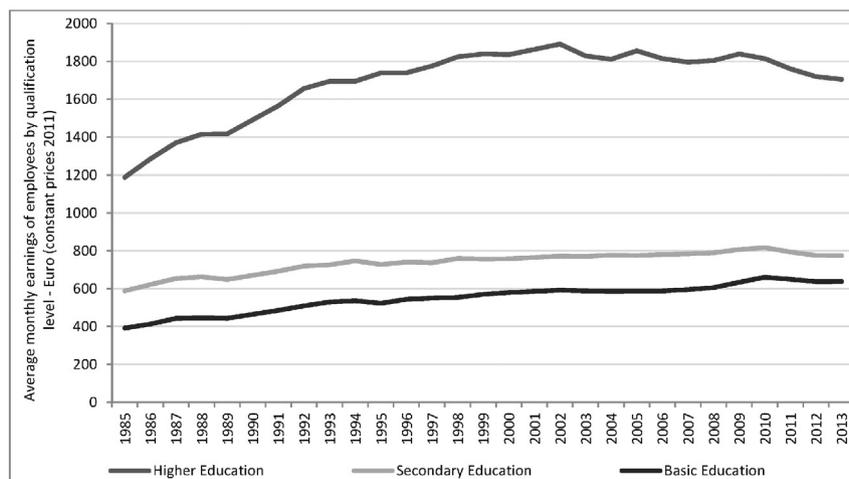


Fig. 2. Average monthly earnings of employees by qualification level (Euro – constant prices 2011). Source: GEP/MSESS (until 2009) | GEE/ME (from 2010); data obtained in [www.pordata.pt](http://www.pordata.pt).

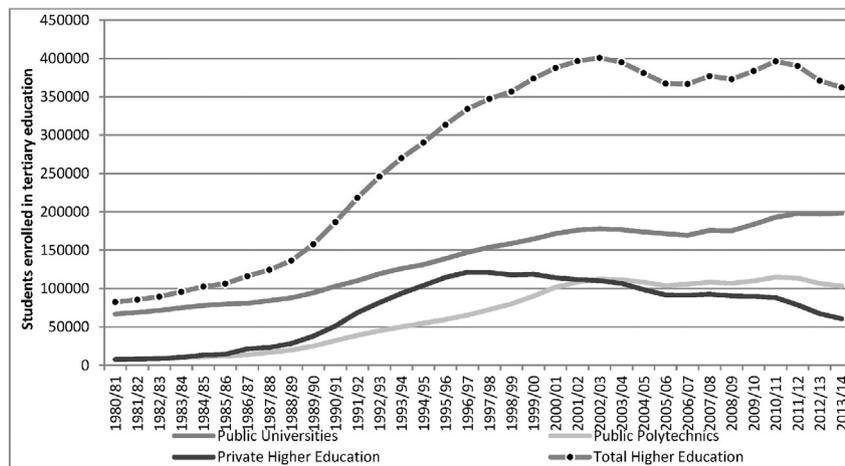


Fig. 3. Students enrolled in tertiary education in Portugal by subsystem and type of education, 1980–2014. Sources: Barreto, A. (1996), “A situação Social em Portugal, 1960–1995”; DEGSup – DSAT/OCES – DSEI; DGEEC. Adapted from Rodrigues and Heitor (2015).

since the early 2000s (Horta, 2010). However, the recent introduction in 2007 of new regimes for access to tertiary education fostered further enrolment (see Heitor and Horta, 2014), with the total enrolment in tertiary education of 20-year-olds increasing by 20% between 2005 and 2009 and reaching about 36% of this age-group (compared to 30% in 2005).

This article focuses on the fact that increasing participation rates and extending the recruitment base cannot be achieved without understanding student living conditions and support systems. Data from Eurostudent, a European-wide study on student living conditions conducted since 2005 (with recent results for 2015), characterized Portugal as the country where student income would depend the most on family or partner income sources. This income represents 70% for those students maintaining their own household and 66% for students living with parents or relatives. A minimal amount of income would come from part-time work and public funding sources, even in a higher education system in which 20% of students benefit from social support grants. This observation, among many others, underlines the need to diversify and enlarge student support mechanisms.

### 3. On the design and political selection of student support mechanisms

According to the OECD, systems of student support are characterized by a combination of different schemes, but attention has been mostly given to scholarships and grants (i.e., non-repayable subsidies) and loans (i.e., repaid). There are also other types of “indirect” student support schemes, including canteens, student residences, and in-kind subsidies, but these are not considered in this article. Countries in Europe, with the exception of the UK, Norway, the Netherlands, Denmark and Estonia have systematically established loan systems not as the main instrument of student aid but as a complementary scheme to improve participation rates in tertiary education and diversify the available funding mechanisms (OECD, 2009). In this article, student loans are considered together with social support funding schemes with the ultimate goal to improve equity in access to tertiary education, as well as to ensure sustainable funding of higher education systems (Debande, 2003). In general, there are a number of distinct schemes focusing on levels of prior eligibility (access), conditions of the loan (including interest rate), and reimbursement period (after graduation).

#### 3.1. Emerging loan schemes and regimes

At the level of initial access to tertiary education, loan schemes range from universal schemes, which do not impose any specific criteria for

eligibility, to means-tested loans, which are available only to particular groups of students, or the conditions of which vary according to explicit criteria (e.g. Callender, 2008). The conditions of the loan can differ according to the design of the loan system. A typical element is the publicly subsidized interest rate, which allows a student to repay the loan at a lower interest rate than the existing market rate. The on-going conditions of the loan can also be changed according to factors such as student performance, which in certain cases could even lead to loan termination (Atuahene, 2008). Educational awarding criteria are commonly used, although in different ways. In Denmark, Finland and Sweden, continuity in the support given to a student is related to the achievement of targets in terms of the completion of a degree. In the Netherlands, students receive conditional loans, which may be converted into grants if the students obtain at least 50% of their total possible study marks for the year and complete their degree in a pre-specified period of time (Vossensteyn and Jong, 2008).

Two different schemes are common at the level of reimbursement: (i) mortgage-type loans and (ii) income-contingent loans (see Chapman and Lounkaew, 2010). While the mortgage loan is based on a repayment scheme in fixed instalments over a fixed period of time, income-contingent loans are based on a repayment scheme taking the form of a percentage of the individual borrower’s annual income after graduation. Repayment is spread over the professional career of the student, improving the match between repayment of the loan and materialization of the benefits of the investment. Although income-contingent loans have become common worldwide (OECD, 2008), their applicability is dependent on the national fiscal system (and its sophistication to ensure the repayment of loans; Chapman, 2008), including the administrative capacity to collect income-contingent loans.

In Europe, different student loan schemes have been implemented. In Finland, the student loan scheme is a conventional, mortgage type of scheme supported by public funds (and a state guarantee). Denmark has developed a hybrid system, combining mortgage-type loans with a subsidized interest rate. The most typical loan scheme in the German higher education system is also a mortgage type loan but with income-contingent safeguards and interest free (100% subsidized interest rate). The Dutch system is a hybrid, with an approximate market interest rate. The Swedish and UK systems are both income contingent but with different interest rates – approximate market rate and interest free respectively (CEDEFOP, 2012). In Australia, one of the longest existing government-supported loan schemes has been the income-contingent loan (Chapman, 2008), which involves a combination of mandatory (minimum) automatic repayments through the fiscal system and voluntary (additional) repayments, with the latter including

a bonus of 10% (i.e. if one voluntarily repays \$1000, the debt is reduced by \$1100). These schemes are interest free, but the debt is annually indexed to the consumer price index.

In terms of interest rate, the level of subsidies appears to be related to the financial characteristics of the beneficiaries and the coverage of the loan scheme. The interest-free loans used in Germany and France are targeted at students from low-income families (e.g. Zigele, 2008), while in Nordic countries and in the Netherlands, students pay an interest rate close to the market rate, but the vast majority of students are entitled to benefit from loans (e.g. Vossensteyn and Jong, 2008).

Taking into account the diversified features of student loan systems, the introduction and further development of these systems have always been associated with specific political orientations, beyond requiring different levels of public investment, which strongly depend on the level of subsidized instruments associated with each loan system. Additionally, one should expect these systems to present varying levels of complexity in terms of required infrastructure, and organizational and administrative requirements (see Chapman and Lounkaew, 2010; Atuahene, 2008; Johnstone, 2004; Simpson, 1987). Thus, it is not surprising that some countries have developed new structures within higher education public bodies to implement and manage loan systems, or have even developed specific agencies for this purpose, as is the case in the UK (Student Loans Company), Hungary (Diákhitel Központ – Student Loan Centre), the Netherlands (The Informatie Beheer Groep) and Denmark (Danish State Educational Grant and Loan Scheme Agency).

### 3.2. The mortgage-type loan and risk-sharing scheme introduced in Portugal in 2007

In 2007, the Portuguese government issued new legislation to increase the flexibility of access to higher education, together with two main financial instruments to support student enrollment: i) by extending the social support system for low-income students, with the number of grants increasing from 63 thousand in 2007 to 75 thousand in 2010 (Fig. 4) and ii) by introducing a new scheme of mortgage-type student loans, making use of a risk-sharing scheme with mutual guarantee.

Mutual guarantee schemes (Fig. 5) are typically developed to support small and medium size enterprises (SMEs) through the issuing of financial guarantees to banks to facilitate the access of SMEs to credit with better conditions for investments throughout their activity cycles (Zecchini and Ventura, 2009). These better conditions refer to credit obtained, its cost, and the period of time for the credit to mature. In general, the guarantees are issued by private societies (i.e., Mutual Guarantee Societies, MGS) and are counter-guaranteed by a Mutual Counter-

Guarantee Fund (FCGM). The FCGM shares the risk with the MGS by covering part of the risk carried on each individual guarantee issued by the MGS, from 50% to 80%, depending on the market evaluation of the individual operations. The net result over the last few decades has been a considerable multiplier effect of mutual guarantee schemes, but the system so far was exclusively used for SMEs.

In the case of “Portfolio Guarantees”, the fund may counter-guarantee the full guarantees issued by the MGS, or a high percentage of them, but in that situation a cap rate (or stop loss clause) is set on the overall portfolio. This is the method used in Portugal to establish an innovative student loan program for individual students, following the scheme illustrated in Fig. 6. It is based on the release of a full portfolio of loans (e.g., amounting to an initial volume of €1,000,000) issued by the banking sector. This portfolio is guaranteed by the MGS up to a 10% default rate (and, therefore, with a maximum loss accepted of the order of €100,000). In turn, the counter-guarantee fund covers the MGS risk. In addition, the necessary public participation protects the losses accepted by the program (i.e., to a maximum of €100,000). In other words, for each set of €1,000,000 in student loans issued by the banking sector, the public investment represents up to €100,000. The element of mutuality is, therefore, the key element in making it possible for the scheme to make use of private finance through a risk-sharing mechanism. This is because prospective student borrowers have no saleable collateral and thus, the risks for the lender, in the absence of some sort of guarantee of repayment, preclude the effective operation of a private capital market.

In the Portuguese case described here, the FCGM shares a specific percentage of the risk with the MGS which is also taken into account for the purpose of determining the final loss of each entity if there is a claim from the beneficiary. Any collateral effect obtained by the MGS also proportionally covers the part counter-guaranteed by the FCGM.

The implementation of the first mutual guarantee loan system for tertiary education students in Portugal is based on a public guarantee given to private banks, which manage and issue the loans directly to students within a framework of special and favorable conditions (when compared to traditional private loans pervasive in the market). Additional capital added to the fund to cover student loan amounts to only about 2% to 3% of the entire fund. This solution was designed in times of severe financial restraints in the public sector, which made it difficult to introduce a system based exclusively on public loans. In addition, this type of loan system was possible because the Portuguese counter-guarantee fund had already been in place for several years, with strong dynamism and critical mass on counter-guarantees designed for programs supporting SMEs. It was an apparently frugal

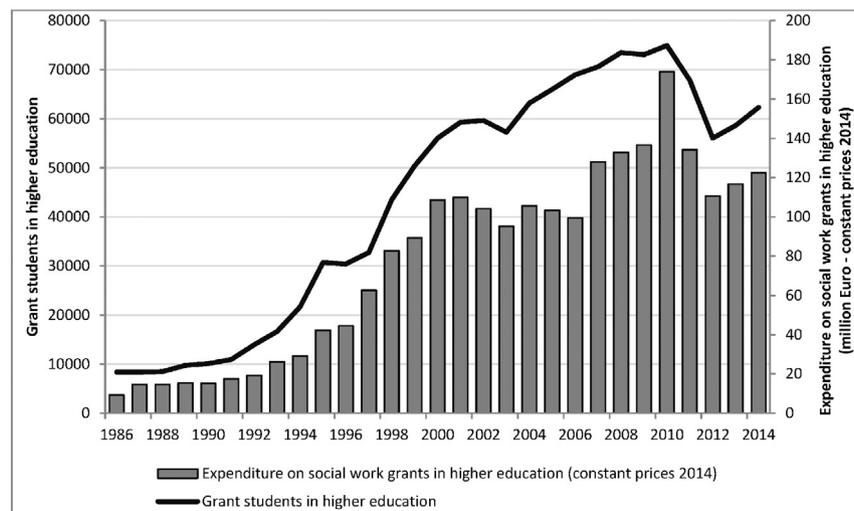


Fig. 4. Number of students with social grants and overall expenditure in social support of higher education students (constant prices 2014). Sources: DGEEC; adapted from Rodrigues and Heitor (2015).

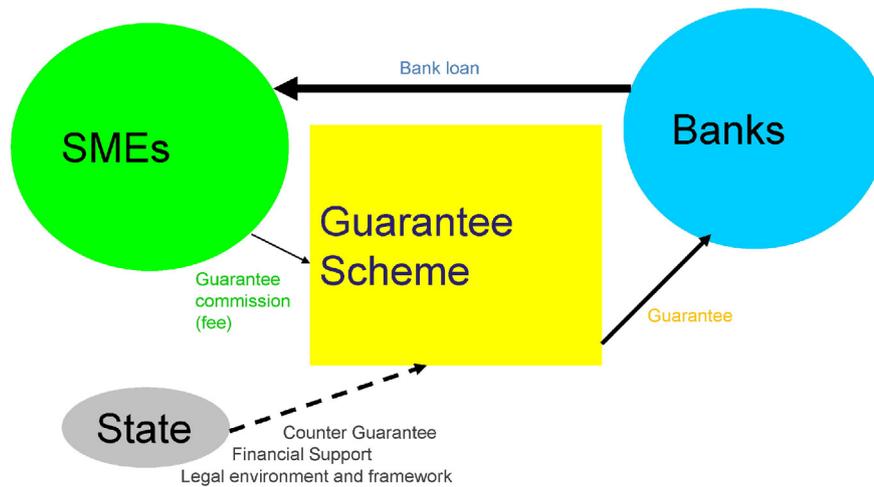


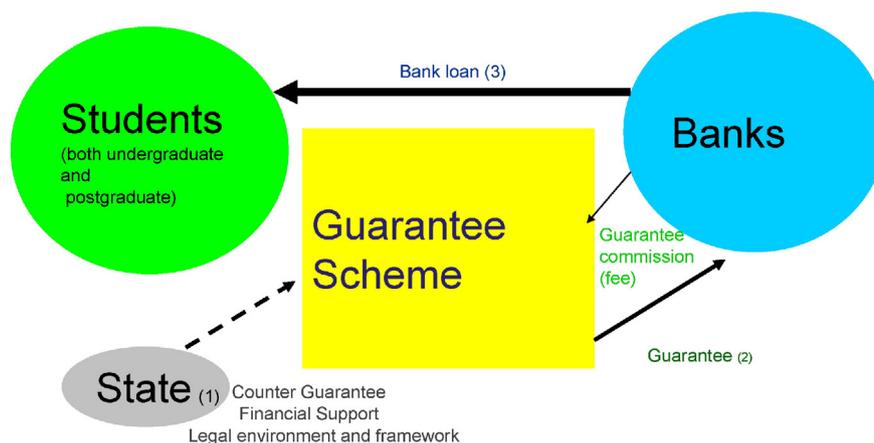
Fig. 5. Historical guarantee triangular relationship, as developed and used over the last decades for SMEs. Source: SPGM, Portugal.

approach – low public investment just covering the guarantee, almost inexistent management costs, no hiring of public servants to manage or operate the program – to launching an impact program targeting middle class students typically beyond the scope of social grants but nevertheless with risky financial limitations (and thus increasing the recruitment base for tertiary education).

The system is open to all banks and types of degrees (post-secondary degrees, first-cycle studies, master's degrees, and doctorate degrees) as well as post-doctoral training. It also includes students involved in international mobility programs, including the ERASMUS program and other international student interchange programs. The loans can range from €1000 to €5000 per year of the degree, with a maximum of €25,000 over a period of 5 years. The period for using the credit is thus between 1 and 5 years, depending on the length of the degree courses, and from 3 to 12 months for students in international mobility programs. The maximum amount available is set in order to add an effective 'purchase power' concerning both education costs and living costs, while taking into account the levels of indebtedness resulting from a loan, which is particularly important for a society with no experience in the practice of education-related debts and with other high levels of debt (e.g., housing, consumer goods). In specific situations, exceptional conditions for access to grants are made available for doctorate students and post-doctoral researchers.

The loan is given in monthly instalments of equal amounts by transfer to the student's current bank account, with the credits being automatically approved by the banks, since the student or his relatives do not have to give any kind of endorsement or patrimonial guarantee. Banks can consider the following foreclosure conditions: default on other loans that the student has in the system (cross default); breach of conditions of the loan in question; unjustified incidents in the system; and the student's failures in the academic program without an explanation acceptable to the bank. The bank may accept a maximum of one justified failure per course or loan, meaning that a second failure, even if justified (or an unjustified failure accepted by the bank), will result in suspension of payment of further instalments of the loan and immediate foreclosure on, and early repayment of, the loan.

The period for reimbursement is between 12 and 16 years (years of the degree course plus at least 1 additional year of grace for the capital plus years of reimbursement), with a maximum of 6 to 10 years of reimbursement. The reimbursement period is normally fixed at twice the length of the degree course. The interest rate is fixed for the total period of the contract (including the period of grace and reimbursement) and determined according to "swap" rates (i.e., IRS rate in euros – EURIRS), increased by a maximum spread of 1.0%. This spread is reduced by 0.35% for students with a yearly average classification equal to or above 70% of the maximum (14 out of 20 points), and by 0.80% for students with a



- (1) Ministry of Science, Technology and Higher Education
- (2) Portfolio guarantee (covers losses up to 10% of bank loan values)
- (3) Up to 5.000 Euros per academic year

Fig. 6. Extended guarantee triangular relationships to include student loans. Adapted from Heitor and Horta (2014), Higher Education Policy 2014, vol. 27, 239–257.

yearly average classification equal to or above 80% of the maximum (16 out of 20 points).

In the context of existing student loan systems in Europe, the system described above assumes a universal character and is greatly simplified in terms of access, without any kind of endorsement or patrimonial guarantee given by the student or his relatives. It is a mortgage-type loan with a reduced interest rate (when compared to the market rate) because of the guarantee given by the state (with private banks facing reduced risk). Education awarding criteria is used after the first year, allowing the possibility of an additional reduction in the interest rate in cases of specified academic success (also because of private banks' awareness of reduced risk in those cases).

In other words, while the system launched in Portugal follows the mortgage-type student loan systems in other countries, it involves an innovative element of mutuality, which was the key to making use of private finance at a time when further extending public funds was impossible. It should be acknowledged that in many countries that use mortgage-type student loans (e.g. in Canada and in the case of the US Stafford loan system), there is a guarantee to the lender that in the event of default, the repayments will be made by the government. In many other countries the same sort of idea is implicit if the loan is actually provided by the government (e.g. in Thailand).

#### 4. Discussion: student support systems in Portugal, 2007–2014 – the critical role of social support schemes and the low take-up rate of loans

The student loan scheme described above was launched in Portugal with an initial public capitalization of M€1.5 for the 2007–08 academic year, which served to capitalize the Mutual Counter-Guarantee Fund (FCGM) and assure the public guarantees given to participating banks. Table 1 shows that 3351 loans were issued by the end of that academic year, representing about M€36.8 of contracted loans (for the complete period of the loans), of which M€34.9 were effectively used. By the end of the second academic year (i.e., 2008–09), 7,207 loans were issued by the banking sector, with a contracted amount of loans of about €M80.9 for the complete period of the loans, which were guaranteed through a public capitalization of about M€4.4.

This growth rate was designed to guarantee a sustainable loan system – with a complementary function of providing a basic social support system for students – which disbursed at that time about 73,493 publicly-supported grants to lower-income students, representing 21% of total enrolments in higher education (this figure refers to 2007/2008, according to DGEEC, the statistics office for education and science in Portugal). After seven years of operation, 20,922 loans were issued by the banks, with a contracted value of €M238.2, of which €M207 were effectively used. So far the percentage of loans that have not been repaid has been very small (5.08% on the yearly average, with a maximum figure of 9.33% for the year 2007–08 relative to the oldest loans), which demonstrates the feasibility of such a loan scheme in periods of public financial strain. The low figure of the non-repayment of contracted loans (although seven years is still a relatively short period) is encouraging for the implementation of such scheme given that the international

repayment rate is known to be, on average, 40% or less (see Shen and Ziderman, 2009).

It is worth noting that the take-up rate of the loan system only accounts for about 2% of the student body. In this respect, several questions may be posed including: i) what is it about the loan system that discourages take-up?; and ii) is it the case that banks do not favor the qualification of students for loans, even if there is no formal sort of guarantor arrangement?

For the analysis, two major periods need to be identified. The first was the launching phase, 2007–2010, which was characterized by the building of trust between relevant stakeholders, including families and banks, as well as main political actors, either in parliament or through-out student unions and movements. The success of this phase was particularly dependent on the guarantee given by Government that the new loan system would complement the social support for low-income students, which grew considerably in this period (Fig. 4). The second was the austerity period, 2011–2014, which was associated with a decrease in the number of loans given (see Table 1). This period was affected by recession and economic and budgetary problems, and the analysis follows the analysis of Hernando and Villanueva (2014) with respect to bank lending behaviors in times of economic slowdown, regarding both increasing uncertainty in family finances and the guarantee to be given by banks to avoid any kind of endorsement or patrimonial guarantee given by the student or his relatives. Although this had been formally planned since the early implementation phase of the system, analysis has shown an increasing informal resistance on the part of banking institutions to providing student loans.

Overall, the low take-up of the new loan system can to be attributed to: i) the relatively large penetration rate and number of advantages of the public social support system; ii) students' and families' concerns about defaults, which increase in times of uncertainty; and iii) restrictions by the lending institutions in association with the financial crisis, which had large implications in the banking industry. This agrees with the analysis of Gvetadze (2014) concerning the association of low penetration of loan schemes with repayment of loans regarding lack of flexibility and in accounting for graduate's income or employability status.

Notwithstanding the reduced penetration of loans in Portugal, one can argue that the introduction of the loan scheme hereby described contributed to the diversification of student income sources and to improving the conditions of access and student autonomy in tertiary education in the country. After seven years of operation, the target of the program was achieved with a simple and frugal system, in a context where social grants represent the main mechanism for student support. Two main observations can be made. First, as shown in Table 2, students benefiting from loans are from all types of social groups and not primarily associated with lower-income families. Analysis has associated this observation with a double social recruitment pattern for higher education, whereby students from families with tertiary education levels co-exist with newcomers to tertiary education of lesser or low-income backgrounds.

Second, data also suggests that primarily middle-income families use loans (Table 3), supporting Costa et al.'s (2009) findings that loans were mainly used by these families but assumed a complementary

**Table 1**

Number and values of mutual guarantee loans given to tertiary education students. Source: SPGM (May 2015).

Academic year	Number of loans	Contracted credit (in Euros)	Contracted credit used (in Euros)	Non-repayments	Percentage of non-repayments
2007/2008	3351	€36,839,226	€34,952,203	€3,260,681	9.33%
2008/2009	3856	€44,063,077	€41,546,822	€3,455,506	8.32%
2009/2010	4066	€46,913,580	€44,214,536	€2,161,542	4.89%
2010/2011	4529	€51,599,263	€47,476,135	€1,435,382	3.02%
2011/2012	2027	€22,971,764	€19,334,955	€141,528	0.73%
2012/2013	1825	€21,904,480	€14,796,062	€67,344	0.46%
2013/2014	1268	€13,957,198	€4,722,844	€0	0.00%
Total	20,922	€238,248,587	€207,043,557	€10,521,981	5.08%

**Table 2**  
Loans usage in Portugal: social–professional category of domestic origin group.  
Source: Costa et al. (2009).

Social–professional category of domestic origin group	Students with loan (%) (multiple answer)		Overall higher education students (%)	
	Father	Mother	Father	Mother
Business owners, administrators and liberal workers	16	8	16	9
Technical professionals	26	22	35	39
Independent workers	10	5	9	7
Independent agriculture workers	2	1	3	1
Operational employees	25	47	15	34
Industrial employees	20	16	21	9
Agriculture employees	1	1	1	1
Total	100	100	100	100

role vis-a-vis grants. This is also in line with the findings of studies throughout Europe and the United States that concluded that loans in some regions may be primarily used to support tertiary education students among middle- and upper-income families. Loans can be ineffective among lower-income students, whereas the converse is true for grants (see OECD, 2009). In the Portuguese case, for most students, the family is the most important source of income. The exceptions are those students who benefit from grants and loans, and for whom the most important sources of income are grants and subsidies. This is congruent with the fact that those students benefiting from grants come from poorer social economic backgrounds and may need a loan to face contingent financial instability.

In addition, the analysis in this article has found that the decision to take out a loan is difficult for students from low economic background households, who tend to be the most indebted and risk averse (see Friend and Blume, 1975), and who may benefit from social grants. This suggests the need to integrate elements of income-contingent schemes into the current loan structure, particularly concerning repayment options. However, one should note that this would introduce additional complexity into the system, including appropriate metrics to measure income.

## 5. Summary

This article discusses the challenge of enlarging the social basis of tertiary education in Portugal in the period 2007–2014, by extending the social support system for low-income students with a new loan scheme introduced in 2007. The analysis includes a period affected by severe recession, stagnant economic growth and budgetary problems, and considers important policy implications. It underlines the critical role of a social support grant system in opening up access to tertiary education and fostering counter-cyclic measures against the negative impact of economic recession on accessing tertiary education. The loan system has proven to be resilient and to extend students' options, as well as to stimulate a “new culture” of investment in education, although it was characterized by a low penetration during the initial 7 years of operation, covering only about 2% of the student population.

The new loan system is a risk-sharing scheme involving the banking industry and follows mortgage-type student loans in other countries,

but it involves an innovative element of mutuality, which was key to the use of private finance at a time when extending public funds was impossible. It was driven by a public–private partnership supported by a FCGM and benefiting from a very simplified access, a reduced interest rate with an additional reduction depending on students' success, a one-year grace period and a long repayment period. It was launched with a reduced infrastructure and minimal governmental intervention, with only the necessary investment to assure the operation of the guarantee scheme. Overall, it has allowed the leveraging of public investment through the mutual guarantee scheme in gathering private resources under significant beneficial conditions, in a way that supplements existing social support grants rather than replacing them.

While the social support system was significantly enlarged up to 2010, covering more than 70,000 students (i.e., about 20% of the total higher education population), a total of only 20,922 loans were issued during the first 7 years of operation of the new scheme, 2007–2014. These were mainly used by students from medium-income backgrounds, confirming the complementary role of the loan scheme in relation to social grants. It should also be noted that the repayment levels of the loans have so far been much higher than those usually observed internationally. The analysis shows that the relative low penetration rate of the loan scheme in its initial years of implementation can be attributed to: i) the relatively large penetration rate and number of advantages of the public social support; ii) student and family concerns over defaults; and iii) restrictions on the part of the lending institutions in association with the financial crisis, which substantially affected the banking industry.

The extrapolation of the results of this study to other socio-economic and cultural contexts requires caution. Risk perception and instability brought about by the financial crisis and the austerity measures in place in Portugal after 2010 have led to growing youth unemployment and a climate of instability and uncertainty, which has affected risk behaviors at large, including those associated with taking up a loan to cover tertiary education costs. The financial crisis has also led most of the banks to minimize their engagement in loan schemes and to introduce “informal” obstacles to loans, leading to declining numbers of student loans since 2011–12. It should be noted however that the loan program has proved to be resilient since it survived government changes, the financial crisis and the economic adjustment program imposed on Portugal over the period 2011–2014.

**Table 3**  
Loans use in Portugal: Sources of student income.  
Sources: Costa et al. (2009); Eurostudent (2005); Eurostudent (2011).

Sources of student income	Students with loan, only (%) (multiple answer)	Students with loan and grant (%) (multiple answer)	Overall higher education students (%) Eurostudent (2005)	Overall higher education students (%) Eurostudent (2011)
Family	73	67	70	70
Grants/subsidies	4	76	8	7
Work	31	14	21	20
Other sources	1	–	2	2

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