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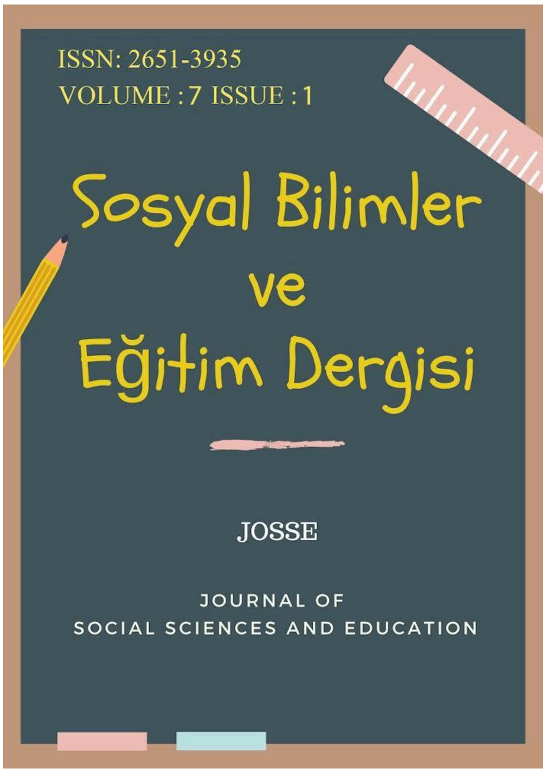

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A Comparative Perspective on Fee Policies Used in OECD Countries for Financing Higher Education

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A Comparative Perspective on Fee Policies Used in OECD Countries for Financing Higher Education

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Abstract

One of the biggest problems faced by countries globally is the financing of higher education. Especially in the face of increasing demand for higher education and limited public resources, countries are in need of reform in terms of financing higher education. In recent years, there has been a global trend towards the adoption of higher education financing strategies that focus on cost sharing. The purpose of this study is to examine the higher education financing policies of countries with different systems compared to Turkey, to address the financial challenges in Turkish higher education financing, to recognize alternative financing options and to suggest strategies for Türkiye to expand its financing sources. For this reason, the study is "descriptive" and the data on the countries are analyzed by using the "documentary scanning" method. A comparative perspective on higher education financing is presented by analyzing the current higher education financing policies in OECD countries and their current remuneration schemes. The study covers all OECD member countries. As a sample, the current state of financing models and fee structures in seven countries, including the United States, Australia, Germany, the United Kingdom, China, Japan, Russia, the United States, Australia, Germany, the United Kingdom, China, Japan and Russia, each with different higher education finance policies, are presented. In order to improve higher education financing in Türkiye, it is suggested that the "Income- Contingent Loan" method, which is offered to the student on an optional basis in the collection of debts in higher education financing systems, should be implemented as an alternative student borrowing method, even if it is not generally used in every country.

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Introduction

Higher education institutions are important actors in the development of sustainable societies (Findler et al, 2019, 96). Higher education institutions play a crucial role in the creation, preservation and dissemination of knowledge, which is crucial for the social and economic well-being of communities at both regional and global levels.

The impact of education is so significant that it has the power to influence and shape the lives of individuals and the overall development of society. A good understanding of education has such a strong impact that it spreads from individuals to society.

Education, especially higher education, is a social investment that requires a lot of resources. It is generally accepted that education is an economic good with various characteristics related to its production, consumption and financing. Higher education services have gained a semi-public character due to the fact that they can be produced within the free market system due to their high individual returns and that the social benefits of education services are spread to all individuals (Ergen, 2006, 134). Since higher education is seen as a semi-public service, there is no obligation to cover the costs of the service from public resources.

The expansion of higher education is both necessary and desirable (Barr, 2014, 63), but higher education is expensive to deliver. The cost of education consists of the value of the resources consumed to produce it (Xia et al., 2022, 1). Even if higher education is very expensive, many people continue to go to university even if they know that they will be in debt after graduation. Because they think it is a good choice for their future (Maloy, 2018, 1).

In the contemporary neoliberal economic framework, individuals are consistently expected to benefit more from pursuing higher education. The increasing demand for higher education leads to an increase in the associated costs. Moreover, research needs in higher education institutions, comprehensive libraries and laboratories lead to an increase in tuition fees and overall university costs. Financing of higher education refers to the process of financing education and providing the necessary financial and material resources to ensure their efficient use and the continuity of educational services. As a result, the financing aspect of higher education systems is seen as an unresolved issue that requires attention and solutions in terms of meeting the expenses related to higher education (Yakut-Özek, & Akbaşlı, 2021, 1054).

The methods of financing, management, distribution and control in higher education are closely linked to the management system. The financing system and the management structure support each other. There is a strong link between the two systems. The historical process reveals two management models. These are the Anglo-Saxon and Continental European systems. The Anglo-Saxon model is a system of governance in which higher education institutions are independent of, or have a very limited link to, the centralized system of governance. Management is carried out by intermediate institutions at the institutional level. In the continental European model, higher education institutions are generally under the authority of the Ministry of National Education and some professional institutions belong to different ministries. In this model, the state provides a significant portion of the financial resources for higher education (Ateş, 2019, 55). Countries such as Northern Europe and the USA, Canada and the UK are included in the Anglo-Saxon system of governance, while countries in Southern Europe and Latin America are governed in the Continental European model (Garritzmann, 2024, 7).

Traditionally, there are significant differences between Continental Europe and Anglo-Saxon countries on issues related to higher education. In general terms, higher education is considered a public service in Continental Europe, whereas in Anglo-Saxon countries it is seen as a separate area subject to market regulation. The implications of these differences are of great importance. The emphasis in Continental European higher education is mainly on teaching activities, whereas in Anglo-Saxon countries the focus is on research, especially applied research. While continental European higher education is more oriented towards theoretical aspects for the development of cognitive capacities, higher education institutions in Anglo-Saxon countries are more practical and oriented towards facilitating employment opportunities. While Continental European universities provide their students with a more comprehensive education, higher education in Anglo-Saxon countries tends to be specialized from the outset. As a result, while the majority of universities in Continental Europe are state-owned, many institutions in the United States rely heavily on private funding (Aguilera-Barchet, 2012, 119). Therefore, tuition costs in Anglo-Saxon countries are generally higher than in Europe.

Between 2019 and 2020, the majority of OECD countries experienced an increase in government spending, particularly in education. The increase in overall government spending during the COVID-19 pandemic crisis can be attributed to initiatives such as fiscal stimulus and health interventions. Investments in education, such as the development of distance learning infrastructure, have contributed to the inclusive climb. Many countries, such as Brazil, Chile, Costa Rica, Hungary and Türkiye, faced a 5% reduction in public spending on education between 2019 and 2020. Türkiye stood out as the only country where total public expenditures decreased in this time period (OECD, 2023, 320).

Covering most of the higher education expenditures from public resources will reduce the private education costs of individuals and lead to an increase in private earnings. As a result, it leads to a decrease in the price of higher education and causes an increase in demand (Gölpek, 2011, 140). Countries face the challenge of reforming higher education financing due to increasing private demand and limited public budgets.

Over the last two decades, as countries have grappled with the problem of financing rapidly expanding higher education systems, there have been major changes in the way higher education is financed in many countries as public spending on education has not kept pace or, in some cases, public support has declined (Johnstone, 2005, 2009; Woodhall, 2007;Marcucci & Johnstone, 2007; Vossensteyn, 2000; Hauptman, 2007). In particular, there appears to be a global trend in the adoption of higher education financing strategies focused on cost-sharing.

The study aims to analyze the different financing models and strategies adopted by various countries and institutions to facilitate access to higher education. It includes information on higher education fee policies used by countries in financing higher education, with a focus on cost-sharing policy. A comparative study design was chosen for this research. This is because it allows for the comparison of the financing approaches used by countries in higher education or to reveal partially similar aspects.

Data on higher education financing policies used by countries and information on current fees for the academic years 2023 and 2024 for some selected countries are obtained from official websites and official publications of the countries, allowing for a comprehensive review of recent developments.

Financing Higher Education

The issue of financing is quite complex and has a wide range (Johnstone, 2009, 347). The higher education policies of countries differ according to the supply or financing of the service (Özekicioğlu, 2013, 15). The answers to the question of how and from where the necessary financing (monetary resources) will be provided for the education services provided by countries to the society vary depending on the basic nature of the state, the economic system applied by the country, how education is seen as a commodity and the degree of priority given to the education sector.

The financing methods used by countries in higher education can be analyzed under two main headings: the financing of higher education institutions and the financing of higher education students. From this point of view, costs can be classified under two main headings depending on whether the financing of students in terms of education costs will be met by public or private resources (Özekicioğlu, 2013, 24).

Table 1

Public and Private Sources Financing Higher Education

Financing of higher education	Production of the Service	
	Public	**Private**
Public	Providing the costs incurred at public universities free of charge with public resources (tax financing)	Payment by the state to students enrolling in universities in pre-determined amounts according to the number of people (Voucher Scheme)
Private	Public and/or private production of instructional costs (tuition fees, borrowing and scholarships) by covering them out of public resources	

Source: The World Bank, Higher Education in Developing Countries: Peril and Promise, Washington USA, 2000, p.56

In the first case in Table 1 the public sector is entirely responsible for the provision and financing of higher education services and the tax financing method is used. The tax financing method is a system generally used in developing countries. The second case is the voucher financing method used in higher education. This method is suitable for countries where higher education is publicly financed and delivered by the private sector. Higher education services are provided by the private sector in the form of education vouchers, but financed by the public sector in a similar way to tax financing methods. In the third case, higher education is financed solely by private sources and delivered by the public and/or private sectors. This practice, which has become widespread around the world, is based on reducing the burden on the state budget and sharing the cost with the beneficiaries. Tuition fees, borrowing (loans) and scholarships are included in this group (The World Bank, 2000, 56). The financing methods used for higher education worldwide can be categorized under two main headings: “Public” and “Private”. In this respect, it would be useful to explain the financing methods used in more detail.

There are two main approaches to financing higher education with public resources. The first approach, called the "Tax Financing Method", finances higher education through taxes collected from all segments of society, taking into account the benefits that higher education provides to society. The second approach is known as the "Voucher Method". The voucher financing approach ensures that the taxes collected from the public are given to the students who will benefit from this service under the name of school vouchers or education vouchers instead of higher education institutions and enables the student to take initiative (Özekicioğlu, 2013, 28). The voucher method is made within the framework of an agreement that includes the desired features in higher education and where students have the authority to make decisions.

In the context of financing using private resources, there are three main categories in which it falls. The first category, called "Tuition Fee Financing", is implemented as a hybrid approach. In this approach, there is cost-sharing between the state and higher education students and students contribute a minimum amount to the costs of higher education (Jongbloed, 2004; Özekicioğlu, 2013).The second approach is known as the "Scholarship Financing Method". Scholarships provided by both the public and private sectors are given to students free of charge and are widely used worldwide (Akça, 2012, 100-101). The third approach, called the "Borrowing Financing Method", aims to cover the costs incurred by higher education students and has become increasingly important especially in recent years (Ergen, 2006, 137).

Student borrowing programs can appear as many variants of each other. We can classify these programs under two main headings. The first one is "Fixed Plan or Traditional Mortgage Type" and the second one is "Income-Contingent Borrowing".

Traditional mortgage-type borrowing is a borrowing program that provides higher education borrowers with the opportunity to repay a predetermined fixed plan after graduation (Woodhall and Richards, 2008, 189). This type of borrowing was the first form of higher education borrowing and was offered to students by commercial or state-owned banks and backed by the government. Repayments are predetermined on a fixed schedule (Chapman, 2014, 29). Repayments can start with a small amount and gradually increase, and the interest rate can be fixed or variable (Johnstone, 2005, 10). In addition, this type of borrowing covers both the student's tuition fees and living expenses.

Traditional mortgage-type borrowing is a borrowing program that provides higher education borrowers with the opportunity to repay their loans within a predetermined fixed plan after graduation (Woodhall and Richards, 2008, 189).

Income-contingent borrowing is a borrowing program in which individuals who receive higher education services borrow for the cost of these services and are repaid through the income tax system based on their post-graduation income.

Countries have recently argued that optimally designed borrowing programs should take income into account, and that income-based borrowing programs can reduce the risk of defaulting on repayment and reduce distorted behavior in the labor market (Murto, 2024, 5). For this reason, countries have started to use income-based borrowing programs in financing higher education.

Taxpayers arguably represent the most important source of financial support for the provision of higher education services in the public sector (Akça, 2012, 96). However, student borrowing in higher education, which is increasingly used by many countries, stands out as an alternative model among financing methods. This model envisages a wide range of private sector and commercial banks in the financing of higher education institutions.

Giving the money needed to finance education to the learner means that the learner commits to pay the lender a certain portion of his or her future earnings. The lender thus buys a "share" of the graduate's future earnings. This is similar to investing in risky assets in a similar way (Barr, 2014). For example, in the case of equity investment in a capital company, there is limited liability between the shareholders, i.e. the risk is only as high as the capital invested.

Investment in higher education is an investment in human capital, similar to investment in machinery, infrastructure or other non-human assets. The primary objective is to increase the economic productivity of individuals. In a free market system, individuals are rewarded with a higher wage for increasing their contribution to society through this mechanism (Friedman, 1955, 94). However, lending for higher education in the free market is seen as risky.

Cost Sharing

There has been a global trend towards the adoption of cost-sharing-oriented financing strategies in higher education (Johnstone, 2004, 2009; Woodhall, 2008, 2007; Vossensteyn, 2000, 2005; Ziderman and Albrecht, 2013, 1995). This trend has manifested itself in a variety of ways, such as the introduction or raising of tuition fees; the creation of loan schemes; or the shifting of social support from work scholarships to loans.

The division of the financial burden of providing higher education services between society (represented by the government) and the individuals (and their families) receiving higher education services is called "cost sharing" (Vossensteyn, 2000). The formulation of the theory of cost sharing in higher education is based on human capital theory and public goods theory. The concept of the cost of education originates from human capital theory (Xia et al. 2022, 1).

The issue of cost sharing examines how education costs are shared between governments (taxpayers) and individual participants in higher education and their families (Vossensteyn, 2000).

The concept of human capital suggests that education is a valuable economic investment that provides not only individual advantages but also a wide range of social benefits. The human capital approach underlines the idea that education increases productivity, leading to fiscal externalities from higher wages and tax revenues (Chapman and Lounkaew, 2015, 771). The magnitude of the personal and social returns from education makes national and social investment in education a crucial precondition for a pragmatic cost-sharing arrangement (Xia et al. 2022, 1).

In this context, the idea that higher education costs should be shared by public and private sources was put forward by Bruce Johnstone. According to Johnstone (2005), the components involved in cost sharing consist of four main elements: (a) government agencies or taxpayers through taxation; (b) individuals who are parents relying on their savings, income or borrowing; (c) students with limited access to savings, current earnings or borrowing; and (d) philanthropic individuals making donations or current contributions. While the business sector and universities are sometimes seen as part of the equation, they usually fall into one of the categories mentioned above.

Johnstone and Marcucci (2007) argue that the policy is intricately linked to political decision-makers' perspectives on the obligation of parents to finance their children's higher education or the role of the state. The upfront collection of tuition fees is based on the belief that parents have a duty to contribute at least partially to the costs associated with their children's higher education and should make payments in proportion to their financial means. As a result, the amount of tuition fees due or the level of financial assistance available depends on the family's income.

Method

The descriptive survey model, which is used to describe a past or current situation, was used in the study. This method involves examining an event, person or object in its natural context without attempting to change or influence it in any way (Karasar, 2010). Documentary survey method was used to collect, define, describe and evaluate the data. This method involves the systematic examination of pre-existing records and documents to collect data. In the context of written documents, documentary review includes activities such as finding, examining, describing and evaluating sources with a specific purpose in mind (Karasar, 2013).In this study, various scientific sources including books, theses, dissertations, articles, journals, seminar reports and international reports on the financing policies and tuition fees applied in the higher education financing systems of OECD member countries were carefully examined. Through a comprehensive analysis of these financial systems, the study reveals the current state of financial models and fee structures in eight countries, each with different higher education finance systems, and makes recommendations for improving higher education finance in Türkiye.

A Comparative Perspective of Higher Education Financing Policies and Fee Policies of OECD Countries

Higher education financing policies used in various countries are presented below by collecting information from national official websites that regulate higher education institutions.

USA

Tuition policies in the United States are based on diversity and are characteristic of both public and private universities. The amount of tuition fees is determined by the supply and demand in higher education institutions (Dezhina & Nafikova, 2019, 24). Public universities can receive financial support from state governments, which allows them to charge lower tuition fees to students residing in the same state. Tuition fees are collected from students in advance through "Pre-charging".

The state guarantees all student loans and covers the interest for the duration of the study period (Johnstone, 2005, 21-22). However, borrowers are provided with a grace period immediately after graduation, with repayment of loans starting at the end of the grace period.

As of the 2020-2021 academic year, there are 3,567 higher education institutions in the United States, of which 2,277 award bachelor's degrees and 1,289 award associate degrees (Irwin et al., 2022, 26). In the United States, according to the National Center for Education Statistics (NCES), the total expenditure of higher education institutions in the 2019-2020 academic year is $671 billion. Public higher education institutions received 430 billion dollars, private non-profit higher education institutions received 228 billion dollars and private for-profit higher education institutions received 13 billion dollars from the country's budget resources.

The cost of students to higher education institutions is 50,457 USD for undergraduate academic programs, 65,193 USD for private (non-profit), 17,141 USD for private (for-profit). In associate degree academic programs, it is 17,950 USD public, 26,199 USD private (non-profit), and 16,213 USD private (for-profit) (NCES, 2024). Considering the size of the students benefiting from education, expenditures have an extremely important place in terms of national resources.

Between autumn 2009 and autumn 2020, the total number of undergraduate students fell by 9 percent, from 17.5 million to 15.9 million. In the ten-year period from autumn 2009 to autumn 2019, before the outbreak of the coronavirus pandemic, undergraduate enrollments showed a downward trend (down 5%). On the other hand, total enrollment in graduate programs, including master's and doctoral programs, grew by 10 percent between autumn 2009 and autumn 2020, with student numbers increasing from 2.8 million to 3.1 million students (Irwin et al., 2022, 25).

For public higher education institutions, 43% of the largest source of income comes from subsidies allocated from the national budget, while for private higher education institutions with a profit objective, 93% comes from tuition fees paid by students.

Students are offered different borrowing programs for tuition fees, categorized as federal and private loan programs.

Federal Student Loan Programs: Federal governments offer a borrowing program for students at affordable interest rates administered by the states. Direct subsidized and unsubsidized loans are available to students. To cover tuition costs, students in higher education are required to submit a Free Application for Federal Student Aid (FAFSA) before applying for any of the borrowing programs. The FAFSA collects data about the student, including information about their living situation, marital status, and whether they have other siblings who will receive support. The application and assessment process determines which type of borrowing program is most appropriate for the higher education student (URL-1).

The borrowing amounts and levels of support provided to higher education students for financial assistance may vary depending on the family circumstances of the student. Whether a student lives with his/her family (hence classified as dependent) or away from his/her family (hence classified as independent) affects the amount of loans and support available to students in predetermined amounts (URL-2).

The higher education institution decides on loan types and loan amounts. However, there are limits on subsidized and unsubsidized loan amounts. These limits vary depending on the year of study and whether the student is dependent or independent. Higher education students have different annual loan limits depending on their class status. Borrowing limits available to students for the 2024 academic year;

- For students living away from their families, first-year undergraduate students have a limit of $9,500, of which $3,500 is subsidized, second-year undergraduate students have a limit of $10,500, of which $4,500 is subsidized, third-year undergraduate students and above have a maximum limit of $12,500, of which $5,500 is subsidized, and no more than these amounts can be in subsidized loans.

- Graduate students are considered independent and have a borrowing limit of $20,500 without subsidy. Total loan limits, including both subsidized and unsubsidized amounts, are $31,000 for undergraduates (maximum of $23,000 for subsidized loans) and $138,500 for graduate students (maximum of $65,500 for subsidized loans, including loans taken for undergraduate study).

Subsidies are applied in the form of interest on loans at borrowing amounts. Borrowing interest is covered by the US Department of Education for subsidized loans. The current interest rate is 5.50% for undergraduate borrowers after July 2023 and before July 2024 and 7.05% for graduate borrowers.

Private borrowing Programs: Students' financial needs can be met through private sources provided by banks or higher education institutions that offer the advantage of providing additional funds on top of tuition fees. This type of borrowing is considered more advantageous than federal loans. However, it is often not used by students unless it is mandatory for reasons such as deferred payments or debt forgiveness. As a result, higher education students should carefully plan borrowing programs that suit their needs.

As of 2023, students graduating from higher education in the US owe over 1.6 trillion dollars to federal student borrowing programs. The number of borrowers is around 43 million (Murto, 2024, 2). In repayments, the government offers Income Driven Repayment (IDR), an income-based repayment method, as an option for indebted students to repay their debts (Murto, 2024, 1-2).

IDR plans treat the relationship between repayment amount and repayment burden differently, linking income-based repayment to labor market outcomes and providing protection against adverse labor market conditions (Stiglitz, 2014; Barr et al., 2019).

Australia

The Higher Education Contribution Scheme (HECS) is considered to be a reform in the financing of higher education in Australia, launched in 1989. It was the inception of the world's first income-contingent student loan system, in which students were allowed to borrow for tuition costs, which were then collected through a tax mechanism based on borrowers' income. The Australian model of income-contingent loans has since been adopted in many other countries (Chapman and Nicholls, 2013; Higgins, 2019; Chapman and Hicks, 2018).

Enacted in 2003, the Higher Education Support Act 2003 forms the basis of current higher education implementation policies. From 2005 to the present, it is known as HECS-HELP (Higher Education Contribution Scheme- Higher Education Loan Programme) (Australian Government, 2024a, 1). This legislation is designed to provide financial assistance for higher education and specialized vocational education and training.

The financial aid schemes provided by the Australian government for higher education students are as follows;

- Commonwealth Supported Places (CSPs)
- Higher Education Contribution Scheme- Higher Education Loan Programme (HECS-HELP)
- FEE-Higher Education Loan Programme (FEE-HELP)
- Overseas-Higher Education Loan Program (OS-HELP)
- Student Services and Ameneties Fee- Higher Education Loan Programme (SA-HELP).

Places supported by the Australian government are called CSPs. Higher education students in Australia enroll in CSPs before enrolling in academic programs. Students admitted to CSPs are referred to as "government-funded students". The cost in a CSP is divided into two parts: tuition fees and a student contribution. The Australian Government subsidizes a portion of the tuition costs by making a payment to the higher education institution where the student is enrolled, and the second part of the cost of higher education is covered by the student's "student contribution". Students enrolled in CSPs use HECS-HELP loans to pay the contribution (Australian Government, 2024a, 1). Non-enrolled students have to pay the full cost of higher education. The amount of contribution varies according to academic programs. Different types of education are classified into "groups".

Table 2

Maximum Contribution Amounts for Full-Time Students (2024)

Groups	Fields	2024 student contribution (annually) (A$)
Group 1	Law, Accounting, Management, Economics, Economics, Trade, Communication, Society and Culture	$15.142
Group 2	Education, Graduate Clinical Psychology, English, Mathematics or Statistics	$4.124
	General Health, Other Health, Environment, Computing, Visual and Performing Arts, Psychology or Social Work studies	$8,301
Group 3	Nursing, Local and Foreign Languages	$4,124
	Engineering, Surveying, Environmental Studies	$8,301
Group 4	Agriculture	$4,124
	Pathology	$8,301
	Medical, Dental or Veterinary Science	$11,800

Note: Central Bank of the Republic of Türkiye, exchange rate 1AUD= 21.3154TL, online, 21.03.2024, (https://www.tcmb.gov.tr/kurlar/kurlar_tr.html)

Source: Australian Goverment, 2024 Commonwealth Supported Places and HECS-HELP İnformation, 2024. (https://www.studyassist.gov.au/system/files/documents/2023-12/Final%202024%20CSP%20and%20HECS-HELP%20booklet.pdf, online,22.03.2024).

The HELP loan limit is A$121,844 for most tertiary students enrolling in 2024. A higher limit of A$174,998 is offered for some programs or courses (health programs such as medicine, dentistry and veterinary medicine) (Australian Government, 2024a, 15).

Table 3

Repayment Rates (2023-2024)

Repayment Income Threshold (A$)	Repayment Rate %
$51,550 under	0
$51,550 – $59,518	1.0%
$59,519 – $63,089	2.0%
$63,090 – $66,875	2.5%
$66,876 – $70,888	3.0%
$70,889 – $75,140	3.5%
$75,141 – $79,649	4.0%
$79,650– $84,429	4.5%
$84,430 – $89,494	5.0%
$89,495 – $94,865	5.5%
$94,866 – $100,557	6.0%
$100,558 – $106,590	6.5%
$106,591 – $112,985	7.0%
$112,986 – $119,764	7.5%

$119,765 – $126,950	8.0%
$126,951 – $134,568	8.5%
$134,569 – $142,642	9.0%
$142,643 – $151,200	9.5%
$151,201 and above	10.0%

Note: Central Bank of the Republic of Türkiye, exchange rate 1AUD= 21.3154TL, online, 21.03.2024, (https://www.tcmb.gov.tr/kurlar/kurlar_tr.html)

Source: Australian Goverment, 2024 Commonwealth Supported Places and HECS-HELP İnformation, 2024. (https://www.studyassist.gov.au/system/files/documents/2023-12/Final%202024%20CSP%20and%20HECS-HELP%20booklet.pdf, online, 22.03.2024).

In Australia, if a student pays for tuition through an income-contingent loan, the government can recover an average of 43 percent of the loan value. Students who pay the loans in advance directly after graduation receive a 15 percent discount, taking into account the hidden subsidy in the loan (Albrecht and Ziderman, 1993, 83-84).

When higher education graduates get a job and start earning an income, they start repaying the money they borrowed for their studies. A certain repayment threshold is set each year. If borrowers' earnings exceed this threshold, their employers collect repayments for their HELP loans through salary deductions. If a graduate's income for 2023-2024 is below A$51,550, there is no deduction from earnings unless they exceed the income threshold.

FEE-HELP is available for students enrolled in fee-paying higher education institutions. These higher education institutions are not subsidized by the government, but students are allowed to borrow FEE-HELP for all or part of their tuition costs. The FEE-HELP borrowing limit is A$121,844 for higher education students enrolled in 2024, with a maximum limit of A$174,998 for health programs such as medical, dental, veterinary, etc. (Australian Government, 2024b, 7-9). Reimbursement is the same as the rates used in HECS-HELP.

OS-HELP is a loan available to qualified students who wish to pursue a specific period of their higher education abroad while enrolled in a CSP. This borrowing option is provided by students to cover expenses such as airfare, accommodation and other travel costs (Australian Government, 2024c, 5). In addition, eligible students can receive extra funding for an approved Asian language course in preparation for their Asian study abroad experience.

The borrowing amount for overseas study is A$7,921 (excluding Asian countries); A$9,054 for study in Asian countries, plus A$1,263 for language study. Students are limited to accessing two OS-HELP loans or one OS-HELP loan for a six-month semester during their academic life (Australian Government, 2024c, 5), providing a balance between financial aid and responsible borrowing practices.

The borrowing received by the student in the year of study is calculated according to the Consumer Price Index (CPI) for that year and the real value of the borrowing is preserved. The indexation rates are determined by the Austarilan Taxation Office (ATO) as 2023 7.1%, 2022 3.9%, 2021 0.6%, 2020 1.8%, 2019 1.8%, 2018 1.9% (ATO, 2024).

Germany

Student loans, which are paid to students from low-income families as educational support for living expenses and educational needs (BAföG, 2022, article), were introduced in 1971 to create equal opportunities in the education system. Student loans are regulated by the "Bundesausbildungsförderungsgesetz" (Federal Education Assistance Act) and are often referred to as 'BAföG' loans. BAföG loans are means-tested, especially for borrowing for living expenses, and eligibility depends on parental income (Grave and Sinning, 2014, 112-113).

The BAföG consists of two equivalent components: a scholarship and a state loan. This means that only part of the funds received after the end of the study program will be repaid, while the rest is a subsidy provided by the German government.

The main purpose of BAföG is to provide financial assistance for specialized training in achieving a professional qualification. Higher education students receive BAföG support during the normal academic period. Half of the financial support is provided as a non-repayable grant and the remaining half as an interest-free loan. However, the repayment conditions are extremely favorable and the student is under no circumstances obliged to repay more than €10,010 (BAföG, 2022).

Financial support for living and care expenses is provided to students according to the Federal Education Assistance Act (BAföG). For the fall semester 2022 and onwards, if the student lives with his/her family, he/she will receive a total of 633 €, of which 511 € for basic needs, 94 € for health insurance and 28 € for care insurance. If he/she is far away from his/her family, €812 for basic needs, €94 for health insurance and €28 for long-term care insurance for a total amount of €934. As of April 1, 2023, the borrowing interest rate is 4.37%.

According to Law 18(a) of the Federal Education Assistance Act (BAföG), repayments can be made on an "income-dependent" basis. Under this repayment option, the student is exempt from repayment if his/her monthly income is not more than €1,000. If the monthly income is €1,605, the payment starts at €42 and increases as the income increases.

United Kingdom

The Students Loans Company (SLC) was established in 1989 to provide higher education students in the UK with the financial support they need. The SLC is a non-profit government agency operating independently of the Ministry of Education, providing scholarships and loans to higher education students. The loans offered to students cover both living expenses and tuition costs (SLC, 2024).

Student loans were included in the student aid package in 1990/91 and were initially £420, or one-sixth of the maximum public funding. Over time, loans have increased while grants have decreased. By 1996/97 loans had reached almost half the maximum level of support. For pre-2012 students, student loans have a zero real interest rate due to inflation adjustments. Loans before 1990 were repaid in a "mortgage-style" system. These payments were applied monthly in 60 equal installments over 5 years. The government implemented new regulations for student borrowing in the 1998/99 academic year. New students received financial assistance in the first year in the form of loans and grants. Beginning in 1999, both new and 1998 newly enrolled higher education students were granted maintenance loans based on income (Bolton, 2019, 5).

There are differences in the implementation of student finance policies in the four countries of the United Kingdom, namely England, Northern Ireland, Wales and Scotland. These differences are a result of different policies governing financial aid to students. The current system, in place since 2006, involves the collection of repayments through deductions from employees' payroll, calculated on the basis of their current earnings relative to income received (Barr, 2014, 78-79).

There are three categories of financial assistance provided by the Student Loans Company (SLC) to higher education students in the UK. These categories include support for undergraduate students, postgraduate students, as well as financial assistance to cover living costs during their studies.

For undergraduate students, it is the higher education institution that sets the tuition fee and the amount borrowed by the student from the SLC institution for tuition fees is paid directly to the universities. Tuition fees for full-time students can reach a maximum of £9,250 in a single academic year, while in the case of accelerated study programs, tuition fees can be as high as £11,100 (SLC,2024).

Living costs and Maintenance loans have to declare the student's household income. The borrowing amount is deposited directly into the student's account by the SLC institution. Borrowing amounts vary depending on the student's living conditions at the university.

Table 4

Cost of Living and Care Borrowing Amounts for Full-Time Students

	2023-2024 academic year	2024-2025 academic year
With his family	8.400£'e kadar	8.610£'e kadar
Outside London, away from his family	9.978£'e kadar	10.227£'e kadar
In London but far from his family	13.022£'e kadar	13.348 £'e kadar
Those who have completed one year of study abroad after studying in the UK	11.427£'e kadar	11.713£'e kadar
60 years of age or older in the first year of study	4.221£'e kadar	4.327£'e kadar

Note: Central Bank of the Republic of Türkiye, exchange buying rate 1 British Pound (£)=39.66TL, online, 01.03.2024, https://www.tcmb.gov.tr/kurlar/kurlar_tr.html)

Source: https://www.gov.uk/student-finance/new-fulltime-students, online, 01.03.2024.

For part-time students, maintenance and living expenses of up to £6,935 per academic year are available. For Master's students, loans of between £11,570 and £12,167 are available to help with tuition fees and living costs. For PhD students, loans of between £27,265 and £28,673 are available (SLC, 2024).

The repayment plans of undergraduate and graduate students for the loans they take at the university are determined within the plans prepared on the basis of their university entrance dates and repayments are collected according to these plans.

Table 5

Repayment Schedules and Income Thresholds

Plan Type	Annual Income Threshold	Monthly Income Threshold	Weekly Income Threshold
Plan1	22.015£	1.834£	423£
Plan2	27.295£	2.274£	524£
Plan4	27.660£	2.305£	532£
Plan5	25.000£	2.083£	480£
Graduate Borrowing	21.000£	1.750£	403£

Note: Central Bank of the Republic of Türkiye, foreign exchange buying rate 1 British Pound (£)=39,66TL , online, 01.03.2024, https://www.tcmb.gov.tr/kurlar/kurlar_tr.html)

Source: https://www.gov.uk/repaying-your-student-loan/what-you-pay

In the UK, repayment of support for higher education fees, living costs and care borrowing is income-based. No collection is made until earnings reach a minimum threshold. The amount to be repaid is calculated from the employee's payroll or, if self-employed, from their tax return.

Student loans serve as the main way in which the state provides direct financial assistance to students pursuing higher education. These loans provide students with access to affordable terms to cover living costs and tuition fees. In the UK, around 1.5 million students attending higher education each year are lent £20 billion a year through this loan system. By the end of March 2023, the total amount of outstanding student loans had risen to £206 billion (Bolton, 2023, 4).

China

Increasing tuition fees in Chinese higher education institutions have become unaffordable for students from low-income families. To address this issue and promote access to higher education, the government has implemented various forms of financial assistance such as scholarships, student loans, work-study scholarships, special allowances for students with greater need, and tuition waivers. As part of this initiative, the Government Subsidized Student Loan (GSSL) program was piloted in eight provinces in 1999 and has since been expanded nationwide (Shen et al. 2009, 281). Currently, the GSSL is widely used and serves as the most efficient component of the student financial aid program.

China's rapid progress in higher education has led to the development of four types of student loan programs available to students at higher education institutions across the country. These programs include commercial bank loans, loans from rural credit cooperatives, China Development Bank loans, and home-based China Development Bank loans provided through the Student Financial Aid Management Center (Wei & Wang, 2009, 269).

The repayment period was extended from 14 to 20 years in 2015 (URL-3) to cover the interest accrued during the student's years of study. The maximum repayment period is 22 years by 2022.

Japan

In 2004, the establishment of the Japan Student Services Organization (JASSO) started to operate as a central institution responsible for the comprehensive provision of various student support services in the field of higher education in Japan. In line with the directives set by the Ministry of Education, Culture, Sports, Science and Technology, JASSO carries out its activities based on a predetermined five-year interim target (JASSO, 2022, 2).

JASSO provides financial support to its citizens for students studying in all academic programs. Students who are in need of financial support are provided with interest-free loans, referred to as Category 1, and interest-bearing loans, referred to as Category 2. In addition, scholarships are provided to students, but graduate students cannot benefit from this opportunity.

Students who qualify for Category 1 loans and Category 2 loans have the option to choose a repayment plan based on the existing fixed repayment plan. In addition, they can choose an income-based installment amount based on their income from the previous year. Details on the loan amount and repayment information are provided below.

Table 6

Category 1 Borrowing Amount and Repayment Schedule (Borrowing Interest Free)

University kind		**Monthly amount (¥)**	**Borrowing duration**	**Total Payment Amount (¥)**	**Monthly repayment amount (¥)**	**Number of installments**	**Repayment period(years)**
National and Local State Universities	With his family	45.000	48	2.160.000	12.587	168	14
	Away from Family	40.000		1.920.000	12.307	156	13
		51.000		2.448.000	13.600	180	15
Private Universities	With his family	40.000		1.920.000	12.307	156	13
		54.000		2.592.000	14.400	180	15
	Away from Family	40.000		1.920.000	12.307	156	13
		40.000		2.400.000	13.333	180	15
		64.000		3.072.000	14.222	216	18
National, Local and Private Universities	With his family	20.000		960.000	8.000	120	10
	Away from Family	30.000		1.440.000	9.230	156	13

Source: JASSO 2022'2023, page 10

Note: Category 1 borrowing amount is interest-free and is intended for students starting school in April 2018.

Table 7

Category 2 Borrowing Amount and Repayment Schedule (Borrowing With İnterest)

			Estimated amount of repayment (¥)					
			Current interest rate (0.369%)		**Maximum interest rate (3.0%)**			
Monthly amount (¥)	**Borrowing duration (months)**	**Total Borrowing Amount (¥)**	**Total repayment amount (capital + interest)**	**Monthly repayment**	**Total repayment amount (capital + interest)**	**Monthly reimbursement**	**Number of payments**	**Year of repayment**

20.000	48	960.000	979.648	8.163	1.126.462	9.386	120	10
50.000		2.400.000	2.471.663	13.731	3.018.568	16.769	180	15
80.000		3.840.000	3.990.864	16.628	5.167.586	21.531	240	20
120.000		5.760.000	5.986.350	24.943	7.751.455	32.297	240	20

Source: JASSO 2022'2023, page 10

JASSO (formerly the Japan Scholarship Foundation) granted a total of 22 trillion yen in loans in 78 years between 1943 and 2020 (JASSO, 2022, 8). Repayment can be made on demand, both within a fixed plan and depending on income. Different options are offered for repayment periods ranging from 10 to 20 years.

Russia

According to the 1993 Constitution, Russian citizens can receive higher education without paying fees. The state finances higher education to promote equality, social rights and social responsibility. Free education is subject to two conditions: the student must be a first-time user of higher education services and must pass university entrance exams (Bain, 1999, 36). Admission to universities is based on student performance.

In 2002, Russia introduced its first student loan program. The program, called the Education Loan Program, is offered through the Savings Bank of the Russian Federation. Its main purpose is to provide low- and middle-income families with a borrowing facility that covers 70% of educational expenses and has a fixed interest rate for 10 years with repayments after graduation (Johnstone, 2005, 19). This program aims to give students without financial resources a chance to study.

In Russia, more than 40% of students in public higher education institutions pay their own tuition costs. The amount of fees varies depending on the university and academic program. Russia uses a dual system in which some students attending higher education institutions are required to pay fees, while other students are exempted from such fees. The current legal framework has resulted in the existence of three different categories of tuition fees. These are (Dezhina and Nafikova, 2019, 28);

- The first category includes students admitted to public higher education institutions through the regular admission process without any fees.

- The second category is based on a fee-based admission system applied to less than 25% of the total student enrollment in public institutions. This special category is limited to areas of high demand for education and is often referred to as semi-private.

- Finally, the third category includes fee-based admission to private higher education institutions.

Türkiye

The Higher Education Credit and Dormitories Institution (KYK) in Türkiye provides students with loans for living expenses. These loans are called "student loans" and are not intended to cover the cost of university education. This borrowing is offered to support students to cover part of their living expenses. Borrowing amounts are given to students in monthly installments during the specified period of study and students must be enrolled in a higher education institution.

Article 46 of Law No. 2547 was amended by Article 172 of Law No. 6111 in 2011, and the definition between contribution and tuition fees was made as "*...Students are charged a student contribution fee in first education and tuition fee in second education and distance education for each semester...".* In this context, it is accepted that the amounts received from higher education students are called "tuition fees".

According to the Law, the title "current service cost" covers all amounts charged to students, and the amounts charged to students for second education and distance education are called "tuition fee" and the amounts charged to first education students are defined as "contribution fee".

In accordance with the Decree of the Council of Ministers No. 2012/3584, the contribution loans offered by the Credit and Dormitories Institution specifically for first education students are no longer offered as of the 2012-2013 academic semester.

Today, the number of Turkish higher education institutions has increased with the increase in demand. Universities are established and serve students in two ways: State universities and Foundation universities. As of 2024 in Türkiye: 129 State, 75 Foundation and 4 Foundation Vocational Schools, totaling 208 higher education institutions (YÖK, 2024).

Although the number of foundation universities in Türkiye has increased numerically, the number of students is lower than state universities. The total number of students in the 2021-2022 academic year is 8,296,959. This number of students is 7,616,360 including public universities and open education students (the number of open education students is 2,251,781), while 671,437 students study at foundation universities and 9,162 students study at foundation vocational universities (YÖK, 2024) When these numbers are considered proportionally, the ratio of students studying at foundation universities to total students is around 8%.

As of the 2022-2023 academic year, a total of 876,942 students, 329,572 in boys' dormitories and 547,370 in girls' dormitories, are provided with accommodation services (MEB, 2024).

Minister of Youth and Sports Dr. Osman Aşkın Bak announced that a total of 825,843 students applied for financial aid and scholarships for the 2023-2024 academic year. It was also announced in the same statement that the number of individuals benefiting from loans and scholarships, including both new recipients and those already receiving assistance, has reached approximately 1.7 million students (URL-5).

In the statement made by the General Directorate of Credit and Dormitories, it was announced that scholarship/loan amounts for 2024 will be 2,000 TL for undergraduate students, 4,000 TL for master's students and 6,000 TL for doctoral students (KYK, 2024a).

The repayment amounts are calculated according to the increases in the Domestic Producer Price Index (DPPI). The DPPI was announced by TurkStat to have increased by 45.28% annually and 3.29% monthly as of March 2024. These increases are then added to the borrowed amount and repayment plans are created. The repayment period starts two years after the completion of the education period.

The inflation calculation of the student loan is calculated as a result of the ratio of the D-PPI of the beginning month of the student's loan to the D-PPI of the month of graduation. In other words, the inflation-induced depreciation of the TL for each month of the loan is reflected in the monthly student loan amount.

The daily nutrition allowance given to higher education students residing in dormitories affiliated to the Credit and Dormitories Institution is as follows: In the 2023-2024 academic year, the breakfast allowance is 40.00 TL and the dinner allowance is 80.00 TL (as of the opening date of the dormitories), totaling 120.00 TL. In addition, students who stay at the Credit and Dormitories Institution without paying a deposit and dormitory fee are given a daily allowance of 140.00 TL (URL-4).

Other OECD Member Countries

The information described above provides a comprehensive overview of how higher education is financed in OECD member countries. A table summarizing higher education financing policies and tuition fee policies in other countries is presented.

Table 8

Higher Education Financing Policies Used in OECD Countries

Higher Education Financing Implementation	Countries

No Tuition Fee	Argentina, Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Iceland, Ireland, Italy, Netherlands, Slovakia, Slovenia, Spain, Switzerland, Türkiye, Lithuania, Luxembourg, Latvia, Costa Rica, Colombia, Poland, Romania, Romania, Estonia, Switzerland, Türkiye
Income-Contingent Borrowing	Australia, Chile, Israel, New Zealand, Norway, South Africa, Sweden, United Kingdom
Pre-charge	Canada, China, Japan, South Korea, Mexico, Portugal, Portugal, United States of America

Source: It was created with data obtained from OECD and Eurydice databases.

The financing and resource management of higher education institutions has been increasingly debated in recent times. Educational reforms in leading countries have aimed to change funding sources and management approaches in higher education. As a result, new models for financing and managing higher education institutions have been developed (Zatonatska et al., 2019, 97). The financing used in higher education around the world is generally classified into three groups;

No Tuition Fees: Countries where higher education students do not have to pay any tuition fees or pay very little to attend a public higher education institution fall under this classification. These countries have established policies and frameworks that prioritize accessibility in higher education. Thus, countries seeking to sustain academic progress seek to reduce financial barriers for students.

Income-Contingent or Deferred Tuition: In countries using this financing policy, higher education students are given the option of taking out loans to finance academic and living expenses throughout their educational journey. Repayment of these loans is arranged on a predetermined schedule based on an individual's income, with repayment amounts and income thresholds updated each academic year. The loan repayment depends on the student's earnings after graduation, thus ensuring a fairer system. Furthermore, the repayment period is adjusted according to the income threshold set for graduates, ensuring a balanced approach to managing student debt.

Pre-charging: In the last group of countries categorized, students wishing to study higher education in public or private institutions are required to cover the costs associated with higher education prior to enrolment. However, it is noteworthy that students and their families are not burdened with the full cost of public higher education, as the state implements financial aid schemes aimed at easing the financial burden. These financial aid schemes are designed to offer students a range of funding sources, typically including a mix of grants and loans. Depending on the financial need of students, the state may choose to match some or all of these funds, thus ensuring accessibility to higher education for a wider range of individuals.

The provision of financial assistance in the form of grants and loans is a crucial strategy used by governments to promote educational equity and inclusion. By combining various sources of funding, these programs play a crucial role in facilitating access to higher education for students from different socio-economic backgrounds, ultimately contributing to the overall development of countries.

Higher Education Expenditures of Countries

At first glance, financing education appears to be a simple phenomenon and is simply thought of as "money spent on education". However, a closer look reveals a high degree of complexity. Countries' choices on the financing policy of higher education reveal a complex pattern of money flows. The most general and basic indicator is the resources allocated to higher education by governments. Given the large disparities in terms of countries' economic capacities and student enrollments, aggregate figures are not significantly informative. Therefore, in order to make an economic assessment in relation to purchasing power parity and in relation to student enrolments, it is necessary to consider Gross Domestic Product(GDP)-related statistics for each country.

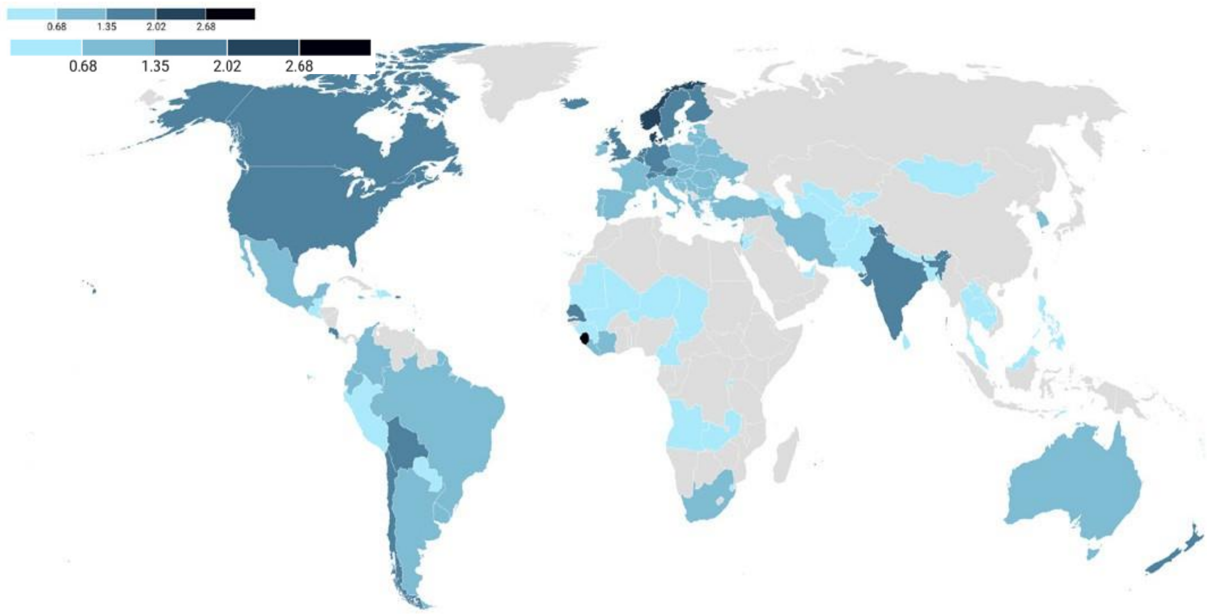

Figure 1. *Share of government spending on higher education in GDP,* (Garritzmann, 2024, 6)

Across countries, the majority of countries allocating significant funding to higher education are in Europe and North America, especially those in Northern Europe. Some countries in Latin America (e.g. Chile, Costa Rica, Bolivia) and several countries and regions in Asia (e.g. India, Macau) also show significant investments. African and South East Asian countries are notably absent from the list of countries that spend the most on higher education. These countries do not seem to allocate enough resources to higher education. Despite a few exceptions, it is evident that rich "Western" nations tend to allocate higher proportions of their budgets to higher education than other global regions. A closer examination of rich Western economies reveals that Northern European and Anglo-Saxon countries (such as the US, Canada, the UK) have particularly high levels of spending, while funding in Continental Europe is relatively low, and even lower in Southern Europe and rich Latin American countries (Garritzmann, 2024, 7).

In most countries, public funding appears to represent the dominant method of financing higher education, a trend that has continued for many years (Garritzmann, 2016). The proportion of public funding exceeds 50% in almost all countries, with figures reaching 70% or even exceeding 90% in many countries. Public spending is particularly prevalent in Scandinavian Europe and Western Continental Europe. In North America, North East Asia, the United Kingdom and some Latin American countries, private funding sources are used as an important source of financing. An analysis of private sources of financing in higher education shows that it is predominantly made up of expenditures by households (Garritzmann, 2024, 19), i.e. education expenditures of students and their families, mostly in the form of tuition fees.

Results and Discussion

The international trend examined includes the analysis of three key elements: tuition fees, loans and social support. Together, these elements reveal the degree of involvement of governments, taxpayers, students, families, employers and philanthropists in financing higher education, which in turn reveals countries' higher education financing policies (Cerdeira, 2009). Even if the tuition fees used in countries are high, it is important to consider the financial aid policies for students. Therefore, data on average tuition fees and details on financial aid, such as the percentage of students benefiting from grants or subsidized loans, show the importance countries attach to higher education. The different types of subsidies and borrowing used in each country vary according to the fiscal system they use. In continental European countries with conservative welfare systems, tuition fees are low but financial aid is limited, resulting in low tuition and low subsidy environments. On the other hand, in Northern European countries with a history of extensive welfare programs, tuition fees are not charged and students often receive substantial support through a low tuition-high subsidy model. In Anglo-Saxon countries, significant financial assistance is available, especially through subsidized and government-guaranteed loans (Garritzmann, 2024, 22).

A significant proportion of higher education students in Türkiye have difficulty in paying the cost of higher education (tuition fees) and living costs (accommodation, food and beverage, transportation, stationery, etc.) due to financial constraints, and even cannot benefit from higher education services (Özekicioğlu, 2013). In this context, student borrowing is considered as an important alternative to overcome these financial constraints and solve problems of access to higher education.

The financing of higher education needs to be evaluated comprehensively and multidimensionally. While economic theories of education as an investment, cost-sharing and income-related borrowing have a significant impact, the importance of political, administrative, legal and broader social policy considerations should not be overlooked. At a time of increasing demand for higher education worldwide and declining public funding, the challenges of restructuring higher education financing also need to be addressed.

Borrowing is seen as a fairer and more efficient way to address the quality and quantity deficiencies in higher education than the tax financing method used in the Turkish higher education system (Ergen, 2006). However, it is crucial that loan repayments are fast and efficient in order to sustain the education fund and provide assistance to students in need. Stricter rules and regulations are needed to increase loan recovery. Strengthening financial aid programs, such as increasing the accessibility of grants and scholarships, can also help students with lower income levels. Taking these factors into account, student borrowing is a viable method to overcome financial barriers to accessing higher education in Türkiye.

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