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Table 3
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Higher education, quality of democracy and social mobility. A review and some policy implications

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…we have taken democracy for granted…it has to be enacted anew in every generation, in every year and day, in the living relations of person to person in all social forms and institutions

(Dewey 1937, 473-474)

Abstract

Higher education is a powerful driver towards democracy and social mobility, and can lead to an increase in the quality of life and wellbeing of human societies. By drawing inspiration and examples from the vast array of existing literature, in this position paper we summarize why and how HE should be considered a fundamental instrument to improve the quality of individual and collective life. Finally, with respect to policy implications, this paper will present some general considerations of the indisputable significance of HE in ensuring democracy and promoting a fair, inclusive society.

1. Introduction

Higher education can be a powerful driver for both improving democracy and enabling increased social mobility.

Regarding the role of HE in reinforcing democracy, it must be underlined that along with the global spread of democratic ideas and societies, a crisis of commitment to and practice of democracy persists. Democracy cannot exist without strong institutions and sound legislation, but it also cannot work without the foundation of a democratic culture. Schooling and Higher Education are decisive forces with a significant role in shaping the democratic development of societies. Universities, in turn, are strategic institutions for the democratic development of school education and societies. A democratic culture encompasses democratic values, ways of knowing and acting, ethical judgments, analytical competencies, and skills of engagement. It includes concern for the sustainable wellbeing of fellow human beings as well as of the environment in which we live. It includes awareness of and concern

for human rights, as well as openness to the cultural diversity of human experience and a willingness to give due consideration to the views of others.

Similarly, we know that HE can be a real driver for social mobility, thus acting as a powerful instrument to re-establish social equality by reducing the socioeconomic imbalances that disadvantage students belonging to low-income families. By providing equal opportunities for higher education, this gap could be addressed and amended.

While the above two "functions" of HE are fundamental in driving a society towards social and political justice, there is not a strong causal relationship between them. In fact, as we will show below, although having more highly educated people in a population is a necessary condition for social democracy, it is not sufficient for democracy to work.

This position paper will review the most relevant empirical evidence from different streams of literature on how HE can play a role in improving the quality of human societies. Based on the results of our analysis, we will propose some recommendations for future policy interventions.

2. Higher Education and democracy: an intuitive but complex relationship

The positive relationship between HE and democracy is well established from both an explanatory and normative perspective. From a normative point of view, education has been believed to be a pillar for the promotion of pro-democratic views (Mann 1946; Dewey 1916). From an empirical point of view, the relevance of HE as a fundamental condition for "democracy" has become quite well-known thanks to political science and its interest in the conditions favouring democratization (Lipset 1959; Almond and Verba 1963; Diamond 1997). Moreover, economists have also been interested in this relationship, starting from Milton Friedman, who wrote, "[a] stable and democratic society is impossible without a minimum degree of literacy and knowledge on the part of most citizens and without widespread acceptance of some common set of values. Education can contribute to both" (Friedman, 1962, 86).

There is empirical evidence that HE education is a fundamental and essential pillar for promoting and sustaining democracy. But what exactly does this mean?

There are many dimensions of the quality of democracy which are influenced by HE: the level of civic and political engagement; the consolidation and persistence of democratic values and trust in democracy as the best type of regime; social stability; good governance and effective government. All these dimensions are linked to the added value that HE gives to democracy, allowing it to arise, develop, institutionalize and, hopefully, survive.

Democracy is based on liberty, but liberty requires free minds. This is the first and most important reason why HE, and education in general, is so important for democracy. The higher the stock of a society's human capital (thanks to HE), the greater the stock of knowledge, skills and thinking which nurture independent (and critical) thought – without which, democracies cannot exist. Only with a consistent number of highly educated citizens

can democracy function successfully. Without this stock and these citizens, the normal dynamics of democracy – made by pluralism, tolerance, regulated political competition of interests and ideas, regulated voice and complaints – could not thrive. A sudden decrease of HE-driven support by the society could cause democracy to fall into a dramatic crisis.

The level of formal education in a country (operationalized as the percentage of the population holding a tertiary degree) thus becomes a simple but essential measure of the possibility of that developing country becoming democratic or of an established democracy persisting, notwithstanding contingent political and economic crises. It is not by simply a coincidence that one of the five objectives of Europe 2020 is for 40% of 30-34 year-old citizens to hold a tertiary degree. Similarly, it is not by chance that improving educational inclusion and educational qualifications are the goals of so many governments around the world.

2.1. HE attainment and strength of democracy: some illustrative data

A large amount of literature exists that points to the correlation between higher education and different dimensions of democracy and democratic quality. Overall, however, it should be remembered that this correlation is a part of a relationship between education in general and democracy: it has been shown that the number of years of schooling is directly correlated with positive democratic polity, including in terms of transition from an authoritarian regime to a democratic one (Barro and Lee 2001; Jaggers and Marshall 2003; Glaeser, LaPorta, Lopez-de-Silanes, and Shleifer 2004; Papaioannou and Siourounis 2005). This established view has been criticized by certain scholars who have focused on other idiosyncratic national characters (e.g. culture or geography) as the real drivers of democracy, while education is considered a kind of by-product of the process of modernization and democratization (Acemoglu, Johnson, Robinson, and Yared 2005). However, this criticism remains isolated and has also been strongly counter-argued (Glaeser et al. 2004; Castello-Climent 2006 and Bobba and Coviello 2007). Thus, it emerges that "Education raises the benefits of political participation and draws relatively more people to support democracy" (Glaeser, Ponzetto and Shleifer 2007, 87).

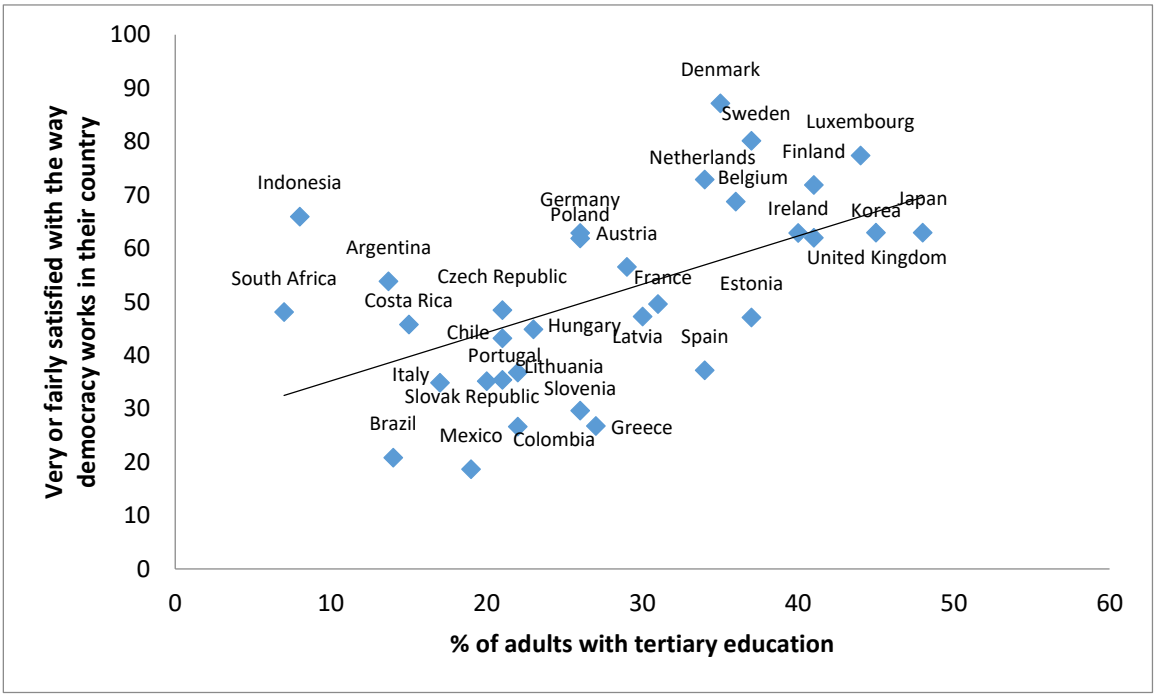
With regards to HE specifically, many studies show a significant correlation between HE attainment and different dimensions of democracy. As is well known, citizens' perceptions of the level of democracy are not based on unique factors or causes. Many studies propose well-designed indexes combining various factors together (for example, class, income, gender and education). However, since the aim of this review is not to analyse the particular factors that determine a population's perception democracy but rather to understand whether and how HE helps democracy to develop and institutionalize, we prefer to focus only on this relationship.

Below, we present some simple graphs showing the relationship between the HE attainment of various national populations (25-64 years old) and their perceptions and beliefs

relating to some of the dimensions relevant for democracy: *satisfaction*, *trust* and *voice*. We have focused on OECD countries (23 European nations and 10 from other continents)[1].

In Figure 1, we can see the correlation between HE attainment and citizens' satisfaction with the way democracy works in their country.

Figure 1. Satisfaction with democracy (33 OECD countries, 2015)

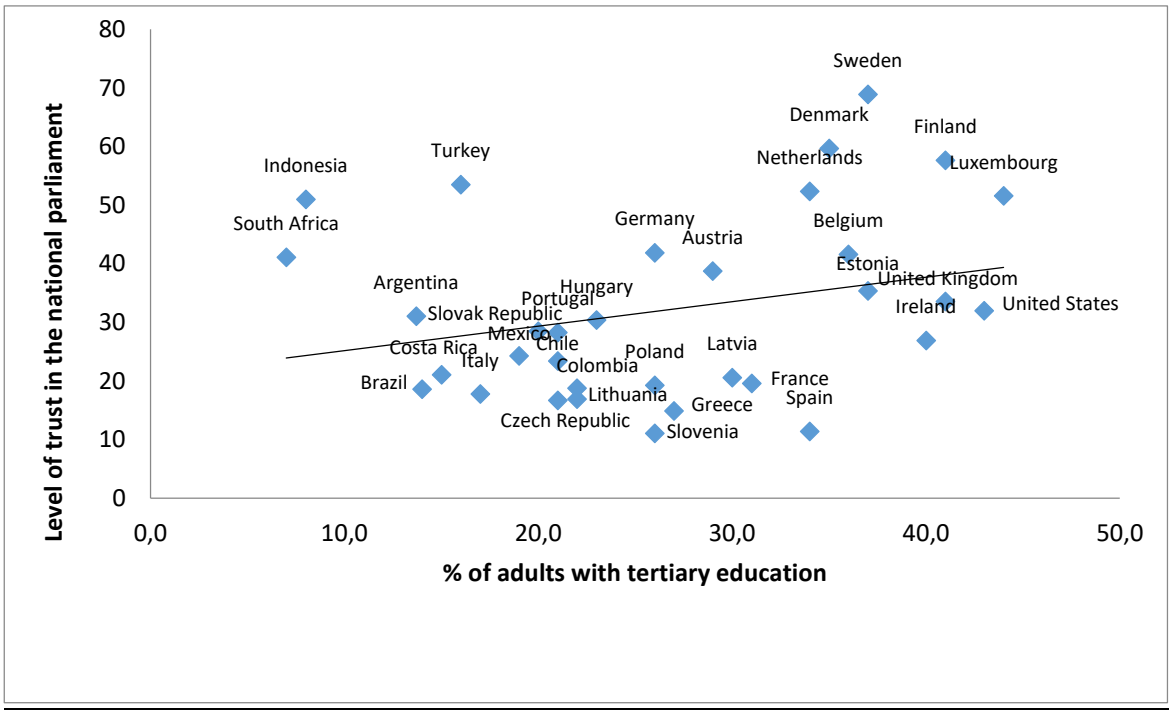


The correlation is quite evident (0.689 for European countries and 0.549 for the others). This may seem like a quite rough correlation, but it does illustrate that the higher a country's percentage of people with tertiary education, the higher the perception that democracy works in their country. Obviously, there are some differences that can be seen between countries with a similar level of HE attainment; these may depend on other nationally-driven factors. Yet, it is also to be underlined that the high correlation is very important because, as it has been shown (Norris 2011), increasing levels of education are linked with higher aspirations regarding the quality of democracy and what it can deliver.

Regarding trust in institutions, we have extracted some data regarding the level of trust in the national parliament, political parties and the judicial system. Obviously, these data are more country-sensitive, because they are constantly influenced by current political trends and the economic situation.

[1] All data reported on the vertical axis (satisfaction with democracy, trust in institutions and so on) are taken from Eurobarometer (Eurobarometer interactive 2015), Latinobarometro (Online Data Analysis 2015), Afrobarometer (Online Data Analysis 2015) and Asianbarometer (ABS working paper series).
The data reported on the horizontal axis (% of adults with tertiary education) are provided by OECD and refer to the educational attainment of 25-64 year-olds (publ. 2015-2016, data 2013-2014), by considering short-cycle tertiary programmes + bachelor's degrees or equivalent + master's degrees or equivalent.

Figure 2. Trust in the national parliament (33 OECD countries, 2015)



As shown in Figure 2, trust in the national parliament is significant enough, especially for European countries (0.428 versus 0.275 correlation for all the 33 countries together) while trust in political parties (see Figure 3) is much lower, and thus only marginally significant (0.240 for European countries and 0.140 for all 33 countries together). What needs to be underlined is that the variance is quite high in both cases (parliament and political parties), especially due to the Nordic countries and the different timing of each country's political development (see, in the case of political parties, the situation in South Africa, Turkey, US, Italy and Brazil). However, the lower correlation with respect to political parties is reversed when looking at trust in the judiciary system: as shown in Figure 4, HE attainment seems to be strongly correlated with trust in the judiciary system (0.6210 for European countries and 0.490 for all 33 countries together). This is quite relevant because the role of the judiciary system is strategic in the equilibrium of powers and in the proper functioning of democracy, although this element is often not quite clear to the average population. The high correlation here shows how higher HE attainment is important in understanding the real meaning of the balance of power and the role of the judiciary system in democracy.

Figure 3. Trust in political parties (33 OECD Countries, 2015)

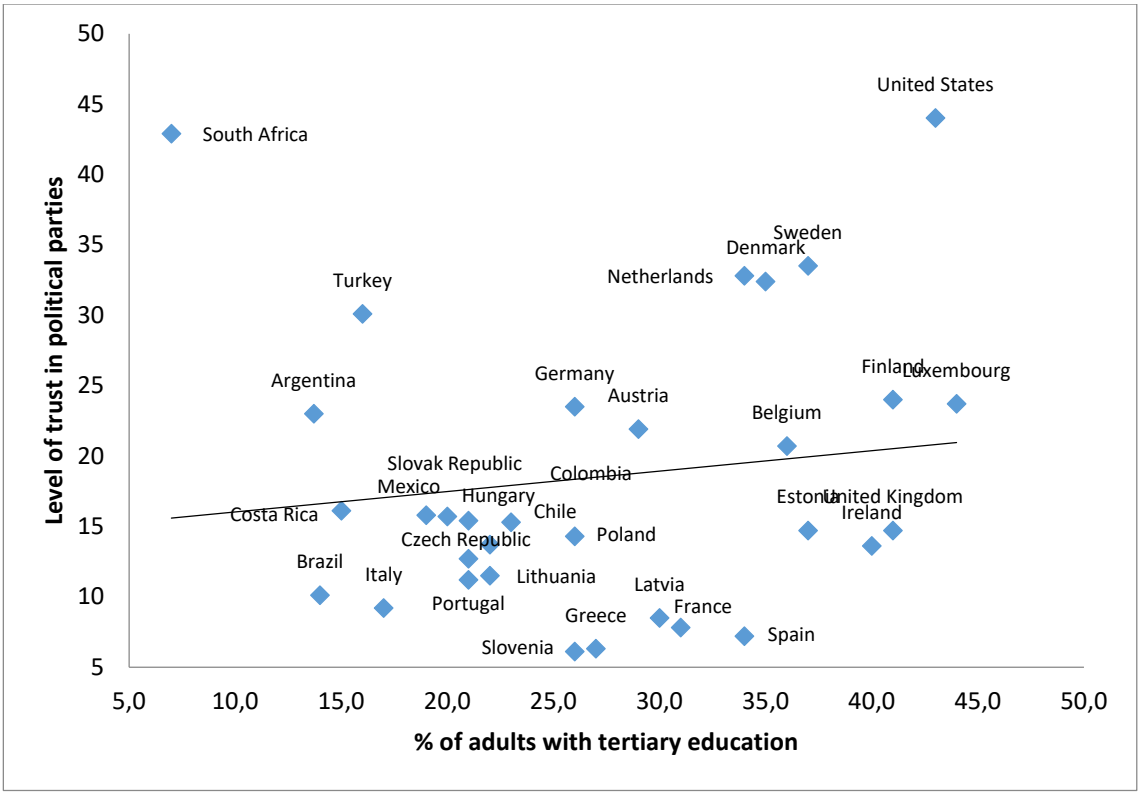
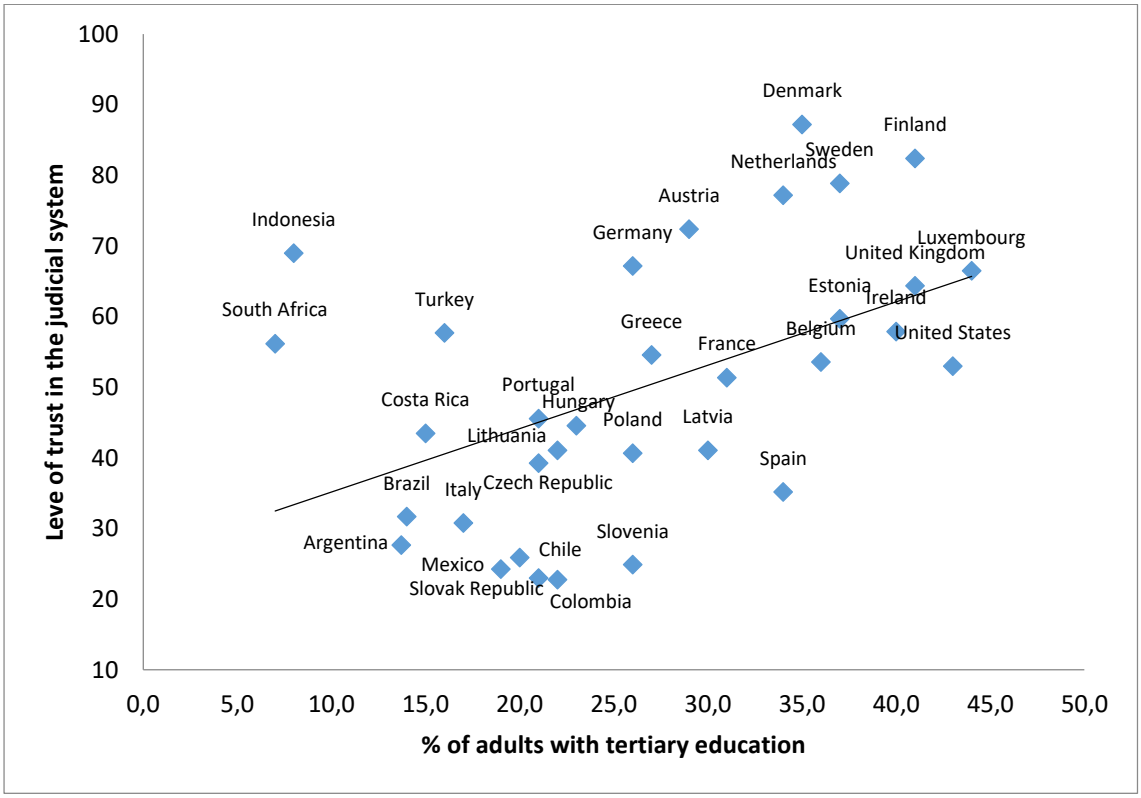


Figure 4. Trust in the judicial system (33 OECD countries, 2015)



Regarding the perception of having a voice, we divided the countries, due to having different questions in the related barometers. Thus, for European countries we used the question on the perception of having a "voice that counts", while for non-European countries we selected the question on the preference of democracy with respect to other regimes. These are shown in Figures 5 and 6. The correlation is significant for European countries (0.465) while it is lower for other countries (0.277). However, to better appreciate this dimension, it is interesting to look at the original data. For example, Table 1 presents the original data for 2008, 2010 and 2015. What emerges from this inter-temporal comparison is that, among the 23 European countries analysed, only in 4 countries can we observe a decreasing perception of having voice, despite the hard times that Europe has undergone due to the financial crisis. In 19 countries, this percentage has increased together with the higher percentage of adults with a tertiary degree. Thus, the correlation has persisted in a robust way even in critical times. The illustrations presented show that HE positively correlates with democracy. Obviously, we also need to keep in mind that socioeconomic, cultural and political context can make a difference to the different dimensions of democracy which can be positively influenced by HE attainment.

Figure 5. Perception of having a voice that counts (23 European countries, 2015)

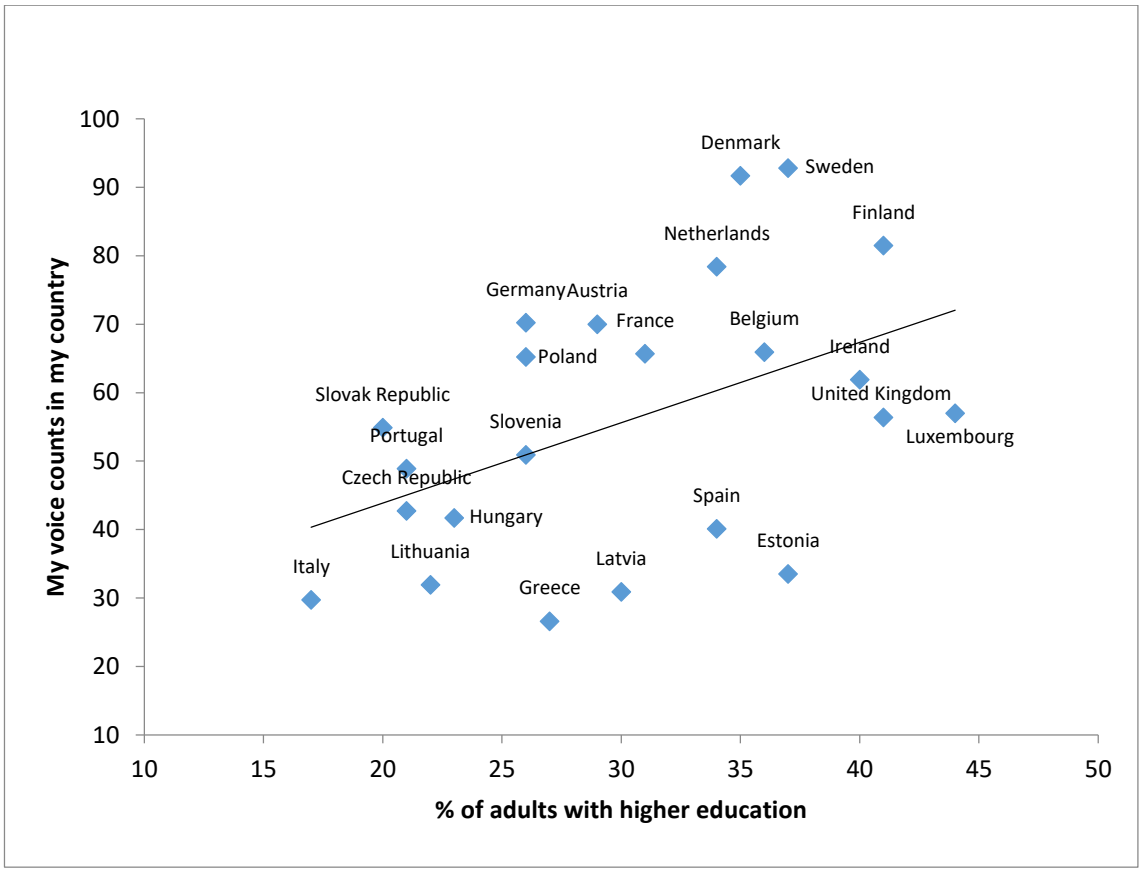


Figure 6. Preference for democracy compared to other types of regimes
(10 OECD non-European countries, 2015)

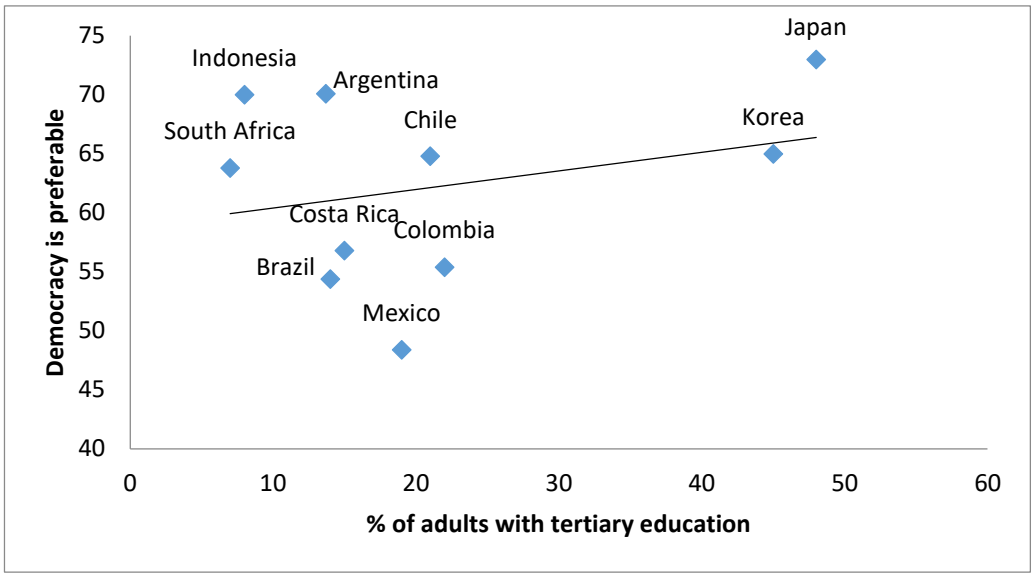


Table 1. Perception of having a voice that counts
(23 European countries, 2008, 2010, 2015)

	2008		2010		2015	
	My voice counts in my country	% of adults with tertiary education	My voice counts in my country	% of adults with tertiary education	My voice counts in my country	% of adults with tertiary education
Austria	51,6	17,6	69,9	18,1	70	29
Belgium	61,9	31,8	61,4	32,3	65,9	36
Czech Republic	21,9	13,5	31,5	14,5	42,7	21
Denmark	92,9	34,7	92,9	32,7	91,7	35
Estonia	43,1	32,9	55,6	34,1	33,5	37
Finland	69,7	35,1	76,6	36,6	81,5	41
France	72,2	26,2	72,7	27,4	65,7	31
Germany	58,5	23,9	66,2	25,4	70,2	26
Greece	28,2	21,8	22,5	23	26,6	27
Hungary	31,1	17,1	48,6	18,4	41,7	23
Ireland	46,5	30,4	37,8	33,5	61,9	40
Italy	17,4	12,2	24,7	13,8	29,7	17
Latvia	17,1		23,8		30,9	30
Lithuania	18,1		15,1		31,9	22
Luxembourg	68,7	24	71,7	27,7	57	44
Netherlands	78,9	30,2	81,1	32,2	78,4	34
Poland	51,1	17,9	60,3	19,6	65,2	26
Portugal	36,7	13,5	36,7	14,3	48,9	21
Slovak Republic	31,1	14,0	50,3	14,5	54,9	20
Slovenia	60,6	21,4	63,9	22,6	50,9	26
Spain	54,9	28,5	49,8	29,2	40,1	34
Sweden	86,4	30,5	90,9	32,0	92,8	37
Turkey	31,2	10,4	20,3	12,0	54,4	
United Kingdom	39,5	30,0	44,9	32,5	56,4	41

It should be noted that HE attainment seems to be less relevant in non-Western countries. Only a weak correlation has been shown pertaining to developing countries (Evans and Rose

2007). Furthermore, it has been shown that in Africa HE attainment is less capable of driving political participation, although it may increase the likelihood of considering democracy the best type of political regime (Mattes and Mughogo 2010). However, what matters is to take as a fact that HE has an impact on democracy. Differences in the correlation trends between developed and developing nations may be attributable to their different stages of systemic development and modernization. It is quite evident, in fact, that there has been a virtuous circle in the process of modernization which, through secularization, urbanization, industrialization and the expansion of the middle class, has boosted democratization and consequently the accessibility of higher education – a self-reinforcing process (Almond & Verba 1963; Inkeles & Smith 1974; Lipset 1959). Therefore, it is quite clear that historical differences may help to explain the difference in correlations between HE and democracy. In turn, the fact that we can find significant correlations in democratic countries and lower correlations in developing countries is not necessarily proof of the irrelevance of HE. On the contrary, it may show how HE is important to anchor democracies when, through a complex historical process, they become enough institutionalized.

2.2 How HE matters for democracy

HE's impact on democracy is multi-dimensional. It is worth sketching a brief overview of the different ways through which HE can reinforce the democratic characteristics of a political system.

HE has always been connected with a high level of political participation, at least in established democracies. This connection was ascertained by Almond and Verba (1963), who defined education as a fundamental determinant of civic culture and participation in democratic politics: "the uneducated man or man with limited education is a different political actor than the man who has achieved a higher level of education". Taking up this statement, why is the educated man a different political actor respect to the uneducated? First of all, because a high level of educated people define the boundaries and content of social interactions in a specific way: education reduces uncertainty in social relationships by strengthening trust and increasing cooperation (Ostrom 2006; Knack and Keefer 1997). It is not by chance that the higher a country's HE attainment, the more likely it is that there will be a high level of political and social engagement in that nation (Shields and Goidel 1997; Verba et al., 1996; Wolfinger and Rosenstone 1980).

HE increases citizens' mental tools in terms of cognitive awareness and ability to evaluate (Milligan et al. 2004). This kind of cognitive path increases individuals' likelihood of being able to think and act critically, and to refrain from extremist political ideas (Lipset 1959; Nie *et al.* 1996; Norris 1999). Therefore, the higher the HE attainment in a society, the higher its probability of having citizens with the appropriate attitudes to participate effectively in politics, select good leaders, understand the issues they are asked to vote upon (Dalton 1996) and reject public corruption (Hakhverdian and Quinton 2013).

HE not only has a positive influence on the political dimensions of democracy, but also has some relevant and very supportive influence on democratic life, such as social integration. Highly educated people seem to show less support for ethnic exclusion (Coenders 2001) and less prejudice towards minorities (Schuman et al. 1997). Thus, HE attainment is a sort of insurance against ethnic conflict and minority repression, and can provide an essential prerequisite for social integration.

Finally, HE attainment is a significant driver of the quality of government, not only in democratic regimes but also dictatorships (Botero, Ponce, Shleifer 2012). However, due to the fact that in dictatorships the composition of different interests is more simplified, it is quite clear that democracies with more highly educated people perform better than those that score lower on this dimension (Fortunato Panizza 2015).

Even in countries that have different legal traditions, ethnic heterogeneity and inequality, governments perform better when HE attainment is high (La Porta et al. 1999). This happens because highly educated citizens tend to complain more than the less educated in instances of government misconduct or when crime is on the rise. Thus, HE enables people to exercise the power of "choice" (Hirschmann 1970); and the more that people exercise their right of voice, the more pressure on the government to pay attention to accountability, representation and good governance.

3. Higher education, equality of opportunity and social mobility: an introduction

One important function that has been traditionally attributed to Higher Education is that it encourages social mobility. In particular, the promise associated with attending higher levels of education is that people who acquire higher skills can be rewarded by the labour market and society with better salaries and more prestigious status, irrespective of their original socioeconomic background. To the extent that this "mechanism" works for all students, and that the selection of students in universities and colleges is based on academic merit, rather than socioeconomic variables, the HE system can contribute to "equality of opportunity" (EoO) for all individuals. In this vein, we define EoO as the characteristic of an educational system in which the opportunities to attend and succeed in education are equalized across individuals with different socioeconomic backgrounds. Although the precise operationalization of such a definition is still subject to conceptual and methodological discussion (see Peragine & Serlenga, 2008), scholars agree on considering indicators such as graduation rates, levels of educational attainment and measures of cognitive and non-cognitive skills, as proxies for the opportunities offered to the individuals in the educational system.

Therefore, the capacity of HE to influence subsequent social equality (i.e. more equal results in life and socioeconomic success) is also affected by factors that are beyond the roles of educational policy-makers – for example, societal values, job market characteristics and

features of the economic system. A prerequisite for more equality to occur later in society is nevertheless under the direct responsibility of educational leaders and politicians. These public figures have the power to support a system that guarantees fair and equal access to HE to the students who 'deserve' it – in other words, those who are motivated and are high achievers. Indeed, if equality of opportunities is not realised at the point of accessing Higher Education, it is very unlikely that HE will contribute to more socioeconomic equality later in the lives of those individuals and societies. For these reasons, we focus on the equality of opportunities for students of different backgrounds in accessing and succeeding in Higher Education as a necessary premise for promoting the equality of our societies and economies. On a practical note, we briefly review some previous literature and key cross-country data to explore whether there is a gap in accessing HE between socioeconomically advantaged and disadvantaged students, and if such a gap is widening over time.

3.1 Socioeconomic status and access to Higher Education: some data

Good news comes from the analysis of tertiary education entry rates[2] in European countries. Table 2 illustrates entry rates in 2005, 2010, 2013 and 2014. In virtually all countries, enrolment rates increased and reached relatively high levels for the first cycle of HE (bachelor); as the literature testifies, higher education systems have completed their transition from elite to massive participation in almost all western countries. On average in OECD countries in 2014, 57% of individuals entered bachelor level studies and 19% entered a master's level programme. Such massive participation in Higher Education should constitute a good sign, although two factors must be kept in mind: (i) not all the students who enrol then complete their programme (and this dropout phenomenon can be more frequent among less privileged students), and (ii) a higher proportion of students who do not enter HE may be those coming from a disadvantaged background.

Therefore, it is important to assess whether the expansion of higher education opportunities (as reflected in enrolments) is also associated with higher equality on the output side (i.e. if it translates to higher graduation rates for students from all backgrounds). Risks on this side were signalled in several cases. For example, Bratti et al. (2008), analysing the case of Italy, showed that "the expansion of university courses has effectively increased the likelihood of university enrolment for students from middle-class and/or less educated parents. However, the expansion in enrolment has not translated into an increased probability of attaining a degree".

Table 2. Trends in entry rates, by tertiary level (2005, 2010, 2013 and 2014 data)

[2] OECD defines "entry rates" as the percentage of people estimated to enter a certain education level at least once in their lifetime (see documentation here: https://stats.oecd.org/Index.aspx?DataSetCode=EAG_GRAD_ENTR_RATES).

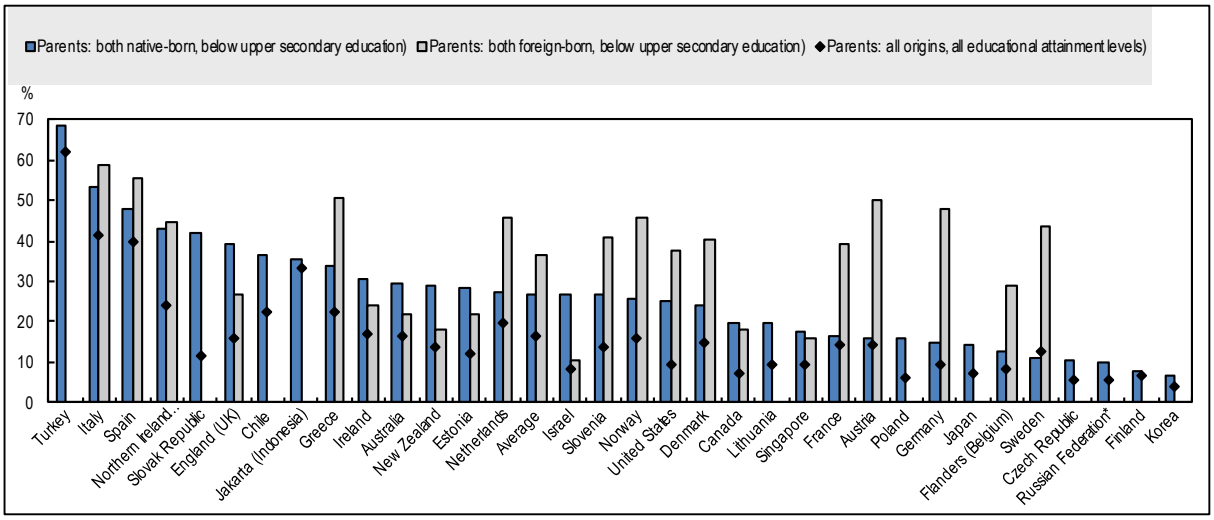
	Bachelor's or equivalent				Master's or equivalent				Doctorate or equivalent			
	2005	2010	2013	2014	2005	2010	2013	2014	2005	2010	2013	2014
Austria	14	47	45	41	31	22	28	28	4.0	7.7	4.0	3.7
Belgium			69	69			26	27			1.0	
Czech Republic			64	63			31	31	3.2	3.9	3.5	3.5
Denmark	57	63	71	71	21	28	32	35	1.9	3.6	3.7	3.7
Estonia			70	65			25	25		2.8	2.0	2.0
Finland	46	57	55	53	26	8	11	11			2.6	2.5
Germany	23	38	48	52	23	20	25	28			5.4	5.5
Greece			66	65			11	13			2.1	2.1
Hungary	47	49	41	32	21	5	14	15	1.7	1.6	1.7	1.7
Ireland			59	81				28				3.0
Italy			37	37			23	24			1.7	1.6
Latvia		69	77	70		8	18	21		2.2	2	1.9
Luxembourg			22	18			30	11			0.7	1.2
Netherlands	54	62	60	65	8	18	17	21			1.2	1.4
Poland			73	68			46	42			3.0	3.1
Portugal		53	52	54		30	36	36		3.3	3.3	3.7
Slovak Republic			56	57			39	37	3.3	4.1	2.9	2.7
Slovenia			79	75			28	29	0.6	5.4	2.7	2.1
Spain			46	48			10	11	4.4	1.8		2.0
Sweden		58	47	45		36	29	28			2.7	2.6
United Kingdom			58	64			28	32			4.0	4.1

Source: authors' elaborations on OECD – Education at a Glance 2016, indicator C3. Selection of the countries was also based on data availability.

From this perspective, some recent data released by OECD (2016) has shed a dark light on HE's ability to guarantee equal opportunities. For instance, Figure 7 reports the percentage of young adults (25-44 years) who did not complete upper secondary school, while Figure 8 reports the proportion of the same age range who hold a tertiary education degree, in both cases by country, parents' educational level and immigrant status. An analysis of the two figures combined provides some interesting patterns which must be discussed with specific attention. Firstly, students from families the where parents did not complete upper secondary school are (in the vast majority of countries) more likely than the whole population of the same age to not complete upper secondary school – on average, 16% of the people aged 22-45 years old in the selected countries do not have an upper secondary school diploma, while the same percentage is 27% for those whose parents both did not complete upper secondary school. Interesting cases exist, however: for example, in France the proportion of 22-45-year-olds without an upper secondary school diploma is similar between those with non-educated parents and the general population (17% and 14%, respectively) while it is much higher for individuals whose parents are not-educated and foreign-born (39%). Secondly, individuals aged 22-45 are much more likely to have a tertiary degree if they come from families where both parents have a high level of education. On average in the selected countries, 40% of the population in question holds a tertiary degree, while the same factor is 67% for individuals

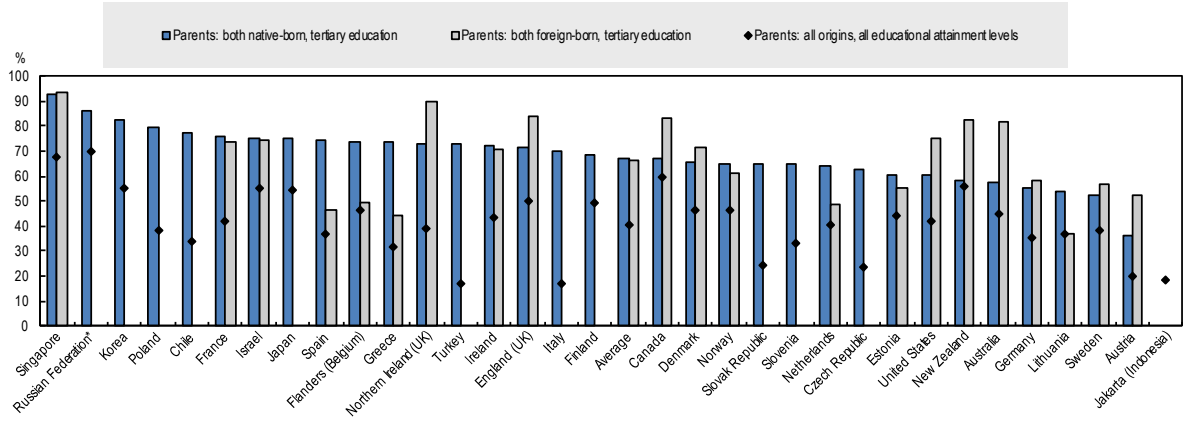
from families with educated parents (and, interestingly, the same high proportion of HE graduates is found even if the educated parents are foreign-born). This pattern is confirmed even in countries where tertiary education graduation rates are structurally very different. For example, in England, 50% of all 25-44 year olds have a tertiary degree, while in Italy only 17% are in the same category, though the percentage of HE graduates from families where both parents are educated is very similar (72% and 70%, respectively).

Figure 7. Percentage of 25-44 year-olds without upper secondary education, by parents' immigrant status and educational attainment (2012 or 2015)



Notes: Chile, Greece, Israel, Jakarta (Indonesia), Lithuania, New Zealand, Singapore, Slovenia and Turkey: Year of reference is 2015. All other countries: Year of reference is 2012. Information on foreign-born parents is not displayed for some countries because there are too few observations to provide reliable estimates. For national entities as well as subnational entities, "foreign-born parents" refers to parents born outside of the country. In the case of England (UK) and Northern Ireland (UK), "foreign-born parents" refers to those born outside of the United Kingdom.
Countries and subnational entities are ranked in descending order of the percentage of 25-44 year-olds without an upper secondary school education (parents: both native-born and without an upper secondary education).
Source: OECD. Table A4.3, and Table A4.5, available online. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

Figure 8. Percentage of 25-44 year-olds with tertiary education, by parents' immigrant status and educational attainment (2012 or 2015)



Notes: Chile, Greece, Israel, Jakarta (Indonesia), Lithuania, New Zealand, Singapore, Slovenia and Turkey: Year of reference is 2015. All other countries: Year of reference is 2012. For national entities as well as for subnational entities, "foreign-born parents" refers to parents born outside of the country. In the case of England (UK) and Northern Ireland (UK), "foreign-born parents" refers to those born outside of the United Kingdom.
Countries and subnational entities are ranked in descending order of the percentage of 25-44 year-olds with tertiary education (parents: both native-born, tertiary education).
Source: OECD. Table A4.3, and Table A4.5, available on line. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

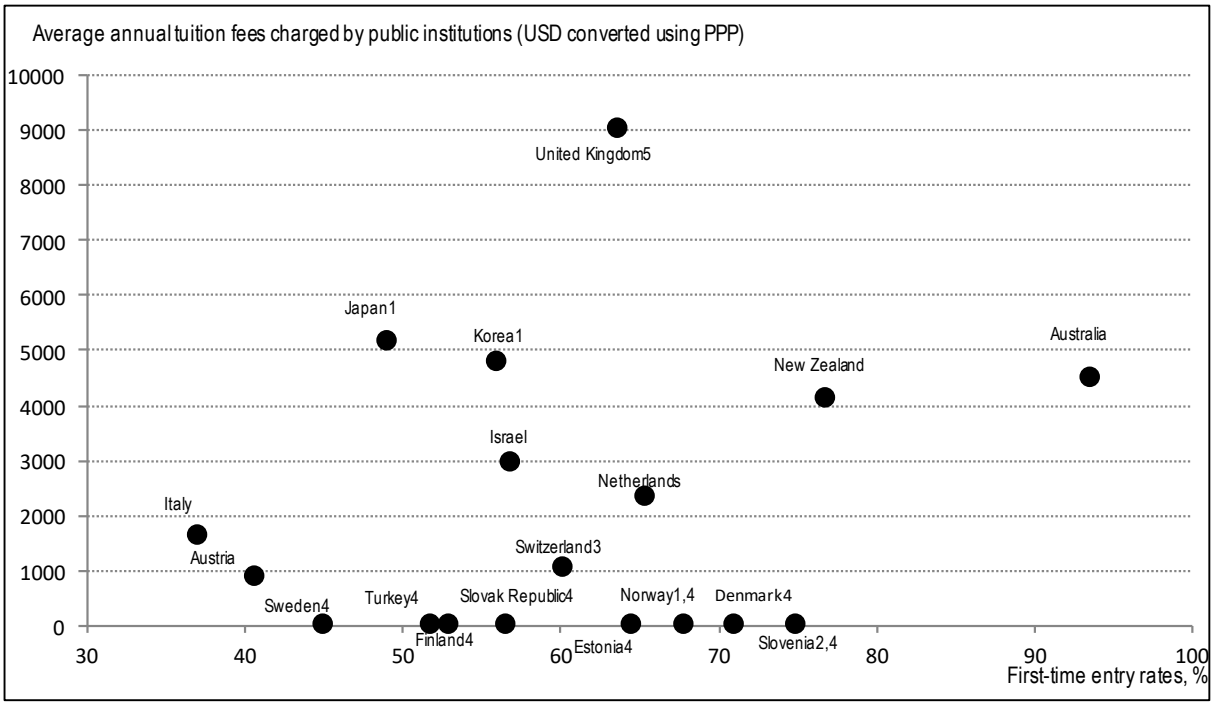
Why are Higher Education systems characterized by a low equality of opportunities of this kind? The systematic (and complex) answer to this (complex) question is well beyond the scope of our analysis; nevertheless, it is worth mentioning some popular causes that have been proposed by academic research and institutional debates.

First of all, financial constraints should be considered. Students from disadvantaged backgrounds may not have enough financial resources (or have too high opportunity costs) to face the investment in higher levels of education. However, some evidence from academic literature and empirical data suggest that this factor can only partially explain the phenomenon under study. Regarding financial constraints, interesting literature has addressed the effects of introducing or raising tuition fees for higher education. Two cases are of utmost relevance, given how much they were debated in the past years: UK and Australia. In the UK, while some authors demonstrate an increased gap in HE participation between socioeconomically advantaged and disadvantaged students after the introduction of policies to raise the fees (Galindo-Rueda et al., 2004), other studies do not point at any serious effects of such policies in shaping the socioeconomic composition of the student population (Crawford et al., 2016). In Australia, the divide appears to be smaller, with studies tending to demonstrate that the introduction of higher fees and loans did not harm the university participation of more disadvantaged students (Chapman & Ryan, 2005; Chesters & Watson, 2013). Overall, the two cases that are mentioned here do not unequivocally support the argument that introducing or raising fees plays a determining role in modifying the likelihood that disadvantaged students do or do not access HE. Moreover, even a more comparative study of four large Anglo-Saxon countries (UK, Canada, USA and Australia) individuated

that financial constraints are not the primary barrier to HE access for less privileged students (Boliver, 2011; Jerrim & Vignoles, 2015).

Observing data from OECD is also interesting in this case. Figure 9 compares average tuition fees with tertiary entry rates in several countries in 2013/14. From the analysis, we can see that some countries have relatively high participation rates despite the high level of fees (e.g. UK, New Zealand, Australia, Japan and Korea) while other countries have lower HE participation rates despite the low (or null) level of fees charged to students (e.g. Austria, Sweden and Turkey). Part of this heterogeneity is explained by differences in the financial aid systems; as highlighted by Figure 10, a group of countries offer high levels of financial support to cover the high costs of HE attendance, as for example the four Anglo-Saxon countries (UK, Australia, New Zealand and Canada). It is also interesting to note that some countries provide financial aid to students even in the absence of HE costs, yet the entry rates are still relatively low (see Finland, Turkey and Norway).

Figure 9. Tuition fees charged by public institutions and first-time entry rates at bachelor's or equivalent level (2013/14)

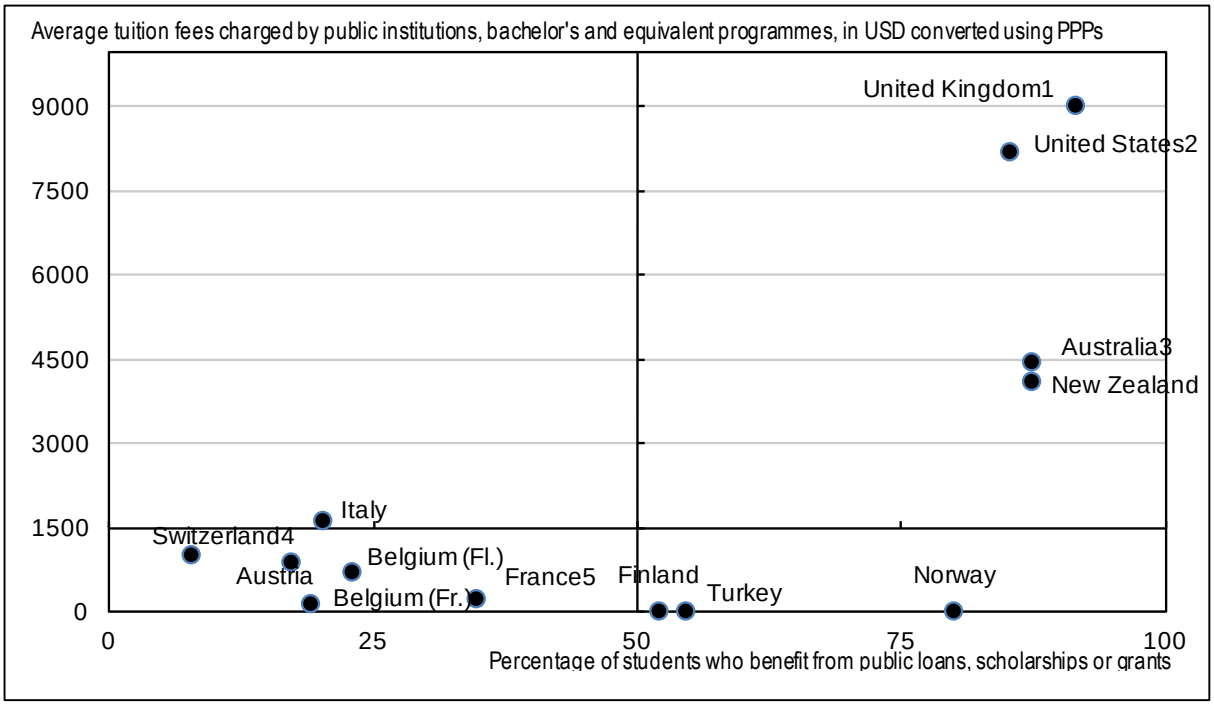


Note: Data on first-time entry rates include international students. For some countries with a large proportion of international students, such as Australia, Austria and New Zealand, this implies that the entry rates shown in this chart are substantially higher than first-time entry rates for domestic students (see Indicator C3). Tuition fees should be interpreted with caution as they result from the weighted average of the main tertiary programmes and do not cover all educational institutions. However, the figures reported can be considered as good proxies and show the differences among countries in tuition fees charged by main educational institutions and for the majority of students.

1. Reference year 2014-2015 for tuition fees (2014 in Korea).
2. Reference year 2011-2012 for tuition fees.
3. Financial reference year 2013 and academic reference year 2012-2013.
4. No tuition fees are charged by public institutions.
5. Data on tuition fees refer to government-dependent rather than public institutions, for England only.

Source: OECD. Tables B5.1 and C3.1. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

Figure 10. Tuition fees charged by public institutions with reference to the percentage of students who benefit from public loans, scholarships or grants at bachelor's or equivalent level (2013-2014) – For full-time national students, in USD converted using PPPs for GDP, academic year 2013-2014.



Note: Tuition fees should be interpreted with caution as they result from the weighted average of the main tertiary programmes and do not cover all educational institutions. However, the figures reported can be considered as good proxies and show the difference among countries in tuition fees charged by main educational institutions and for the majority of students.

1. Tuition fees refer to England only.
2. Reference year 2011-2012.
3. Only includes the major Australian Government scholarship programmes. It excludes all scholarships provided by educational institutions and the private sector.
4. Financial reference year 2013 and academic reference year 2012-2013.
5. Tuition fees range from USD 215 to USD 715 for university programmes, depending on the Ministry of Higher Education.

Sources: OECD. Tables B5.1 and OECD (2015, Table B5.3). See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

Secondly, families from more disadvantaged backgrounds may have constraints which prevent them from accessing adequate information to enter higher levels of education, often coupled with lower levels of aspirations and awareness. Social competition at the key points of transition and selection causes a socioeconomic differentiation of the population, favouring families with prior social advantages, who are best placed to compete for limited places or pathways that confer the greatest positional advantages (see, for example, Marginson 2016, and Lucas 2001, 2009). Some hard evidence of this argument can be noted in studies on US Higher Education. Two strands of the literature are worth mentioning here. From one perspective, Dynarski & Scott-Clayton (2013) and Dynarski et al. (2013) extensively reviewed literature that documented the increasing costs and complexity of obtaining federal and state financial aids, in a way that bureaucratic burdens essentially undermine the effectiveness of such aid. Their suggestions point at simplifying the procedures and steps to request financial aid to maximize opportunities for low-income students. From another perspective, Hoxby & Avery (2013) demonstrate that a significant proportion of high-achieving, low-income students do not apply to selective and prestigious higher education institutions despite the fact that their academic achievements would suggest potential for good results, and even despite the fact that these institutions would be likely to offer them financial packages to offset the additional costs compared to cheaper institutions. In subsequent work, Hoxby & Turner (2015) illustrate how an information intervention was successful in increasing the participation of this category of students, and they suggest using similar policies to increase expectations, awareness and reduce the information gap between affluent and disadvantaged students. Many studies from different countries demonstrate that students from disadvantaged socioeconomic backgrounds have lower expectations to access and succeed in higher education than their affluent counterparts: see, for example Stinebrickner & Stinebrikner (2014) for US, James (2000) for Australia and Troiano & Elias (2015) for Spain. Moreover, there is a link between student aspirations and the characteristics of the educational systems. A study by Parker et al. (2006) found that the differences in academic aspirations between poorer and richer students are wider in educational systems that are characterized by a greater stratification among schools.

Thirdly, even if HE institutions establish admission criteria based on merit and remove the financial barriers to enrolment and attendance, inequality would have already characterized individuals' early education, so students from disadvantaged backgrounds would be less prepared to enter higher education. Evidence of the relevance of this cause is provided even in countries where access to HE is limited by costly tuition fees; for example, Chowdry et al. (2012) focused on Britain and found that socioeconomic inequalities in the results at the end of secondary schooling are more relevant in explaining the socioeconomic gap in HE than any differences at the moment of entering HE. The more general argument is that equalization policies – i.e. those aiming at reducing the gap in educational opportunities between wealthier and poorer families – tend to be less effective if implemented at later stages of educational paths. Instead, evidence regarding the 'technology' of educational

production suggests that, given its cumulative nature, earlier interventions are likely to have stronger effects in shaping educational opportunities later in life (Cuhna & Heckman, 2007; see Heckman, 2006 for the economic rationale of investing in socioeconomically worse-off students). Economics literature amply demonstrates the strong link between families' socioeconomic background and outputs/results from the early stages of education (Haveman & Wolfe, 1995), and this source of inequality tends to reproduce asymmetries in opportunities which are difficult to correct when students reach the age of to access HE. Following this reasoning, it is possible to see that differences in the educational performance between students from different socioeconomic statuses (SES) are already stark when they are 15 years old, as the recently released PISA 2015 data continue to confirm. In Table 3, we report the country-average test scores in sciences, by quartiles, from the index for Economic, Social and Cultural Status (ESCS). The findings highlight that, in all countries, the scores of students from higher levels of ESCS are markedly higher than those from disadvantaged backgrounds.

Table 3. OECD PISA 2015 test scores in science, by country and by SES quartiles

	Performance in science, by socioeconomic status				Difference in science performance between students in the top quarter and students in the bottom quarter of ESCS	
	Bottom quarter of ESCS	Second quarter of ESCS	Third quarter of ESCS	Top quarter of ESCS		
	Mean score	Mean score	Mean score	Mean score	Score dif.	S.E.
Australia	468	497	525	559	92	(3.4)
Austria	448	478	512	545	97	(5.4)
Belgium	450	482	522	560	111	(4.9)
Canada	492	518	542	563	71	(3.4)
Chile	402	441	452	497	95	(4.7)
Czech Republic	444	476	505	551	107	(4.9)
Denmark	467	489	512	543	76	(4.4)
Estonia	504	524	539	573	69	(4.2)
Finland	494	517	542	572	78	(4.9)
France	441	477	515	558	118	(5.0)
Germany	466	503	527	569	103	(5.1)
Greece	415	441	461	503	88	(5.6)
Hungary	420	466	486	537	117	(5.3)
Iceland	448	466	482	500	52	(4.5)
Ireland	465	489	513	545	80	(3.8)
Israel	417	454	491	511	94	(6.1)
Italy	442	476	490	518	76	(5.0)
Japan	498	533	549	578	80	(4.6)
Korea	480	502	527	556	76	(5.5)
Latvia	461	478	500	524	63	(4.0)
Luxembourg	425	463	496	551	125	(3.7)
Mexico	386	408	423	446	60	(4.2)
Netherlands	465	494	519	559	95	(5.7)

New Zealand	463	504	533	565	101	(5.6)
Norway	463	489	512	535	72	(4.1)
Poland	463	488	508	549	86	(4.8)
Portugal	459	487	504	556	96	(5.0)
Slovak Republic	413	452	470	513	101	(6.3)
Slovenia	471	496	527	560	88	(3.8)
Spain	454	480	503	536	82	(4.0)
Sweden	450	478	513	543	94	(5.0)
Switzerland	455	496	513	561	106	(5.0)
Turkey	400	416	428	459	59	(7.9)
UK	473	490	525	557	84	(4.4)
United States	457	478	508	546	90	(5.6)
OECD average	452	481	505	540	88	(0.8)

Source: authors' elaborations on OECD PISA data extracted from http://gpseducation.oecd.org/
Note: the indicator ESCS is calculated by OECD using information on parents' occupation, education and home possessions.

3.2 What we know about Higher Education and equality of opportunities in various countries

The issue of inequality in higher education is widely explored in empirical academic literature. In this section, we will summarise the empirical evidence that emerges from a number of interesting studies.

Starting from the first set of factors presented above, financial constraints seem to represent a barrier to the Higher Education access, especially in less developed countries. When social inequality is very high, people from low socioeconomic backgrounds invest less in education and skills. They have less capacity to meet educational costs, fewer prospects of entering high-value institutions and fewer opportunities to turn degrees into careers. As a consequence, their relative position deteriorates over the generations (OECD 2014)[3]. In these cases, tuition fee stratification becomes a significant element of discrimination between students from different backgrounds; conversely, free or low tuition (as in many countries of Nordic and Central Europe) eliminates this kind of self-stratification (Marginson 2016). This being said, several studies point out that financial issues are a less important barrier to accessing HE in more economically-developed countries. The case of Ireland, where university tuition fees were abolished in 1996, shows empirical evidence that the reform clearly did not achieve its objective of promoting educational equality (Denny 2014). In the case of Spain, empirical analyses highlight that having a father working as a manager or a professional is the most significant factor in increasing the individual's probability of studying at university (Lopez 2009). Furthermore, financial aid packages could contribute to reducing a family's economic burden, but they are not able to suppress the effect of cultural barriers.

[3] For instance, in many African countries, tuition fee and financial constrains represent a barrier to the educational system access beginning from the early schooling levels and is not a uniquely a problem of accessing Higher Education (Atuahene et al. 2013 and Assaad et al. 2014).

The third case mentioned in the section above, ascribing the cause of low equality of opportunities to inequalities during early education, also finds wide sustenance in academic literature. Several cases show how prior education inequalities determine whether people from low-income families, remote locations or excluded minorities are able to improve their social circumstances. An empirical study (Chowdry et al. 2013), based on administrative education data from England finds evidence suggesting that poor achievement in secondary schools is more important in explaining lower HE participation rates among pupils from low socioeconomic backgrounds than barriers arising at the point of entry to HE.

Similar results are also valid for Japan, where a correlation was found between young Japanese women who attend juku ("cram" school) during elementary school and a reduced probability of attending either junior college or university (Edwards & Pasquale 2003). A Portuguese data analysis reveals that barriers to HE access for less privileged students become stronger when financial constraints occur together with early educational achievement constraints (Naves et al. 2016): private, fee-paying secondary schools often inflate their students' scores and this inflation unfairly improves those students' chances of accessing higher education.

A significant branch of studies investigates the relationship between the expansion of HE and the level of inequality. As shown above, the OECD data illustrate that despite the rapid worldwide grown in HE participation, equality of educational opportunities is still not granted in many cases. Moreover, some academic researchers argue that the expansion of HE is itself one of the causes of persisting inequality. In a comparison of 12 European countries from 1940-1980, Vona (2011) analyses the evolution of the relationship between family background and higher education attainment, and finds empirical evidence that higher education expansion brought about an increase in background-related inequality.

An empirical analysis of HE in the UK during the 1980s and 1990s shows that there was less socioeconomic mobility at the end of the period than at the beginning (Machin & Vignoles 2004). A persuasive explanation for the link between HE expansion and inequality in HE access is proposed by Lucas (2011). The underlying idea is that socioeconomic inequalities in access to education are unlikely to decline as a result of expansion because students from more advantaged socioeconomic backgrounds have better access to information and opportunities. This theory finds further empirical validation in Boliver's (2011) UK study: while higher education expanded dramatically during the 1960s and again during the early 1990s, the data analyses nevertheless established that inequalities in HE enrolments between social classes on higher status degree programmes and lower status universities remained fundamentally unchanged.

Social competition is another factor at work in shaping the complex relationship between HE and inequality. The expansion of HE opportunities exacerbates social competition in education, and this in turn compounds the effects of social inequalities (Arum et al. 2007). Social competition at the key points of transition and selection causes a socioeconomic differentiation of the population, favouring families with prior social

advantages, who are better placed to compete for scarce places or pathways that confer the greatest positional advantages (as claimed by Marginson 2016 and Lucas 2001, 2009). After the diffusion of HE opportunities, the form of inequality in HE education seems to have changed the level of its manifestation: "Qualitative differentiation replaces inequalities in the quantity of the education obtained" (Arum et al. 2007, p. 4). From this point of view, information constraints seem more relevant to explain inequality from a qualitative than a quantitative point of view. Academic studies prove that differences in higher education opportunities have triggered a process that produces social inequalities in many countries. This is the case in Denmark, for example, where an analysis of the HE system between 1984 and 2010 shows that although inequality in accessing HE has been reduced overall through the expansion of the system, this objective has only been achieved by channelling students of lower-educated parents to less-prestigious programmes (Thomsen 2015).

A cross-country comparison between Australia, England and the United States finds evidence suggesting that high-achieving disadvantaged students are much less likely to enter a high status college than their more advantaged peers, and that the magnitude of this socioeconomic gradient is similar across the three countries (Jerrim at al. 2013). Moreover, in the UK, applicants from state schools and from Black and Asian ethnic backgrounds remained much less likely to receive offers of admission from the more selective (Russell Group) universities in comparison with their equivalently-qualified peers from private schools and the White ethnic group (Boliver 2013). In China, an academic study based on data from large-scale surveys on college graduates found that students with better family occupational, educational, regional, and economic status have higher chances of entering elite universities, and those groups have become more and more advantaged with the passing of time (Yue 2015). Similar results and inequality patterns have been detected for Bulgaria, Estonia, Hungary, Poland, Slovakia and Croatia (Ilieva-Trichkova et al. 2014; Doolan and Baranović 2017).

However, empirical studies do not always produce the same results, and some of the conclusions have been contradictory even concerning the same country; this is the case of Italy. The first generation of studies concerning social mobility in Italy, from the late 1980s to early 1990s, supports the view that inequality in accessing education at all levels was stable, with particular reference to HE (Schizzerotto & Schadee 1987; Cobalti 1990). Similar results were obtained in a study of Italian HE in the 20th century, which showed that absolute inequalities of access to tertiary education have not diminished over time (Triventi & Trivellato, 2009). However, a later analysis based on Italian institutional surveys conducted in 1998 and 2003 lead to different conclusions – the empirical study demonstrated how inequality of access was persistently decreasing at all levels of education, benefiting all social classes (Barone at al. 2010). Yet the results are less optimistic if we consider another Italian empirical study showing that the reduction in inequality of opportunity is only 'apparent', demonstrating that greater enrolment numbers have not translated into an increased

probability of attaining a degree for students from middle-class and/or less educated parents (Bratti et al. 2008).

Therefore, the necessity of approaching the issue of socioeconomic equality in terms of HE students' achievements (outputs and subsequent outcomes on the labour market) comes to light. Evidence from Spain, based on a study of 15,000 students who left the educational system between 1991 and 2000, found a positive correlation between parents' level of education and the individual's probability of completing university studies (Lopez 2009). Similar results are presented by a statistical analysis of the impact of social origin on educational achievement and occupational attainment of higher education graduates in Colombia (Cuenca 2016). The results of this study prove that social origin operates directly through socioeconomic status and parental education, which have a strong effect particularly on academic achievement at university level and on income. Furthermore, in American HE, students from low socioeconomic status backgrounds obtain lower results, have different educational aspirations after college and gain lower incomes compared to their peers from a higher socioeconomic background (Walpole 2003).

A final comprehensive study that must be mentioned here is the "Equality of Opportunities Project", which is studying the effects of Higher Education on intergenerational mobility in the United States, using a huge administrative dataset of 30 million HE students between 1999 and 2013 (see http://www.equality-of-opportunity.org for a reference). This case is of prominent interest because the debate about the relationship between college education and socioeconomic mobility is particularly rich and long in the United States, and the high quality research conducted in this context can be used to find clear evidence and patterns. The first descriptive results from the Project are reported in Chetty et al. (2017) and can be summarized in four main points. First, trends in access to HE vary considerably across quartiles of families' socioeconomic background, with students from more affluent families being much more likely to attend top-tier colleges. Second, students from different backgrounds have similar economic returns after they complete college – i.e. tertiary education institutions seem to 'level the playing field' for the population that attends them. Third, different colleges' abilities to lead to upward social mobility vary substantially, with some institutions being particularly good at offering future opportunities and returns to students from disadvantaged backgrounds. Fourth, some institutions with a great ability to stimulate socioeconomic mobility have experienced a decline in their enrolments in the last few years.

4. Final considerations and policy recommendations

In this position paper, we have provided evidence for the strong correlation between HE and critical judgement. We have also shown that such critical/lateral thinking leads to increased socio-political commitment, thus nurturing democracy and fostering a higher

degree of social mobility. At the same time, evidence suggests that a high degree of socioeconomic inequality in the access and success in HE remain a key problem in many countries. To ensure the development of a virtuous cycle/trend (i.e. critical judgement → active political participation → social mobility), which is potentially triggered by HE, we formulate some recommendations:

a) To invest more public and private funding (also through fair loan systems, full tax exemption and dedicated grants) for helping students coming from low-income family to get access to HE and increase their probability to obtain degrees.
b) To incentive mass long-life learning for facilitating older people to get a HE degree. For instance, firms, public and private companies, should be incentivized to invest money not only in executive education but also for ensuring HE training to the mid-low collaborators within their organization.
c) To incentive the HE systems to offer degrees designed for the specific characteristics of different possible targets (in terms of age, education background, income), facilitating that such a diversification will make HE systems more sensible to a wider range of potential students. Flexibility of curricula and a better use of technology can play a role in this direction.
d) To pay attention to policies aiming at reducing inequalities in lower levels of education (primary and secondary), with the aim of streamlining and facilitating access to HE also to students from disadvantaged backgrounds. Several actions could be coherent with this objective, as for example: increasing the age for compulsory education, reducing rigidities in tracking systems, grants and subsidies for students from low socioeconomic backgrounds to complete education.

When considering less developed part of the World, like Africa, it is quite clear that in absence of the combination of leverages and factors that can guarantee a straight process of modernization and democratization, a completely new strategy should be pursued. For example:

e) A specific international Agency could be established, with national branches, in charge to allocate grants and subsidies to potential students by investing funding collected through donors, Western government (that could devote to this initiative part of the money they invest to aid & development policies
f) International Organizations like UN and Unesco, as well EU, could promote and support consortia of universities to establish “international” universities in undeveloped countries through *ad hoc* agreements with the national governments.

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