

Human capital policies and inequality in recessions' times

By [Francesco Vona](#)

Not only economic crises reduce citizens' current welfare, but might as well hinder the long-run economic potential leading to an excessive destruction of physical and human capital. This long-run effect is definitely the big risk European economies are facing in this prolonged phase of recession. Economists often take a different standpoint for investments in human capital: recessions are claimed to have a positive rather than a negative effect on skill formation because higher unemployment frees up time for schooling. What they take for granted is that the choice of staying longer in school is not constrained by the increased difficulty in affording tuition fees, living expenditures and the opportunity cost of not working, particularly for less wealthy households. If this is taken into account, the likelihood that the positive effect prevails depends on public policies as public expenditures in education are needed to offset for the reduced spending capacity of households. The austerity measures imposed to countries at greater risk of default by the European institutions make it more difficult to maintain an appropriate flow of public expenditures in education.

So far, however, the standard view of a positive effect of recessions on skill formation is in line with data (Oecd, *Education at Glance 2012*). In the majority of European countries, including the most financially exposed ones, both enrollment rates at all levels of education and public expenditures in education as a proportion of public expenditures are held unchanged (or increased) one year after the crisis. Unfortunately, updated data until 2012 are not

available to evaluate long-term country responses[\[1\]](#). However, a reversal of this trend is likely to occur in next years if further budget cuts are carried out in indebted states. Signals in this direction have already emerged in budget cuts just implemented in Italy and Spain, two of the countries already with a relatively low level of subsidies for less advantaged students compared to the EU average (Usher and Cervanen, 2005). Poor households are likely to bear the costs of these cuts the most as they heavily rely on public support to overcome stringent liquidity constraints. Equity considerations in access to education are of paramount importance as students from good family backgrounds have a significantly higher probability to acquire higher degrees and to enter elite institutions in virtually all European countries (see Raitano and Vona, 2010). Even leaving aside equity considerations, it would be exceedingly difficult in this context to pursue the target of the Lisbon agenda, 'making Europe the most competitive knowledge-based economy in the world', without interventions aimed at improving the quality of European educational systems from which long-run growth crucially depends.

To make hands meet and reconcile equity with improving quality, market-based solutions have been proposed. The main goal is to drain fresh, mainly private, resources into slack educational systems and, at the same time, to increase competition as a discipline device for improving quality. *The Economist*, for instance, recently supported a voucher system that would enable students to choose between public and private institutions[\[2\]](#). For university education, another proposal under consideration in many countries (see Ichino and Terlizze 2012, for Italy) and already adopted in many others (see Dearden *et al.* 2008) is to combine higher tuition fees, that would reduce the burden on the public budget, and a system of contingent student loans to be repaid depending on future incomes. It is claimed that such a system would increase fairness. While educational systems in Europe

certainly need substantial interventions to increase quality, it is not warranted that these reforms would go in the right direction.

On the voucher system, it should be observed that the existing quality of private schools in EU countries is not higher than the one of public schools. Considering PISA (Program for International Student Assessment) test scores as a standardized measure of quality, We estimate the impact of private schools on average test at the school level controlling for confounding factors at the school and the country level (family background, country-level policies, class size, school location, see for details Raitano and Vona, 2010). From this analysis, it emerges clearly that public schools outperform private ones in reading, science and math scores. Therefore, a simple reallocation of resources towards the private sector would lead to a decrease in overall quality. Put it differently, the private sector is not ready to take the lead for reforming the educational system in EU countries, hence creating a larger market for private schools might even be inefficient. It is also questionable whether a voucher system would really succeed in increasing the students' choices in presence of limited slots for best schools and priority given to those residents in the school neighborhood.

On the income-contingent scheme, it certainly improves loan-based schemes that tend to select out students with both low propensity to risk and self-esteem, such as typically those from marginal ethnic groups or poor family background.

Indeed, conditioning loan repayments to future income reduces the uncertainty of human capital investments and so should work particularly well for disadvantaged students. However, the perception of the risks involved might not be reduced enough to induce people to invest, particularly when the loan taken is relatively large (as it would be for the increase in the fees) and when other lifelong loans such as mortgages are

expected to be undertaken in the future. In addition, since disadvantaged students make the choice of starting university in an unfavorable position in terms of existing skills and competencies, their expectations on future earnings might be so low to not justify the risk, though partial, of paying for university education. Even if these problems of income-contingent schemes can be somehow corrected, for instance in the UK they are complemented by a grant for disadvantaged students (Dearden *et al.*, 2008), they can hardly favour an effective equalization of educational opportunities.

These critiques do not imply that human capital policies and the European educational system are well designed and dynamic enough. Particularly for university education, increasing competition for scarce resources and decentralization in decision-making can help in creating highly innovative institutions, but not to increase equal access for all. In particular for the issue of equality of opportunity, it is well known that it is better achieved intervening early in the educational stream (Cunha and Heckman 2007, Heckman and Bas 2010). According to this view, policies imposing the share of less well-off students in elite universities, as it has been recently proposed for France and experimented in Brazil, seem to perform poorly both for equity and efficiency.

In times of crisis, an alternative way to make the European system more dynamic, to prevent an excessive destruction of human capital and to increase equality of opportunity is (obviously as it might be) to target the issue at the European level. However, 'inclusive' interventions to enhance the competences of less rich pupils are not at zero cost, but typically require large scale public investments in the crucial phase of pre-primary education and, later one, targeted interventions in marginal schools of poor neighborhoods. A large scale public intervention can be done launching EU bonds conditioned to certain strategic goal such as the finance kindergarten for all European kids or targeted

interventions in marginal schools. Incidentally, these 'conditioned bonds' would probably appear far more acceptable for skeptic citizens of Nordic countries. EU resources for these goals can also be drained by gradually phasing out the expensive Community Agricultural Policy, which absorbs more than 1/3 of the EU budget, and by devoting a fraction of structural funds for targeted interventions in marginal primary and secondary schools. Clearly, targeted EU policies for skill formation, especially of the less well-off, would also have a positive effect on growth by increasing the share of students with good basic skills and so the effectiveness of lifelong training policies, which crucially depends on the level of basic skills.

With these policies for increasing equality of opportunity in place, the effect of reforms aimed at increasing competition among universities using a combination of loans, higher tuition fees and premia depending on academic records can not only be fairer, but also remarkably more effective by enlarging the pool of potential candidates for good universities and enhancing the lifelong learning potential of EU citizens.

Further readings:

Raitano, M. and Vona, F., 2010. Peer Heterogeneity, Parental Background and Tracking: Evidence from PISA 2006. *Documents de travail de l'OFCE* 23-2010.

Dearden, L., Fitzsimons, E., Goodman, A., Kaplan, G., 2008. [Higher Education Funding Reforms in England: The Distributional Effects and the Shifting Balance of Costs.](#) *Economic Journal* vol. 118(526).

Cunha, F., and Heckman, J., 2007. [The Technology of Skill Formation.](#) *American Economic Review* 97(2).

Heckman, J., and Bas, J., 2009. Policies to Create and Destroy Human Capital in Europe. *IZA Discussion Papers* 4680, Institute

for the Study of Labor.

Usher, P., and Cervanen, A., 2005. *Global higher education rankings: Affordability and accessibility in comparative perspective*. Washington, Toronto: Educational Policy Institute.

[1] Eurostat has data updated to 2010, see <http://appsso.eurostat.ec.europa.eu/nui/setupModifyTableLayout.do>. As it is evident looking at the percentage of public expenditures in education as a percentage of GDP, only in Italy one can observe a timid -0.1% decline between 2007 and 2010.

[2] <http://www.economist.com/node/21564556>

Financing higher education: Should students have to pay?

By [Guillaume Allègre](#) and [Xavier Timbeau](#)

Is it necessary to ensure that a greater portion of the cost of higher education is borne by students in the form of higher tuition fees, which might or might not be coupled with loans? It is often argued that financing higher education through taxes is anti-redistributive. We show in a [working document](#) that from a life cycle perspective proportional taxation is not anti-redistributive.

While raising higher education fees is not on the political agenda in France, it is a subject of intense fighting, not only in Quebec, but also in Spain and Great Britain, where student protests erupted at the end of 2010. Reports in France regularly propose raising tuition fees: recently (2011), in a note by the [Institut de l'Entreprise](#) [in French] on the role of business in financing higher education, Pierre-André Chiappori proposes “lifting the taboo on tuition fees”. In a [contribution to Terra Nova](#) [in French] published in 2011, Yves Lichtenberger and Alexandre Aïdara propose raising annual university tuition fees by about 1000 euros. Paradoxically, the authors also propose creating a study allowance that could be used anytime in a person’s life. The authors are attempting to deal with two contradictory economic dynamics. On the one hand, a study allowance would help raise the general level of education, a factor in innovation and growth, while simultaneously fighting against social self-selection in higher education:

In countries that have adopted it [the study allowance], disadvantaged social strata may have an opportunity to undertake lengthier studies even though their social origins have predestined them to short-term courses that provide quick entry into salaried employment. This is an important means of raising the general level of education and the qualifications of young people, which is a central concern of this report. (Lichtenberger and Aïdara, [p.82](#))

But on the other hand, education benefits better-off strata, and being free makes it anti-redistributive:

The fact that public higher education is virtually free leads, first, to a transfer of resources (the public cost of education) to young people who are in education the longest. This overwhelmingly means young people from better-off strata. This transfer is reflected ultimately in private returns to the beneficiaries: higher wages and then pensions, which benefit the most highly educated throughout their lives.... As things stand, higher education’s free character has no redistributive value and even aggravates inequalities.

(Lichtenberger and Aïdara, [p.84](#))

Indeed, even if the anti-redistributive character of free higher education is not the only argument made by advocates of higher tuition, it is one of their main arguments. This argument relies on a static and familialist vision of redistribution. We adopt a life cycle perspective instead.

As highlighted in the second excerpt above, on average the beneficiaries of education spending enjoy a significant private benefit: they will have higher wages and pensions throughout their lives. Even assuming that tax (on income) is proportional to income (which is not the case: in reality, it is progressive), they will pay much more tax, in absolute terms, than individuals who have completed shorter studies. Above all, tax allows for the financing of education by individuals who actually receive significant private benefits, and in proportion to this benefit. People who suffer discrimination in the labour market or who were oriented towards less profitable sectors and benefit from low returns to education reimburse society a lesser amount through their taxes than those who benefit more. Financing through income tax leads people with higher incomes to contribute even when they have not had a lengthy education. The injustice would therefore lie in the transfer between persons with high incomes who are not highly educated and those who are highly educated. But if education is characterized to a great extent by significant social returns, thanks to its impact on growth ([see Aghion and Cohen](#)), then people with high incomes are actually beneficiaries of spending on education, whether or not they are highly educated themselves (for instance, self-taught entrepreneurs benefit from the availability of skilled labour).

Adopting a life cycle perspective, we show in a [working document](#) that financing spending on non-compulsory education (beyond 16 years) by a proportional tax represents a net transfer from those with higher incomes during their careers to those with lower incomes during their careers. From a life cycle perspective, free non-compulsory education financed by

taxes does not benefit individuals with more affluent parents (the transfer from individuals from better-off households to those from poorer households is not significantly different from zero). If individuals from the poorest households react to the increase in tuition fees by reducing their investment in education, even when this is financed by loans, then there can be little doubt that they will be the first victims of this type of reform. Advocates of tuition increases generally argue for small increases in tuition fees and exemptions based on means-testing the parents. But recent developments in Australia, the United Kingdom and Canada show that, once the fees have been introduced, it is difficult to prevent governments that are seeking new funds from increasing the fees and reducing the exemption thresholds.

In higher education, the leading injustice is the lack of access to people from modest backgrounds. The surest way to ensure equity in education is still to fund it through income tax and to reform education so that it is targeted at academic success for all rather than at selection.