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Tuition Fees and Social Segregation

Lessons from a Natural Experiment at the University of Paris 9-Dauphine

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Extended abstract

Increases in tuition fees have been a major recent trend in higher education in many developed countries (OECD, 2014). In some countries, university tuition fees are long-established and have been the subject of research into the effect of tuition fees on the access to higher education, the pursuit of studies and the outcomes for students. In France, on the contrary, university tuition fees are set by the government, at a level that makes them almost free, contrary to the practice in most English-speaking countries.

In this article, we study the first experience of increased tuition fees in a French public university – the University Paris 9-Dauphine – and we assess the effect of these tuition fees on the academic pathways selected by this university and consequently on the characteristics of the student populations concerned. Dauphine was the first university to obtain the status of *grand établissement* (prestigious research and higher education institutions). This status, acquired in 2004, allows it to create what are called *diplômes de grand établissement*, Master's degree programmes for which the university is free to set the tuition fees. Some of the national Master's degree courses (for which the tuition fees are still set by the public authorities) were therefore transformed into *masters d'établissement*, for which the university sets the tuition fees. At Dauphine, the scale of tuition fees ranges from 0 to 4000 euros per year depending on the parents' income. The first courses concerned began in 2010/2011.

Although Dauphine can be seen as an experiment in a new system, the subject of this article – the link between university tuition fees, student pathways and outcomes – is particularly important in the new French university context. Having been given greater autonomy, French universities are facing a lack of financial resources; there is a strong temptation to collect additional funds by making students participate in their tuition costs. The subject is also important from a theoretical viewpoint: the results presented in the literature are often contradictory about the

effects of tuition fees. It is therefore possible that context plays a decisive role in the effects of tuition fees. From this perspective, a detailed study of France, with its institutions and conceptions of higher education that differ so greatly from those of the English-speaking countries, should be rewarding. In addition to this unusual national setting, our approach is original in that we consider the whole academic pathway, not just the access to education as a function of its cost. To our knowledge, this global approach is unique in the literature. And yet it seems difficult to exclude *a priori* the existence of path dependency, particularly at an advanced level of education like the Master's degree. This path dependency is expressed through the modes of selection used by the university and the applications and past choices made by students.

To study students' pathways, we use an optimal matching method (Abbott and Forrest, 1986). This is based on a calculation of distances between trajectories, on the basis of which we establish a typology of student pathways. We then seek to determine, using an unordered multinomial logit model, the extent to which the type of trajectory can be related to the socio-economic characteristics of the students and the extent to which the tuition fees increase at Dauphine may have changed the types of pathways favoured for admission to these Master's degrees at Dauphine. Lastly, we study the effect of this tuition fees increase on graduation outcomes. For some authors (see for example Gary-Bobo and Trannoy, 2008), a rise in success rates should be expected when tuition fees are increased: higher tuition fees lead to greater self-selection of students, who are more exacting as regards the quality of the services provided and more motivated (to avoid wasting the financial resources invested in their studies). From this perspective, we evaluate the effects of the tuition fees increase on outcomes, using the difference-in-differences method adapted for a non-linear model (Puhani, 2012).

The methodology used allowed us to identify four types of pathway and to bring to light the potential effects of segregation and inequality on student pathways generated by the introduction of tuition fees, and the absence of any positive effect of these elite programmes on graduation rates. More precisely, we shown that the introduction of tuition fees has had contrasting effects on the pathways of students selected by Dauphine. The pathways that procure the lowest probability of access to the fee-paying Master's are those with a relatively high proportion of students from disadvantaged social backgrounds and of scholarships on social criteria and with a low proportion of foreign students. Conversely, the pathways giving the highest probability of access to these fee-paying Master 2 programmes are those followed by the students from the most well-off social categories. Added to which, pathways with time spent outside the university system also favour enrolment in these Master 2 programmes, probably because the students who follow these pathways are more familiar with fee-paying studies.

The revelation of this segregating effect of the rise in tuition fees at Dauphine is all the more interesting because the rise was progressive. Scholarship students, although not directly concerned by the rise in tuition fees, are indirectly affected, since the academic pathways they follow are less likely to lead to one of these

prestigious Master's now they are fee-paying. This result emphasises the need to analyse the complex mechanisms that cause students from disadvantaged backgrounds to be penalised by the introduction of tuition fees, even when these tuition fees are determined according to the parents' income. More generally, it also raises questions about the specificity of Dauphine in the French university landscape, and the difficulties that ensue, before drawing conclusions as to whether the experiences of this establishment are more widely applicable. Its prestigious status as a quasi "grande école" and its particularly prosperous catchment area constitute one of the most favourable contexts for the apparently "successful" introduction of tuition fees (along with that of Sciences Po Paris). And yet, if a segregation effect can already be identified within the setting of this experiment, despite the fact that the tuition fees are determined according to the parents' income, it is highly probable that this effect will be much stronger if such a policy is extended to the national level. Finally, beyond the question of segregation effects, and as suggested by Flacher et al. (2013), it is essential to consider the issue of the introduction or increase in tuition fees within a broader context, taking into account the institutional frameworks specific to each country.

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