Environmental costs of the global job market for economists

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*Each year, the international job market for economists involves more than 1,000 candidates and several hundred recruiters from around the world meeting for short pre-screening interviews at annual congresses in Europe and the United States. **Alberto Prati**, **Olivier Chanel** and **Morgan Raux** argue that it's time to reassess this unsustainable system and estimate the carbon footprint of alternatives.*

When Anna, a graduating PhD in economics at the University of Stockholm, applied for a position in Oslo in 2019, her first job interview took place not in Oslo, not online and not even in Stockholm – but in Rotterdam. Anna was also interviewed for a job at the University of Bergen. Strangely enough, she met the recruiting committee on the other side of the globe: in San Diego, California. Anna is a fictitious character, but her story will be familiar to many economics postgraduates who had similar experiences before the pandemic.

The international job market for economists is the reason for the ephemeral popularity of Rotterdam and San Diego among junior academics in 2019/20. This professional job market follows a standardised process where candidates apply to positions in the autumn, are pre-screened by prospective employers in the winter and subsequently receive invitations for a seminar and a set of decisive interviews in the final phase, known as a "fly-out".

Job applications are made online, mostly via a non-profit platform, econjobmarket.org. Fly-outs are held in person at the recruiting institution. But what about the pre-screening interviews? These are typically short (25-30 minutes) and happen at the annual congress of the European Economic Association (EEA) or at the annual meeting of the American Economic Association (AEA). In the academic year 2019/20, the EEA congress took place in Rotterdam and the AEA meeting in San Diego.

These short interviews generate global hypermobility, at odds with economists' research efforts to fight climate change (Weder di Mauro, 2021). To attend the meetings in Rotterdam and San Diego, job market participants covered over 22 million kilometres, equivalent to more than 550 times the circumference of the earth. We calculate the environmental costs of this pre-screening process and evaluate the impact of some alternative systems.

Rotterdam and San Diego were the last cities to host job market meetings in person before the pandemic brought an unexpected disruption to the recruitment system. The international job market for economists was held entirely online in 2020/21 and 2021/22.

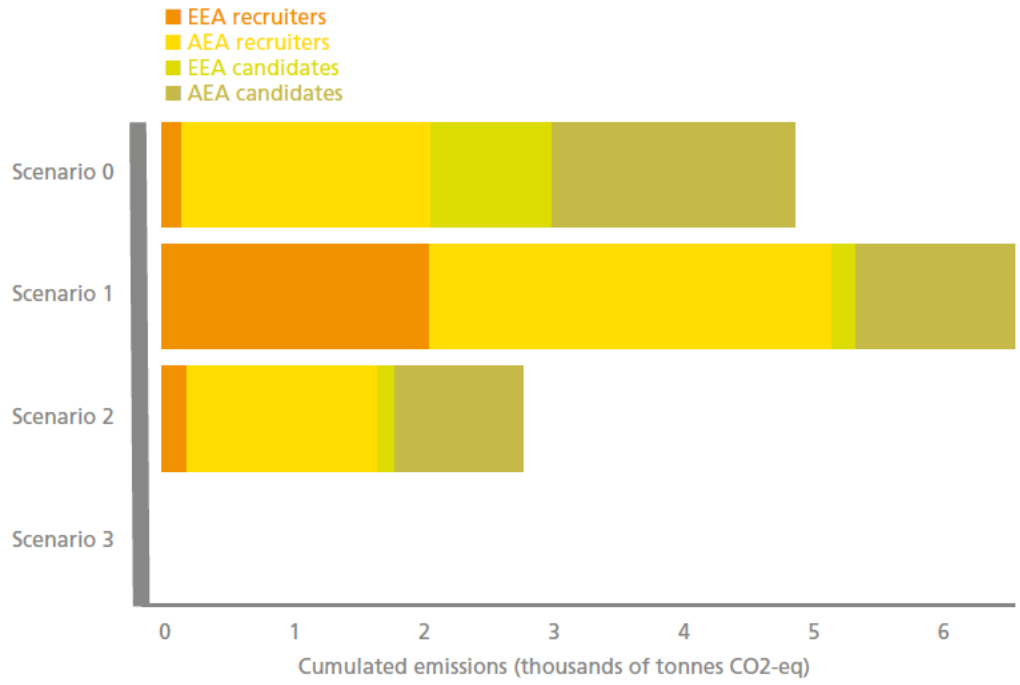
As Covid-19 restrictions are lifted during 2022, will the pre-screening phase revive its pre-pandemic standards? We hope it will not. We map out three alternative scenarios and the potential gains in terms of emissions and other costs. Our aim is to help economists rethink the profession's recruitment mechanism.

For our estimations, we used an anonymised dataset provided by econjobmarket.org. The dataset contains information about more than 1,000 candidates who attended an interview in San Diego,

Rotterdam or both. We know the geographical origin of the candidates and of the recruiters as well as their destination.

We prudently assume that the recruiting committees are formed of just two people and that participants prefer to travel by train rather than plane for any journey shorter than six hours. The carbon footprints of the different scenarios are presented in Figure 1. These estimates refer to the pre-screening phase only: the environmental impact of the entire recruitment process (including the fly-out phase) is inevitably larger.

Figure 1:
Decreasing volume of cumulated emissions (thousands of tonnes CO2-eq) associated with each scenario



Scenario 0: Business as usual
The 2019/20 meetings in San Diego and Rotterdam generated about 4,800 tonnes CO2-eq – that is, about 2.1 tonnes CO2-eq per participant. To put this in context, a participant could compensate for these emissions by living car-free for one year or going vegan for two years.

Admittedly, San Diego is a particularly remote destination and the choice of a more reachable venue would bring some sizeable gains. For example, if the AEA meeting took place in New York or Chicago instead, overall emissions would have been cut by about a quarter.

On top of climate-related costs (CO2-eq emissions), we also calculated the other environmental costs associated with transport – local air pollution, noise, congestion, habitat, well-to-tank (the indirect emissions released to provide transport) – and other economic costs related to the meetings such as private costs and time lost. When considering all these externalities, the comprehensive assessment of the 2019/20 meetings is €4.45 million (£3.76 million).

Scenario 1: All recruiters conduct interviews at both annual meetings and candidates only go to the closest meeting

This is, maybe surprisingly, a bad idea. In the current system, most recruiters attend only the closest meeting, while many candidates cross the Atlantic to attend the interviews. Given that there are more interviewed candidates than recruiters, it is natural to wonder if the market should rather require the latter to travel.

But, the cumulated emissions would be even higher than in 2019/2020. This happens because not all participants – either candidates or recruiters – attend both meetings in the current system. Instead, Scenario 1 would require all recruiters to do so.

Scenario 2: Recruiters and candidates attend only the closest annual meeting

This solution would cut emissions by half. Intercontinental air transport is the biggest entry in the CO2-eq bill, and its elimination can bring a huge environmental gain without major changes in the job market organisation.

This solution may sound unfair since it puts candidates from different continents on an unequal footing. But this inequality is already present in the current system, where a candidate who is interviewed in another continent pays higher costs in terms of time, stress, jetlag and, of course, money than a next-door candidate.
Scenario 2 applies a practice that is common in most professions: candidates who live far away are interviewed online, while candidates who live closer are interviewed in person.

Scenario 3: Recruiters and candidates meet online

This solution would nearly eliminate the environmental costs associated with pre-screening interviews. Importantly, it would not prevent face-to-face interactions between shortlisted candidates and recruiters, who would still meet in person during the fly-out phase.
Scenario 3 could also make the job market fairer. Online meetings would reduce, or perhaps eliminate, the financial barriers that prevent candidates without affluent sponsors from attending the job market meetings and personal barriers related to caring commitments or disabilities. In addition, online interviews could be recorded, archived and watched asynchronously, thus facilitating the introduction of hiring practices that reduce biases and noise.

Conclusion

The EEA announced in July 2022 that in light of rising fuel prices, continuing travel disruptions and uncertainty about Covid-19, the European job market for economists will be kept online for 2022/23.

The AEA has also recommended that employers conduct all initial interviews virtually and has asked that interviews do not take place during the AEA meeting itself.

The experience of the job market taking place online has offered a good opportunity to reconsider the previous unsustainable recruitment system in economics. It is a pressing responsibility for our profession to do more in fighting climate change. A good start is to look at the plank in our own eye.

This article summarises 'The Environmental Cost of the International Job Market for Economists' by Olivier Chanel, Alberto Prati and Morgan Raux, CEP Discussion Paper No. 1819 (https://cep.lse.ac.uk/pubs/download/dp1819.pdf). Results are based on updated peer-reviewed estimates published in Ecological Economics (https://doi.org/10.1016/ j.ecolecon.2022.107565).

Further reading
Beatrice Weder di Mauro (2021) 'Combatting Climate Change: A CEPR Collection', CEPR Press (https://voxeu.org/article/combatting-climate-change-cepr-collection).