

## **BIOGRAPHY**

**Jan Eeckhout** is professor of economics at Barcelona GSE-UPF. He has teaching and research interests in applied economics, with a special emphasis on the labor market. He studies unemployment, organizational design, and inequality in cities. His work has been published in the *American Economic Review*, *Econometrica*, the *Review of Economic Studies*, and has been supported by several government grants, including funding from the National Science Foundation (US) and the European Research Council. Jan Eeckhout has been a tenured professor at the University of Pennsylvania, where he was for 9 years. He has also taught for one year at NYU Stern and visited MIT, and he has been on the editorial board of the *International Economic Review*. He received his Ph.D. in Economics from the London School of Economics.

## **PROJECT**

### **European Research Council Starting Grant**

Project acronym: SORTING

Project full title: The role of sorting for estimation, market design and development

## **Overview**

**Objective:** Sorting is prevalent in many economic environments. High skilled workers match with the most productive managers, men marry women with similar education levels, experienced venture capitalists finance more successful start-ups. As a returning European investigator, my objective is to continue and expand my research program developed in the US. Using equilibrium theory, the objective is to provide testable hypotheses for the role of sorting in development and market design. In the process of development, there is occupational sorting in the allocation of workers to managers. Due to increased openness and improved communication, managers now have access to a broader labor market. For example, Apple managers in California design the iPod, and workers in Taiwan produce it. Some preliminary analysis shows that in this environment most of the gains from trade are due to sorting. This has substantial implications for inequality and poverty. The main beneficiaries turn out to be both the lowest and the highest skilled workers. I present new evidence on occupational sorting: richer countries have added 20% managerial jobs while poorer countries have added only 5%. A second strand of this proposal facilitates the testability of two-sided matching markets. I purport to derive general conditions for unique assortative matching. This theoretical finding enables identification of model estimates. Because in the presence of various characteristics of a matched agent the well-known condition of supermodularity is typically violated, this result is important for its general applicability. This result also turns out to be important for market design questions in two-sided markets where uniqueness is a key requirement for incentive compatible mechanisms. In another related market design problem, the focus is on the role of the price mechanism itself as a force towards sorting. Finally, an application of two-sided matching to biomedical research labs is explored.