## Comment

**Renos Vakis:** Coelho, Fernandes, and Foguel set about to test whether women face career barriers in the largest manufacturing firms in Brazil. Indeed, gender segmentation and segregation in the labor market is a widespread phenomenon in Latin America, and Brazil is not an exception. Understanding the magnitude of the problem is thus a first step in finding ways to reduce its prevalence.

Typically, studies that look at these issues focus mainly on the cross-sectoral segregation and constraints that women face in moving across low- to high-productivity sectors. The authors take an interesting approach: they look at whether gender matters in the time it takes to get a promotion to a managerial position in the largest firms of the Brazilian manufacturing industry. By focusing on a specific area of the economy, they are able to take advantage of a unique set of information on manufacturing workers at different occupations and hierarchical levels and to track career paths in terms of occupation and wages. In addition, the clever approach to separate the analysis between domestic and international firms also allows them to shed light on the process and potential mechanisms of the career barriers.

Indeed, the approach allows them to confirm large and significant gender differences in career barriers. Specifically, they find that women have a lower probability of being promoted than men, and even when they do get promoted it takes them longer to do so. The authors also find that these results are driven by large differences in promotions within domestic firms as opposed to foreign-owned firms, where the results are weak. This allows them to conclude that preferences, self-selection, and statistical discrimination are at play. On one hand, women with higher career aspirations may optimally choose multinationals, where there are more options for the most career-minded workers, implying that statistical discrimination is less an issue. By contrast, jobs in domestic firms offer more flexibility in terms of hours per week, but they do so at the cost of higher statistical discrimination. In this sense, the

self-selection of career-minded women makes statistical discrimination more apparent within domestic firms.

One of the strengths of the paper is that it employs various methods to show the robustness of the results. Controlling for censoring the nonparametric analysis as well as the employment of various indicators for ascension to test the main results are great ways to rigorously validate the results. They all point to the same consistent results mentioned above, further strengthening the findings.

Because it focuses on high-skilled workers in large firms, the paper cannot provide insights about similar gaps in other parts of the economy, something that would be quite interesting to understand in the future. Even within the manufacturing sector, the large firms used in the analysis represent only 5 percent of all the firms in the sector (though these firms employ about one in every three sector employees).

A number of additional exercises could have helped shed light on some of the findings and the underlying mechanisms. For example, it is hard to separate self-selection from statistical discrimination in the current approach. It would be important to explore ways to do that so that the magnitude of the difference between these aspects might eventually be understood. In addition, much of the literature on self-selection in the labor market discusses how life-cycle aspects affect employment decisions. In this sense, exploring these results by separating women by marital status or by whether or not they have children may be important. Finally, extending this work to other sectors of the economy, or better, exploring ways to create a labor market—wide analysis, will be extremely useful.

Pushing further into the policy implications, the paper briefly discusses ways to deal with the presence of statistical discrimination. That this exists even for highly skilled workers is a deep concern, as observed by the authors, who also note that traditional policy measures like imposing job quotas may not be realistic for the case of Brazil. They suggest that policymakers explore ways to change social norms, a policy area that could induce deep structural societal change with direct benefits for the high-skilled female population. In the interest of accomplishing this goal, the paper addresses reform areas such as maternity and paternity leaves and increases in the supply of early childhood infrastructure. Promoting female role models may be another channel that provides information while at the same time helps widen the aspirational window for women and break social norms and stigmas. These approaches would undoubtedly be beneficial to all women. Additional work in these areas, including experimental work and impact evaluations to test some of these policy options and their impact on breaking some of these gender barriers and gaps, will be key in the future.