



STANFORD UNIVERSITY  
DEPARTMENT OF ECONOMICS  
STANFORD, CALIFORNIA 94305-6072

NICHOLAS BLOOM  
PROFESSOR OF ECONOMICS  
NBLOOM@STANFORD.EDU  
(650) 723-3712

October 20<sup>th</sup> 2015

**Michela Giorcelli Job Market Letter**

Dear Committee,

I am writing to strongly recommend Michela Giorcelli who is an outstanding applied micro student studying management, entrepreneurship and innovation with a historical twist. She has a fantastic job-market paper on the short and long run impact of management practices on firm outcomes in Italy – described in detail below - which reflects both impressive drive to collect a massive new micro-dataset and research creativity, alongside a number of other impressive papers themed around management and innovation.

I have known Michela since she took my labor second year PhD class about three years ago, and since as a member of her PhD committee meeting her probably twice a month to discuss her papers, and particularly her job-market paper.

Michela's job-market paper uses historical data from post-WWII Italy to study the effect of international management and technology transfer on firm performance in terms of sales, growth, survival, exporting and innovation. This international transfer arose from the Marshall Aid program which the US provided in order to rebuild Europe after WWII to avoid war destroyed countries falling into the communist sphere of influence (particularly Italy given it

was already quite left-leaning). As a result the US government funded huge management and technology training programs aimed at inducing rapid economic growth. But because of budget cuts during the program the technology transfer parts of this program ended up only being stopped part-way in a semi-random nature, so that this “treatment” ended-up being pseudo-random experiment.

To exploit this historical natural experiment Michela carefully scanned and photographed extensive historical accounting records of 1000s of Italian firms and used this to build a 30 year firm-level performance panel to study the short and long run impact of management transfer. She has several important findings, including a massive impact of both management practice transfers, with this rising substantially over time and strongly complementary with technology (i.e. training on modern capital equipment) transfers. These impacts are broadly homogeneous across firms sizes, industries and types (e.g. exporting vs domestically focused). The 30 year nature of her data allows her to study these impacts up to two decades out showing also an extremely durable impact.

What she finds is hugely important for the nascent management literature because of the:

- scale as she is studying 1000s of firms (compared to, for example, 17 firms in my India paper with Eifert, Mahajan, McKenzie and Roberts or a few hundred in Bruhn, Karlan and Schoar’s Mexico paper)
- duration as she looks at up to 20 years out, which is impossible in standard experiments which typically analyze about one or two years out
- heterogeneity in that she can analyze both large firms (>100+ employees) as well as entrepreneurial small and start-up firms
- complementarities in that she can investigate causality the interaction of management and technology, which prior experiment evidence has struggled with due to the need for two cross-randomized interventions

This paper is not only important for the body of management and entrepreneurship research, but will also be important for policy work on technology transfer to developing countries, since post-WWII Italy is comparable in GDP per capital level and growth rate in Italy to China and

other East Asia and Pacific developing countries today, and I see this paper likely being published in a top-5 economics journal.

Michela has three other projects in progress I will briefly explain. She is working with Nicola Bianchi looking at the impact of Marshall management and technological transfer program on Italian innovation (as measured by patenting) in the project “The transmission of innovation across firms and countries”. She has another innovation linked paper with Nicola that is based instead around his JMP from last year looking at the impacts of Italy’s university reforms in early 1960s which dramatically increased the number (but not quality) of STEM students, and again is studying the short and long-run outcomes of this reform. Finally, working with Petra Moser she is studying the impact of copyright on the production on opera’s where the identification comes from Napoleon’s introduction of stronger French copyright on the areas he conquered. They investigate both direct production channels, alongside migration and agglomeration impacts.

Overall, it is clear these from these other papers and Michela’s job-market paper of a clear approach of tackling management and innovation topics using clever historical natural experiments (the Marshall Plan, the 1961 Italian Higher Education expansion and Napoleon’s campaigns) alongside detailed data collection. This has both been highly productive in her current research but is a strong methodology for tackling future topics, and as such bodes very well for her continuing high productivity.

So, in summary, Michela is a creative, hardworking and smart student who has an excellent job-market paper and alongside an impressive array of projects, and will be one of Stanford’s top applied micro students this year.

Sincerely,

A handwritten signature in cursive script that reads "Nicholas Bloom".

Nicholas Bloom