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## PLACEMENT CO-CHAIRS

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## PLACEMENT ADMINISTRATOR

Amy Devine

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## RESEARCH INTERESTS

Macroeconomics, Innovation, Household Finance

## EDUCATION

Ph.D. in Economics, Columbia University	2016 – 2022 (Expected)
M.A. in Economics, Columbia University	2015 – 2016
Ph.D. in Cell and Developmental Biology, Rutgers University	2009 – 2015
B.S. in Pharmaceutical Science, Peking University	2005 – 2009

## REFERENCES

**Matthieu Gomez**

Assistant Professor

Columbia University

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of Financial Economics

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## JOB MARKET PAPER

### **Innovation and Concentration: Theory and Evidence from Decomposing Top Sales Share Growth**

*Abstract:* I study the causes and implications of the rise in firm sales concentration by inferring the underlying innovation process that drives firm dynamics. To achieve this, I first use an accounting decomposition to identify two sources of top share growth: (i) incumbent top firms grow bigger; (ii) new top firms replace old top firms. When individual firms grow in response to an own innovation shock and shrink at the impact of a creative destruction shock, the growth of top share can result either from an increase in own innovation or a decrease in creative destruction. I then build an analytical framework and show that own innovation and creative destruction have differential impact on the two components of top share growth. Via this mechanism, I use the two sources of top share growth obtained from the accounting decomposition to identify the rates of own innovation and creative destruction that drive firm dynamics. I find that the rise in annualized top share growth rate from  $-1.21\%$  over the 1980-1990 period to  $0.95\%$  over the 1990-2010 period are mainly due to increase in own innovation, while the increase in creative destruction offsets a small amount of the rise in top share growth. Both the increases in own innovation and creative destruction contribute to the increase in aggregate productivity growth.

## OTHER WORKING PAPERS

### **Employment during the COVID-19 Pandemic: Collapse and Early Recovery** with **Tam Mai**, **SSRN download link**

*Abstract:* We use monthly Current Population Survey data to document employment changes during the COVID-19 pandemic at the occupation, industry, and metropolitan statistical area (MSA) levels. Over March-April 2020, jobs losses are larger for occupations with higher physical proximity or lower work-from-home feasibility, especially for lower-paying occupations. Non-essential industries also see greater declines in employment. Such occupational and industrial susceptibility to COVID-19 contributes to the variation in employment changes across MSAs: Employment shrinks more for MSAs with larger pre-crisis fractions of workers employed in occupations with higher infection risk. Over April-June 2020, occupations and industries that are hit harder recoup more jobs, but the recovery is

only partial. Moreover, the gains are concentrated in lower-paying occupations and a few industries. Taken together, these abrupt changes in employment following the COVID-19 outbreak are unprecedented and potentially have long-term implications for occupational inequality and regional disparity.

### **Income Inequality and Mortgage Credit Allocation**

*Abstract:* This paper studies how income inequality at the Metropolitan Statistical Area (MSA) level affect mortgage credit allocation along the income distribution of households *within* MSAs. I find that MSA-level income inequality has heterogeneous effect on household-level mortgage debt accumulation. Two measures of inequality, the ratio of 95th-to-80th percentile (p95/p80) and the ratio of 80th-to-50th percentile (p80/p50) of household income, exhibit significant impact. With respect to credit approval along the income distribution, high p95/p80 inequality works more in favor of low-income households while high p80/p50 inequality benefits high-income households more.

### **PUBLICATIONS (IN BIOMEDICAL SCIENCE)**

1. Shi A, Liu O, Koenig S, Banerjee R, Chen CC, Eimer S, Grant BD *RAB-10-GTPase-mediated regulation of endosomal phosphatidylinositol-4,5-bisphosphate* **Proceedings of the National Academy of Sciences** 2012 Aug 28; 109(35): E2306-15.
2. Sun L, Liu O, Desai J, Karbassi F, Sylvain MA, Shi A, Zhou Z, Rocheleau CE, Grant BD *CED-10/Rac1 regulates endocytic recycling through the RAB-5 GAP TBC-2* **PLoS Genetics** 2012;8(7):e1002785.
3. Liu O, Grant BD (2015) *Basolateral Endocytic Recycling Requires RAB-10 and AMPH-1 Mediated Recruitment of RAB-5 GAP TBC-2 to Endosomes*, **PLoS Genetics** 2015, 10.1371/journal.pgen.1005514
4. Wang P, Liu H, Wang Y, Liu O, Zhang J, Gleason A, Zhang H, Yang Z, Wang H, Zhou X, Shi A, Grant B, *RAB-10 Effector EHBP-1 Promotes Bridging of Tubular Recycling Endosomes and Filamentous Actin*, **PLoS Genetics** 2016 Jun 6;12(6):e1006093. doi: 10.1371/journal.pgen.1006093.
5. (In Chinese.) Li XT, Yuan YL, Xia YY, Yu BZ, Zhang TJ, Liu O, Lv XZ, Zhan SY. *Genetic polymorphism of glutathione-S-transferase M1 and T1: a systematic review in Chinese population and a pilot study in smear-positive pulmonary tuberculosis cases of Jilin province* **Chinese Journal of Epidemiology** 2009 May; 30(5):502-6.

## TEACHING EXPERIENCE

### TEACHING FELLOW

#### **Columbia University**

Finance and the Real Economy (Undergraduate) Spring 2019, Spring 2020

Instructor: Matthieu Gomez

Corporate Finance (Undergraduate) Fall 2018, Fall 2019, Fall 2020

Instructors: Olivier Darmouni and Ethan Namvar

Intermediate Macroeconomics (Undergraduate) Fall 2017, Spring 2018

Instructors: Irasema Alonso and Jón Steinsson

#### **Rutgers University**

Genetics (Undergraduate) Fall 2013, Spring 2014, Fall 2014, Spring 2015

### INSTRUCTOR

#### **Institute of Industrial Economics of Chinese Academy of Social Sciences**

Macroeconomics (1st-year PhD level, equiv. 1.5 credit minicourse) Summer 2018

### LAB MENTOR

#### **Rutgers University**

Mentored pre-med, master and PhD students during their lab rotations 2011-2015

## FELLOWSHIPS

Dissertation Fellowship, 2021-2022, Columbia University

Dean's Fellowship, 2016 – 2021, Columbia University

Anne B. and James B. Leathem Fellowship, Summer 2011 – 2014, Rutgers University

Excellence Fellowship, 2009 – 2010, Rutgers University

## PERSONAL INFORMATION

### LANGUAGES:

Chinese (native)      English (fluent)      French (intermediate)      German(basic)

- French: Diplôme de Français professionnel-Affaires B2 awarded by the Paris Chamber of Commerce
- German: Goethe-Zertifikat B1

PROGRAMMING: Python, Stata, Matlab

CITIZENSHIP: Chinese

DATE OF BIRTH: Oct. 24th, 1988

SPORT: player on Table Tennis women's team at Peking University (2005 – 2008) and at Columbia University (2016 – 2017)