Chapter 5

Does a Federal Glass Ceiling Have Differential Effects on Female and Male Technology Entrepreneurs?

Todd M. Inouye
University of Hawai'i at Hilo, USA

Jeffrey A. Robinson
Rutgers University, USA

Amol M. Joshi
https://orcid.org/0000-0002-3023-6749
Oregon State University, USA

ABSTRACT

Glass ceilings are invisible organizational barriers encountered by underrepresented groups in large hierarchies. This chapter empirically investigates the existence and characteristics of an internal, government-wide glass ceiling for female employees using aggregate pay grade and demographic data on nearly 1.5 million U.S. Federal employees between 2001-2011. The external consequences for over 15,000 technology ventures seeking R&D funding from 12 federal agencies is explored. In this context, the researchers analyze over 50,000 grants and find that a unit increase in a novel, government-wide, glass ceiling measure is a meaningful and negative predictor of subsequent Phase II funding outcomes for Phase I grantees. More importantly, the negative external effects of the identified glass ceilings are significantly larger for women technology entrepreneurs when compared to their male counterparts.

INTRODUCTION

The term "glass ceiling" entered the corporate conversation in 1986 when Hymowitz and Schellhardt first coined the expression in the *Wall Street Journal.*[1] The concept continues to gain currency among scholars and is emerging as a core topic in the management literature (e.g., Adams & Funk, 2012; Akande, 2013; Glass & Cook, 2016). Glass ceilings are defined as invisible organizational phenomena in which overt and subtle barriers to managerial advancement exist for women (Ragins, Townsend, & Mattis, 1998). As described in the quote below from Robert B. Reich, U.S. Secretary of Labor, and Chairman of the Federal Glass Ceiling Commission, glass ceilings are perceived to exist and persist in management leadership hierarchies:

The research [conversation] indicates that where there are women and minorities in high places, their compensation is lower … Nor does the evidence indicate that the glass ceiling is a temporary phenomenon. In fact, the research cited [in the Federal Glass Ceiling Commission Report] finds relatively few women and minorities in the positions most likely to lead to the top—the "pipeline" … In short, the fact-finding report tells us that the world at the top of the corporate hierarchy does not yet look anything like America. (Glass Ceiling Commission Final Report, 1995)

Since publication of this landmark report in 1995, a number of research studies support its basic claims. White males have been found to most likely achieve higher pay and increased promotion opportunities (Judge, Cable, Boudreau, & Bretz, 1995), women are more likely to experience greater challenges when promoted to CEO and then are allowed less room for error when in place as compared to males (Cook & Glass, 2014), and women appear to have less authority than men in the workplace. For cases where women do have authority, it is more likely to be at lower levels and more often than not, it is in the supervision of other women or minorities (Smith, 2002). Research on ethnic minority glass ceilings as the focus are rare. At the beginning, literature on glass ceilings pertained to just gender, but fairly quickly ethnic minorities have been grouped together in the diversity research conversation. The majority of studies do confirm that glass ceilings still exist for minorities, and that stereotyping, biases, and subtle racism still stand as barriers to removal (Wilson, 2014).

Prior research on glass ceilings primarily deal with identification of the phenomenon by considering differences in salary or management level

21 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/does-a-federal-glass-ceiling-have-differential-effects-on-female-and-male-technology-entrepreneurs/233192

Related Content

Translanguaging as a Pedagogical Practice for Successful Inclusion in Linguistically and Culturally Diverse Classrooms
Isaak Papadopoulos (2022). *Handbook of Research on Policies and Practices for Assessing Inclusive Teaching and Learning (pp. 422-448).*
www.irma-international.org/chapter/translanguaging-as-a-pedagogical-practice-for-successful-inclusion-in-linguistically-and-culturally-diverse-classrooms/294240

A Case Study on Useful Aids for Students With Communication Disorders in Inclusive Settings
Yumi Hisatsuneand Shigeru Ikuta (2023). *Developing Inclusive Environments in Education: Global Practices and Curricula (pp. 95-116).*
www.irma-international.org/chapter/a-case-study-on-useful-aids-for-students-with-communication-disorders-in-inclusive-settings/325773

"Struggle" for Trust – Unintended Consequences of an "Integration Project"
Markéta Levínskáand David Doubek (2019). *International Journal of Bias, Identity and Diversities in Education (pp. 14-27).*
www.irma-international.org/article/struggle-for-trust--unintended-consequences-of-an-integration-project/231471

Signs of Plurilingualism: Current Plurilingual Countermoves in Danish Higher Education
Petra Daryai-Hansenand Marta Kirilova (2019). *International Journal of Bias, Identity and Diversities in Education (pp. 43-58).*
www.irma-international.org/article/signs-of-plurilingualism/231473

Using Digital Storytelling to Inform Students About Bullying: Results of a Pilot
Program