

WHAT HAPPENS AFTER GLASS CEILINGS SHATTER?

THE INFLUENCE A FIRST FEMALE LEADER HAS ON WOMEN'S REPRESENTATION IN ELECTED OFFICES



Curtis Bell | June 2016

An OEF Research Discussion Paper



RESEARCH

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EXECUTIVE SUMMARY

Hillary Rodham Clinton ended her 2008 presidential campaign by saying, “although we were not able to shatter that highest and hardest glass ceiling this time, thanks to you it has 18 million cracks in it.” This oft-used glass ceiling analogy¹ conveys two beliefs about women in politics. First, it claims the first woman to reach the highest elected office in government must overcome extraordinary obstacles to do so. Second, and perhaps more importantly, it also implies that “shattering” this glass ceiling causes lasting change that will ease the path for other women who follow.

But is there any evidence to support this? Could a Clinton victory increase the share of women in the highest elected offices of the United States, or even lead to subsequent female presidents? Since American voters have never voted a woman into the White House, we need to look beyond American politics to see how women in the highest elected office might influence women’s access to other elected positions.

This discussion paper leverages data from the 50 democracies that have each already had a female leader to better understand what happens after glass ceilings shatter. The experiences of these countries offer little evidence that a first female president or prime minister brings subsequent women to the same position. There are many more countries that have waited decades for a second female leader (e.g., the United Kingdom and India) than there are countries that have elected multiple women to the highest office.

However, countries with current and former female leaders have significantly higher numbers of women in their legislatures, and this gap in women’s representation persists even after accounting for confounding factors like greater economic opportunities for women, greater gender equity, and legal gender quotas. Previous research on how *descriptive representation* (the number of women in a legislature) influences *substantive representation* (advocacy for that group) strongly suggests even small changes in the gender diversity of elected bodies can have profound effects on legislation.² If a path-breaking female leader brings more women into elected offices, this is likely to have important consequences for public policy.

The first section of the paper briefly reviews recent research on the drivers of women’s participation in politics and highlights some plausible reasons a female president or prime minister could bring more women into power. The second section offers descriptive data on where, when, and how other countries shattered their glass ceilings by first inaugurating a woman to the highest elected office. The third and fourth sections discuss implications for subsequent female leaders and female representation in national legislatures. A final section concludes the paper and briefly discusses implications of the analysis.

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Cover image: Hillary Clinton after winning New York primary. Photo by Spencer Platt/Getty Images.

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WHY MIGHT SHATTERING THE GLASS CEILING MATTER?

Research on women in politics offers two pathways by which a female leader may increase women's access to other elected offices: by making voters more willing to vote for women and by making female candidates more likely to run in the first place.³

CHANGING VOTERS' PERCEPTIONS OF FEMALE CANDIDATES

Early work on women's representation explored whether female candidates for office are stymied by conscious and unconscious voter biases that disadvantage aspiring female leaders. Much of this research used laboratory experiments to see how candidate gender influences participants' perceptions of candidate strengths and weaknesses given identical resumes and media coverage. Study participants often associated female candidates with stereotypically feminine traits, though there are probably several complicating factors such as incumbency, a participant's education level and sex, the presence of ongoing crises like foreign policy emergencies, and even perceptions of the candidate's physical beauty.⁴

Other work is more skeptical of the influence of these voter biases, countering that experimental settings produce effects that are much greater than those occurring in real elections between real candidates.⁵ Surveys of the American electorate find that most voters actually desire more gender parity in politics and would be likely to support female officeholders if they were running in their districts.⁶ The research literature acknowledges sexism among *some* voters, but many researchers have turned away from the idea of widespread overt sexism as a persuasive explanation for the low level of women's representation. However, others worry that voter surveys are marred by a social desirability bias that causes respondents to affirm their support for gender equity in politics despite private sexist biases that keep them from actually voting for women.⁷

There is less debate over the effects high-profile female politicians have on voters once they take office. Recent studies show that female politicians serve as important role models for young women and motivate them to become more politically active.⁸ Women are substantially more likely to vote for female candidates,⁹ so getting motivated female voters to the polls to vote for a woman at the top of the ticket can have positive spillover effects for other female candidates on the ballot. Importantly, several studies indicate high-profile women in power erode traditional gender norms, which could then help other women vying for elected office later.¹⁰ This research provides many reasons to believe a first female president or prime minister could foreshadow an era of greater women's representation in elected offices.

ENCOURAGING AND ENABLING MORE WOMEN TO VIE FOR ELECTED OFFICE

Once they decide to run, female candidates tend to fare as well or even better than male candidates.¹¹ This fact leads another group of researchers to argue that the gender gap in political representation is caused by fewer female candidates, and not by widespread voter sexism. But why don't women run, and why might path-breaking first female leaders cause more women to run for elected offices?

Political scientists Jennifer L. Lawless and Richard L. Fox have documented convincing evidence that there is a political ambition gap that leaves qualified women less likely to run for elected offices than comparably qualified men.¹² Lawless and Fox identify five primary reasons¹³ women have lower levels of political ambition.

FIVE REASONS WOMEN ARE LESS POLITICALLY AMBITIOUS THAN MEN (LAWLESS AND FOX)

- 1.** *Due to socialization, women are less likely to consider careers in politics.*
- 2.** *Young women are less exposed to political news, and consequently are less interested in politics.*
- 3.** *Women are less competitive, perhaps due to less or different competitive socialization.*
- 4.** *Women are less likely to be encouraged to run for office.*
- 5.** *Given similar qualifications, women are less likely to consider themselves qualified for office.*

The presence of a female candidate in the highest executive office has a direct influence on many of these drivers of the political ambition gap. We know that female politicians serve as role models for adolescent women and drive them toward greater political engagement.¹⁴ This engagement could directly address the first and second causes of the ambition gap. One recent study documented a significant increase in political discussions among women of all ages where women’s political representation is greater.¹⁵ Other work has shown that political discussions measurably increase other types of civic participation.¹⁶ These findings are supported by survey studies that show women have more political knowledge about women in power than they do about other areas of political knowledge.¹⁷

Some of the research done by Lawless and Fox shows women are less competitive, even if they have just as much political knowledge as men. They make a fascinating connection between the competition gap and involvement in organized sports. Women who did not participate in organized sports during their formative years are about 20% less interested than men in competing for office, but those who did participate are only 11% less interested. Lawless and Fox test this mechanism by surveying young women about their future plans. Participation in sports increased future political ambition by 25% in women and only 15% in men.¹⁸

This is an important study because it demonstrates how deeply engrained the causes of the political ambition gap can be; choice of youth activities can affect interest in elected office decades later! This fact makes it all the more remarkable that seeing women in power actually increases other women’s desire to compete for office. One analysis of U.S. House races between 1956 and 2002 finds women were more likely to challenge incumbents when those incumbents were female. As the number of female incumbents increases, so does the number of female newcomers interested in vying for political office.¹⁹

Female heads of government can increase the competitiveness of female candidates much more directly. Women in power are more likely to appoint other women to cabinet- or ministry-level positions, and such appointments can boost the qualifications of women who might later run for office.²⁰ Hillary Clinton’s experience demonstrates this very well, as her time as the appointed Secretary of State is widely perceived to be her most important qualification for the presidency—even more important than her decades of advocacy or her eight years representing one of the country’s largest states in the United States Senate.

Legal gender quotas—typically specified so that parties’ candidate lists must include some minimum percentage of female candidates—are more likely to be adopted when more women are in elected office.²¹ In this way, having a woman in power can provide an enduring boost to other women in politics. Such steps increase incentives for women to enter politics and break down gender stereotypes that favor male candidates. Although quotas can be circumvented by informal institutions and male-dominated networks, they have proven to be a useful tool for increasing women’s descriptive representation.²²

Secretary of State Hillary Clinton shakes hands with Liberian president Ellen Johnson Sirleaf; photo by U.S. Department of State



WHERE HAVE GLASS CEILINGS ALREADY SHATTERED?

Though the United States does not have a rich history of women in the highest levels of government, other countries do; 50 countries have had a woman in the highest office²³ at some point since 1950, and seven currently have a woman in power as of June 2016.

FIGURE 1: Countries With Current And Former Female Leaders



Women have had the most success coming to power in northern Europe, South Asia, and Latin America. These three regions having disparate cultures and democratic traditions shows that explanations relying on culture and religion are likely to come up short. Many South American countries have had a female president, and in the June 2016 Peruvian presidential run-off, Keiko Fujimori came within one half of one percentage point of becoming that country's first female leader. Four of the five parliamentary democracies in Scandinavia have had at least one female prime minister, as have all three of the large, populous countries on the Indian subcontinent. The four countries with the largest Muslim populations have had female leaders, and women have dominated politics in Bangladesh for nearly three decades.

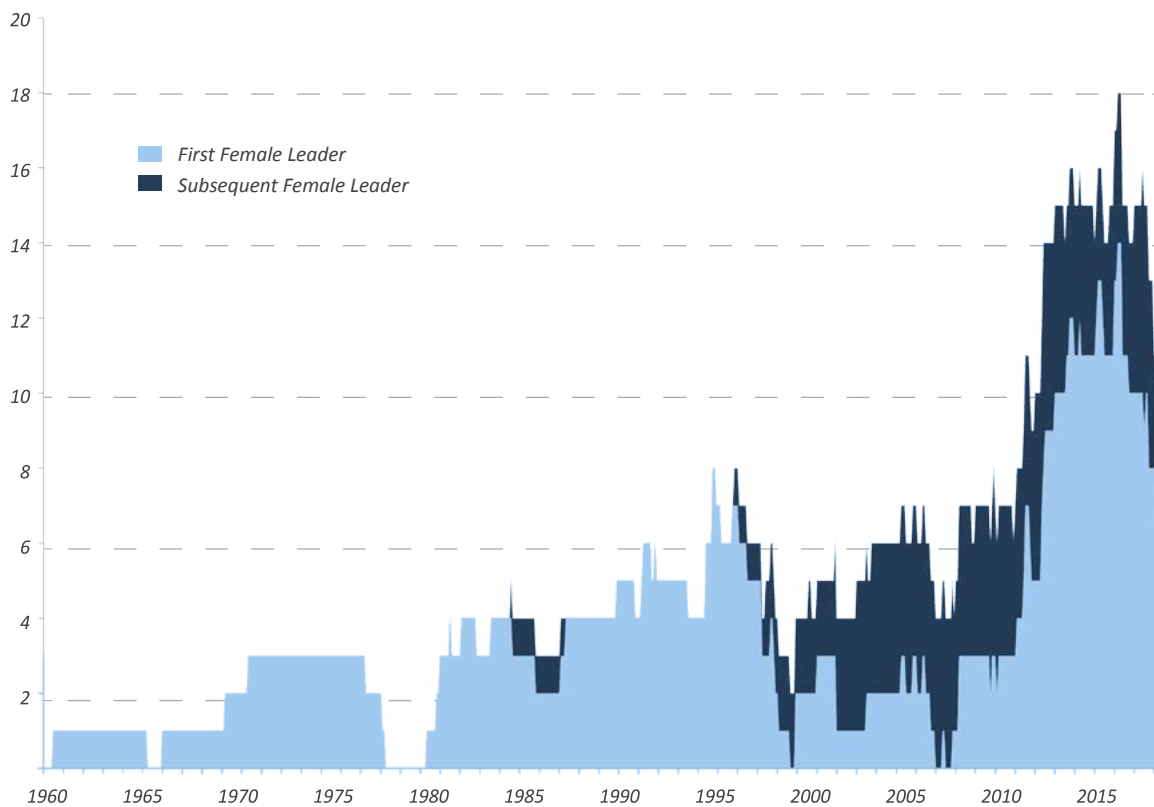
These numbers may overstate the extent to which glass ceilings have shattered because many women reached power through appointment or mid-term transition rather than election. Of the eight women to have served in the highest role in a sub-Saharan African country, only one—Ellen Johnson Sirleaf—was elected before taking office. Canada's only female prime minister, Kim Campbell, took power mid-term and then lost the subsequent election. Indonesia's only female president, Megawati Sukarnoputri, was never elected. Fifty countries have had a female leader, but only 29 elected a woman to the position. The next map (see Figure 2) disaggregates these routes to political power.

FIGURE 2: How Glass Ceilings Have Shattered In Fifty Countries



Nearly a quarter of the world’s states have had a female leader at some point since 1950, but this is only a recent phenomenon in most places. The first elected female leader didn’t enter office until 1960, and women never simultaneously led more than five states until after the end of the Cold War. Much of the increase since 1990 is not due to more women being elected; many women were selected for post-conflict appointments in places as diverse as Haiti, Liberia, Kyrgyzstan, and the Central African Republic.

FIGURE 3: Women in Highest Office By Month, January 1960–Present



There has been a notable rise in the number of female presidents and prime ministers since 2000. There were as many as 18 in the spring of 2014. The nine female leaders to serve thus far in 2016 are Chancellor Angela Merkel (Germany), President Dilma Rousseff (Brazil), President Park Geun-hye (South Korea), President Michelle Bachelet (Chile), Prime Minister Sheikh Hasina (Bangladesh), President Ellen Johnson Sirleaf (Liberia), Prime Minister Erna Solberg (Norway), Former Prime Minister Laimdota Straujuma (Latvia), and President Dalia Grybauskaitė (Lithuania).

The last two years have seen a sharp drop in the number of women in the highest elected office, from 18 in May 2014 to only eight in June 2016. If President Rousseff is ultimately impeached in Brazil, the number of female leaders will fall to its lowest level since before 2009.

DO FEMALE LEADERS INFLUENCE THE EMERGENCE OF SUBSEQUENT FEMALE LEADERS?

Of the 50 countries that have had a woman in the highest office at some point since 1950, only 12 have had multiple women in this role. There are anomalous cases like Argentina, Finland, and New Zealand, where the ascent of one female president or prime minister preceded other women taking power. But far more common are cases like India, the United Kingdom, Israel, and Pakistan, where an iconic woman held power years ago but has yet to be followed by another woman in the same position. A similar pattern holds in state-level American politics; 27 of 50 states have had a female governor, but just five have elected multiple women to this position: Texas, New Hampshire, Arizona, Kansas, and Washington.



Bangladesh is the only country without a rotating head system (e.g. Switzerland) to have elected women in consecutive elections. Rival Prime Ministers Khaleda Zia and Sheikh Hasina have won at least six Bangladeshi elections, dating back to 1991.

Left: Khaleda Zia at a book opening ceremony; photo by Mohammed Tawsif Salam. Right: Sheikh Hasina at the Kremlin

If we exclude outlier cases like the rotating head system in Switzerland and the dual Captains Regent system in San Marino, we find only two cases where a female leader immediately succeeded another female leader: Bangladesh and Swaziland. In Bangladesh, Prime Ministers Khaleda Zia and Sheikh Hasina—two women from rival Bangladeshi political dynasties—have alternated power through elections for decades. The Swazi case is very anomalous; when King Sobhuza II died in 1983, power in Africa’s last remaining monarchy was exchanged between two of his wives each serving as Queen Regent until the current king, Mswati III, took the throne in 1986.

The wait for a second female leader after the first has been much longer elsewhere. More than three decades passed between the end of Isabel Perón’s tenure in Argentina (1976) and the inauguration of Cristina Kirchner in 2007. Israel, India, and the United Kingdom are among the 14 countries that continue to wait for another woman in power more than 15 years after their first female leaders left office.

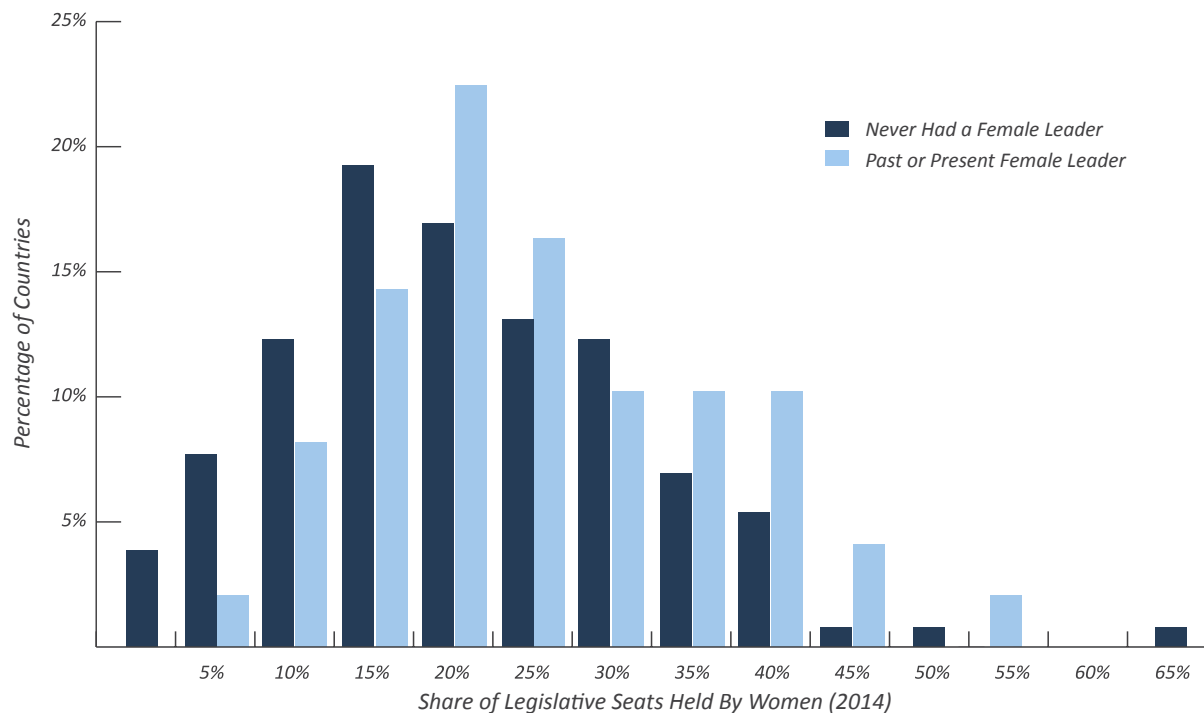
In this most restrictive sense, a first female leader has not heralded subsequent female leaders. There is no evidence to suggest that a shattered glass ceiling significantly raises the chances of other women taking power in the near future. The United States would be exceptional if a Hillary Clinton presidency were to be followed by a new era in which women were more often elected to the highest office.

Only 25% of the countries to have had a female leader have had multiple female leaders. Twelve have been waiting more than 20 years for their next female leader.

However, it is important to note that because many democracies have only recently elected women, many countries have not had many opportunities to elect second or third female leaders. We do not yet know much about the long-term effects of female presidents and prime ministers. In time, women who enter politics at lower levels of government may gain experience and emerge as viable contenders for the highest elected offices. If women began in lower elected offices during a female leader's tenure, then it would take some time before a large cohort of junior female politicians resulted in another woman in the highest office. Alternatively, the shattered glass ceilings could solidify again as the legacy of female leadership fades from political memory. We may gain some insight on this by considering how female presidents and prime ministers influence the prevalence of women in lower-ranking elected offices.

SHATTERED GLASS CEILINGS AND WOMEN'S REPRESENTATION IN NATIONAL LEGISLATURES

FIGURE 4: Women's Representation In National Legislatures



As of 2014, women held 24.1% of the legislative seats in democracies that have had a female leader and only 18.6% of seats in democracies that have always been led by men. In the 535-member United States Congress, this 5.5% difference equates to roughly 30 additional women on Capitol Hill—more than enough to substantively influence the type of legislation that is advanced to the president's desk.²⁴

Why is there a difference in descriptive representation between democracies that have and have not had a female leader (Figure 4)? Does having had a female leader *cause* greater women's representation in other elected positions, or is this merely coincidental? After all, countries that are more likely to elect women into the highest leadership positions should also be more likely to elect them into less-senior roles.

We can better isolate any “ceiling-shattering” effect linking female leaders to women’s representation in legislatures with a statistical analysis that accounts for these other drivers of women in politics. We obtained data for other relevant factors to serve as control variables in cross-national regressions (see Table 1).

TABLE 1: Variables Included in Statistical Model of “Ceiling-Shattering” Effects

CONTROL VARIABLE	EXPECTED RELATIONSHIP WITH WOMEN’S REPRESENTATION
<i>Legal Structures</i>	
Parliamentary Democracy	Increases representation vis-à-vis presidential systems
Legal Gender Quota	Increases representation when quota is in effect
Logged Regime Duration (years)	Increases in more stable, longer-enduring governments
<i>Measures of Women’s Economic Empowerment</i>	
Logged Per Capita Gross Domestic Product	Increases as countries become more developed
Fertility Rate	Decreases as women have more children per person
Women’s Participation in the Labor Force	Increases as more women enter the labor force
Infant Mortality Rate	Decreases as welfare, as measured by IMR declines
<i>Regional and Time-Dependent Gender Norms</i>	
Region Identifiers	Decreased representation in Asia and North America
Year	Increases with spread of gender equity norms over time

Countries with advanced economies tend to elect more women, as do countries with greater gender parity in the workforce, longer-enduring democratic governments, legal gender quotas, and parliamentary constitutions.²⁵ Democracies in Europe, the Americas, and sub-Saharan Africa elect substantially more women than those in Asia, the Pacific, and the Middle East. Even after accounting for all of these factors, democracies that have never had a female leader have roughly 4% fewer women in their legislatures than those that have had a female leader at some point since 1950, and 6% fewer than countries currently served by a female leader.

Even after accounting for other predictors of women in politics, democracies that have had a female leader have 4-6% more women in the legislature than democracies that have always had a man in the highest elected office.

How important is this 4–6% effect? In most countries, this represents dozens more women in the legislature. To achieve a comparable effect, a country could put a gender quota in place or drastically improve economic opportunities for women. Other statistical tests that are even more sensitive to unobserved differences between countries confirm similar results.²⁶ Even while controlling for several other predictors of women’s involvement in politics, countries that have had a female leader have significantly more women in the legislature.

Women in Parliaments Annual Summit; photo by European Parliament, Flickr



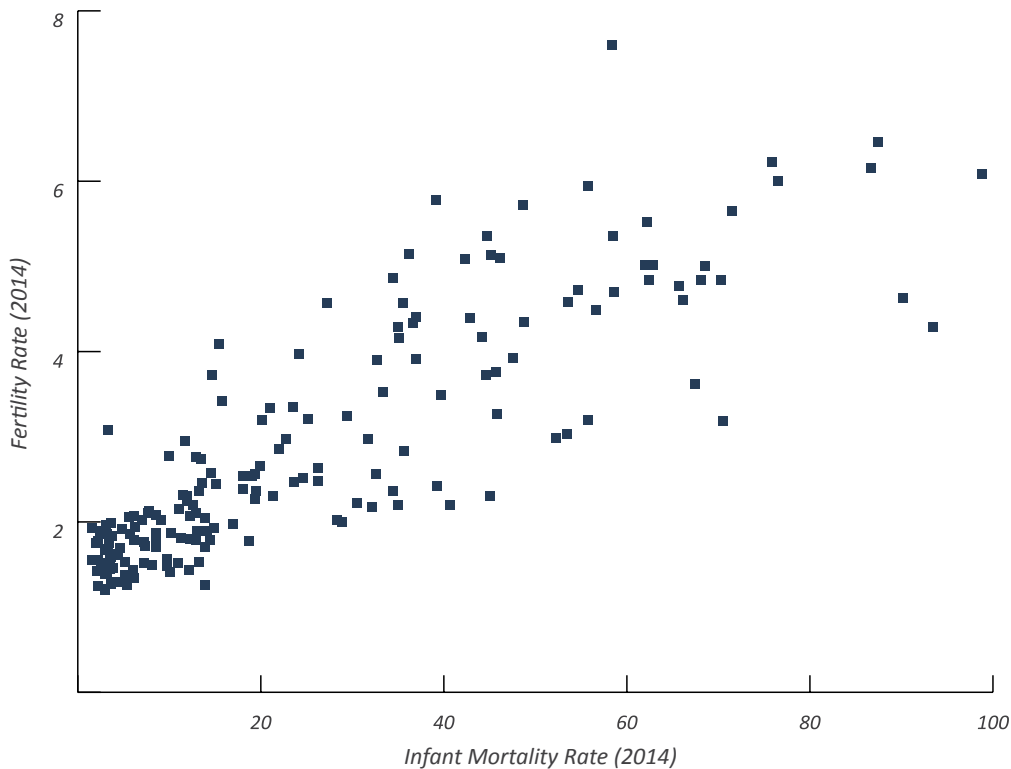
TABLE 2: Determinants of Female Representation in Democratic Legislatures

VARIABLE	COEFFICIENT	SIGNIFICANCE	INTERPRETATION
Current Female Leader	6.32	p < 0.000	Increases representation 6%
Former Female Leader	4.53	p < 0.000	Increases representation 4%
Parliamentary Democracy	1.50	p < 0.002	Increases representation 1.5%
Gender Quota	4.12	p < 0.000	Increases representation 4%
Logged Regime Duration	0.86	p < 0.001	Increases representation, variable rate
Logged Per Capita GDP	3.15	p < 0.000	Increases representation, variable rate
Fertility Rate	1.31	p < 0.000	Increases representation 1.3% per child
Women/Men in Labor Force	0.06	p < 0.000	Increases as women enter work force
Infant Mortality Rate	-0.03	p < 0.096	Decreases with IMR, weak relationship
Year	0.28	p < 0.000	Increases by 0.28% each year
Americas	4.20	p < 0.000	Higher in Americas than in Asia
Europe	6.34	p < 0.000	Higher in Europe than in Asia
Sub-Saharan Africa	6.34	p < 0.000	Higher in Africa than in Asia
Middle East/North Africa	-4.80	p < 0.000	Lower in Middle East than in Asia

N = 1,822 country-year observations over 117 democracies
 R-Squared = 0.38

The only unexpected results to emerge from the analysis relate to infant mortality (surprisingly weak) and fertility rate (surprisingly positive instead of negative). These surprises are easily explained. When two variables are very closely related to each other, the variance they share can complicate the interpretation of both estimated effects. Figure 5 shows that the statistical correlation (0.83) between infant mortality and fertility rate is very high; as the risk of infant death increases, women have more children. Every marker represents one country in 2014.

FIGURE 5: The Correlation Between Infant Mortality And Fertility In 2014



When results are re-evaluated with infant mortality rate, per capita gross domestic product, and fertility rate in separate models, this interference disappears and the results are as expected. A 10-death per 1,000 drop in infant mortality rate increases women's representation in the legislature by 7%. The effect of fertility decreases so that women are most likely to be elected where women average fewer children.

Though women in the highest positions of power have increased the gender diversity in some legislatures more than others—Brazil's is quite low (9%) despite Dilma Rousseff's leadership—many anecdotes illustrate this effect. During Corazon Aquino's presidency in the Philippines (1986–1992), only 9% of the country's legislators were women. This was very near the global average among democracies at the time. This figure remained at 10–12% for nearly ten years after she left office, only increasing sharply to 18% when the country's second female president, Gloria Macapagal Arroyo, was elected in 2001. Female representation has not dropped off since Arroyo left in 2010. In fact, between 2010 and 2014 it climbed from 22% to 27%. In nearby Indonesia, only 8% of the country's legislators were women when Megawati Sukarnoputri was inaugurated in 2001. This increased to 11–12% by the time she left office and has since doubled to 17–18%.

CONCLUSION: FOR WHOM DOES A SHATTERED GLASS CEILING MATTER?

Evidence from the 50 countries that have already placed a woman in the highest elected office strongly suggests that the glass ceiling effect is real: after a woman serves in the country's highest elected office, there tends to be a sizeable increase in the number of women elected into the legislature. The average size of this effect is about 4–6%. This statistical result is robust over several different modeling decisions and while controlling for other factors that strongly influence the prevalence of women in elected offices.

Furthermore, research on women and politics provides ample explanations for the findings. The positive influence women in power have on other women's political engagement and competitiveness disproportionately affects younger women—women who will begin with civic participation and lower-level elected offices before possibly rising through the political ranks toward more prestigious elected positions. It is therefore unsurprising that shattered glass ceilings have a much greater effect on lower-profile elections. The women elected into legislatures today will form a large pool of viable female candidates for a country's most important leadership positions in the years to come. Glass ceilings shatter with important consequences, but those consequences may take a generation to become fully realized.

But even if the first female president of the United States is unlikely to break a glass ceiling for future female presidential candidates in the short term, all available data point to creating greater opportunity for other women to serve in government. If the United States is anything like the 50 countries that have already placed women in the highest office, then we should expect an enduring increase in the number of women in Congress—an increase that self-perpetuates as the ascent of more female legislators diminishes gender stereotypes, establishes new norms around gender diversity, strengthens the credentials of women who will later vie for higher office, and brings more diverse perspectives into American politics.

NOTES

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 23. The title of the person in the highest office varies across political systems, but this person is nearly always the president or prime minister. Identifying the highest office is less straightforward in the semi-presidential systems that are so prevalent in eastern Europe, but this analysis generally identifies the highest leader as the “head of government” with the most power over domestic policy, rather than the “head of state” who has mostly ceremonial duties and represents the country in foreign relations.
 24. See: Swers, Michele L. 2005. “Connection Descriptive and Substantive Representation: An Analysis of Sex Differences in Cosponsorship Activity.” *Legislative Studies Quarterly*, 30(3): 407–433.
 25. See: Paxton, Pamela, Melanie M. Hughes, and Matthew A. Painter II. 2010. “Growth in Women’s Political Representation: A Longitudinal Exploration of Democracy, Electoral System and Gender Quotas.” *European Journal of Political Research*, 49(1): 25–52; Iversen, Torben and Frances Rosenbluth. 2008. “Work and Power: The Connection Between Female Labor Force Participation and Female Political Representation.” *Annual Review of Political Science*, 11(1): 479–495; Matland, Richard E. 1998. “Women’s Representation in National Legislatures: Developed and Developing Countries.” *Legislative Studies Quarterly*, 23(1): 109–125; Hill, David B. 1981. “Political Culture and Female Political Representation.” *Journal of Politics*, 43(1): 159–168.
 26. In addition to the OLS results included in Table 2, we also used fixed effects models and general estimating equations without time and region controls. Results hold whether one accounts for former female leaders with a simple dichotomous indicator or with a function that counts the number of years since the last women left office.



R E S E A R C H

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