

The Past, Present and Future of Research on Gender and Corruption

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Abstract

This chapter argues that the well-documented empirical relationship between gender and corruption is the product of multiple causal mechanisms that push and pull against one another. In some contexts, mechanisms linking gender and corruption push in the same direction and create a strong, statistically significant relationship between the two. In other contexts, these mechanisms can cancel each other out to create a weak relationship or none at all. The chapter's key conclusion is that future research should focus on separately identifying the multiple causal mechanisms that make women less susceptible to corruption than men with particular emphasis on how institutional, social, or individual characteristics can condition or modify the relationship.

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In 2001, Dollar et al. (2001) reported an interesting finding from cross-national time-series data: countries with a greater proportion of women in their parliament *also* experience less corruption in their government according to measures like the Transparency International (2019) Corruption Perception Index. This finding was quickly confirmed by Swamy et al. (2001), who also discovered an individual-level relationship between tolerance for corruption and gender in the World Values Survey data (Inglehart et al., 2020). The relationship between gender and corruption they discovered was substantively strong and theoretically surprising. This discovery touched off a flurry of research attempting to understand how the gender-corruption relationship works and apply it as a policy solution to the pressing problem of corruption around the world.

In this chapter, we describe how research into gender and corruption has evolved over time and what we believe are the most promising avenues for future study. Although there is now little doubt among scholars that gender is causally entwined with tolerance for and participation in corruption, a common understanding of the processes that relate the two has not been reached despite years of sustained empirical research with causal inference techniques (Angrist and Krueger, 1999). We speculate that there is a confusing pattern of results in prior work despite sound research design because the relationship between gender on corruption is the product of multiple mechanisms that push and pull against one another. In some contexts, mechanisms linking gender and corruption push in the same direction and create a strong, statistically significant relationship between the two. In other contexts, these mechanisms can cancel each other out to create a weak relationship or none at all. Such findings do not translate easily into actionable policy precisely because (a) there are multiple causal mechanisms underlying them and (b) the strength and/or direction of these mechanisms is context-sensitive.

Our key argument is that future research should **focus on separately identifying multiple causal mechanisms that make women less susceptible to corruption than**

men, with particular emphasis on how institutional, social, or individual characteristics can condition or modify the relationship. This may require generating new theories and testing hypotheses from them, but (as we will explain in this chapter) many such theories already exist. Therefore, we think there is a more pressing need to empirically separate and measure the strength of various causal pathways leading women to be more resistant to corruption. Special attention must also be paid to simultaneity when groups (countries, agencies, etc.) are the unit of analysis: more women in government can reduce corruption, but corruption can also reduce the participation of women in government.

In a nutshell, we think that a falsificationist research program—that is, trying to collect evidence that critically tests the predictions of a particular theory—is not quite appropriate for this field. Of course, hypotheses should still be derived from theories and tested with evidence. But the pattern of evidence to date implies that we cannot expect one theory to rise above the others in explaining why gender and corruption are connected. Some mechanisms will be operative in some contexts but not others; multiple mechanisms may drive behavior in certain places and times while one mechanism dominates in another. Our goal must be to empirically separate and identify these mechanisms in contexts and, from this heterogeneity, develop an overarching theoretical framework describing why and how these mechanisms are activated or de-activated.

Empirical Origins

The initial work into the relationship between gender and corruption was, for the most part, empirically driven; there was no strong theoretical framework from which the cross-national association between gender and corruption was derived. Dollar et al. (2001) and Swamy et al. (2001) are holotypes for this stage of research in the field. Both are based on observational data. They offered possible interpretations for their findings but mostly left theory-testing

to future research.

When early studies offered an explanation for their findings, they drew on psychological and sociological evidence of a more pro-social orientation of women compared to men. For example, Dollar et al. (2001) cites several studies purporting to show that women are on average more generous and helpful than men.¹ One of these studies, Eckel and Grossman (2008), finds that men behave more selfishly than women in dictator games played in a laboratory (Hoffman et al., 1994), where each subject has the chance to unilaterally and anonymously decide how much of a pot of money to share with an anonymous partner. Swamy et al. (2001, p. 51) does not offer a causal explanation for the gender-corruption link, but its authors note that they are:

reassured to learn that our evidence is entirely consistent with the findings of leading criminologists. For instance, Gottfredson and Hirschi (1990, p. 194) show... that arrests for embezzlement per 100,000 white-collar workers are higher for men for every age group. They also cite a variety of sources to make the case that across age groups, countries, and types of crime, the evidence regarding higher participation of men is remarkably uniform. The following summary statement from a study conducted by the National Academy of Sciences of the United States reflects the confidence with which the gender differential has been identified in the criminology literature:² “The most consistent pattern with respect to gender is the extent to which male criminal participation in serious crimes at any age greatly exceeds that of females, regardless of the source of data, crime type, level of involvement, or measure of participation.”

Evidence also suggests that, although both men and women in the United States vote based

¹It is worth noting that the first meta-analytic study they cite, Eagly and Crowley (1986), actually comes to the opposite conclusion. Dollar et al. summarize this study by saying that “women are more likely to exhibit ‘helping’ behavior” (p. 423) but the study itself concludes that “in general men helped more than women and women received more help than men” (p. 283).

²Blumstein et al. (1986), cited in Gottfredson and Hirschi (1990).

on what they perceive as the nation’s economic interests, men are (at least in some situations) more strongly influenced by their personal self-interests than women (Kam, 2009; Clarke et al., 2005; Welch and Hibbing, 1992).³ Against this background of prior knowledge, which “impl[ies] that women will be less likely to sacrifice the common good for personal (material) gain,” it is logical to deduce that “increased female participation leads to more honest government” (Dollar et al., 2001, p. 424).

There was some initial skepticism of whether the correlations reported by this early work represented a causal relationship between women and corruption. For example, Sung (2003) examined the possibility that initial findings were spurious, as the relationship between women in parliament and corruption becomes statistically and substantively weaker once a measure of democracy is controlled for. But this skepticism was quickly dampened by subsequent research that seemed to confirm the initial findings. Laboratory experiments like Schulze and Frank (2003), Alatas et al. (2009) and Beaman et al. (2009) demonstrated that spuriousness cannot fully explain the link between gender and corruption: at least in some environments (as described in the next section), women are less likely to engage in bribery even when facing identical incentives to men. Rivas (2013) found that women were no less likely than men to accept bribes, but *were* less likely to reciprocate the bribe with preferential treatment.

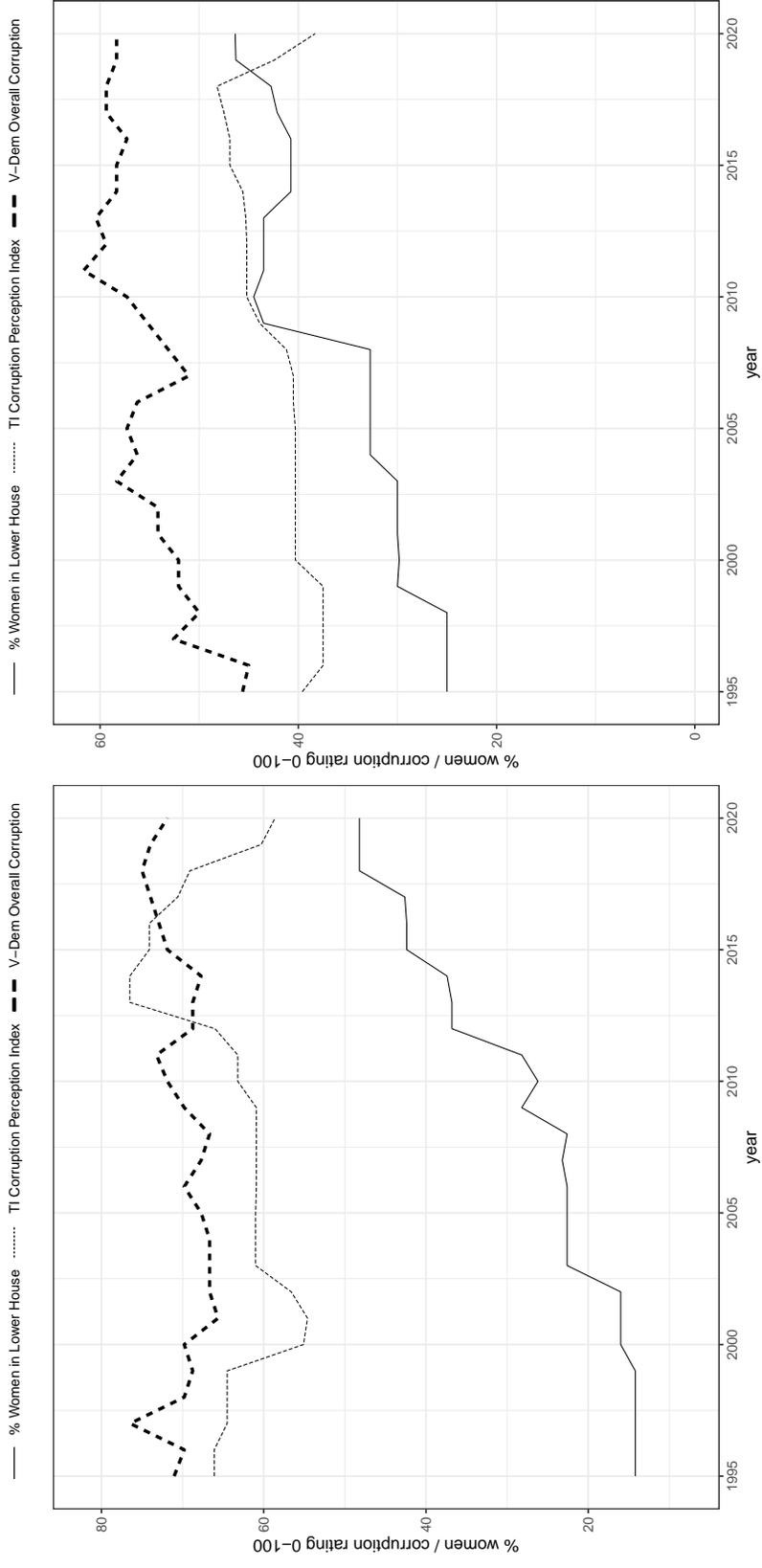
Indeed, some of this early work is optimistic that its results can translate directly into policy. Swamy et al. (2001, p. 53) concludes by saying that “given this evidence, we suspect the gender differential in corruption will be stable in the medium term, and policy initiatives [to increase women’s representation]... will indeed reduce corruption.” Even more surprisingly, some policy-makers implemented feminization initiatives contemporaneously with the discovery of the gender-corruption link (Moore, 1999; McDermott, 1999; UN Women, 2011).

³For example, “Men rely significantly on how their households are doing financially in their decision calculus. When times are tough for them and their own, they punish the incumbent. Women, on the other hand, rely significantly less on household economic evaluations in their vote choice” (Kam, 2009, p. 620)

An increasing role for women in government worldwide had an unclear effect on corruption. For example, the establishment of a female-only traffic police force seems to have decreased incidences of bribery in Peru, although that perception was not universally shared nor did it result in larger-scale changes in the organization’s culture (Karim, 2011). Moreover, when studying women’s police stations that specialize in pursuing domestic and sexual violence cases, a case study in four Latin American countries found that “an all-female staff does not necessarily guarantee better service quality” (UN Women, 2011, p. 5). It is not hard to come up with examples of countries with greatly increasing levels of women’s representation but persistent corruption. Figure 1 shows two such examples: Mexico (Figure 1a) and South Africa (Figure 1b). In both cases, women’s representation in the lower house of the legislature has markedly increased between 1995 and 2020, reaching approximate parity by the end of the time period. Both countries still have substantial corruption according to the Varieties of Democracy Project’s Political Corruption Index (Coppedge et al., 2021a) and the Transparency International (2019) Corruption Perception Index.

The uncertain effectiveness of feminization to reduce corruption (and the natural progress of scientific inquiry) led to the next stage of the research program studying corruption and gender: questioning the nature of the causal linkage between the two. If women were intrinsically and universally more resistant to corruption than men, as Dollar et al. (2001) suggested on the basis of sociological differences between men and women, we would expect to see greater women’s representation in government to be associated with lower corruption in that government virtually everywhere. But, as we see in Figure 1, that is not so. This is the basis for the puzzle that the second stage of research sought to solve.

Figure 1: Change in Women's Representation and Corruption over Time for Two Countries



(a) Mexico

(b) South Africa

The graphs show the change in corruption and women's representation over time for two countries, Mexico (Figure 1a) and South Africa (Figure 1b). Corruption is measured using the Varieties of Democracy Political Corruption index (Coppedge et al., 2021a) and the Transparency International (2019) Corruption Perception index. Women's representation is measured by the proportion of women in the lower house of the legislature from the V-Dem v. 11.1 data set (Coppedge et al., 2021b).

Context Sensitivity and Reverse Causality

As highlighted by the previous section, the early experiments designed to study the relationship between gender and corruption confirmed a causal link between the two. These papers bolstered the credibility of Dollar et al. (2001) and Swamy et al. (2001): their discoveries could not be explained away as mere confounding or an artifact of measurement. These experiments also suggested that feminization initiatives could actually work to reduce corruption.

But these experiments *also* indicated that this relationship is complex: gender differences in behavior exist in some contexts but not in others. For example, Alatas et al. (2009) found that women were less likely to engage in corrupt activity but in only one of the four countries they studied. Field and lab experiments by Armantier and Boly (2013) on Canadian and Burkinabe subjects not only found no gender difference in willingness to accept a bribe but also that bribed women provide *more* corrupt benefits to their patron than bribed men. Puzzling findings like these motivated efforts to refine the causal explanation for the gender-corruption link.

Some of the research conducted at this time specifically studied the heterogeneity of the relationship between gender and corruption in different contexts. For example, Esarey and Chirillo (2013) showed that greater women's representation is only associated with lower corruption in democracies, not dictatorships. Additionally, they found that the individual-level gender gap in tolerance for corruption observed in surveys only exists in democracies as well. Esarey and Schwindt-Bayer (2018) and Schwindt-Bayer and Tavits (2016) further indicate that even within democracies only those with relatively strong mechanisms of voter accountability have a strong negative association between women in government and corruption.

This wave of research attempted to use patterns in the gender-corruption relationship to rule out some causal explanations. For example, if a gender-corruption link only exists in

democracies with strong accountability to voters, it is much more difficult to explain that link with women's greater intrinsic moral aversion to corruption. If women were intrinsically averse to corruption, they would presumably be more likely than men to avoid it when serving in dictatorial governments or democracies without clarity of responsibility for policy outcomes. Esarey and Chirillo (2013) proposes the alternative that voters may provide an extrinsic incentive for female politicians to avoid corruption by punishing them more harshly than men for corruption scandals; this incentive would only be relevant in democracies with clarity of responsibility (that stigmatize corruption) and not dictatorships (which operate via patronage, personalistic rule and/or nomenklatura systems).

Still, a large number of potential explanations were consistent with the evidence in the literature at this point. Esarey and Chirillo (2013) notes that women's well-documented greater aversion to risk (Jianakoplos and Bernasek, 1998; Watson and McNaughton, 2007; Eckel and Grossman, 2008) might make them more likely than men to avoid corruption when it is risky (in democracies that punish it) but equally likely to participate in corruption when it is not risky (in dictatorships where corrupt behaviors are integral to governance). Or perhaps women are relative newcomers to the political scene and therefore do not have the opportunities to engage in corruption that more established politicians do (Goetz, 2007; Alhassan-Alolo, 2007), but would be willing to do so once given the opportunity. Maybe cultural factors like masculinity (competitiveness) or power distance (acceptance of power inequality) mediate the link between women's representation and corruption (Debski et al., 2018).

Or perhaps widespread corruption reduces women's involvement in politics instead of (or in addition to) the other way around. Many of the arguments for this direction of causality focus on the effect of corruption on the recruitment of new candidates for office and/or appointed bureaucratic positions. The key insight is that corruption creates the need for secrecy and loyalty among politicians to avoid exposing their corrupt activities. This need

leads politicians to recruit and appoint people they believe they can trust, people who are like them in many ways—including gender. Bjarnegård (2013) offers both cross-national statistical evidence and a detailed case study of Thailand to support her claim that “the clientelist context specifically carries with it incentives for individuals to accumulate homosocial capital” (p. 11), meaning that male-dominated governments are more likely to recruit candidates like themselves in corrupt, clientelist systems. Thus, when “(male) elites involved in cabinet formation will tend to appoint ministers whom they can trust with secretive tasks” (Stockemer and Sundström, 2019, p. 83) the result is that women are excluded from high-level executive branch positions. Along similar lines, Stockemer (2011, p. 697) argues that women are excluded from office because in corrupt countries “political seats can be bought and public officials are elected based on often male-dominated clientelistic networks.” Sundström and Wängnerud (2016, p. 355) make a similar argument that “shadowy arrangements affect the recruitment of women in two ways: (i) they pose a direct obstacle to women when male-dominated networks influence political parties’ candidate selection, and (ii) they pose an indirect obstacle when they influence citizens’ everyday life experiences and make them reluctant to engage in political matters” with this second effect being “larger for women than for men since women, generally speaking, have less power in society.”

Summarily, this stage of research about gender and corruption succeeded at demonstrating that the relationship was far more complex than originally believed. It emphasized the need to rule out simultaneity in future observational studies. Experiments verified that women are (at least sometimes) less likely to approve of and participate in corruption, but cannot determine how much this causal relationship explains the connection we see in cross-national panel data where bidirectional causal linkages are possible. This tranche research also failed to narrow the set of potential explanations for why more women’s representation is associated with lower corruption; indeed, the number of potential explanations that were broadly consistent with the available evidence grew substantially. Thus, this research under-

scored a pressing need for more observational research designed to produce a clear empirical picture of why, how and when women in government are more resistant to corruption.

Theoretical Proliferation

To rule out simultaneity and establish defensible causal links between gender and corruption in real-world governance, the cutting edge of research has taken full advantage of observational causal inference research designs (Angrist and Krueger, 1999). This approach has clarified some important questions. For example, studies using a variety of different instrumental variables for women’s participation in government have confirmed that it does cause reduced corruption in government, at least in some contexts (Jha and Sarangi, 2018; Paweenawat, 2018; Esarey and Schwindt-Bayer, 2019).⁴ It has also firmly established the bi-directionality of causal relationships between gender and corruption in government. For example, the instrumental variables approach taken by Esarey and Schwindt-Bayer (2019) showed that corruption caused reduced women’s representation in addition to women’s representation reducing corruption. Stockemer and Sundström (2019) also found a negative relationship flowing from corruption to a reduced proportion of women in a country’s cabinet. Thus, we now know that it is imprudent to draw policy conclusions from the links we see in studies like Dollar et al. (2001). Observational data is produced by a simultaneous relationship between gender and corruption that is analogous to data on price and quantity that are produced by the intersection of supply and demand curves. If we want to know how increasing women’s representation will reduce corruption, we must work considerably harder.

However, in most cases careful empirical investigation suggests multiple theoretical mech-

⁴For example, Esarey and Schwindt-Bayer (2019) examines only democracies on the basis of earlier findings from Esarey and Schwindt-Bayer (2018) and Esarey and Chirillo (2013) and thus its findings are limited to that context.

anisms of influence. A pattern of confusing, contradictory findings characterizes the empirical record for most of the possible explanations for a link between gender and corruption. There are a large number of instances of this phenomenon in recently published work.

For example, new findings have resurrected explanations for the gender-corruption link that had been apparently falsified in the past. Esarey and Chirillo (2013) concluded that intrinsic gender differences were ruled out by their finding that women are only more resistant to corruption in democracies (see also Boehm, 2015). But Bauhr et al. (2018) argues that it is women representatives' stronger interest in public service delivery (and their greater propensity to break up clientelist networks) that results in reduced corruption when they are elected to office (p. 1060). In particular, because women officials pursue policies "that benefit traditionally female-oriented sectors, such as education and health care," the need for petty corruption to obtain these services is reduced among the primary consumers (women citizens). Their conclusion is supported by data from the European Union in 2013, where they found that (a) greater women's representation in regional legislatures is associated with lower levels of grand and petty corruption in the region but (b) that female citizens' experience with corruption is substantially more reduced than men's. This evidence suggests that an *intrinsic* difference in the policy preferences of female politicians drives part of the reduction in corruption that they create. Such evidence supports the argument of Wängnerud (2020, p. 2) that "an influx of women into political institutions is accompanied with an influx of empathetic and other-regarding values and that the important change, leading to lower levels of corruption, is that self-regarding values, rather than individual men, are replaced." Thus, we now have reason to believe that there are intrinsic—albeit not necessarily natural, permanent, or essential—differences in how men and women think about corruption.

On the other hand, new evidence has *also* emerged to support the idea that increased risk-aversion among women does indeed reduce their willingness to engage in corruption. Barnes and Beaulieu (2019) conducted a survey experiment in the United States designed

to test how respondents evaluated a politician’s likelihood of accepting illegal payments from lobbyists. The experiment placed multiple explanations into competition, examining whether voters thought women would be less susceptible to corruption because (a) they were more honest, (b) they were more averse to the risk of being caught, (c) they were excluded from opportunities for corruption. They “find strong evidence to suggest that perceptions of risk aversion help to explain why female politicians reduce suspicions of corruption” but “that honesty and marginalization do not have similar effects” (p. 158).⁵ Thus, the risk-aversion hypothesis offered by (among others) Esarey and Chirillo (2013) is vindicated by new evidence. The perceived intrinsic honesty of women only influenced male subjects in the experiment, partially but not fully consistent with Wängnerud (2020)’s theory about the key role of other-regarding values in mediating the link between gender and corruption.

What about the hypothesis that women politicians face harsher punishment from voters for engaging in corruption compared to otherwise equivalent men? Survey experiments conducted by Batista Pereira (2020) in Brazil suggest that corrupt women politicians face harsher punishment from voters than corrupt men, but this same study finds no such relationship for essentially identical survey experiments in Mexico. A survey vignette experiment administered in the United Kingdom by Eggers et al. (2018) finds that male voters treat men and women members of parliament (MPs) involved in an expenses scandal equally, but that female voters are less likely to vote for implicated women MPs compared to implicated men MPs. Another survey experiment by Schwindt-Bayer et al. (2018) finds no evidence for differential punishment of women at all in either Brazil or the United States.

As yet another example of this confusing pattern of results, consider the following set of studies about the relationship between women’s longevity in office and their susceptibility to corruption. Bauhr and Charron (2020) use a regression discontinuity design on data from French municipalities to show that newly elected women mayors who narrowly won

⁵See also Barnes et al. (2018), which comes to similar conclusions.

election are associated with less corruption than comparable male incumbents, but that female incumbents are not; they argue that political outsiders who are not yet integrated into networks of corruption provide only a temporary respite from corruption until these newcomers are integrated into the system. Afridi et al. (2017) find the opposite result in India, where corruption and efficiency are at first worse in localities randomly assigned to have electoral quotas for women but eventually move toward parity with those localities without quotas. Meanwhile, Brollo and Troiano (2016) find (using a regression discontinuity design) that municipalities in Brazil with female mayors are consistently *less* corrupt than those with male mayors! It is difficult to draw any firm conclusion about whether electing women to public office reduces corruption from this record of research.

In sum, the overall impact of the most recent phase of research about corruption and women’s representation was not to narrow the range of theoretical explanations for the relationship between the two, but to provide support for many different explanations and expand the number of viable theories. More concerningly, as a whole they provided contradictory evidence in support of and opposition to essentially all of these theories. In that sense research has failed to produce a clear empirical picture of why, how, and when women in government are more resistant to corruption.

Conclusion

Researchers studying the link between representation of women in government and the corruption of that government have failed to arrive upon a unified explanation for the relationship between gender and corruption. The current literature renders a sort of dodo bird verdict in the competition among theories: “everyone has won and all must have prizes” (Luborsky et al., 1975).⁶

⁶From p. 995: “The subtitle you will recognize since it is from *Alice in Wonderland*—it was the dodo bird who handed down this happy verdict after judging the race.” This phrase characterized their contemporaneous

Based on this pattern of findings, we recommend that the research community redirect their efforts away from studies designed to falsify (or critically test) a particular explanation for the gender-corruption relationship. Such studies produce evidence for, against, or indifferent to various explanations depending on details of the research design (Incerti, 2020), the institutions and culture of the country studied, characteristics of the local and global environment peculiar to the time of the study, the nature of the treatment and perhaps other factors we have not considered.

But we do *not* recommend giving up. There are important conclusions that can be drawn from the current literature and these conclusions suggest a way forward. The evidence consistently suggests that causality flows in both directions is strong enough to be politically important. We think the best interpretation of an otherwise confusing pattern of confirmation and falsification is that many causal mechanisms for the gender-corruption relationship are in simultaneous operation and the magnitude of any particular mechanism's effect depends on the context in which it is evaluated.

For this reason, we believe that the future of this research program lies in determining where and when these explanations will tend to work together to produce a large causal relationship between women's representation and corruption. The extremely strong empirical relationship between corruption in a country and women's share of legislative seats in that country that was discovered by Dollar et al. (2001) and Swamy et al. (2001) is not the result of a single mechanism, but multiple mechanisms that are simultaneously influencing behavior. Where these mechanisms push in the same direction, they produce a large, politically important causal link between gender and corruption. Where they push in opposing directions—such as in dictatorships (Esarey and Chirillo, 2013)—they may cancel each other out. And, of course, these separate mechanisms may be individually more or less activated by any policy designed to decrease corruption by boosting women's representation in govern-

assessment of the state of research comparing efficacy of different modes of psychotherapy.

ment. Even in contexts where we observe (for example) that greater women's participation reduces corruption, artificially or exogenously increasing women's participation via a policy change may not have the same effect if the nature of the policy neutralizes or reverses the mechanism by which the causal link operates.

Consequently, we think that the next stage of gender and corruption research should not be focused on conducting critical tests of the predictions of various theories. These tests will continue to be a part of this research, but the focus should be on being able to separately identify and measure the strength of various mechanisms linking gender to corruption in a particular context. Sometimes, a study will fail to reject the null hypothesis that a particular mechanism has no influence on behavior in that context. But we should expect that more than one mechanism is operating at once. When studying groups (e.g., countries), we should also expect that these mechanisms are bi-directional.

As one example of the kind of research we have in mind, Stensöta et al. (2015) study the effect of increasing women's representation in the administrative (bureaucratic) state on corruption. They study the bureaucracy because its institutional context may change how gender influences corruption when compared to similar relationships in the legislature. Indeed they find that "the curbing effect of women representatives on corruption is greater in the electoral than in the bureaucracy arena" and that the magnitude of the relationship in the bureaucracy is inversely proportional to the administration's organizational strength and identity (pp. 492-493). We see this work not as an attempt to support one theory or falsify another, but instead as an attempt to determine how various theories apply to behavior in a context where some may be activated and others de-activated to produce an overall causal relationship between women and corruption.

Another model for future work comes from Pereira and André Melo (2015) and Pavão (2018). They provide evidence from Brazil that voters may not hold elected officials accountable for corruption if they do not believe that there is a viable alternative candidate who is

genuinely anti-corruption⁷ or if they believe that they benefit from their representative's ability to bring public spending to their area. Thus, even if disproportionate voter punishment of corrupt female politicians can explain why women are less involved in corruption than men, we would not expect this pressure to operate in environments with pervasive corruption or when women are able to direct disproportionate spending to their constituents.

These papers approach their research questions from the perspective of determining which explanations work in a particular context and why (or why not). They are trying to isolate individual mechanisms and figure out what makes them stronger or weaker in a given context. Eventually, that kind of evidence should enable us to develop and test an overarching theory linking these mechanisms together. That is why we believe this sort of work will be the most impactful during the next phase of the gender and corruption research program.

⁷Klašnja et al. (2016) comes to a similar conclusion based on their study of Slovaks.

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