

Episode 4 — Myth: Women Are More Risk-Averse Than Men

Overview:

Popular discourse tends to depict women as less likely than men to take risks. Christine LaGarde, Managing Director of the International Monetary Fund, famously implied that women make less risky financial decisions when she stated that the financial crisis of 2008 would not have occurred "if it had been Lehman Sisters rather than Lehman Brothers". But are women really more risk-averse than men? Research has in fact shown that men and women are more similar in their risk preferences than commonly believed. We bust this myth with leading experts to show that women may act more risk-averse only because of gender norms that place expectations on them to do so.

Featured Guests:

Dr. Thekla Morgenroth, previously of University of Exeter and now at Purdue University Dr. Julie Nelson, University of Massachusetts Boston

Research Mentioned:

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- 2. Botelho, T. and Abraham, M. (2017). Pursuing Quality: How Search Costs and Uncertainty Magnify Gender-based Double Standards in a Multistage Evaluation Process. Administrative Science Quarterly 62(4), 698-730.
- 3. Kaplan, S. and Walley, N. (2016). The Risky Rhetoric of Female Risk Aversion. Stanford Social Innovation Review. https://ssir.org/articles/entry/the_risky_rhetoric_of_female_risk_aversion
- 4. Liu, E.M. and Zuo, S.X. (2019). Measuring the impact of interaction between children of a matrilineal and a patriarchal culture on gender differences in risk aversion. PNAS 116(14), 6713-6719
- 5. Morgenroth, T., Fine, C., Ryan, M.K. and Genat, A.E. (2017). Sex, Drugs, and Reckless Driving: Are Measures Biased Toward Identifying Risk-Taking in Men? Social Psychological and Personality Science 9(6), 744-753.
- 6. Nelson, J.A. (2015). Are Women Really More Risk-Averse Than Men? A Reanalysis of the Literature Using Expanded Methods. Journal of Economic Surveys 29(3), 566-585.

Additional Sources:

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Transcript Episode 4 — Myth: Women Are More Risk-Averse Than Men

Dr. Julie Nelson: Some of the articles that I read said, "well, this helps explain why women don't rise to the top so often in business. Becoming a business leader means taking risks and if women don't take risks well, you know, that's just kind of their own fault." Well, I mean that's absurd.

Alyson: That was Dr. Julie Nelson talking about how the myth that women are more risk averse than men can serve as an excuse for sexism and gender bias. Welcome to episode four of Busted, a podcast where we bust prominent myths related to gender and the economy. By teaming up with leading experts, we uncover the origins of each myth, find out what the research actually says and give you the tools to bust each myth yourself. I'm Alyson Colón and my pronouns are she and her.

Carmina: And I'm Carmina Ravanera, and my pronouns are she and her.

Alyson: The myth we're busting today is that women are more risk-averse than men. Carmina, let's get started on busting this myth. Tell me a bit more about it.

Carmina: Well, this belief that women are more risk-averse than men is commonly held and maintained not only in popular media, but also in the academic research. So, for example, we'll often hear that woman are not as good at investing as men are because they just don't take financial risks. Or we'll hear that they don't speak up as much with their ideas at work, which leads them to get passed over for promotions. And that's why they don't get into the field.

Alyson: Yes. I hear this perspective a lot. I think many people probably remember Sheryl Sandberg, the Chief Operating Officer at Facebook. Sandberg wrote in her book, *Lean In*, that women need to be more confident and take more risks to get ahead in the workplace, suggesting that women aren't promoting themselves enough or that they should change themselves to change gender inequality. What did our experts have to say about this myth?

Carmina: Well, first I spoke to Dr. Julie Nelson, who is a professor of economics at the University of Massachusetts Boston. Julie conducts research on feminism and economics and is particularly interested in methodology and its implications for social and environmental policies. She wrote a great paper on the topic of risk aversion in 2014 called *Are Women Really More Risk Averse Than Men*.

Alyson: Great. I'm really excited to hear what she has to say.

Carmina: I asked Julie how she thinks this myth originated and here's what she had to say.

Julie: Well, I think there's a very old stereotype about this. If you think back to ancient myths in Western culture, you've got, you know, Odysseus venturing forth and his wife staying home and weaving on a loom. This idea that men are the people that go forth, are adventurous and take risks. And once you kind of get that stereotype in your head and you think this has to do with actual male and female



characteristics, you tend to see evidence for it and ignore evidence against. That's just a classic, well-known phenomenon in psychology called confirmation bias. And so, to the extent that that myth has been around and people have believed that, they tend to continue to believe it and even tend to not see the evidence. There's also some political reasons for this as well. That is, to the extent that it's been mostly white men in power, if they want to hold onto that power, they say, well, "you need to be like us, you all are very different. You're not like us". That's an excuse for hanging on.

Carmina: I also spoke to Dr. Thekla Morgenroth, who is a postdoctoral research fellow at the University of Exeter in the field of social and organizational psychology. And like Julie, they also published a great paper on this topic called *Sex Drugs and Reckless Driving: Our Measures Bias Toward Identifying Risk Taking in Men.*

Thekla: So risk-taking is a really sort of central aspect of masculinity. So it's very much part of the stereotype of what a man is like. And of course, what a man is like is what a woman is not like, at least in our current understanding of what we think of men and women. And so I think that then just translates into what you expect men and women to be like. So, if you think that risk-taking is a very masculine thing you, of course think that men are more likely to do that, and women are less likely to do that. And of course this role—the origin of stereotypes is a debated thing, there's different theories about that. But one reason could be that just in the past, the division of labor was very different from what it is now. And there [in the past] men maybe did take more risks, and so we associate them with risk taking. But nowadays that's not necessarily the case, I would say.

Carmina: As they both allude to, this myth has permeated throughout society and has been repeated very often. There's a lot at play involved here: our expectations for men and women, gender bias and stereotypes, and gender roles going way back in history.

Alyson: What I'm curious about are the impacts of this myth. I'd assume that if society just sees women as risk-averse, that would have some negative consequences.

Carmina: You'd be right. The stereotype can lead to discrimination and unequal outcomes for women. Here's some consequences and implications of this myth that Julie and Thekla talked to me about.

Julie: I think it's got impacts on women particularly, but then also on some larger societal problems. One of the major impacts I see on women, again, because I'm an economist, I tend to think about in the economic realm, but some of the articles that I read said, "well, this helps explain why women don't rise to the top so often in business. Becoming a business leader means taking risks. And if women don't take risks well, you know, just kind of their own fault". Well, I mean, that's, that's absurd. It's absurd to think that the best business person is always a bigger risk taker, for one thing. And then it's absurd to think that the differences between men and women in risk-taking are big enough to cause, you know, any point to that explanation. I tend to think of that explanation largely as a way of trying to avoid facing up to real discrimination and sexism. The other thing which I think has some real effects too, is that people often feel like they need to live up to, or maybe live down to, whatever, live consistent with stereotypes. It's no secret that, you know, boys on playgrounds are sometimes teased, called a sissy, called a girl, if they don't act in, you know, boy enough sorts of ways. Well, to the extent that we think of men as more risk-



taking and we think of certain areas of our social, political, economic life as being more masculine, it may be that there becomes, you know, a macho attitude about how you're supposed to behave in those realms. For example, in finance, after the 2008 crisis there was this, you know, thing going around: what if the Lehman brothers had been Lehman sisters? And I think that's an interesting question. Not because women bring something differently, different with them, if they were to go into the top leadership roles in finance, but I think finance would be very different if we didn't stereotype it as this kind of male, testosterone-fuelled area and said, you know, it's a human area, men and women, both doing it. I think it would have a very different attitude about risk and care.

Thekla: I think there's lots of implications. I think it has implications for who we hire for certain positions and who we maybe promote to certain positions. For example, if we think that a leader should take certain risks because that's important to promote the organization and to move the organization forward. then you probably want someone who fits that. Of course, there's always ambiguity. And if we think risk taking is important, we're more likely to think that a man will take risks, even if there's no indication of risk taking, or even if the indication is the same for the man and the woman, because we want someone who's suitable for that position. And that idea that men take risks means that they are more likely to get promoted in those positions. But even for people who are in leadership positions or are in positions where risk taking is important, a lot of research in psychology shows that we're more likely to process information that's in line with the stereotypes we have and in line with the expectations that we have. So even if a man and a woman, if both of them are equally likely to take risks, we're more likely to see that for the man and remember the information. And also, we're going to see that in a more positive light for the man than for the woman, because for men that is in line with their agenda, well it's in line with what we expect men to be, but for women it is against the gender role. We expect women to be cautious and to be careful. And so, when a woman isn't careful, she's quickly seen in quite a negative light. So, I think there are a lot of different implications in the workplace.

Alyson: So it seems like this is such a widely accepted stereotype and it has a lot of meaningful and even harmful consequences that reinforce gender roles for everyone. So, both of these researchers decided to do studies on gender and risk-taking in order to debunk this myth. Let's start with Julie. What did you learn about her research?

Carmina: When I asked Julie why she decided to study risk aversion and gender, this is what she told me.

Julie: Well, I didn't start out doing research to question the perception. I just had a question in my mind of, where are the media articles and supposed research results supporting this belief coming from, since there have been a number of media reports about these big gender differences. You know, men are from Mars, women are from Venus kinds of reports, and all sorts of different issues of personality traits and behavior and that kind of thing. I'm an economist, so I saw this literature, economics literature with a lot of titles saying, "women are more risk averse than men" or, you know, similar, "will men be men and women be women" or, you know, these kinds of things. And I'm a social science researcher. I'm also a feminist. I believe in looking at what the data says. So that was my question. My head was going, "I don't think men and women are all that different". I know for a fact that we're all very influenced by stereotypes.



Carmina: Julie than did a meta analysis of academic economics articles on gender and risk aversion, and she has some really interesting finds. Her first finding was that many of the researchers who looked at risk difference between men and women may have been swayed by their own confirmation bias. And her second finding was that any differences with regards to risk preferences between men and women in the datasets were actually very small and insignificant, but they were treated as significant because they appear to confirm this very prevalent stereotype. I'll let Julie explain in more detail.

Julie: What I found was that this is really quite mythical. There are tiny shreds of evidence and whole piles of evidence against, evidence of similarity--very tiny shreds of evidence towards supporting the myth. And a lot that goes against it or simply doesn't support it. So, these articles that have these titles, "women are more risk averse than men", what they're doing, and what I found overwhelmingly was that researchers were letting their own confirmation bias, their own beliefs, influence what they said they found and how they titled their articles. When I actually got the data and did all of this, I found that if you have lots and lots of data, you know, you'd review or do an experiment on lots and lots of men and women, you can find a very small difference on average. And this very small difference on average means nothing really for individual men and women. So, let me try to explain with an analogy, which is men are on average taller than women, right? Are some men still really short? Yeah. Are some women tall? Yeah. If you think about the next woman you meet and the next man you meet, is the man likely to be taller than the woman? Probably. Might be the case that the woman is taller than the man. Yeah. There's you know, some tall women, some short men, well, this is a distributional difference. Okay. When we say men are on average taller than women, we don't mean all men are taller. We just mean, you know, on average, there's this difference. It turns out that the difference, the sort of distributional difference between men and women on height is really pretty big. That is, if you were to guess that the next man you meet is going to be taller than the next woman you meet, you'd be right about 95% of the time. Now, you get the tall woman and the short man. In the evidence I looked at on gender and risk, a lot of this was from things like lottery games. Like you give people a choice of a gamble of betting some money or holding onto what they have. Some of this is from surveys, some of this was from investment behavior, but I looked at the evidence and I looked at the best evidence. The evidence taken from the largest samples, you can get pretty wild results all over the place. But if you only look at a few people, right, the best evidence suggested a very small substantive on average difference. Such that if you were to make a guess about whether the next man you meet takes more risks than the next woman you meet and if the guess was the man, you'd be right 54% of the time. You've got a 50% chance with no knowledge of the person at all. Right. Just flipping a coin, goes all the way up from 50% to 54%. If you take the evidence from the literature. So yes, you can find little shreds of evidence, but they're very tiny. And it really means nothing, obviously, about any individual man or woman. Lots of women take risks. Lots of men are cautious. I didn't coin this, but somebody else said, there's this idea that, you know, men are from Mars, women are from Venus. Another way that this is more accurate on this sort of thing is, men are from North Dakota. Women are from South Dakota.

Alyson: Oh, that's super interesting. Through her study it's easy to see how our own biases can easily creep into how we frame and present research findings. What about Thekla's work? Did they find something similar in their studies of gender and risk aversion?

Carmina: Absolutely. Thekla and their team looked at the measurement of risk taking and research and discovered that the scales that researchers use to study risks are often biased towards men by only



selecting masculine behaviors as risky. The scale makes it seem like men are more risk-taking than women. This echoes Julie's work, where bias also skewed results. I'll let Thekla explain.

Thekla: Yeah, so what we basically did is we just used some scales of risk-taking that have been used in the past, and that have found that men take more risks than women do. And we looked at those and realized that the items that they use or the questions that they asked seemed very masculine. So they would ask things like how likely wouldyou be to ride a motorcycle, or how likely would you be to bet on the outcome of a sporting event, and all these things are like very much in line with the male roles in society. So things that men usually do, and that's much less likely than the things that women usually do. But there's of course lots of other things that women do that are very risky. For example, cheerleading is one of the most risky sports out there, and women are much more likely to do that. Or undergoing really extreme diets, that's something that women do more and that's a huge health risk. But also things such as like donating a kidney to a family member. We were just thinking, "okay, what happens if you use those kinds of items that are maybe more gender neutral or maybe more feminine?" And what we found was then, when you use those items, those risk-taking, gender differences in risk-taking that you see usually go away. So really what is happening is that these scales are really just picking up on masculine gender roles. Unsurprisingly, if you ask about masculine behaviors, men are more likely to do those, but if you ask about similarly or like equally risky behaviors that are more feminine, women are actually more likely to do that. And that's kind of what we found.

Carmina: Thekla also discussed how we need to take social context into account when talking about risk and gender. Taking the same risks can have very different outcomes for different people. So the payoff or the loss can be really different when looking at either men or women.

Thekla: Of course. So when you think about risk, of course, there could be a thing that women could just like risk less than men do, but it could also be that it's just that some behaviors perhaps are seen as more for men than they are for women. And so, for example, if you think about casual sex. I mean, of course that has risks for both men and women, so that if you have unprotected sex, you could get an STI, whether you're female or male. But only women could get pregnant from that. And so that's an additional risk that men don't really face. And then in some more recent research that we haven't published yet, we find that very similar things happen in the workplace. So the same behaviors that are seen as risky workplace behaviors, for example, asking for a promotion, asking for a pay rise, taking on a task that maybe you're not quite sure whether you can actually accomplish it, occurs more for men than for women. And a lot of that is sort of the social costs that women face when they do those things, because they are seen as sort of maybe too pushy or like pushing it too far, or they're too greedy and so they get a backlash from that, whereas men don't. So, and of course over time, if, even if your baseline of risk-taking is the same for men and women, if this pays off more for men of course they're more likely to do that again. And that's exactly what we find. So people who have more positive experiences with risk-taking are more likely to take risks again in the future. And so over time, these consequences can lead to actual differences in risk taking, but that doesn't necessarily mean, it's not necessarily inherent. It's not like women inherently don't want to take risks. It's just, it doesn't pay off for them in the same way. So this research has made me question whether risk taking is actually a useful construct, because if we look, like if we really look at what people are talking about, it's individual behaviors. And what we found in our research is just that people somewhat adhere to gender norms, and that they do that in the domain of risk taking as they do in any other domain. So I'm not actually sure how useful this construct of risk-taking or



sort of talking about that as if it's like a general trait, that just generalizes to all kinds of different behaviors, I don't know how useful that is.

Alyson: I think what a lot of people may not take into account is that our views of risk are themselves gendered. A lot of behaviors women take on everyday are risky, but they aren't viewed that way. It seems like risk taking really needs to be understood within its social context, particularly when researchers are trying to study it and make conclusions about people of different genders. Is there any other related research on how women are actually not as risk averse as the media and academic literature make them out to be? I'm thinking of one study I've seen, which showed that women investment professionals are as risk loving as men, disproving the myth of women's fundamental risk aversion in finance and investment.

Carmina: Yeah, that's a great one. There is a significant amount of research showing that men and women are more similar in their risk preferences than commonly believed. As Thekla said, the context of risk taking and different outcomes from taking a risk are really important to consider. For example, one 2012 study from the United Kingdom discovered that girls from single-sex schools were as likely to take risks as boys in coed and single-sex schools were, and they were significantly more likely to take risks compared to girls from coed schools. And a similar study in China from 2019 compared risk-taking of girls and boys in a patriarchal community versus in a matrilineal community and they found that girls from the matrilineal community took more risks than boys did, while in the patriarchal community, the opposite was true. But when girls from the matrilineal community spent progressively more time with children from the patriarchal one, then they became more risk averse.

Alyson: So, what's the key takeaway from all of these studies in terms of risk preference?

Carmina: The authors of these and other studies suggest that gender differences in risk taking are shaped by social norms and constraints and not innate differences. Even the perception of what is risky or not can really depend on one's social context. For example, in a setting where risky financial behavior is just not a norm for women, then taking a risk can lead to not only a financial loss, but also to a social loss. On the other hand, a man who chooses to take a risk is acting according to masculine gender norms. So it's not as much of a social risk for him. And we know from the research that when men and women adopt behaviors that are just not coded for their gender then they can be judged harshly because of this violation of social standards. So when we consider gender based risk preferences, it's crucial to understand that men and women can face vastly different results from risk taking.

Alyson: So if someone was to say to me, "Hey, Alyson, maybe women aren't in leadership roles because they're just inherently more risk averse than men", what should I say to convince them otherwise?

Carmina: Well, you can start by pointing out that this myth is simply not supported by the data. As Julie said, if we were to look at the distributions of risk preferences of men and women, we would see that men vary quite a bit and women vary quite a bit, and then their distributions overlap. So simply put, there are more differences within the category of men or within the category of women than across genders. And you could also encourage them to think about risk preferences in terms of context and examine how certain factors such as socioeconomic status and gender roles impact risk preferences.



Alyson: Did Julie and Thekla have any additional comments on what people can do to combat this myth?

Carmina: Sure. Here's what Julie had to say, particularly for researchers and academics.

Julie: Well to respond, first of all, that it's, you know, it really is a myth. It's a gross exaggeration of a very, very tiny on average difference. You could ask people to encourage people to go back to their research, but when reading the research to look not only for difference, but also for similarity. Researchers tend to [to look for this data]; it's much sexier to find an article and say, "we found a difference". Articles that don't find difference are much less likely to be published. So it's a difficult area to give someone an easy solution to, because the stereotype is so appealing, and actually looking at what the data says is more work. But encourage people to you know, particularly people who might be academics, who might be interested in the real world applications in this, to take a real careful look at what the data with the information actually says. You can also ask people to just reflect a little bit on their own life. Do they know men that don't take risks? Do they know women that do take risks? I think that people's own experiences, if they really pay attention to it, actually goes against what they might believe just from looking at these stereotypes.

Carmina: Thekla similarly suggested giving examples that show how women take risks all the time.

Thekla: I think the best way is really to just point out examples of female risk-taking. There's so many. I've already mentioned a few such as, I dunno, donating a kidney, going a diet, like maybe difficult feminine tasks of cooking an elaborate meal for dinner party or something like that. There's so many things that women do all the time that are risky. And also, even things such as childbirth. That's a pretty risky thing to do and only women do that. So, I think there's just lots of examples. Giving some of these examples and just pointing out how maybe people just don't think of feminine examples when they think of risk is a good strategy moving forward. Like what we, for example, also found in our studies is that the two behaviors that are similarly risky or objectively have the same risk to your health, for example, the masculine one is seen as more risky than the feminine one. So just sort of pointing out that flaw, pointing out things that are risky, that are seen as feminine or that women do more often. I think it's a good strategy for one, because mostly when you point these things out, people are like, oh yeah, that is pretty risky. And I guess women do these things. So, I found that that's a good strategy to get people to think about it critically.

Alyson: I think we can say that this myth is busted. Of course, if you'd like to learn more about risk preferences across genders, you can go to our website at the Institute for Gender and the Economy to read articles, research, and more on this topic. You can also find the research we've discussed here in our show notes.

Carmina: And finally, don't miss our fifth and final episode of Busted. We'll be busting two myths concurrently. First, that sexual harassment is just a women's issue. And second, that sexual harassment is purely a result of sexual desire. Here's a clip from our next episode.

Dr. NiCole Buchanan: With sexual harassment, we often mistakenly think of it as something that's about attraction or perhaps flirting gone wrong. But the reality is that sexual harassment and other forms of sexual violence are about power. They're about having power over someone else. And so when we have



a society that is focused on showing your masculinity at all times, never risking being vulnerable, not having empathetic connection to others and an investment in taking power over others as a way of demonstrating your masculinity, then sexual harassment is a natural consequence of that.

Alyson: Until next time, happy mythbusting.

Sarah: I'm Sarah Kaplan and I'm the director of the Institute for Gender and the Economy. If you like this podcast make sure to review it and subscribe, it's how we get the word out. If you're interested in learning more about how to analyze the gendered assumptions built into your work, check out our five course specialization on Coursera called "Gender Analytics: Gender Equity Through Inclusive Design", head to Genderanalytics.org for more information.