Women's Labor Force Participation in the Kurdistan Region of Iraq

A Study of Social and Psychological Barrier

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Abstract

Women's labor force participation in the Kurdistan Region of Iraq is very low, at 14 percent. This paper investigates a number of social and psychological barriers to participation, using recent methods in the measurement of social norms and cultural beliefs and primary data collected from all three governorates. Furthermore, since greater growth in employment generation is expected in the private sector, the paper explores women and men's perceptions toward working in the private sector in detail. The findings show that while 70 percent of women and men support women's participation in the private sector. Several challenges remain in both information about the sector, as well as perceived risks and discrimination. More broadly, the findings show that traditional gender role expectations may still impede women's labor force participation. Perceptions of common societal practices and beliefs of other members from the same household are all correlated with women's work. The paper explores additional mental barriers using a smaller sample of younger and more educated female job seekers, who are registered with a jobs agency, and finds that both perseverance in the job search process and trust and engagement with formal institutions are additional behavioral barriers.

Women's Labor Force Participation in the Kurdistan Region of Iraq: A Study of Social and Psychological Barriers

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1. Background

Low levels of engagement among women in MNA's labor force vary from country to country yet female unemployment is consistently high across all nations. Female labor force participation (FLFP) is as high as 58% in Qatar, 57.5% in Kuwait, 55% in Djibouti, and as low as 14% in Jordan, 12% in the Syrian Arab Republic and 6% in the Republic of Yemen.[1] In the Kurdistan Region of Iraq (KRI), according to the labor force and demographic surveys conducted in 2012, 2013, 2014, 2015 and 2017, FLFP was 12.2%, 12.7%, 13.1%, 14.8% and 13.8% respectively.[2] Female unemployment in nearly all countries in MNA is at least twice as much as that of their male peers. For example, the unemployment rate for women in Iraq is 3 times higher than men, at 31% compared to 10% in 2017.[3]

Social norms and cultural beliefs dictate behavior in ways that affect important development outcomes for women, including their participation in public life, access to economic opportunities, control of finances, educational attainment, and ability to choose their health care (Bernhardt et al, 2018, Field et al, 2016, Outhread et al, 2013, Banerjee et al, 2018). Although the MNA region began to intensify their efforts to get more women to join the workforce in 2009, studies have hypothesized that social and cultural barriers to female employment participation persist. Gender and Development and the ensuing Opening Doors: Gender Equality and Development in MNA reports were instrumental in identifying such informal institutions as key binding constraints on the achievement of gender equality in MNA (World Bank, 2012, 2013).

Responsibilities towards family are also central in women's decision-making processes when it comes to the world of work. For example, familial obligations may prevent them from working longer hours, which may be further curtailed after marriage. A recent study describes how the beliefs of both men and women regarding gender roles may hinder women's participation in the workplace. Using data from the Arab Republic of Egypt, Morocco, Lebanon, and the West Bank and Gaza, the study reveals that two-thirds to more than three-quarters of men support the notion that a woman's most important role is to take care of the household, and the majority of men believe that it is their role to monitor and control women's movement. In some countries, majorities of women appear to accept male guardianship, showing evidence of the internalization of these beliefs (El Feki et al, 2017).

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[1] All statistics are from the ILOSTAT database, the latest year for which data is available was 2018. Retrieved from https://data.worldbank.org/ in October, 2019.

[2] Labor force surveys were conducted in 2012, 2013, 2014, and 2015, and a demographic survey was conducted by in 2017, the most recent source for the FLFP statistic. All surveys were conducted by the Kurdistan Regional Statistics Office.

[3] ILOSTAT database, retrieved from https://data.worldbank.org/ in October, 2019.

However, social norms and beliefs are frequently not measured directly and often conceptualized inadequately, using terms such as "social norms" and "culture" and "conventions" interchangeably. What is also less understood is the relative importance and interplay of these perceptions, at the individual, household and societal levels. Laying out a clear conceptualization framework, and systematically measuring and validating social norms, cultural beliefs, as well as intrahousehold expectations of women's behavior will help design appropriate interventions to increase women's economic participation and in turn to broaden economic development and growth.[4]

Therefore, the interpretation and measurement of social norms and cultural beliefs is critical. Social norms, which refer to widely shared beliefs about how others in a social group behave and how they ought to behave, are a product of human sociality. They arise from social interdependence and are the product of an unwritten rule for behavior and common knowledge of that rule. Social norms are informal governance mechanisms and exert a powerful influence on our decision-making and behavior. In consequence, norms have been called the "glue" or "cement" of society (Elster, 1989). Social norms for behavior are rules for behavior within a particular reference group and may change as this reference group changes. Social norms are maintained through approval, or disapproval and sanctions, in particular by members of the relevant reference group. The tendency to associate and behave as members of groups - what we call human sociality - can cause groups or societies to get stuck in and perpetuate negative or harmful collective patterns of behavior (World Bank, 2015). Social norms as defined are also different from moral and legal rules.

Women's economic participation may also be influenced by deeply internalized beliefs about how the world works. These cultural beliefs drawn from society shape perceptions and filter the "facts" that people believe and are able to understand (DiMaggio, 1997).[5] For example, women and men may believe (correctly or incorrectly) that some industries and not others are female-friendly. They may draw on beliefs about safety, transportation, and the level of skill required. They may have internalized fundamental reactions to mixed-gender environments or to supplanting their husbands as breadwinners (Dildar, 2015; Evans, 2016). They may have specific beliefs about working in the private sector which are different from the public sector and that may prevent them from seeking jobs in that sector. Furthermore, in a difficult job market for women, additional individual psychological barriers may further hinder participation. For example, navigating the job market can be both daunting, and it may take longer for women to find jobs. Recent literature, however, points to certain tools that may be utilized to help overcome these. Planning and goal setting in a realistic manner can help by breaking down the complex task of job hunting and overcome the intention-action divide (see Oettingen, 2014 for a popular formulation and Rogers et al 2015 for a review of this literature).

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[4] See Appendix Figure 1 for a simple diagram.
[5] While in the literature this is often referred to as cultural schemata and mental models (World Bank, 2015), we will refer to them as cultural beliefs.

An evaluation in South Africa showed that job seekers who went through a more deliberative written exercise, including setting realistic goals, thinking through obstacles, and envisioning how to overcome these obstacles, were more likely to both find employment and use more formal channels in the process (Abel et al, 2017). Female job seekers may need to engage in the job search process for longer showing greater persistence or "grit" to succeed (Duckworth, 2016). Goal setting can help here as well by both creating realistic targets, and as a reminder to follow through.

In 2016, the Kurdistan Regional Government (KRG) laid out a strategy to accelerate and prioritize job creation in the private sector (Kurdistan Regional Government, 2016). This poses several challenges towards increasing female participation in the labor force. For example, one reason why increased educational attainment by women in the region has not translated into increased labor force participation is that the contraction of opportunities in the public sector has not been met by an increase in the formal private sector (Assaad et al, 2018). However, women still prefer to work in the public sector. While greater completion of tertiary education in the region is an influential factor, the favorable working conditions such as shorter working hours, job security and fringe benefits are also important reasons as to why women are more likely to prefer the public sector (Assaad and Barsoum, 2019). Wage discrepancies between men and women are also lower in the public sector (Said, 2014).

In KRI, while women's participation in the private sector has increased incrementally, labor force and demographic surveys indicate these rates are still low. For example, labor force and demographic surveys indicate the participation rate was 20.1% in 2012, 14.9% in 2013, 20.6% in 2014, 24.2% in 2015, and 24.3% in 2017 (compared to about 55% for men in all of these surveys). More importantly, little is known as to what the social norms and personal beliefs of women and men are towards women's work in the private sector. Recognizing these perceptions may be key to understanding labor supply decisions in the future.

Our paper contributes to current literature in several ways. It uses the latest research from behavioral science and unique primary data sets from the Kurdistan Region of Iraq (KRI) to carefully investigate and discuss a number of social, cultural, and psychological barriers that women may face in their decision to join the labor force. Our research question asks which of these barriers do we see evidence of in KRI in the context of female labor force participation and which of these are most binding. To the best of our knowledge, this is the first study that attempts to systematically and quantitatively measure such psychological barriers in KRI with respect to FLFP at the individual, household, and societal levels.

The paper proceeds as follows. First, we comment on the current state of labor force participation across public and private sectors in KRI. Next, we discuss the systematic measurement of perceptions for both women and men including social norms and cultural beliefs of individuals and counterparts, towards women's work in the private sector, as well as the labor force in general. Subsequently, we outline additional barriers to women working in KRI, including drawing on a related study of barriers to women persisting in their job search

efforts. We conclude with a discussion section including possible interventions and lessons for policy.

2. Data and Methods

2.1 Data Sources

2.1.1 Social Norms Sample

We primarily present findings from a recently completed survey in KRI in 2018, that systematically measures social norms and cultural beliefs, and refer to this as the "social norms sample" in the rest of the paper. A random sample was drawn from the sample frame of the SWIFT survey implemented by the Poverty and Equity Global Practice at the World Bank. Districts from all three governorates of Erbil, Sulaymaniyah, and Dohuk were included, except for districts with a population of less than 30,000. The instrument we use was specifically developed to measure social norms in an urban context, and we, therefore, exclude rural areas. The number of clusters sampled from the remaining districts was in proportion to the population. Finally, the required number of households was randomly sampled from the list of households in each cluster in a given district, along with a replacement list of households.[6]

Both a female and male counterpart in each household was included, restricting to spouses, father-daughter, and brother-sister relationships, in order to compare perceptions of the counterpart's beliefs, with actual beliefs held by the counterpart. We oversampled households with working women, to assess if social norms and beliefs were different for the women and men in these households, and set a target to survey 33% working women (out of all the women we interviewed). Randomly drawn households were called initially to screen whether there was a male-female counterpart as described above, and to meet the target on surveying working women.[7]

Given that we restricted household selection to those with women between the ages of 20-55 and with a male counterpart with the relationships described above and oversampled households with working women, we cannot calculate labor force participation rates or unemployment rates from this sample. However, our results are representative of both non-working and working women within this age range (and their male counterparts), and of urban areas in all the three governorates in KRI.

In collaboration with Kurdistan Regional Statistics Office (KRSO), we partnered with a local survey firm, Sheekar Research Company, to implement the survey in August and September 2018. The instrument was initially translated into both Kurdish and Arabic, digitized, pilot-tested and administered on tablets.

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[6] However, households where the SWIFT survey had already been conducted were excluded.

[7] Given the low female labor force participation rates in KRI, it was particularly challenging to find households where women worked, and several samples had to be drawn to meet this target.

At least 10% of surveys were monitored in person, and most surveys were checked for inconsistencies by field monitors. Surveys with significant inconsistencies were either re-administered or a different replacement household was selected to complete a new survey.

2.1.2 Rwanga Sample

A second data source we draw upon is from a sample of recently or currently active female job seekers, in partnership with a local non-profit, Rwanga Foundation– we refer to this as the "Rwanga sample" throughout the paper. Rwanga maintains a jobs portal, where students and other job seekers are recruited from universities and job fairs to register, and employers are invited to post new opportunities each month. Rwanga has offices and outreach programs in the three urban areas of Erbil, Dohuk, and Sulaymaniyah. We discuss findings from both a longer diagnostic exercise with a smaller sample of 100 job seekers, as well as a short survey with a larger sample of 1,780 job seekers (all of whom were registered with Rwanga at the time of the study) that we conducted. This sample of female job seekers is different from the social norms sample; in particular, women in the sample were younger and better educated, and most had completed a college degree.

2.2 Measuring Social Norms and Cultural Beliefs

A review of the social norms literature concludes that it is important to distinguish between measuring empirical and normative beliefs when measuring social norms (Mackie et al, 2015). These have been characterized as "social empirical" and "social normative" expectations (Biccheiri et al, 2014) or often as "descriptive" and "injunctive" norms (Cialdini, Kallgren, & Reno, 1991). Another way of stating these dual aspects is to say that social norms consist of a rule for behavior and common knowledge of that rule (Brennan, Eriksson, Goodin, & Southwood, 2013) or between following a "typical" or "appropriate" action in a group (Paluck and Ball, 2010). We will define and follow the interpretation as below:

- **Social Empirical expectation**: the extent to which individuals believe that others in a relevant reference group/population conform to or engage in the behavior. This is a *first-order* expectation: a belief about "what others typically do" in a relevant group.
- **Social Normative expectation**: the extent to which individuals believe that members of a relevant reference group believe they ought to conform to a behavior and may sanction those who do not. This is a *second-order* expectation: a belief about the beliefs of others, and specifically beliefs about what others in one's reference group think one should do. We will often simplify and refer to it as "what others believe" in a relevant group.

We interpret results as follows; if both social empirical and normative expectations are consistently reported in a social group, there is strong prima facie evidence that a social norm exists.

The framework for measuring social norms outlined in Bicchieri, Lindemans, & Jiang (2014) involves the measurement of a few additional components. According to this framework, the identification of a social norm requires measuring: a) individual behavior; b) social empirical expectations about the behavior of others (i.e. what others in your reference group do); c) personal normative beliefs; d) social normative expectations concerning the beliefs of others (i.e. what others in your reference think one should do, along with the sanction or disapproval for deviance); and e) cost-benefit calculations on the part of individuals. It is only by measuring these components and specifying the reference group to which they apply, can we diagnose the existence of a social norm as well as its strength. It is also important to measure why people act in the ways that they do – some people may be acting in ways that are consistent with a social norm but for rational or self-interested reasons. If that is the case, changing behavior may require not only changing the social norm but also changing incentives.

Our study explores five key aspects of women's decision-making vis-à-vis labor force participation- current work status or wanting to work and effort exerted towards finding work for non-working women, expectations of how many others work in the reference group, expectations of normative beliefs of other people in their reference group about women who work and their sanctioning behavior, and personal beliefs and practical considerations vis-à-vis work. We explore cultural beliefs through the measurement of individual beliefs. We further enhance this framework by adding expectations of the beliefs of a male counterpart in the household, to examine the influence of other family members in a woman's decision to work, similar to Bernhardt et al. (2018).

A contribution of the study is that we examine empirical and normative perceptions and influences across four dimensions related to women's work: i) general views on whether women should work; ii) beliefs about working in the private sector; iii) beliefs about gender roles as they relate to women's availability to work compared to taking care of responsibilities in the household; and iv) beliefs about publicness and mixing of genders in the work environment. These themes were chosen based on barriers identified in the literature, findings from focus group discussions in a similar measurement study in Jordan (Gauri et al, 2019), and the current focus in Iraq on employment and participation in the private sector. All four thematic groups are explored using a set of questions, which were adapted as needed for male and female respondents in KRI.

Such systematic measurement allows us to measure social expectations across a number of thematic areas directly, and better characterize the nature of the behavior we observe and comment on the presence or absence of social norms, instead of "guessing" from observing a pattern of behavior (see Appendix Figure 1). Measuring all the different components, including social empirical and normative expectations (i.e., what others in one's reference group do and believe is appropriate), allows us to compare such expectations with individual beliefs to

determine the relative importance of the different components towards the behavior of interest (i.e., female labor force participation). Comparing these different components also allows us to find mismatches in stated beliefs (for example, beliefs stated by men), and expectations of the male counterpart (or perceptions of women of their male counterpart's beliefs).

Table 1 provides an illustrative example for the case of women's work in general of the set of questions we explore under each theme. To understand the extent to which perceptions of what others do and believe affect women's own (and in the case of men, female relative's) decisions to work outside the home, we ask men and women direct questions about whether they or their wife/ sister/ daughter work outside the home and whether they think it is okay for women to do so. To measure the respondent's social expectations, we ask them to think about people around them who are most likely to be in their reference group. They are subsequently asked to think about ten such people who are female, married, and working, and estimate how many, out of these women, work outside their homes. Similarly, to measure social normative expectations, we ask respondents to estimate how many people, out of ten, would criticize married working women who work outside.

In addition to normative influences, decision-making can be, based on rational considerations. The literature[8] on women's labor force participation points to various structural and practical barriers to women's work, including the lack of childcare options, low wages, limited employment opportunities, etc. To account for these structural considerations, the survey includes questions related to work (reservation wages, education levels, public vs. private preferences).

Table 1. Example of questions asked for each component of the social norms framework

Personal behavior	Personal normative beliefs
Do you/your spouse work?	Is it okay for women to work outside of their homes?
Social empirical expectations	**Social normative expectations**
Take a moment to think about the adult women where you live. These could include your family members, friends, neighbors, and others. Out of 10 such women, how many work outside their home?	Take a moment to think about all the people where you live. These could include your family members, friends, neighbors, and others. How many such people would think or speak badly about married women who, because of work, return home after 5pm in the evening?

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[8] http://documents.worldbank.org/curated/en/794801551071879305/Women-and-Jobs-for-an-Inclusive-Labor-Market-in-KRG-A-Pilot-Program-Program-Summary

Expectations of counterpart	
Think now for a moment about your husband/ father/ brother, and his views. Does he think or speak badly about women who work outside their homes?	

2.3 **Limitations of the Study**

The study has several limitations. First, the Social Norms survey sample is representative of urban women and men in KRI; due to the lack of availability of more work options for women in rural areas, we did not include rural women and men in the study. Second, while we were able to oversample working women and were able to speak with a sufficient number of women working in the public sector, we were unable to find larger numbers of women working in the private sector. Future surveys should include more women working both in the formal and informal private sector. Finally, all regression results presented using the Social Norms survey data are correlations and do not bear any causal interpretation.

In the Rwanga sample, while we started the study with a large number of female job seekers (1,780) registered at the jobs agency, we faced difficulty in regular follow-ups with this sample, and high attrition rates by the end of the study. As such, we only report findings that help to better explain some of the findings from the Social Norms survey.

3. Results

3.1 Descriptive Statistics

3.1.1 Social Norms Survey

Table 2 shows descriptive characteristics of the social norms sample broken down by working women, non-working women, men with a working woman counterpart, and men with a non-working woman counterpart. In total, 1,150 respondents were interviewed, out of which 577 or 50.2% were women, and the rest were men. Nearly all respondents (99.6%) identified themselves as Kurdish. Thirty-six percent of the sample were from Erbil, 36.4% from Sulaymaniyah and 27.5% were from Duhok. Nearly 94% of the sample was women and men from the same household, out of which nearly 82% were spouses (the remaining were brother-sister, 15%, and father-daughter relationships, 3%). We successfully oversampled and interviewed working women among our female respondents (32%), close to our target of a third. Women on average were slightly younger than men, with an average age of 35 years, compared to men who were 39 years old on average.

The table also shows that working women are indeed different from non-working women. Working women in the public sector, on average, had the most education even when compared to men, including almost twice as many years of education when compared to other women in

the sample. Working women overall were also less likely to be married and have a young child. However, nearly 86% of all the respondents were married, and close to half (45%) had a young child. The income distribution shows about 50% of the respondents had household income less than 500,000 IQD, or about $420, in the last 30 days.[9]

Table 2: Descriptive characteristics of the Social Norms sample

	All	Women	Percent		Men	Percent
N	1150	577	50.17		573	49.83
Respondent Working		177	30.68		504	87.96

	Overall	Working women (public sector)	Working women (private sector)	Non-working women	Men with working counterpart	Men with non-working counterpart
N	1150	126	51	400	184	389
Age	37.15	37.54	35.86	34.62	39.64	38.61
	(9.45)	(7.76)	(7.87)	(9.59)	(8.47)	(9.85)
Years of education	8.75	13.24	6.86	6.66	10.71	8.82
	(5.24)	(3.81)	(5.49)	(5.11)	(5.14)	(4.48)
Married	0.86	0.77	0.76	0.86	0.86	0.89
	(0.35)	(0.42)	(0.43)	(0.34)	(0.34)	(0.31)
Young child	0.45	0.40	0.33	0.46	0.44	0.48
	(0.50)	(0.49)	(0.48)	(0.50)	(0.50)	(0.50)
Erbil	0.36	0.33	0.51	0.35	0.38	0.35
	(0.48)	(0.47)	(0.50)	(0.48)	(0.49)	(0.48)

3.1.2 Women's Participation in Private Sector Work

We next describe women's participation in the private sector, outlining differences between women working in the private sector compared to the public sector.

We find that 28% of working women in the sample are working in the private sector, compared to 42% of men.[10] The nature of private sector work continues to be largely informal, with nearly 75% of women in the private sector reporting to be "self-employed" or an "unpaid worker in the family business."[11] We also observe formal private sector participation for women in the Rwanga sample. For example, nearly 75% of female job seekers who found a job in the preceding 2 months (i.e. in June and July 2018) were employed in the private sector. We

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[9] Income was recorded for the last 60 days since some workers are not paid every month. This is just lower but not very different than the median income range reported in the demographic survey in 2017, where the median fell in the range of 500,000-750,000 IQD.

[10] While we oversampled working women, we did not stratify based on public or private sector. However, our sample is small, and we advise caution in over-interpreting this statistic. There are several other factors that may affect this statistic, such as seasonality.

[11] Over 98% of women in public sector work report being a paid employee.

expect most of this employment to be in the formal private sector, as is the trend for the college-educated job seekers registered with Rwanga.

We also observe heterogeneity in female participation in the workforce across the three governorates; Appendix Figure 2 shows the oversampling of working women across governorates. More women were looking for work in Sulaimaniyah (10.6%) compared to Duhok (5.1%) and Erbil (4.8%), consistent with the historical trend of greater FLFP in Sulaimaniyah.

Over half of the women working in the private sector in our sample are in tailoring. Other reported employment in the private sector includes being a pharmacist, knitting cloth, and working with political parties. In comparison, the top four occupation categories in the public sector are Kurdish language teacher, nurse, public employee, and math teacher.

Wages are higher in the public sector, which is unsurprising given the higher incidence of informality that we capture in private sector work, and consistent with research that shows that the public sector wage premium is higher for women (Gindling et al, 2019). The median wage in the public sector in the survey sample for women of $420 per month is twice as high as in the private sector ($210 per month). This difference, however, drops to a premium of a third higher when restricting to paid wages in both sectors.

There are also wage differences between men and women who work in the private sector. In general, overall, between both paid employment and self-employment, the difference is about 50% higher median wages for men.[12] This may be an additional barrier to entry in the private sector.

We also asked working women about sexual harassment in two ways, whether they have observed other women getting harassed, or they have been harassed themselves, in the past 3 months. Overall, reported harassment is low, and there is little difference between both observing and/or experiencing harassment between the public and private sectors.[13]

3.2 Barriers to Women's Work in KRI

3.2.1 Perceptions towards Private Sector Work

We asked all respondents the questions shown in Table 3 below on participation, risks and discrimination in the private sector, including about the social-empirical and social-normative expectations, their personal beliefs, and expectations of others in the household. First, we discuss each of these perceptions in detail, before comparing and contrasting across groups.

Given low female participation rates of women, particularly in the private sector, and even fewer in the formal private sector outside the home, most men and women do not know of many other

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[12] The samples to compare paid versus self-employment in the private sector are small.
[13] We restricted the analysis to women who work outside the home in public and private sectors. Unfortunately, the number of observations for women who work outside the private sector is low.

women who live nearby and work in the private sector. Both women and men on average know only 1 woman (out of 10 working women) who works in the private sector. As expected, women working in the private sector know more women (1.22 on average) compared to women working in the public sector (0.78), and only 25% of respondents overall know more than 2 women working in the private sector (Appendix Table 1). When asked about the most common private sector jobs outside of teaching, over half (55%) of female and male respondents mentioned small business activity (tailoring, textile, and baker) or indicate that they do not know. Others do report more formal work in health care (nurse, doctor, or other health sector employee), businesses (accounting, marketing, and secretary), sales (at malls), and working at beauty salons. More specialized occupations for women in the private sector that were mentioned include working as lawyers, engineers, and in banking (Appendix Figure 3 shows the broad categories).

Table 3: Questions asked to respondents on the private sector (including social normative expectations, personal beliefs and expectations of counterpart)

Private Sector Questions
1. Okay for women to work in the private sector
2. Women who work in the private sector are more vulnerable to harassment
3. Women who work in the private sector will be laid off when they get married or pregnant
4. It is hard for women to find a job in the private sector because men are preferred

When asked about the social normative expectations of others (i.e., what others believe is appropriate) the responses of working women were different and negative, compared to both non-working women and men (see Figure 2 and Appendix Table 2). That is, working women believe that more people in their reference group would think or speak badly of women working in the private sector, and are more likely to agree with the perceived risks and discrimination. This may be because working women are more likely to have experienced such negative perceptions more directly, i.e., if they work in the private sector, or it may just be "hearsay", for example in the case of women who work in the public sector. Further analysis suggests that these negative social normative expectations are stronger for women who work in the public sector, indicating it may be more because of the latter.

We also observe heterogeneity by the work status of women and their counterparts when respondents were asked about their personal beliefs (see Appendix Table 3). A large number of respondents personally believe it is okay to work in the private sector. Nearly 78% of women think it is okay for women to work in the private sector, and a further 14% think it is okay under certain circumstances. However, these views are most favorable for women working in the private sector, followed by non-working women, followed by women working in the public sector. Men's views are not as favorable as women's, however, still, 65% of men think it is okay for women to work in the private sector, and a further 16% agree it is sometimes okay.

Intra-household power dynamics may potentially constrain women's economic participation regardless of social norms. Nearly 63% think their counterparts are okay with women working in the private sector, as shown in Appendix Table 4. However, when it comes to associated risks (including greater chances of harassment and being laid off) and discrimination in hiring, average views imply that women think their male counterparts underestimate the risks and discrimination associated with working in the private sector, compared to what women think themselves, as well as what men say their beliefs are.

To investigate further, we compare the match rates for spouses from the same households (shown in Appendix Table 5). We show the percentage of responses that matched perfectly between the expectations of the husband as reported by women with what the husbands reported as their beliefs. Overall, the accuracy of female expectations of their spouses is low, for example, just over half (54%) of women guess accurately whether their husband is okay with women working in the private sector. This number drops further on questions around risks and discrimination in the private sector – for example, only 41% of women can guess accurately what their husbands think about men being preferred in the private sector. Figure 1 shows a comparison of these perceptions (social normative, personal beliefs, and expectations of counterpart). Respondents on average believe that more people will agree to the risks and discrimination that women face in the private sector, compared to their own beliefs and there is a wide mismatch in these perceptions. We also note that comparing personal beliefs to expectations of counterpart on average leads to the same conclusions as above; individuals think their counterparts have more favorable views than they actually do.

Figure 2 shows a standardized response value to all private sector questions by a few different demographics of interest, in particular, women working in the public sector, private sector, or not currently working, and for men with a working or non-working counterpart. Across these demographics, the graph shows that it is women who are working in the public sector have the worst perceptions about women working in the private sector. As expected, women working in the private sector have the most favorable views, however, the views of non-working women are almost as favorable. Furthermore, as expected, men with working counterparts have more favorable views than men with non-working counterparts.

Figure 1: Individual, societal, and counterpart expectations towards the private sector
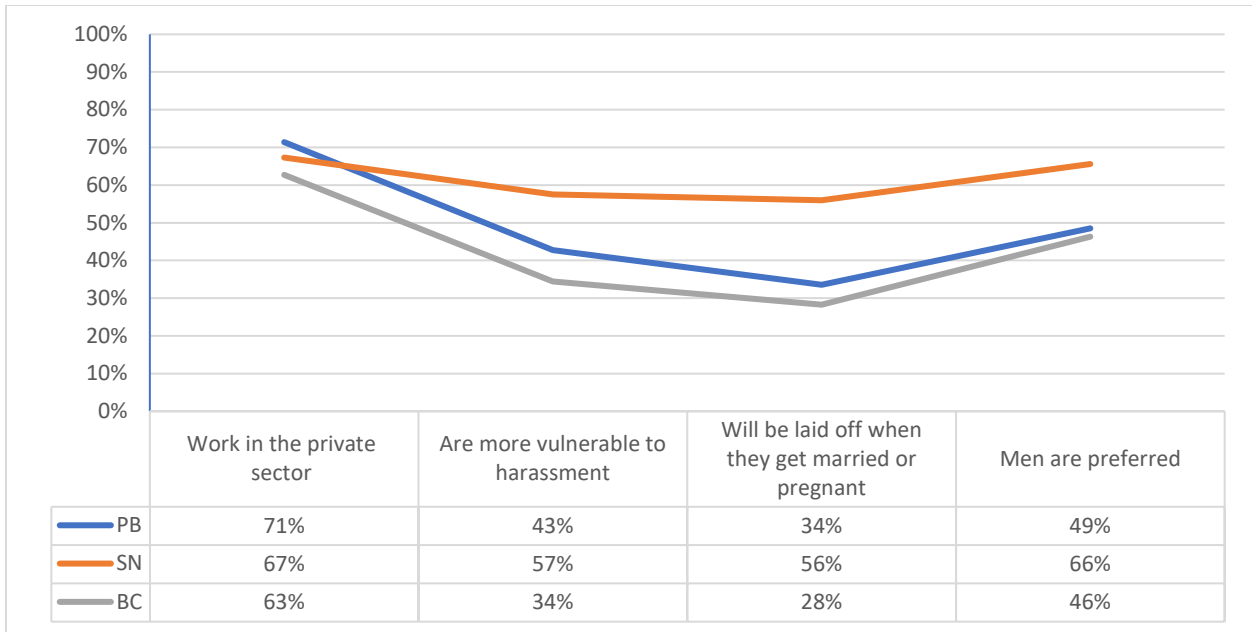
Figure 2: Private sector perceptions across different groups

	Work in the private sector	Are more vulnerable to harassment	Will be laid off when they get married or pregnant	Men are preferred
PB	71%	43%	34%	49%
SN	67%	57%	56%	66%
BC	63%	34%	28%	46%
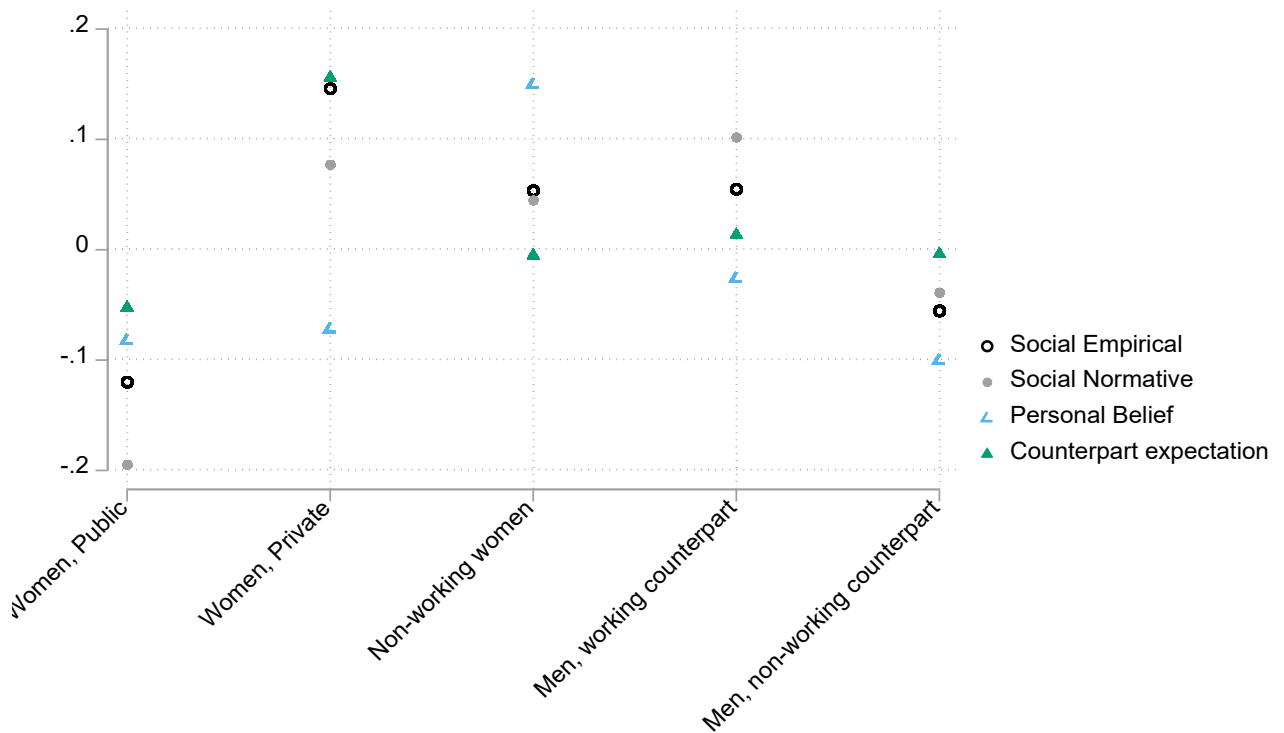
Scatter plot of belief indices on the private sector

Next, we put these together in the following framework to better understand what influences and is correlated with the personal beliefs and preferences of women towards participating in the private sector. We discussed personal beliefs with respect to acceptability in working in the private sector above; when asked about their preference for which sector to work in, overall, non-working women still prefer the public sector (about 60%). About 21% do not have a preference, and 18% prefer the private sector.

We estimate the following regression framework:

(i) $Y_i = \beta_0 + \beta_1 social\_empirical\_expectations_i + \beta_2 social\_normative\_expecations_i + \beta_4 intra\_household\_expecations_i + \beta_i X_i + \mathcal{E}_i$

where Y_i is the belief of individual i about working in the private sector or a preference for working in the private sector, $social\_empirical\_expectations_i$ is the number of working women in the private sector that the respondent knows, $social\_normative\_expecations_i$ is the extent to which the reference group of the respondent would approve or disapprove of private sector work for women, and $intra\_household\_expecations_i$ is whether the respondent perceives the male counterpart is okay with private sector work for women (i.e. Q1 in Table 3 above). X_i are controls, including gender, age, years of education, marital status, has a child below the age of 5, household income, number of cars as a measure of assets, and governorate dummy variables.

The results are shown in Appendix Table 6. The dependent variable in Columns 1-3 is personal belief of acceptability of working in the private sector, as well as preference for working in the private sector for both female and male respondents. These variables are re-scaled to a binary outcome from a Likert scale response for easier interpretation.

The regression shows that while both social empirical and normative expectations are correlated with individual beliefs about acceptability of working in the private sector, the perceptions of counterparts is most strongly correlated. For example, a one standard deviation increase in such perceptions is correlated with a 13% increase in acceptability.

Column 2 shows the relationship between individual acceptability and the standardized index of all questions asked about the private sector (Q1-Q4 in Table 3 above), and the results are similar. While societal expectations (both empirical and normative) are significantly correlated, it is the expectation of the counterpart that's more strongly and significantly correlated.

 Next, we explore perceptions towards working in the private sector in particular for non-working women, and ask whether such expectations are correlated with if non-working women want to work? We investigate using the following regression framework:

(ii) $Want\ to\ work_i = \beta_0 + \beta_1 social\_empirical\_expectations_i + \beta_2 social\_normative\_expecations_i + \beta_3 personal\_beliefs_i + \beta_4 intra\_household\_expecations_i + \beta_i X_i + \mathcal{E}_i$

where *Want to work$_i$*, includes both male and female respondent responses on if a non-working female (respondent or female counterpart) in the household wants to work,[14] *social_empirical_expectations$_i$* is the number of working women in the private sector that the respondent knows, *social_normative_expecations$_i$* is the extent to which the reference group of the respondent would approve or disapprove of private sector work for women, *personal_beliefs$_i$* is whether the respondent is okay with private sector work for women, and *intra_household_expectations$_i$* is whether the respondent perceives the male counterpart is okay with private sector work for women. X$_i$ are controls as above.

Appendix Table 6 Column 4 shows the regression. We find that social expectations, in particular, empirical expectations for both women and men (i.e. the number of other women you know who are working in the private sector) predict wanting to work for women who are currently not working, or for unemployed female counterparts of male respondents. Even though women and men do not know that many women working in the private sector, incremental exposure to women working in the private sector, even on the margins, appears to be important, for both women and men. Personal beliefs and expectations of counterpart are also correlated with wanting to work, with personal beliefs more strongly correlated (the coefficient is similar to social empirical expectation).

We summarize as follows: individual cultural beliefs with respect to greater acceptability of the private sector are influenced by both societal expectations and counterpart beliefs within the household (and more strongly so by the latter). Knowing more people who work in the private sector, as well as more favorable perceptions of the private sector in the household are also important correlates for women who want to work. Therefore, in general, greater acceptability of women working in the private sector, and greater willingness to work for women, are both correlated with better social norms and cultural beliefs about the private sector.

3.2.2 Other Barriers to Women's Work: Perceptions of Women's Work in General and Traditional Gender Roles

Next, we discuss the other thematic social norms questions that were asked to respondents: women working in general; publicness and mixing; and gender roles as shown in Table 4 below. All responses, across all components (social empirical and normative expectations, personal beliefs, counterpart expectations are shown for working women, non-working women, and male counterparts of these two groups in Appendix Tables 1,2, 3, 4).

Table 4: Social, individual, and counterpart belief questions asked across the three thematic areas in addition to the private sector questions shown in Table 3

Women Working	Gender Roles

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[14] Our main motivation for this specification is to include a larger sample in the regression framework.

• Women working from home • Women working outside the home • Women working in KRI • Necessary for both husband and wife to work to live comfortably	• Married women working • Married women returning home from work after 5 PM • Leaving child below 5 years with relative to go to work • Appropriate age of child for women to leave child and go to work
Publicness and Mixing	
• Women working in environment where most other employees are men • Working women risk their reputation by working	•

Figure 3 below shows that as more conditions are added to women's work, respondents tend to report reduced acceptability. For example, while 42% of women (on average in the reference group of respondents) work from inside of their homes, this number drops to only about 6% when asked if they return home after 5 pm. Across most questions, personal beliefs for women are more favorable towards labor force participation compared to the expectations of others in their reference group (the exception being leaving children with a relative and returning home after 5 pm). The discrepancy between personal and societal beliefs is quite large in some instances; for example, while 86% of respondents believe it is okay for women to work outside their homes, they expect only about 65% of their reference group to find this acceptable.

Beliefs of counterpart are reported to be more positive than the expectation of others in a reference group. However, this in some cases not very accurate. For example, for non-working women, the accuracy rate on spousal expectations is just over half (at 53%) on questions across these 3 themes (see Appendix Table 5).

Figure 3: Personal beliefs, social expectations, and counterpart expectations about women working under various conditions.

	Work	Work outside	Work if married	Work w/ men	Leave children w/ relative	Return after 5 pm
SE	42%	37%	30%	22%	17%	6%
SN	62%	65%	65%	54%	57%	51%
PB	93%	86%	78%	64%	56%	40%
BC	79%	83%	96%	82%	69%	77%
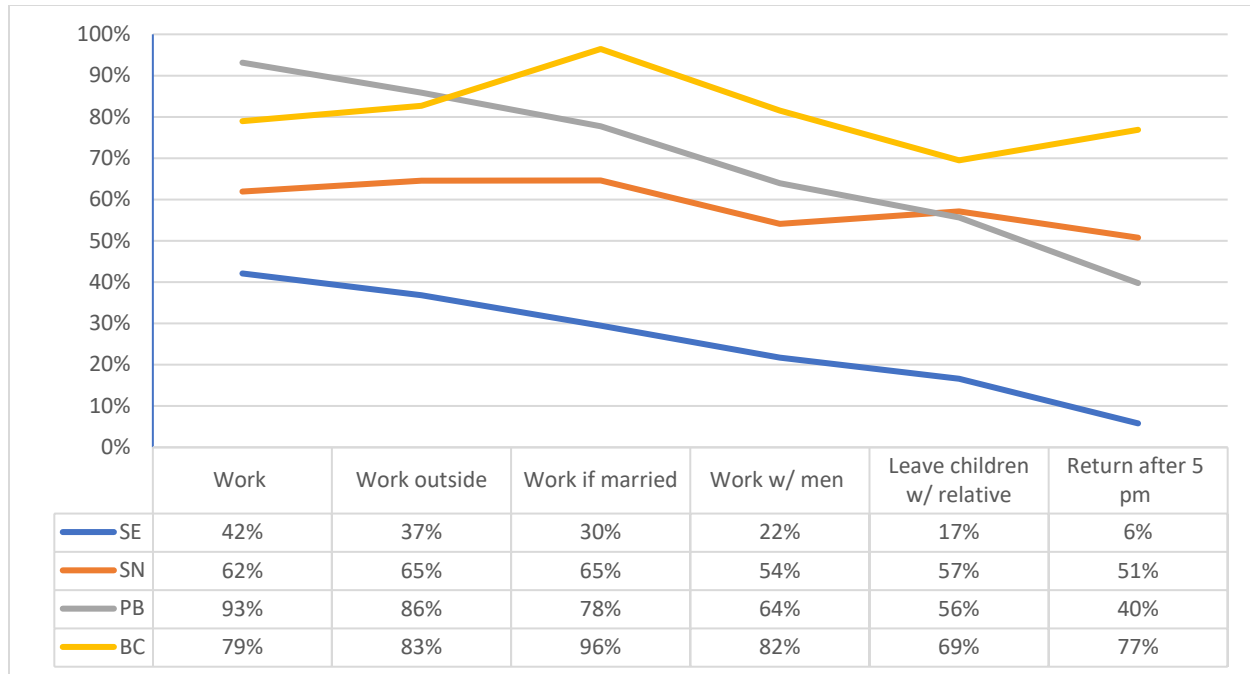
Next, we look at how working women are different from non-working women across the three themes shown in Table 4 (women working in general, publicness and mixing, gender roles). This analysis provides key insights in terms of how working women and their counterparts think differently from households where women are not working. It tells us how social norms and beliefs vary across the thematic areas between households with and without working women. Put differently, changing these perceptions in households with non-working women may be the first step towards greater acceptability and effort in women joining the labor force.

For regression analysis, since several questions were asked for each thematic area as shown in Table 4 above, we first aggregate the responses and standardize to create indices.[15] Separate indices were constructed for variables under each of the themes, as well as components of our measurement: social empirical and normative expectations, personal beliefs, and expectations of counterpart. For specification (ii) below we also construct separate indices by gender.

We run equation the specification below separately for women and men to better isolate the influence of male counterpart perceptions, and at the individual level.

$Y_i = \beta_0 + \beta_1 SE\_index_i + \beta_2 SN\_index_i + \beta_3 PB\_index_i + \beta_4 IH\_index_i + \beta_i X_i + \varepsilon_i$

where Y_i is the work decision for individual i (i.e. whether the female respondent or female counterpart of male respondent is working or wants to work), SE_index_i is an index of relevant

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[15] This helps to reduce multiple testing, and we test if the broader theme is different across working women and non-working women. This is also a simpler way to show the reliability and validity analysis of these indices as shown in Appendix Section 7.

social empirical questions for a given theme, and similarly, SN_index_i includes social normative variables, PB_index_i includes personal beliefs, and IH_index_i includes perceptions of male/female counterpart, X_i are control variables including age, years of education, marital status, has a child below the age of 5, household income, number of cars as a measure of assets, and governorate dummy variables.

The regressions results in Appendix Table 7 show that social empirical expectations (i.e. expectations of what other women in a reference group do) are significantly different and positive for the questions on working women in general (Columns 1 and 2) and gender roles (Columns 5, 6,and 7). These results are shown for both female and male respondents and hold even after controlling for a number of other variables. This implies that women and men in households with a working woman have greater exposure to working women, as well as married women working and different child care options. Equally important, it appears that perceptions of publicness and mixing do not appear to be different for working women and their families compared to households with non-working women (Columns 3 and 4).

It is interesting to note that social normative expectations (perceptions of what others in a reference group believe) are significantly negatively correlated for women in a number of cases, as shown in Columns 1, 3, and 6. The index refers to working women questions, publicness, and mixing, as well as gender roles. This pattern indicates that working women tend to think that more people in their reference group would disapprove of women working under these conditions, compared to non-working women, and this may indicate that working women are exposed to greater criticism, after they started working.

For questions about gender roles (Columns 5, 6, and 7), along with social empirical expectations, expectations of counterpart for women and the personal beliefs of men within the household are also significantly and positively correlated with female work status. These results highlights the importance and influence of men's views when it comes to decisions on questions related to married women working and childcare.

We also show the regressions for the individual variables that comprise the gender role index in Appendix Table 8 and following the same model specification above (these include married women working, returning after 5 pm, leaving the child with a relative, appropriate age of child to resume work, shown in Table 4 above). We show these regressions only for female respondents, to show the influence of the male counterpart. The regression results show that social empirical expectations are positively and significantly correlated for "married women working" and "leaving children with relatives". This implies that working women are more likely to know of other married women who avail of different childcare options, including leaving children with relatives. Personal beliefs or counterpart expectations are positive and significantly different for households with working women when asked about "leaving children with relatives" and "returning home after 5 pm" respectively. This implies that individual beliefs of working women and their male counterparts are positively different and more flexible when it comes to these considerations.

Also, as discussed in the previous section, working women's personal beliefs are strongly negative about the risks of working in the private sector (primarily from public sector workers) as shown in Column 9.

For male respondents, social empirical expectations are correlated for the working women and gender role themes (Columns 2 and 7), showing that men also know more working women, and other households who deviate from expected gender roles. Their expectations of female counterpart views are also positively significantly correlated with the gender role theme as shown in Column 7. This suggests that men may in some cases pay attention to the female counterpart's views as well, alongside their own views.

The results taken together suggest that women who work and their counterparts tend to have somewhat different views and expectations across these thematic areas. When it comes to women working, in general, it appears that working women are more aware of others who work, but are also more likely to think that others will speak badly of working women. When topic areas such as gender roles (and the private sector as discussed above) it appears that along with what others do, individual perceptions and expectations of counterpart are different for working women, i.e. both societal expectations, as well as individual and household perceptions (or cultural beliefs in the household) are different. While these are derived from correlations, it still suggests that individuals and their counterparts in households with working women were amenable to changing these perceptions in the ways outlined above.

3.2.3 Job Seeker Effort: Persistence and Channels to Finding Work

Job search intensity, including both persistence in looking for work, "intention-action" gaps (i.e. what people say they want to do, and what they actually do) and exploring additional channels to finding work are further barriers to finding work for women in KRI. We find evidence of these barriers through responses in the social norms sample, as well as an additional sample of job seekers registered at a job agency in KRI called Rwanga Foundation.

In an initial diagnostic exercise with 100 randomly selected job seekers with women who were registered with Rwanga, women who are currently working, had to on average look for a job for 7.5 months before they were able to successfully find a job. However, non-working women had stopped looking for work after 2.76 months. Working women respondents (N=175) in the social norm sample reported a similar number of an average of almost 9 months looking for jobs before they found their current job (the median was 3 months, and 62% had found jobs within 6 months).

We also observe "intention-action" gaps for non-working women who want to work in the social norms sample as well. For example, while 68% of non-working women said they want to work, only 20% of these women (who want to work) had either spoken to a friend or relative about work or looked for work in the past 6 months. Even fewer, 13.8%, had contacted a job

center or agency or website, or looked up advertisements on TV/newspapers, or talked to a company. Only 8.6% of women who want to work had sent their CV to an employer, and 5.2% had interviewed for a job, in the past 6 months.

Women seeking employment underutilize formal channels in KRI. Women registered with Rwanga, and who had found jobs recently had used a few additional formal channels such as job agencies, and websites to look for jobs with a median number of 6 different job agencies, websites, employment offices, and other formal channels compared with 4.5 for non-working women. Conversely, working women had reached out to fewer friends and family. However, in spite of this, more working women had eventually found jobs through friends and family (53.5%) compared to formal channels (46.5%). During follow up calls with staff from Rwanga, most of the total of 1,780 job seekers re-iterated that they did not believe applying through more formal channels would lead to eventual employment. A commonly held belief, that hindered efforts to reach out and work with registered job seekers is that successful employment is only achieved through connections and informal contacts, leading to less effort using formal channels, as well as lower trust in such institutions.

4. Discussion

In this paper, we report findings on psychological, social, and cultural barriers to participation from two primary data sets, first a representative sample of women and men, including working women in all the 3 governorates of KRI, and second a sample of job seekers who were registered with a job agency. We find a few positive indicators with respect to female labor force participation and perceptions towards women's work in the private sector. For example, perceptions towards women working in the private sector appear to be favorable; about 70% of women and men are okay with women working in the private sector, and these numbers are even higher among non-working women, in particular for those who want to work (nearly 84%). Wages are also perceived to be higher on average in the private sector compared to the public sector. In the smaller sample of younger and more educated women who were registered with a job agency, we find that about 75% found work in the private sector, in July and August of 2018.[16]

However, both women and men know very few women actually working in the private sector (about 1 out of 10 working women on average) given low female participation rates in the labor market in general. About 58% report not knowing another woman who works in the private sector. Furthermore, private sector work for women is associated with small business engagements such as tailoring, textiles, and baking for example instead of higher-skilled work opportunities in private companies.

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[16] About 83 job seekers of 1,370, or 6% of job seekers had found jobs in the 2 months.

There is a mismatch when it comes to perceptions of risks and discrimination associated with private sector work, including greater harassment, being laid off, and men being preferred. For example, individuals expect others in a reference group to have much worse expectations than they have themselves. Conversely, they expect their counterpart to have more favorable expectations, and there is just over a 50% match in responses between spouses from the same household. This indicates that while both social norms and cultural beliefs within the household (of both men and women) play a role in shaping the beliefs and preferences of women working in the private sector, there is also a mismatch in these perceptions between expectations and what is reported by respondents.

These findings suggest a number of interventions and important avenues for future research. For example, various channels including college career services, jobs agencies, and other such institutions, can provide female job seekers with more information about jobs available in the private sector, including which parts of the private sector women are already working in, and highlighting jobs with greater skill requirements. At a larger scale, there is scope for media campaigns, about women-friendly workplaces in certain private-sector firms, that directly address the negative perceptions of working in the private sector. Since there is likely to be variation in the quality of jobs in the private sector, the institutions of the Kurdistan Regional Government (KRG) can help by identifying accredited companies to work in. The information provided by KRG and associated agencies is crucial, since this information may be viewed as coming from a trusted source.

Successful women working in the private sector and women entrepreneurs can serve as effective role models in changing both social norms and cultural beliefs, for both women and men. Story telling has been shown to have a powerful influence on real-life behavior and can be used to highlight the successes of such women. For example, in Brazil, access to the TV Globo network—which was dominated by soap operas with independent female characters with few, or even no children—has been linked to the country's rapid drop in fertility. Viewing the soap operas had an effect equal to 1.6 years of additional education (La Ferrara, Chong, and Duryea 2012). Similar, exposure to different lifestyles in cable television shows in Indian villages changed attitudes towards reduced acceptability of domestic violence and son preference, and increased women's autonomy and decision making, particularly in reduced fertility, and increased education of younger children (Jenson and Oster, 2009). A recent evaluation documents the impact of viewing a popular show called MTV Shuga on HIV and sexual knowledge and behaviors; for example, the authors find that those who viewed the show were more likely to subsequently get tested for HIV (Banerjee et al, 2019). More cost-effective forms of storytelling through edutainment can be explored including compelling narratives. For example, shorter documentaries of successful individuals from similar communities or backgrounds in Ethiopia raised aspirations as well as changed behaviors around savings, credit, and investment in children (Bernard et al, 2014).

However, such productions are likely to be most effective when individuals can identify with the characters and the circumstances are similarly applicable to most. Equally important, if there is

increased salience of greater viewership, then expectations of others' beliefs may also change towards a more favorable view of the private sector.

Concurrently, the private sector can also be encouraged to recruit and retain more women, through social recognition or other notional recognition and publicity, which can also be facilitated by the KRG.[17]

Furthermore, the regression analysis showed that social empirical expectations (what others in one's reference group do) have been associated with women's decisions to work or wanting to work, particularly, when respondents were asked questions about women working in general, as well as traditional gender roles. Personal beliefs and expectations of counterparts were also correlated with women working within the context of traditional gender role questions. This implies that when it comes to gender roles and working, the decision by women to work is influenced by an interplay of what others are doing, their own beliefs, as well as their expectations of their counterpart's view.

Some implications of the above results are that publicizing women's work in KRI may be a useful policy tool – perceptions of the extent to which women are working seem to matter. The acceptability of working in the private sector by both women and men can also be publicized, given the big mismatch in negative expectations of others about risks and discrimination compared to more favorable individual beliefs (especially for non-working women).

Moreover, the results on households with working women thinking differently about gender roles (especially leaving children with relatives, and returning after 5 pm) point towards focusing policy tools on improved childcare provision, as well as introducing flexible work hours so women can work from home or return home earlier if needed. While we only asked about leaving children with relatives as a childcare option[18] (and age of a child when it is acceptable to do so), the feasibility of other childcare options such as those offered by companies or local childcare agencies will require further research and investigation. The results showed that the perceptions of counterpart (i.e. that of men) are different for households with working women, and as such good policies will involve men directly. Recent interventions have also successfully targeted men in the region to support women in finding employment (Bursztyn et al, 2018). Interventions could help to involve men both in the job search process, but also in playing a greater role in the household – for example, in utilizing childcare options at the man's workplace or nearby (if available).

Additionally, based on work with a job agency, registered job seekers did not think that applying through more formal channels would lead to successful employment, given the commonly held belief in KRI that successful employment is only achieved through connections

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[17] In fact, a pilot program to recognize companies with the most "female friendly" policies and provisions is already being implemented in KRI.
[18] The formative research had found that of all the available childcare options, leaving children with relatives was the most acceptable.

and informal contacts. In order to change these views, first additional and robust job agencies should be encouraged to develop. Next, the KRG can again play a role in both referring job seekers to such agencies, and publicizing the success of such agencies in helping women find jobs. In order for such agencies to be successful, they have to successfully encourage and motivate female job seekers to engage in the job search process over longer periods to overcome the difficult labor market conditions, which are all useful areas of investigation for future research and policy.

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6. Appendix

Figure 1. Identifying different behaviors.[19]

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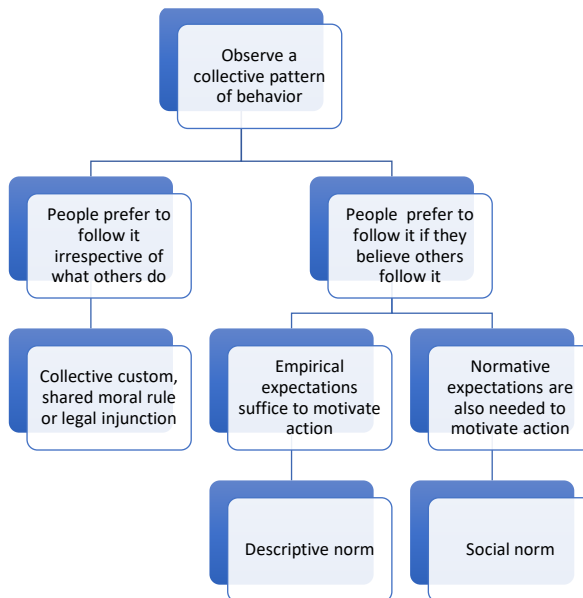
[19] Bicchieri, *Social Norms, Social Change*. Penn-UNICEF, July 2012.

Figure 2: Geographical distribution on participation by gender, and composition of public and private work (unweighted) in the sample
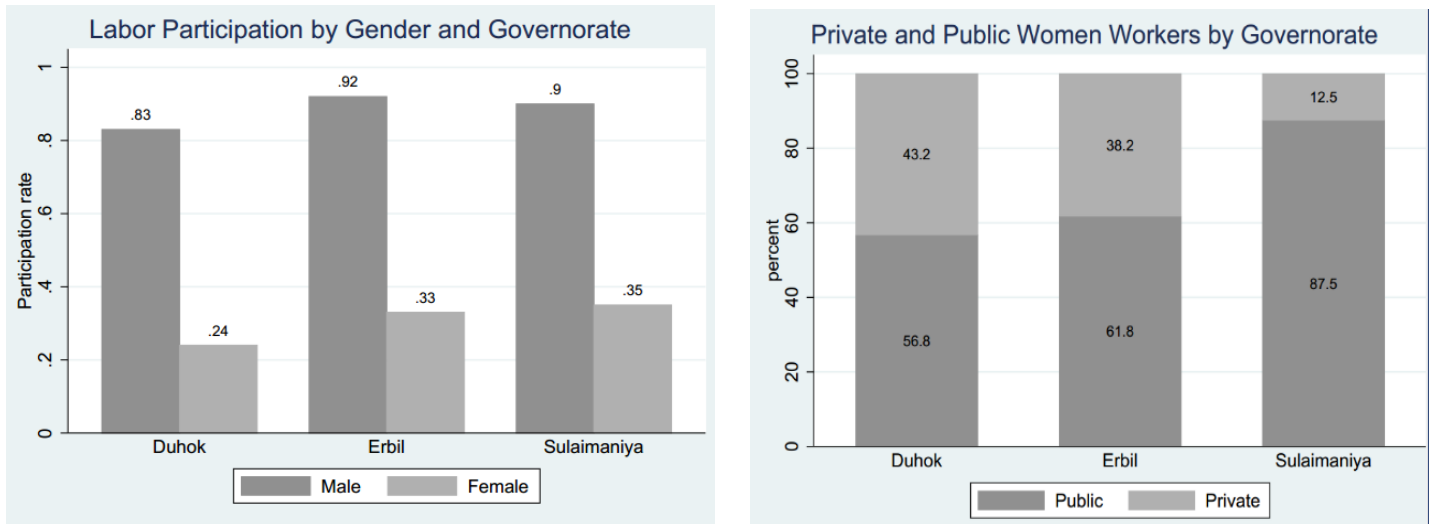
Figure 3: Perceptions of the 2 most common work categories for women in the private sector

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Guess of Common Worktype for Women by Gen...
First guess (SEE4A)

Category	Male	Female
Business	30	33
Craft		106
Specialist	17	24
Beauty	19	25
Security and Army	1	4
Seller	18	28
Health	54	63
Factory	5	10
Public Sector		12
Education	8	16
Agriculture	2	2
Don't know	59	108

frequency

Guess of Common Worktype for Women by Gen...
Second guess (SEE4B)

Category	Male	Female
Business	38	57
Craft		100
Specialist	22	24
Beauty	37	45
Security and Army	4	
Seller	32	44
Health	31	57
Factory	6	5
Public Sector		19
Education	7	15
Agriculture	5	4
Don't know	11	

frequency

Table 1: Social Empirical Expectations, what others in the reference group engage in

Empirical question	Overall	Working women (Public Sector)	Working women (Private Sector)	Non-working women	Men with working counterpart	Men with non-working counterpart
women work (out of 10)	4.21	6.86	5.35	3.91	4.89	3.19
	(3.28)	(2.89)	(3.05)	(3.30)	(3.07)	(2.93)
work outside home (out of 10)	3.68	6.51	3.96	3.15	4.53	2.85
	(3.14)	(3.00)	(2.92)	(3.03)	(3.05)	(2.74)
women work in KRI (%)	35.57	39.63	33.43	34.29	39.11	34.25
	(21.74)	(27.85)	(25.40)	(24.68)	(17.19)	(16.91)
job search for women (months)	15.58	18.89	15.44	14.19		
	(15.25)	(15.74)	(12.96)	(15.24)		
job search for men (months)	7.47	8.97	7.63	6.83		
	(9.18)	(10.22)	(8.99)	(8.74)		
work with men (out of 10)	2.17	3.40	2.27	1.87	2.35	1.98
	(2.64)	(3.22)	(2.30)	(2.43)	(2.90)	(2.45)
reputation at risk (out of 10)	0.18	0.27	0.20	0.23	0.11	0.14
	(0.86)	(1.25)	(0.60)	(0.98)	(0.50)	(0.73)
married women work (out of 10)	2.95	5.49	3.47	2.65	3.35	2.17
	(2.82)	(2.79)	(2.59)	(2.64)	(3.03)	(2.40)
return after 5pm (out of 10)	0.58	0.78	0.92	0.61	0.55	0.44

	(1.29)	(1.44)	(1.53)	(1.31)	(1.42)	(1.09)
leave children relatives (out of 10)	1.66	2.85	1.81	1.44	1.93	1.27
	(1.84)	(2.07)	(1.57)	(1.68)	(2.03)	(1.59)
age of child	3.79	2.19	2.78	3.74	3.31	4.86
	(3.53)	(1.83)	(2.43)	(4.07)	(2.79)	(3.56)
woman work in private sector (out of 10)	0.98	0.78	1.22	1.07	1.07	0.89
	(1.66)	(1.33)	(1.65)	(1.70)	(1.91)	(1.59)

Notes: These questions were typically framed as: "Think of the adult women where you live, out of 10 such women how many work" (in the first row).

Table 2: Social Normative Expectations, i.e. expectations of what others in the reference group believe and sanction

	Overall	Working women Public	Working women Private	Non-working women	Men with working counterpart	Men without working counterpart
women work						
Most or all	20.34	21.67	17.14	27.36	12.82	18.37
Some	39.97	28.33	60.00	36.79	41.88	41.70
A few	39.69	50.00	22.86	35.85	45.30	39.93
No one	58.47	110.00	42.86	81.60	53.85	34.28
work outside home						
Most or all	19.47	18.33	18.92	29.25	11.38	16.01
Some	36.41	31.67	54.05	31.13	35.77	39.50
A few	44.12	50.00	27.03	39.62	52.85	44.48
No one	57.70	110.00	37.84	80.66	47.97	36.30
work with men						
Most or all	28.94	25.30	23.26	36.78	23.26	26.04
Some	34.66	34.94	34.88	31.80	33.33	37.85
A few	36.40	39.76	41.86	31.42	43.41	36.11
No one	38.51	50.60	16.28	47.89	36.43	30.90
reputations at risk						
Most or all	14.88	13.64	7.89	17.05	6.86	17.74
Some	38.99	33.33	50.00	41.94	40.20	35.89
A few	46.13	53.03	42.11	41.01	52.94	46.37
No one	66.82	90.91	31.58	75.58	74.51	55.24

married women work						
Most or all	17.09	14.93	12.50	20.43	10.71	17.80
Some	37.82	34.33	45.00	36.96	36.61	39.02
A few	45.10	50.75	42.50	42.61	52.68	43.18
No one	55.18	88.06	27.50	64.78	56.25	42.42
return after 5pm						
Most or all	32.88	39.39	26.19	38.68	26.24	29.04
Some	30.24	26.26	38.10	29.97	27.66	32.01
A few	36.88	34.34	35.71	31.36	46.10	38.94
No one	28.18	25.25	19.05	33.10	26.24	26.73
leave children relatives						
Most or all	21.58	22.22	21.43	25.56	15.56	20.61
Some	36.12	30.86	45.24	39.63	27.41	36.82
A few	42.30	46.91	33.33	34.81	57.04	42.57
No one	34.67	53.09	19.05	42.59	29.63	27.03

VIEWS ABOUT THE PRIVATE SECTOR

woman work in private sector						
Most or all	33.74	34.82	31.91	37.76	29.38	31.86
Some	40.30	28.57	46.81	37.16	40.63	46.31
A few	25.96	36.61	21.28	25.08	30.00	21.83
No one	10.00	10.71	8.51	11.18	6.25	10.62
harassment						
Most or all	35.97	48.08	13.95	33.82	37.04	36.48
Some	34.36	26.92	55.81	36.76	35.56	31.45
A few	29.67	25.00	30.23	29.41	27.41	32.08
No one	22.34	18.27	11.63	30.88	24.44	16.98
laid of when married/pregnant						
Most or all	21.38	31.43	13.51	20.94	20.90	19.56
Some	44.25	40.00	56.76	44.77	41.79	44.79
A few	34.37	28.57	29.73	34.30	37.31	35.65
No one	17.24	14.29	18.92	23.83	15.67	12.93
men are preferred						
Most or all	40.60	47.66	31.82	42.50	29.86	42.54
Some	35.66	33.64	47.73	38.13	29.17	35.24
A few	23.74	18.69	20.45	19.38	40.97	22.22
No one	16.33	16.82	9.09	14.37	19.44	17.78

Notes: These questions were framed as "Think about the people where you live, how many such people would think or speak badly about women who work?"

Table 3: Personal beliefs

	Overall	Working women Public	Working women Private	Non-working women	Men with working couterpart	Men without working counterpart
women work inside home						
Yes	93.14	98.41	90.20	95.90	90.71	90.16
Sometimes Y/N	4.05	0.79	7.84	3.59	4.37	4.92
No	2.81	0.79	1.96	0.51	4.92	4.92
woman work outside home						
Yes	85.91	96.83	94.12	93.64	84.15	74.29
Sometimes Y/N	7.17	2.38	3.92	4.07	11.48	10.28
No	6.91	0.79	1.96	2.29	4.37	15.42
live comfortably						
Yes	80.40	89.68	92.16	88.52	77.72	69.15
Sometimes Y/N	14.00	9.52	7.84	10.46	17.39	18.25
No	5.60	0.79	0.00	1.02	4.89	12.60
work with men						
Yes	63.94	78.57	82.00	65.72	64.67	54.64
Sometimes Y/N	17.24	10.32	10.00	17.78	20.65	18.30
No	18.82	11.11	8.00	16.49	14.67	27.06
reputations at risk						
Yes	14.64	15.87	21.57	28.46	3.83	4.44
Sometimes Y/N	21.60	15.08	27.45	19.23	20.22	25.85
No	63.76	69.05	50.98	52.31	75.96	69.71
married women work outside						
Yes	77.74	96.03	78.43	86.19	75.00	64.43
Sometimes Y/N	14.02	3.17	19.61	7.93	16.85	21.65
No	8.24	0.79	1.96	5.88	8.15	13.92
return after 5pm						
Yes	39.77	45.60	49.02	45.78	43.41	28.91
Sometimes Y/N	25.31	23.20	23.53	23.02	28.02	27.34
No	34.92	31.20	27.45	31.20	28.57	43.75
leave children relatives						
Yes	55.68	78.57	78.43	69.33	48.89	34.21
Sometimes Y/N	21.94	11.90	9.80	17.78	25.00	29.74
No	22.38	9.52	11.76	12.89	26.11	36.05
VIEWS ABOUT THE PRIVATE SECTOR						
woman work in private sector						
Yes	71.40	72.80	82.35	79.74	67.96	62.86
Sometimes Y/N	15.27	17.60	13.73	13.33	17.13	15.84
No	13.33	9.60	3.92	6.92	14.92	21.30
harassment						
Yes	42.74	53.23	45.65	37.88	45.30	42.33
Sometimes Y/N	26.10	22.58	26.09	25.35	25.97	28.04
No	31.16	24.19	28.26	36.77	28.73	29.63
laid off when married/pregnant						

Yes	33.56	47.46	36.96	31.67	37.72	28.32
Sometimes Y/N	40.60	29.66	34.78	35.28	41.32	50.29
No	25.84	22.88	28.26	33.06	20.96	21.39
men are preferred						
Yes	48.52	44.35	70.21	51.98	41.34	47.26
Sometimes Y/N	17.70	12.90	14.89	17.41	17.32	20.10
No	33.78	42.74	14.89	30.61	41.34	32.64

Notes: These questions were typically framed as "it is okay for women to work from their home".

Table 4: Beliefs about counterpart

	Overall	Working women Public	Working women Private	Non-working women	Men with working couterpart	Men without working counterpart
work inside home						
Yes	21.02	20.63	15.69	21.91		
Sometimes Y/N	8.30	5.56	11.76	8.51		
No	70.67	73.81	72.55	69.59		
work outside home						
Yes	17.28	15.87	20.00	17.44		
Sometimes Y/N	9.17	7.14	6.00	10.00		
No	73.54	76.98	74.00	72.56		
work with men IB						
Yes	18.48	16.80	18.00	19.64	17.61	18.36
Sometimes Y/N	15.40	10.40	26.00	15.50	13.07	16.44
No	66.12	72.80	56.00	64.86	69.32	65.21
reputations at risk IB						
Yes	4.65	3.23	1.96	5.17	1.64	6.43
Sometimes Y/N	13.14	9.68	23.53	14.99	6.56	14.21
No	82.22	87.10	74.51	79.84	91.80	79.36
married women work IB						
Yes	3.55	0.79	3.92	4.42		
Sometimes Y/N	12.97	8.73	25.49	12.47		
No	83.48	90.48	70.59	83.12		
return after 5pm IB						
Yes	23.12	20.97	17.65	24.61		
Sometimes Y/N	20.25	15.32	21.57	21.47		
No	56.63	63.71	60.78	53.93		
leave children relatives IB						
Yes	30.51	17.21	38.78	33.77		
Sometimes Y/N	22.38	18.03	24.49	23.56		
No	47.11	64.75	36.73	42.67		
woman work in private sector						
Yes	62.72	67.21	58.82	61.05	69.61	60.22
Sometimes Y/N	19.42	15.57	31.37	21.05	14.92	19.34
No	17.87	17.21	9.80	17.89	15.47	20.44
harassment						
Yes	34.43	40.00	22.92	32.42	38.95	34.07

Sometimes Y/N	27.86	29.17	39.58	26.92	26.16	27.42
No	37.71	30.83	37.50	40.66	34.88	38.50
laid off when married/pregnant						
Yes	28.28	35.77	20.93	25.21	32.12	27.60
Sometimes Y/N	43.05	43.09	44.19	45.61	42.42	40.65
No	28.67	21.14	34.88	29.18	25.45	31.75
men are preferred						
Yes	46.36	42.50	46.94	47.87	41.62	48.36
Sometimes Y/N	26.45	30.00	22.45	26.33	32.37	23.22
No	27.19	27.50	30.61	25.80	26.01	28.42

Notes: These questions were typically framed as "does he (husband, father or brother) [or she when asked to male counterpart] speak badly of women who work inside their home".

Table 5: Agreement between female expectation of male spouse, and personal belief of male spouse

	All women (% match)	Working women-Public (% match)	Working women-Private (% match)	Non-working women (% match)
Women work from home	63.28	67.42	63.16	62.09
Work outside home	59.63	67.42	54.05	58.06
Work with men	49.88	60.67	35.14	48.53
Putting reputation at risk	62.53	73.56	60.53	59.93
Married women work	62.07	71.91	63.16	58.77
Return after 5pm	45.67	55.17	47.37	42.72
Leave children with relatives	44.29	50	47.22	42.47
Private Sector				
Work in private sector	54.23	59.77	50	53.49
Harassment	42.54	54.02	31.43	40.71
Laid off	45.71	42.11	42.42	47.22
Men preferred	41.3	44.05	48.57	40

Notes: The table shows the percentage match between what women expect of their spouses, and the beliefs of spouses themselves. The questions had 3 answer options on a Likert scale: yes, no, sometimes yes/no, and a match indicates the same response.

Table 6: Regression on private sector attitudes, and wanting to work

	(1) Okay to work in private	(2) Okay to work in private	(3) Prefer Private	(4) Want to work
Social empirical	0.0262**		0.00389	0.0574***
	[0.0104]		[0.0121]	[0.0199]
Social normative	0.0517***		0.00649	0.0188
	[0.0106]		[0.0123]	[0.0196]
Personal Belief				0.0526**
				[0.0224]
Expectation of counterpart	0.132***		0.0280**	0.0383*
	[0.0107]		[0.0125]	[0.0210]
Social empirical index		0.0397***		
		[0.0109]		
Social normative index		0.0298**		
		[0.0133]		
Expectation of counterpart index		0.0918***		
		[0.0134]		
Female	0.104***	0.104***	-0.00715	0.0908**
	[0.0209]	[0.0219]	[0.0243]	[0.0412]
Age	-0.000209	-8.00e-05	-0.00263*	-0.00650***
	[0.00133]	[0.00140]	[0.00154]	[0.00241]
Yrs of Education	-0.000681	-0.00139	-0.0113***	0.0123***

	(1)	(2)	(3)	(4)
	[0.00224]	[0.00236]	[0.00260]	[0.00441]
Married	-0.0395	-0.0735*	-0.0875**	-0.0684
	[0.0369]	[0.0385]	[0.0426]	[0.0736]
Erbil (dummy)	-0.0604**	0.0236	0.0382	-0.0578
	[0.0281]	[0.0303]	[0.0328]	[0.0503]
Suli (dummy)	-0.105***	0.0101	0.0970***	-0.139***
	[0.0282]	[0.0324]	[0.0328]	[0.0515]
young_child	0.0310	0.0357	0.0196	-0.00732
	[0.0239]	[0.0252]	[0.0278]	[0.0434]
HH income	0.0101*	0.0104*	0.00287	-0.00904
	[0.00558]	[0.00589]	[0.00648]	[0.0102]
Wages higher in private sector	0.0272	0.0168	0.157***	
	[0.0233]	[0.0244]	[0.0272]	
Num cars	-0.0355*	-0.0567***	-0.0164	
	[0.0183]	[0.0193]	[0.0213]	
Constant	0.814***	0.791***	0.271***	0.876***
	[0.0658]	[0.0693]	[0.0756]	[0.129]
Observations	881	927	887	598
Adjusted R-squared	0.241	0.147	0.062	0.132

Standard errors in brackets   *** p<0.01, ** p<0.05, * p<0.1

Notes: Columns 1-3 represents personal beliefs of acceptability of working in the private sector, as well as preference for working in the private sector for both female and male respondents for both working and non-working respondents. Both of these of the dependent variables are re-scaled to between 0-1 for easier interpretation. Column 4 includes both male and female respondent responses on if non-working female (respondent or female counterpart) wants to work. "Social Normative" is a standardized variable of the single question of how many would speak badly of women working in the private sector, whereas "Social Normative Index" is a standardized aggregated variable including all the 4 questions asked about the private sector, including perceptions of risks and discrimination. The other perception variables should be in interpreted in a similar manner.

Table 7: Regressions results across the 4 themes showing differences between women and men in households where the women is working (vs households where she is not)

	1	2	3	4	5	6	7	8	9	10
Outcome	Working female	Working female	Working female	Working female	Working female	Working female	Working female	Working female	Working female	Working female
Theme	**WW**	**WW**	**PM**	**PM**	**GR**	**GR**	**GR**	**PR**	**PR**	**PR**
Respondents	Women respondents	Male respondents	Women respondents	Male respondents	Both	Women respondents	Male respondents	Both	Women respondents	Male respondents
Social Empirical Index	0.0613***	0.0967***	0.0104	0.0110	0.0696***	0.0609***	0.0745***	0.0118	-0.0222	0.0420*
	[0.0180]	[0.0198]	[0.0170]	[0.0202]	[0.0135]	[0.0168]	[0.0206]	[0.0148]	[0.0173]	[0.0219]
Social Normative Index	-0.0338**	0.00805	-0.0466***	0.0171	-0.00732	-0.0398**	0.00739	0.00960	-0.0139	0.0259
	[0.0156]	[0.0208]	[0.0176]	[0.0201]	[0.0130]	[0.0186]	[0.0192]	[0.0180]	[0.0235]	[0.0273]
Personal Belief Index	-0.0188	0.00912	0.0291	0.0214	0.0352**	0.0286	0.0366*	-0.0393**	-0.0532**	-0.0163
	[0.0283]	[0.0130]	[0.0206]	[0.0206]	[0.0139]	[0.0205]	[0.0197]	[0.0183]	[0.0232]	[0.0288]
Counterpart Expectation Index	0.00266		0.00952			0.0373*		0.0143	0.0186	-0.00168
	[0.0164]		[0.0179]			[0.0195]		[0.0183]	[0.0232]	[0.0283]
Controls										
Age	0.0141***	0.00344	0.0149***	0.00359	0.00792***	0.0143***	0.00345	0.00895***	0.0150***	0.00377
	[0.00219]	[0.00230]	[0.00225]	[0.00228]	[0.00156]	[0.00219]	[0.00228]	[0.00178]	[0.00247]	[0.00262]
Yrs Education	0.0309***	0.00152	0.0325***	0.00534	0.0164***	0.0290***	0.00305	0.0199***	0.0348***	0.00409
	[0.00359]	[0.00456]	[0.00368]	[0.00448]	[0.00284]	[0.00362]	[0.00441]	[0.00306]	[0.00385]	[0.00484]
Married	-0.134**	-0.108	-0.133**	-0.109	-0.125***	-0.121**	-0.106	-0.162***	-0.161**	-0.116
	[0.0609]	[0.0777]	[0.0627]	[0.0777]	[0.0472]	[0.0603]	[0.0776]	[0.0531]	[0.0689]	[0.0846]
Erbil	0.0961**	0.0789*	0.0103	0.0731	0.0591*	0.0640	0.0355	0.0365	0.0179	0.0486
	[0.0461]	[0.0461]	[0.0504]	[0.0462]	[0.0324]	[0.0461]	[0.0460]	[0.0399]	[0.0558]	[0.0552]
Suli	0.0450	0.120***	-0.0205	0.120***	0.0431	-0.0132	0.0813*	0.0319	-0.0435	0.103

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	[0.0441]	[0.0439]	[0.0463]	[0.0447]	[0.0305]	[0.0420]	[0.0439]	[0.0419]	[0.0552]	[0.0631]
Young child	0.0473	0.00798	0.0444	0.0102	0.0182	0.0472	0.00240	0.0172	0.0268	0.0104
	[0.0406]	[0.0435]	[0.0405]	[0.0434]	[0.0297]	[0.0404]	[0.0429]	[0.0330]	[0.0437]	[0.0481]
HH Income	0.0528***	0.0743***	0.0570***	0.0788***	0.0632***	0.0529***	0.0730***	0.0713***	0.0549***	0.0835***
	[0.00911]	[0.00957]	[0.00880]	[0.00958]	[0.00647]	[0.00898]	[0.00947]	[0.00718]	[0.00973]	[0.0107]
Num cars	-0.00857	0.0161	-0.00305	0.00263	0.00998	-0.00475	0.0269	0.000468	0.00402	0.00797
	[0.0319]	[0.0347]	[0.0315]	[0.0346]	[0.0234]	[0.0313]	[0.0343]	[0.0264]	[0.0345]	[0.0400]
Female					0.0120			0.0576**		
					[0.0275]			[0.0289]		
Observations	558	560	554	560	1,044	559	485	972	493	479
Adjusted R-squared	0.293	0.176	0.285	0.141	0.242	0.306	0.202	0.200	0.302	0.129

Notes: Standard errors in brackets *** p<0.01, ** p<0.05, * p<0.1. The outcome variable is always whether the woman (respondent or counterpart) is working. Columns 1 and 2 shows regressions for the questions we had under the theme women working (WW). Columns 3 and 4 show regressions for questions we had under publicness and mixing (PM), Columns 5-7 show regressions for questions related to gender roles (GR), and columns 8-10 show regressions for questions under the private sector theme (PR). All regressions are shown separately for male respondents and women respondents. We also show the gender roles (GR) and private sector (PR) regressions for everyone in columns 5 and 7.

Table 8: Regressions with individual variables on women's work and gender roles on the sample of female respondents

	(1)	(2)	(3)	(4)	(5)
	Working Female	Working Female	Working Female	Working Female	Working Female
Dependent Variable					
	Working outside home	Married women work	Returning after 5pm	Leaving child with relative	Age of child to return to work
Topic					
Social Empirical Expectation	0.0757***	0.0754***	0.00885	0.0477**	0.0114
	(0.0181)	(0.0179)	(0.0149)	(0.0187)	(0.00954)
Social Normative Expectation	-0.0408***	-0.0353**	-0.0334*	-0.0212	-0.00614
	(0.0154)	(0.0175)	(0.0199)	(0.0191)	(0.0109)
Personal Belief	-0.0405	0.00714	-0.00389	0.0467**	0.0147
	(0.0287)	(0.0222)	(0.0196)	(0.0230)	(0.0110)
Counterpart Belief	0.000487	-0.00604	0.0548***	0.0286	-0.00502
	(0.0168)	(0.0174)	(0.0195)	(0.0196)	(0.0106)
Controls					
Age	0.0139***	0.0138***	0.0142***	0.0148***	0.0150***
	(0.00218)	(0.00224)	(0.00225)	(0.00235)	(0.00271)
Yrs of Education	0.0294***	0.0291***	0.0321***	0.0331***	0.0330***
	(0.00379)	(0.00379)	(0.00354)	(0.00391)	(0.00418)
Married	-0.148**	-0.151**	-0.108*	-0.101	-0.0901
	(0.0611)	(0.0635)	(0.0644)	(0.0660)	(0.0746)
Erbil	0.0885*	0.0666	0.0614	0.0598	-0.00333
	(0.0462)	(0.0462)	(0.0501)	(0.0570)	(0.0591)
Suli	0.0378	0.0147	0.0150	-0.0267	-0.0468
	(0.0436)	(0.0424)	(0.0486)	(0.0527)	(0.0608)
Young child	0.0556	0.0489	0.0389	0.0352	0.0399
	(0.0404)	(0.0415)	(0.0416)	(0.0428)	(0.0476)
HH Income	0.0512***	0.0512***	0.0605***	0.0533***	0.0563***
	(0.00908)	(0.00939)	(0.00931)	(0.00980)	(0.0107)
Num cars	-0.0101	-0.00310	0.000631	0.00497	0.0342
	(0.0316)	(0.0322)	(0.0324)	(0.0351)	(0.0377)
Constant	-0.563***	-0.556***	-0.662***	-0.668***	-0.621***
	(0.0931)	(0.0961)	(0.0917)	(0.0999)	(0.137)
Observations	546	537	533	480	398
R-squared	0.332	0.326	0.315	0.329	0.313

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

7. Reliability and Validity of Social Norms measurement

We use exploratory factor analysis (principle factor analysis) to show that the social empirical expectations and social normative expectations are being measure differently i.e. the items under these components load onto different factors. When unrestricted, there are 3 factors with eigenvalue greater than 1 (see the screen plot in Figure 4). However, since the third factor only contains a few items, we restrict to 2 factors, and show that the empirical and normative items load onto separate factors (Table 9). We repeat this analysis (not shown) to confirm that social empirical and normative expectations are measured differently from personal beliefs.

Table 10 shows the correlation across all items aggregated across the 4 components: social empirical, normative, personal beliefs, and counterpart beliefs. Social normative, and counterpart expectations are most strongly correlated (although still less than 0.5). Personal beliefs are also correlated with societal and counterpart expectations. However, none of these components are strongly correlated with each other, showing that we are capturing different aspects of an individual's beliefs.

Figure 4: Screeplot to show number of factors (unrestricted) for social empirical and social normative items
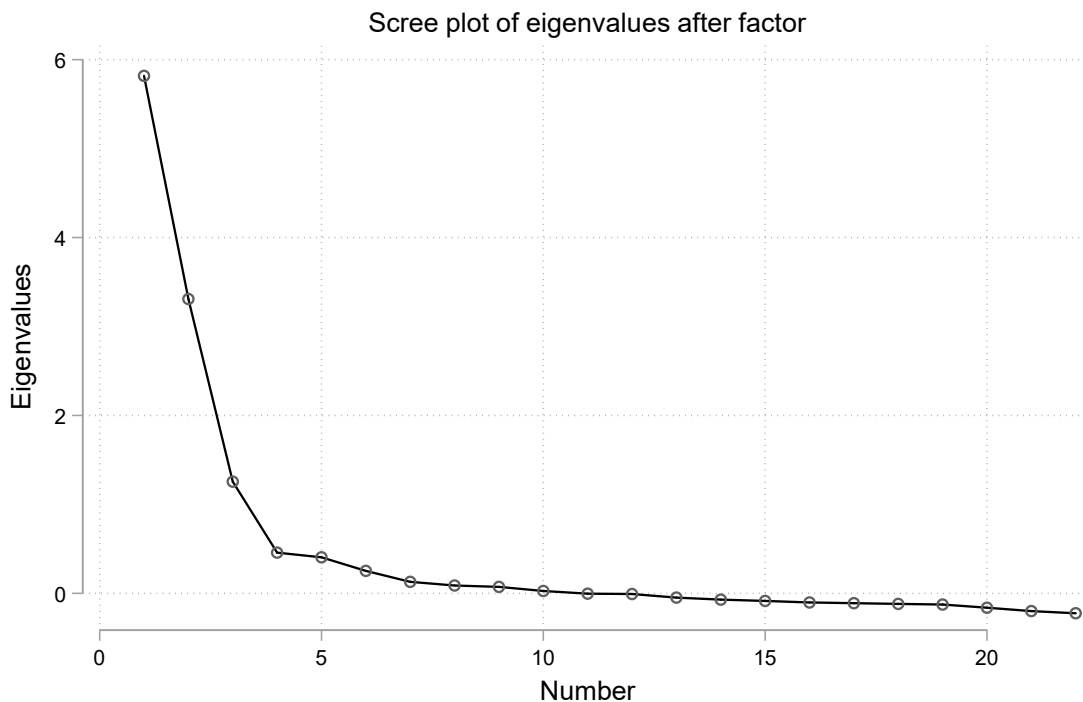

Scree plot of eigenvalues after factor

Table 9: Factor loadings for social empirical and normative items

Variable	Factor1	Factor2	Uniqueness
SEE1 (women work)		0.9242	0.1580
SEE2 (work outside home)		0.8802	0.2177
SEE3 (% women work)			0.9315
SEE5 (work with men)		0.671	0.5418
REV_SEE6 (reputation at risk)			0.9491
SEE8 (married women work)		0.7857	0.3956
SEE9 (return after 5pm)		0.5362	0.6986
SEE10 (leave child with relative)		0.6514	0.5810
rev_age_ch~e (age of child)			0.9972
SEE12 (work in private sector)		0.4617	0.7744
PNS_1 (women work)	0.7718		0.4129
PNS_2 (work outside home)	0.8283		0.3182
PNS_5 (work with men)	0.8253		0.3180
PNS_7 (reputation at risk)	0.7919		0.3692
PNS_8 (married women work)	0.8253		0.3130
PNS_9 (return after 5pm)	0.772		0.4108
PNS_10 (leave child with relative)	0.7926		0.3800
rev_age_ch~n (age of child)			0.9781
REV_PNS_11 (work in private sector)			0.9003
PNS_12 (harassment)	0.5781		0.6575
PNS_13 (laid off if married/pregnant)	0.5083		0.7369
PNS_14 (men are preferred)	0.4096		0.8333

(blanks represent abs(loading)<.4)

Note: Variables with SEE represent items measuring social empirical expectations, and PNS are items measuring social normative expectations. The table shows factor loadings after principle factor analysis and rotation

Table 10: correlation of all aggregated and standardized items across the 4 components

	social empirical z-score	social normative z-score	personal belief z-score	counterpart expectation z-score
social empirical z-score	1			
social normative z-score	0.2482	1		
personal belief z-score	0.3027	0.4022	1	
counterpart expectation z-score	0.1556	0.4851	0.4361	1

For validity, we analyze the distribution of the social norms index, shown in Figure 5.[20] It shows that working women have more positive views, followed by men with a working counterpart, non-working women, and men with a non-working counterpart, as expected. We also show that the combined full index (social norms along with personal and counterpart beliefs) and the social norms only index are positively correlated for women who are currently working, and also for non-working women who want to work (Table 11).

Figure 5: Distribution of standardized, aggregated social norms index

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[20] We aggregate all the standardized individual social empirical and normative questions, and then standardize the aggregate score to create this index.
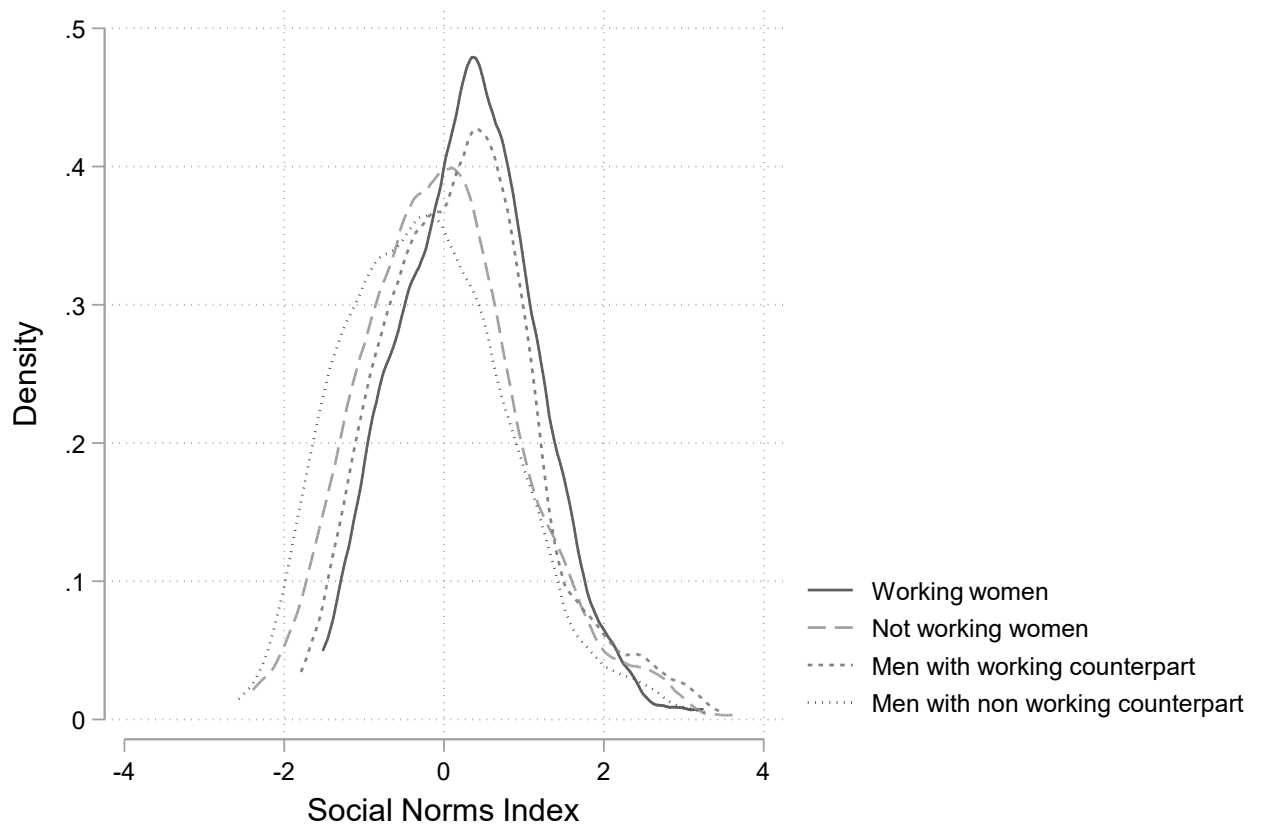
Table 11: Validity of all components and only social norms components

VARIABLES	Working female	Want to work	Working female	Want to work
z_all_indices	1.493***	1.675***		
	(0.102)	(0.209)		
z_sn_indices			1.128*	1.307**
			(0.0723)	(0.137)
Observations	1,145	394	1,143	393

Note: *** p<0.01, ** p<0.05, * p<0.1. All indices are standardized indices of the social empirical, normative, personal and counterpart beliefs. Social norms components include only the social empirical and normative perceptions.