

The Impact of Marriage on Women's Employment in the Middle East and North Africa

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1. Introduction

There is a strong gendered division of household labor in the Middle East and North Africa (MENA). The role of the husband is that of the breadwinner, providing income for the family. The responsibility of the wife is as the homemaker, raising children and assuming domestic responsibilities (Hoodfar, 1997). Marriage is thus a transition which, for women, adds substantial domestic responsibilities that can make it difficult for women to engage in market work (Assaad & El-Hamidi, 2009; Assaad, Hendy, & Yassine, 2014; Assaad & Krafft, 2014a; Assaad & Zouari, 2003; Hendy, 2015; Hoodfar, 1997). Because adult roles—including independent living, socially sanctioned sexual relations, and childbearing—are limited to the confines of marriage, to finish their transition to adulthood, women in the MENA region must marry. This distinction is even reflected in the language used to refer to women; a female is referred to as a girl until she is married, and then is considered a woman (Sadiqi, 2003; Singerman, 2007). For women in the MENA region, marriage is an imperative. When work is irreconcilable with marriage, it is work, rather than marriage, that must give way.

Difficulties in reconciling gender roles, domestic responsibilities and the jobs readily available in the labor market contribute to high rates of unemployment among women, and the low rates of female labor force participation in the MENA region (World Bank, 2013). The challenges women face in working also present a substantial hurdle to making full use of the region's human resources as a potential driver for economic development. Women are catching up with men, and in some cases surpassing them, in their attainment of education (World Bank, 2008). Thus, a more nuanced understanding of the challenges women face in reconciling marriage and work is required for both increasing economic opportunities for women and promoting economic development in the region.

Previous work has established the challenges women face in working after marriage, and that different types of work are easier or more difficult to reconcile with marriage. Specifically, public sector work tends to be easier to continue after marriage than private sector work, although work in family businesses can also often be reconciled with family responsibilities (Assaad, Hendy, & Yassine, 2014; Assaad & Hendy, 2013; Hendy, 2015; Hoodfar, 1997). Although sector of work has been clearly identified as a factor mediating the effect of marriage on women's employment, little research has explored what characteristics of work are driving these differences or what policies might help women who wish to work to continue to do so.

This paper will investigate the impact of marriage on women's employment, taking a more nuanced view of employment characteristics and the factors that may facilitate or hinder continued work after marriage. Our empirical work will be grounded in a strong theoretical understanding of individuals and families maximizing utility in the face of prescribed gender

roles. The economic bases (including specialization) that are linked with marriage (Becker, 1973, 1974, 1985; Shelton & John, 1996) will play a key role in understanding this important intersection of labor markets and domestic responsibilities. We will first examine the impact of marriage on employment, taking into account the likely endogeneity (both in terms of simultaneity and omitted variables) of marriage and work decisions. We will then attempt to identify the specific characteristics of individuals' work and circumstances that drive the impact of marriage on work. For instance, is generous maternity leave the reason that women in public sector jobs are more likely to continue working or is it the more limited number of hours and the more permissive attitude toward temporary absences from work?

The paper will be organized around three main research questions, comparing Egypt, Jordan, and Tunisia:

- 1) What is the impact of marriage on employment? How does this vary by the type of employment undertaken prior to marriage?
- 2) If women leave the labor force at marriage or did not work prior to marriage, what are the chances that they work at some point after marriage? What types of work do they enter after marriage?
- 3) What factors facilitate continuing or entering work after marriage—both in terms of job characteristics that are more reconcilable and individual and household characteristics?

2. Data

Data are needed on the timing of marital statuses and labor market histories, as well as on numerous individual and family characteristics. Given the data requirements, the study will be able to examine three MENA countries: Egypt, Jordan and Tunisia. The study will use the Egypt Labor Market Panel Survey 2012, Jordan Labor Market Panel Survey 2010 and Tunisia Labor Market Panel Survey 2014 data sets. All of the datasets include detailed labor market histories for those who ever worked as well as information on the timing of first marriages. This will allow for the creation of synthetic panel data of individuals' labor market states and marital status on an annual basis, going back a number of years.

Additional data, such as census data from the Integrated Public Use Microdata Series (IPUMS) International will be leveraged as a source for instrumental variables. For instance, sex ratios in the locality of an individual's birth (and for his or her age cohort) can be estimated accurately from this census data and provide an instrument for the timing and probability of marriage. Because employment opportunities may also play a key mediating role in women's work, data from annual labor force surveys may be incorporated to model that potential omitted variable.

3. Methods

To assess the impact of marriage on employment, we will first use the current and retrospective labor market status data to create an annualized panel of labor market statuses five years prior to

marriage and five years after marriage for women who married in the two decades preceding the various surveys.¹

This paper will then estimate a number of survival analysis models:

- 1) Cox proportional hazards models or discrete-time hazards models for the timing and probability of continuing in employment, with time varying covariates that allow for the impact of becoming and being married, as well as interactions with the different characteristics of individuals and their work. This will allow for estimates of how marriage impacts work and how this varies by different types and characteristics of individuals, their work, and the supports they may have in place (such as another caregiver in the household).
- 2) Cox proportional hazards models or discrete-time hazards models that address the likely endogeneity of marriage timing, instrumenting for marriage timing using an instrument such as the sex ratio (in one's place of birth), the presence of older siblings (likely to delay marriage) or the presence of younger siblings (likely to accelerate marriage).²
- 3) A competing risk model for entering or returning to different types of work after marriage, or remaining outside of the labor force. This can be used to assess the impact of different characteristics on entry or return to work, in contrast to exit from work.

Models will be estimated separately for each country, with comparable but country-specific characteristics. The estimation of the underlying probability of exiting work relative to the time from marriage will also allow for an improved understanding of when and why women exit work in relation to marriage. Do women exit work in the year preceding marriage, in anticipation of their changing roles? The year they get married? Or when they are expecting their first child? These baseline probabilities can be backed out of the Cox proportional hazards model, or estimated directly in a discrete time framework.

4. Intellectual Contribution

The problems women face in working after marriage are well known in the MENA region. However, the analysis to date has been largely descriptive, anthropological, or undertaken merely in a bivariate framework (Assaad & El-Hamidi, 2009; Assaad, Hendy, & Yassine, 2014; Assaad & Krafft, 2014a; Hendy, 2015; Hoodfar, 1997; Nassar, 2003). The multivariate literature tends to be limited in scope, for instance estimating the relationship between individual characteristics, type of work, and marriage timing and not accounting for potential endogeneity

¹ Since marriage is nearly universal in the countries we are examining (Assaad & Krafft, 2014b; Salem, 2014, 2015), selection into marriage is not an issue we need to consider. It would not, however, be desirable to focus on all ever-married women as this would over-sample those who married younger. Sampling those who married within a certain time frame is ideal for survival analysis, as a series of "entry cohorts" into marriage, thus representing the typical experience of a woman who married.

² Models that attempt to account for the potential endogeneity of marriage timing will incorporate tests for the validity of the instruments (especially whether the exclusion restriction holds and whether instruments are not weak).

(Assaad & Hendy, 2013). Another strand of the multivariate literature is the single-issue approach, for instance looking at the role of geographic mobility in limiting women's working options (Assaad & Arntz, 2005). None of the literature to date has undertaken a multivariate approach to multiple characteristics of work, nor accounted for potential endogeneity.

This paper, by not only taking a multivariate approach, incorporating multiple, policy-relevant dimensions of work, individual, family, and community characteristics, but also working to account for the endogeneity of marriage timing, will represent a substantial step forward in research on this important issue in the region. In addition to comparing the different factors that affect women's work, this paper will provide a comparative perspective across countries. Providing insight into the mechanisms that drive women's low labor force participation and exit from the labor force at marriage will be of great value in designing policies to facilitate women's economic participation.

5. Policy Implications

This paper is particularly important for understanding the constraints and drivers of low female labor force participation in the region, and constructing policies to increase participation. For instance, is it the hours of work that make it difficult for women to continue to work after marriage in the private sector? If so, facilitating part-time work and incentivizing the creation of part-time jobs might facilitate employment for married women. Alternatively, we may find that it is the availability of alternate caregivers—such as sisters or mothers who are not working—that allow women to continue to work after marriage. If this is the case, then the expansion of nursery and kindergarten services, which are not universally available or readily affordable for women in the region (El-Kogali & Krafft, 2015), might be a crucial part of keeping women employed until their children reach school age. Other potential policy interventions that might allow women to reconcile work and marriage include women-only workplaces as well as allowing women to work from home, a model that is increasingly common in Saudi Arabia (Hamdan, 2012).

The empirical results of the paper will allow us to identify what policies, programs, and job characteristics are most likely to facilitate women continuing, returning to, or entering work after marriage. A comparative policy perspective across countries will be particularly important. Jordan, for instance, has recently implemented a “socialization” of maternity leave costs, combining maternity leave into the larger social insurance system and removing a disincentive for employers to hire and retain women (Assaad, Hendy, & Yassine, 2014). Comparing the systems and impacts of maternity leave policies across countries can identify which approaches are the most effective. Overall, understanding the impact of marriage on work, and the mechanisms through which it operates, will be crucial to allowing women greater options throughout their life course, and preventing marriage from being the end of employment for women who still wish to work. These increases in opportunities for women can also allow countries to leverage women's human capital and promote economic development.

References

- Assaad, R., & Arntz, M. (2005). Constrained Geographical Mobility and Gendered Labor Market Outcomes Under Structural Adjustment: Evidence from Egypt. *World Development*, 33(3), 431–454.
- Assaad, R., & El-Hamidi, F. (2009). Women in the Egyptian Labor Market: An Analysis of Developments, 1988-2006. In R. Assaad (Ed.), *The Egyptian Labor Market Revisited* (pp. 219–258). Cairo, Egypt: American University in Cairo Press.
- Assaad, R., & Hendy, R. (2013). On the Two-Way Relation Between Marriage and Work: Evidence from Egypt and Jordan. In *Economic Development and the Rise of Islamist Parties: ERF 19th Annual Conference*. March 3-5, 2013, AFESD, Kuwait.
- Assaad, R., Hendy, R., & Yassine, C. (2014). Gender and the Jordanian Labor Market. In R. Assaad (Ed.), *The Jordanian Labour Market in the New Millennium* (pp. 105–143). Oxford, UK: Oxford University Press.
- Assaad, R., & Krafft, C. (2014a). *Youth Transitions in Egypt: School, Work, and Family Formation in an Era of Changing Opportunities*. Silatech Working Paper. Doha, Qatar: Silatech.
- Assaad, R., & Krafft, C. (2014b). An Empirical Analysis of the Economics of Marriage in Egypt, Morocco, and Tunisia. In C. Monga & J. Y. Lin (Eds.), *The Oxford Handbook of Africa and Economics*. Oxford, UK: Oxford University Press.
- Assaad, R., & Zouari, S. (2003). *Estimating the Impact of Marriage and Fertility on Female Labor Force Participation When Decisions Are Interrelated: Evidence from Urban Morocco*. *Topics in Middle Eastern and North African Economies No. 5*.
- Becker, G. S. (1973). A Theory of Marriage: Part I. *Journal of Political Economy*, 81(4), 813–846.
- Becker, G. S. (1974). A Theory of Marriage: Part II. *The Journal of Political Economy*, 82(2), S11–S26.
- Becker, G. S. (1985). Human Capital, Effort, and the Sexual Division of Labor. *Journal of Labor Economics*, 3(1), S33–S58.
- El-Kogali, S., & Krafft, C. (2015). *Expanding Opportunities for the Next Generation: Early Childhood Development in the Middle East and North Africa*. Washington, DC: World Bank.
- Hamdan, S. (2012, September 5). Saudi Arabia Signals Openness to Women Seeking Work. *New York Times*.

- Hendy, R. (2015). Women's Participation in the Egyptian Labor Market. In R. Assaad & C. Krafft (Eds.), *The Egyptian Labor Market in an Era of Revolution*. Oxford, UK: Oxford University Press.
- Hoodfar, H. (1997). *Between Marriage and the Market: Intimate Politics and Survival in Cairo*. Berkeley, CA: University of California Press.
- Nassar, H. (2003). Egypt: Structural Adjustment and Women's Employment. In E. A. Doumato & M. P. Posusney (Eds.), *Women and Globalization in the Arab Middle East: Gender, Economy, and Society* (pp. 95–118). Lynne Rienner Publishers.
- Sadiqi, F. (2003). *Women, Gender, and Language in Morocco*. Leiden, The Netherlands: Koninklijke Brill NV.
- Salem, R. (2014). Trends and Differentials in Jordanian Marriage Behavior: Timing, Spousal Characteristics, Household Structure and Matrimonial Expenditures. In R. Assaad (Ed.), *The Jordanian Labour Market in the New Millennium* (pp. 189–217).
- Salem, R. (2015). Changes in the Institution of Marriage in Egypt from 1998 to 2012. In R. Assaad & C. Krafft (Eds.), *The Egyptian Labor Market in an Era of Revolution*. Oxford, UK: Oxford University Press.
- Shelton, B. A., & John, D. (1996). The Division of Household Labor. *Annual Review of Sociology*, 22, 299–322.
- Singerman, D. (2007). *The Economic Imperatives of Marriage: Emerging Practices and Identities Among Youth in the Middle East*. Middle East Youth Initiative Working Paper No. 6.
- World Bank. (2008). *The Road Not Traveled: Education Reform in the Middle East and North Africa*. Washington, DC: World Bank.
- World Bank. (2013). *Jobs for Shared Prosperity: Time for Action in the Middle East and North Africa*. Washington, DC: World Bank.