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Since its establishment in 2003, this program has helped to launch world-class scholars into the exciting and emerging field of entrepreneurship research, thus laying a foundation for future scientific advancement. The findings generated by this effort will be translated into knowledge with immediate application for policymakers, educators, service providers, and entrepreneurs as well as high-quality academic research.
Short Abstract

I consider how families affect economic decisions across two different settings. I use data from Indonesia to understand the role that flexibility plays in job choice for women, especially mothers, Chapters 2 and 3. In Chapter 2, I ask whether the cost of temporal flexibility varies between wage employment and self-employment, especially for mothers. In Chapter 3 uses qualitative to understand how women value flexibility with respect to their choices in self-employment. Chapter 4 examines the influence of parental wealth and income on children’s college attendance using U.S. panel data.

Summary

When attempting to understand economic decisions early economists almost uniquely considered a unitary man but not the rest of his household. Beginning in the 1950’s with Mincer and continuing with Becker (1960, 1965, 1976) the study of economics began to include the study of not just a unitary man but his spouse and children, too. Since then there as been immense growth in this area of economic study and now a vast literature about the importance of households and families exists.1 Economics now takes seriously how canonical models of economic decision-making may change when interacted with models of household decision-making and the needs of family. At the heart of these insights is the fact that is it almost

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1 For limited examples of this broad literature see: McElroy (1891), Lundberg (1993), and Chiappor (1988).
impossible to understand the economic optimization problem of agents without considering that agent’s family and the deeply interdependent decisions they make.

Parents, in particular, optimize not just over their own personal welfare but that of their children. They act to aid and enable their children’s development in myriad ways both rational and altruistic. This fact is no less important to understanding economic decisions for being obvious. This dissertation deliberately considers this phenomenon as a starting place to understanding complex problems of economic optimization; namely, labor market engagement choices and educational financing. The first two chapters consider the differential role women often take when it comes to child rearing and care how it affects the degree and manner to which they engage in the labor market. The third chapter considers the choices that parents make in whether and how to finance their children's education and the impact these decisions have children's educational outcomes and both parties subsequent debt. They are united by the acknowledgment that to consider any of these problems without deliberate consideration of the family would be to fundamentally misunderstand the economic problem at hand.

Families are documented to pay particularly important roles in the economic decisions of women, especially mothers, which tend to be are highly dependent on the demands of the household, specifically, children. Women who balance household duties such as childcare and the potential to support their family financially face trade-offs between the hours spent in income generating activities and in home work. Chapters 2 and 3 of this work consideration these trade-offs with

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special attention paid to the role that self-employment can play in this dynamic. They consider the context of Indonesia, a setting in which women both play traditional roles but are also economically active. It is also a setting in which self-employment plays a prominent and economically important role.

In Chapter 1 I ask whether working hours and temporal flexibility are more or less costly in self-employment than wage employment, especially for mothers. I use household and labor market data from Indonesia to account for sorting between self-employment, wage work, and home work, and estimate their associated wages, hours, and flexibility.

Self-employment is often very different in developing contexts than the entrepreneurs that Goldin and Katz (2011, 2016) discuss. Indeed, up to 50% of individuals are self-employed in some sense in developing contexts, and their businesses tend to have low returns and remain small scale (Gindling and Newhouse, 2014). In Indonesia, the context for this study, there are high levels of informality, especially for women (World Bank, 2013). Women in this population are the target of a myriad of development programs that aim to increase the returns to their enterprises, yet it is important to understand how women make decisions about time investment in their businesses and time spent raising their children.

In this paper, I ask whether working hours and temporal flexibility are more or less costly in self-employment than wage employment, especially for mothers. I use household and labor market data from Indonesia to account for sorting between self-employment, wage work, and home work, and estimate their associated wages, hours, and flexibility. I allow for work-specific sources of observed and unobserved
sources of heterogeneity in women's preferences for sector-specific job characteristics. I find that all women need additional marginal wages to induce more work hours, but that self-employed women need less inducement than wage-employed women, while mothers need more. In other words, in utility terms, hours are less costly in self-employment than in wage employment and more costly for mothers than for non-mothers. I also find that women value temporal flexibility and are willing to give up significant portions of their wage rate for increased flexibility, but that this trade-off is steeper for mothers in wage employment than in self-employment. Self-employed women and mothers are all willing to give up more than 10% of their wages for a 10% increase in flexibility. Specifically, I estimate that self-employed mothers would take a wage cut of one third to work one fewer day per week over a working year.

This paper contributes to several literatures. First, I contribute to the literature on women's labor market choices and flexibility establishing the cost of flexibility in Indonesia, a developing country with different institutional features than the developed countries used in previous work. Second, I differentiate between wage employment and self-employment and find differences in the trade-offs faced by women in these sectors. I also contribute to a literature detailing the nature of and outcomes of the self-employed in developing countries. I provide more evidence on sources of sorting by considering wage-working women's outcomes alongside self-employed women. I also contribute to the insights documented in Bernhardt et al. (2016), who seek to understand the importance of the household in entrepreneurial outcomes in developing countries. My results may suggest one
reason why studies have found that female-run businesses have lower returns than male-run businesses, and they may have implications for future field and survey work as well as policy.

Chapter 2 asks the same two questions: do women value flexibility and do they use self-employment to access it? However, it takes a different approach to answering these questions. Using fifty in-depth qualitative interviews with Indonesian men and women, I find that women, in particular, pay close attention to the impact their work has on their capacity to care for their children. They discussed a desire to be primarily caretakers but to also create extra security through labor market activity. In particular, many of them use the inherent flexibility of self-employment to accommodate the needs of their families while also working. This work complements the findings in Chapter 2 and adds nuance to the narrative told there. It is important to consider this dual goals, caretaking and working, when considering the many programs aimed at entrepreneurial women. If these programs designed to increase business returns do not appreciate the full utility maximization problem women are facing they risk targeting the wrong constraints to meet their goals.

This paper explores the views and experiences of adult parents in Java and Sumatra across various occupations. It especially focuses on the choices women make to accommodate motherhood and work. Taken together with Chapter 2, it suggests a fundamental reality of self-employment for women revolves around making it easier for them to work and take care of their children and household duties. In a traditional culture in which women across geography, age, education,
and social class consider children to be the first priority of their lives one must consider if certain traditional interventions to increase business returns are desirable, appropriate, or effective. Through in-depth interviews Loh (2013) comes to the conclusion that lack of business information and financial access hampers female entrepreneurs. This may well be true but any program that seeks to improve business outcomes must do so with a fundamental understanding of how the business owner conceptualizes and understands the role of the business in her life.

The next natural question is then how to best design programs, entrepreneurship focused or otherwise, which will aid these women. Answers to questions about preferences over business goals and childcare arrangements in concert with the findings in Chapter 2 suggest several directions forward. One would be to offer more childcare in general but perhaps especially in concert with programs designed to foster female entrepreneurship. Increased access to high quality childcare could increase labor market engagement in all forms and alleviate childcare burdens on women. However, as noted above, many women prefer to be the primary caretakers for their children. In this case it is important to understand if high profits or more labor market engagement is first-best end to seek or a means to another development goal like child welfare or female empowerment. While these may all go hand in hand, they need not something like a cash transfer should be measured against more traditional business interventions or even childcare.

Together, these results indicate that self-employed women are willing to sacrifice one third of their hourly wages to work one day fewer per week. This is a substantial cut in earnings and has implications for the types of programs that are
aimed at small-scale female entrepreneurs. It implies that programs need to consider a utility-based approach that appreciates the many roles women fill when considering how to improve their businesses. It also implies that business growth strategies that require more hours and/or less flexibility may be undesirable to women. These settings show clear evidence of financing, training, and capital constraints; however, it may be important to consider childrearing and family constraints in concert with these more commonly considered stumbling blocks.

Finally, Chapter 3 considers the role of parental wealth and income on children’s college attendance, outcomes, and financing choices in the United States. This work is joint with V. Joseph Hotz, Emily Weimers, and Joshua Rasmussen. Using the Panel Study of Income Dynamics, we ask how parental wealth and income affect first children’s college attendance and financing decisions finding that higher levels of parents’ wealth and income increase the likelihood that children attend college with financial support relative to not attending college. However, it is also important to consider the ultimate outcomes of these decisions—namely the educational outcomes like graduation and college quality but also the subsequent indebtedness of both the parents and children. We show that parental wealth increases the likelihood that children graduate from college and descriptive evidence that parental support for college increases the subsequent level of housing debt that parents hold but puzzlingly does not reduce student debt for children. This is important to consider in light of the increasing cost of college and the important role it plays on children’s eventual outcomes.
Economics has progressed well beyond the single, male-oriented framework that marked its earliest days. Models, empirical methods, and data resources now accommodate a richer and more nuanced view of economic agents -- one that recognizes their place within families. In particular, our models have necessarily to incorporate the often-distinct choice sets that women face. The work in this dissertation seeks to highlight several areas in it is clear that a single agent framework falls short of providing real-world insight in both Indonesia and the United States. Families and individuals within them face complex optimization problems. Parents, especially, are balancing current and future outcomes with scarce resources. By purposely considering the role that children pay in their economic decisions we are better able to understand these decisions and the best policies to improve outcomes.