

WORK & FAMILY

Latin American and Caribbean Women
in Search of a New Balance



LAURA CHIODA

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Work and Family: Latin American & Caribbean Women in Search of a New Balance

Office of the Chief Economist (LCRCE) & Poverty and Gender Unit (LCSPG)

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Foreword

Women are at the center of Latin American and Caribbean (LAC) development today. Their impact on the creation of wealth, reduction of poverty and improvement of opportunities for children is greater than at any time in history, placing them at the core of the region's hopes for progress.

Since 1980, nearly 70 million women have joined the labor market. More women in the region today work outside the home than not, narrowing the employment gap faster in LAC than in any other region in the developing world. That trend will only grow as young women enter and graduate from schools and universities in greater numbers than men.

These drastic reductions in gender disparities have grown out of and simultaneously feed into the region's efforts to broaden social equity, reduce poverty and close social inequalities. Policies to eliminate discrimination, improve education of women, and increase access to services have paid off in ways not necessarily imagined.

Maternal mortality rates, for instance, have been declining continuously in the region since the 1980s, a direct consequence of better and improved access to services. In fact, those countries that previously had the highest rates have seen the most progress, with mortality dropping 40 percent in the Caribbean and 70 percent in the Andean region.

These advances don't mean differences between men and women in Latin America and the Caribbean have been overcome. Men and women continue to make decisions differently. The challenge for current and future leaders is to develop a more nuanced approach to gender issues that is better aware of this very different social environment.

In the XXI Century, more and more Latin American women will seek to fulfill the competing demands of work and family life. Understanding the conditions that affect their bargaining positions is therefore crucial to help them do so under less tension and pressures. Policies that help women find a better balance -- through labor contracts that allow flexible leave and part-time arrangements, or regulation that better protect non-formal unions -- should be a rising priority for policy makers in the region.

Conditional cash transfer programs, pioneered in Latin America, are based on the assumption that money in the hands of women is spent differently and benefits children more. With the exception of these programs, however, household interactions are seldom exploited in policy design.

This latest regional study on gender comes then at a very important time and will help shed light on how best to respond and assist women as they attempt to reconcile their "new" roles and identities and better meet their aspirations.

Pamela Cox

Vice President, Latin America and Caribbean Region, The World Bank

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Executive summary

Four decades of important achievements

As a region, Latin America and the Caribbean, has witnessed remarkable achievements towards in gender parity over the course of the last four decades. Women and girls have made important strides in several key areas, including but not limited to education and health.

By the early 1990s, girls had closed the gap and now outperform boys in a number of education indicators. Girls today are more likely than boys to be enrolled in secondary and tertiary schooling and are also more likely to complete both. A significant portion of these achievements is due to girls' increased attainment at the higher levels of education.

Nevertheless, the progress has not been homogeneous. While school enrollment rates of young boys and girls (aged 6 to 11) are largely equal across the region, where present, they tend to favor girls. An important exception concerns the indigenous populations of Belize, Bolivia, and Guatemala, where boys' enrollment still exceeds that of girls by significant amounts. Despite the regional trend of girls outperforming boys in secondary enrollment, boys aged 12-14 still exceed girls on this measure in roughly half of the countries under study, with the gap being in excess of six percentage points in Guatemala and Bolivia.¹ The heterogeneity across countries in attainment, however, is less pronounced than that for enrollment. Girls complete more years of schooling and progress through school more efficiently in most countries. Among the exceptions are Guatemala, Bolivia, Mexico, and Peru, where the years of schooling gap has not yet closed.

Advances in gender parity in health have similarly been remarkable in LAC. Whereas other regions such as South Asia and Europe and Central Asia exhibit sex imbalances, wherein the proportion of males in the total population exceeds that of females by wide (and often unnatural) margins, the female share of the total population in LAC has been above 50 percent and risen steadily since the 1960s. This is indicative of girls' "wantedness" in the region, and stands in contrast with evidence of parental preferences for males in South Asia, for instance. It is also a reflection of increased investments in the health of girls and women as well as better access to effective health care. These improvements have led to longer lives for both men and women, though life expectancy has risen faster for women than for men. Whereas men lived only four years less than women in 1960, they are now outlived by more than six years by women. Improvements in life expectancy for women in LAC are also the result of a continued decline in maternal mortality since the 1980s. The most

¹ Among adolescents aged 15-19, wide gaps favor girls in some countries (e.g., in Nicaragua, Honduras, Panama, and Uruguay, girls school enrollment outpaces that of boys by more than 6.5 percentage points), while they favor boys in others (e.g., Guatemala, Haiti and Bolivia).

dramatic decline has been in those sub-regions that exhibited the highest initial levels of maternal mortality, that is, the Caribbean and Andean countries, where the incidence of maternal mortality fell by about 40 percent and 70 percent, respectively, since 1980.

Perhaps one of the most dramatic changes for women in LAC has been the rapid decline in fertility rates, which have converged to those of high-income OECD countries. In 1960, women in LAC had on average six births, compared to the OECD's three. By 2009, births per woman have fallen to about two in both OECD and LAC. While the downward trend in LAC was experienced region-wide, the degree and timing of the decline was heterogeneous. Two distinct patterns emerge. In a group of relatively higher income countries (including Brazil, Chile, Colombia, Costa Rica, and Panama), the fertility rate fell sharply in the early 1970s, declining at a slower pace thereafter. In contrast, a group of relatively lower income countries (including Ecuador, El Salvador, Haiti, and Paraguay) experienced a more muted and gradual downward trend throughout.²

Accompanying the mentioned strides towards gender parity in education and health has been an unprecedented growth in female labor force participation (LFP), with nearly 70 million additional women entering the labor force since 1980. Three decades ago, only 36 percent of working age women were in the labor force. Since then female participation in LAC has risen faster than in any other region in the world. Today, 52 percent of working age women are active in the labor market and represent roughly 40 percent of the entire labor force in the region. In most LAC countries, the rate of female LFP has at least doubled since the 1960s, and has tripled in Brazil. The expanded professional engagement of women in society has also translated into higher participation in formal politics, with the share of parliamentary seats held by women in LAC at nearly 24 percent, the highest in the world and marginally exceeding that of high income OECD countries (23 percent). While women representation in parliaments is on the increase region-wide, it remains unevenly distributed across countries: it is about 10 percent in Belize, Haiti, Panama, Brazil and Surinam, but it is more than 30 percent in Argentina, Costa Rica, Ecuador and Guyana.

The mentioned gains for women in LAC have taken place within a context of important strides towards broader social equity, as reflected in a significant reduction of poverty (about 68 million Latin Americans have raised above moderate poverty since 2003) and income inequality (for 12 out of sample of 17 countries in the region experienced a decline in Gini coefficients), and a concomitant rise in the share of the middle classes in the region's population (from 20 to 30 percent, as measured by people above \$10 a day on a purchasing power adjusted basis).³

New challenges for women and policy makers

In light of the region's remarkable achievements over the past four decades, it may be tempting to conclude that the gains in access mechanically translate into gains in labor market outcomes and that welfare can unequivocally be inferred from these trends. The findings in this study caution against such simplistic views and urge a deeper understanding of women's decision making processes in order to improve the design and efficacy of policy.

A number of patterns substantiate this point. The relationship between economic development and

² The decline in fertility rates among adolescents has also been heterogeneous across countries in the region. For example, adolescent fertility rates declined sharply in El Salvador and Belize, by about 33 and 35 percent, respectively, since 1998. By contrast, in Nicaragua, the Dominican Republic, and Guatemala, teenage pregnancy remains stubbornly high, with one out of every 10 teenage girls being a mother, matching the levels of Sub-Saharan Africa.

³ While the share of female-headed households in LAC has been on the rise, contrary to the popular understanding, these households do not appear to be at a higher risk of poverty.

female economic participation is neither linear nor monotonic. Empirical evidence consistently points to a U-shaped relationship between female labor force participation and development, as measured by a country's income per capita. Female labor force participation initially declines as per capita income rises then eventually increases again (though not necessarily linearly) at higher levels of development. Different sub-groups of women are drawn into the labor force in a heterogeneous fashion. In particular, single women enter the labor force at earlier stages of development than their married counterparts, with their behavior mimicking that of men; married women then follow—as social norms and adherence to traditional roles soften—in degrees that vary with their characteristics, including their level of education, generational cohort, and family structure.

The heterogeneity in labor market behaviors of women with different levels of education draws attention to the futility of simplistic mappings between the widening opportunities of women arising from gains in health and education and from economic development, on the one hand, and specific labor market outcomes, on the other. For example, marriage in LAC tends to be associated with a considerable drop in labor market participation. However highly educated married women exhibit more attachment to the labor force than those with primary or secondary education, in part because the former tend to view work as more of a career than just a source of income. At the other extreme, married women with less than primary education likewise exhibit stronger ties to the labor force, but for very different reasons, as they are likely compelled to work by sheer need, rather than by choice. However, the presence of children in the household is associated with greater exits from the labor force among women with tertiary education—who are less likely to face budget constraints—that among women with less than primary education.

Likewise, the largest gender wage gaps appear at the bottom and top deciles of the earnings distribution, suggesting another non-monotonic and possibly U-shaped relationship between human capital and labor market outcomes. Indeed, evidence from developed countries shows that among elite professionals, a wage gap emerges with fertility decision, with women's wages lagging considerably behind those of men. Moreover the wage penalties from shorter work hours and career interruptions related to motherhood are positively associated with their husband's level of income, suggesting that spousal income affords women the ability to reduce their labor supply.

Among those countries in LAC for which gender wage gaps can be constructed, three of the four that had not yet closed the education gap—Peru in the early 1990s and Mexico and Guatemala in 2007—exhibit a pattern of wage differentials that surprisingly favors women at the bottom of the income distribution. That is, among the lowest wage earners in these countries, women earn more than men. Despite this advantage over their male counterparts, it is difficult to argue that such women are better off since their wage premium may act as a disincentive to continue their education, which may in turn explain part of the education gaps.

These and other findings documented in this report caution against a mechanical view of the relationship between equalization of access and labor markets outcomes, and draw attention to how measures of participation offer only a partial view of welfare. They also point to the importance of understanding the role of mediating factors that enter the decision making process underlying the economic behavior of women.

Expanded choice set, emergence of new identities, households dynamics, and new tensions

This study acknowledges the evidence discussed above and sheds light on the complex relationship between stages of economic development and female economic participation and, in line with the recent literature, argues that female labor force participation cannot simply be described by an

earnings-maximizing motive. Rather, it shows that the interactions of microeconomic and social factors such as human capital (e.g. education, health, work experience, and skills), social norms, preferences and household structure and dynamics are essential mediators that shape the economic opportunities and decisions of women regarding economic participation. By implication, these factors are likewise key determinants of welfare weakening the validity of welfare assessments made exclusively on the basis of women's labor market outcomes. As development progresses and advances are made in the equality of access agenda—by way of increased human capital accumulation, softening social norms, or structural changes in the economy (e.g., when the tertiary and public sectors gain more importance in the economy)—the set of options available to women expands.

The evidence and analysis in the report ties the historical process of female economic integration and widening choice sets to a fundamental change in paradigm in women's decision making.⁴ This paradigmatic transformation includes a shift in the horizon over which women's human capital investments yield returns and, consequently, in their attachment to the labor market. It also includes a contemporaneous shift in women's perceptions whereby they consider their work a fundamental part of their identity, which is related to the distinction between jobs and careers.

Careers that were once penalized by social norms and/or were unattainable due to lack of education are now within reach for an increasing number of women in LAC. And as elsewhere in the world, their identities have ceased to be unequivocally tied to their families.

"It was about fifteen to twenty years ago that I first began to realize that college women as a group were talking about their futures in ways that would have been unimaginable to me when I was in college. They spoke, candidly and honestly, of "CAREER AND FAMILY" [...] as if the words were not three but one"
(Goldin 2004, recounting the U.S. experience)

In LAC in the 1960s, marital status—rather than the presence of children in the household—predicted women's status in the labor force almost perfectly, with married women withdrawing from the labor force and becoming homemakers. This dichotomy has softened somewhat since the 1970s, though it remains the case that marriage continues to be associated with significant exits of women from the labor force, and these effects are much larger—nearly threefold—than those associated to fertility. The major gains in labor force participation are concentrated among younger cohorts and more educated women, who increasingly remain in the labor force upon marriage. Social norms play a key role in explaining these trends. As illustrated in the report, discriminatory views regarding women in professional spheres have declined considerably, although beliefs about traditional gender roles within the household, which are less susceptible to change, have remained relatively stable. Briefly, women, who continue to value family and caring for their children, assign increasing importance to work, such that their struggle to negotiate the balance of family and career intensifies.

The challenge for research is, of course, to disentangle preferences from social norms, given that the latter are embedded in the former, though recent experiments suggest that preferences may also reflect more fundamental, biological differences independent of learnt behaviors and early socialization (e.g. difference in brain functioning).

Irrespective of the relative importance of norms vs. preferences, a central message of study is the critical role played by family formation in shaping female labor force participation. Family structure and household dynamics affect a woman's valuation and perception of jobs as multidimensional bundles of characteristics, rather as a one-dimensional source of income. Household characteristics

⁴ Goldin 2006.

and dynamics shape her decision to enter the labor force, as well as the choice of occupation and whether it is in the formal or informal sectors. It is mainly at the onset of family formation that gaps between men and women emerge and that pre-existing ones accentuate.

Indeed, the relationship between female economic participation, economic development, and welfare is made more complex by the acknowledgement that individuals are part of larger economic units—families. Whatever the reasons for family formation—be they the result of evolution; or Beckerian-type motives to take advantage of complementarities in consumption and economies of scale in the provision of household goods; or Maslowian-type desires to achieve a sense of belonging that enhances intrinsic values and meets the aspirations of social relatedness—intra-household interactions play a central role in determining welfare and the efficiency and equity of outcomes. As a result, they define new margins for gender policy interventions and objectives that acknowledge the context of the household.

The substantial role of the family as a mediator of female economic participation and welfare is in large part due to the recognition that men and women, while equal in dignity and fundamental rights, differ along important dimensions, beyond the obvious physical relative advantages in fertility.

Indeed, a robust and mounting body of evidence has rejected the hypothesis that men's and women's attitudes and preferences—and thus their choices—are identical. As a result, economic models that are appropriate for explaining male labor force participation have been adapted to accommodate gender differences in labor market decisions. This report documents evidence that risk taking behavior and preferences over job attributes, for instance, are distinct across the sexes. Women are more risk averse than men and thus less inclined to seek positions that involve risk (physical or otherwise), or that involve a very competitive environment. These differences help explain certain disparities observed in the labor market, ranging from wage gaps to occupational choices. But the effects of gender differences in preferences are not limited to the labor market; they also manifest themselves within the household. Studies have shown that, among two-parent households, larger shares of resources controlled by women lead to larger budget shares spent on children's clothing, education, and health.⁵

It is therefore inside the household that divergences of opinion, preferences, and comparative advantages are negotiated to reach decisions regarding the division of labor, child care responsibilities, home versus market production, etc. In some cases, intra-household interactions can yield efficient specialization among spouses, such that both spouses do not have the same degrees of engagement in the labor force. In other instances, the resulting allocation of resources maybe inefficient, reflecting noncooperative behaviors.

Women in Search of a Balance

"When I was at work... I always felt I was shortchanging the girls. But when I was at home, I was worried that I was letting people at work down."

- Michelle Obama

Over the past four decades, social changes have increased the opportunities available to women. A standard economic framework would suggest that these expanded choice sets would unambiguously result in increased welfare. However, as women's feasible goals and identities expand, so do the

⁵ Doepke and Tertilt 2011.

opportunities for trade-offs and tensions between potentially competing aspirations, some of which have received increasing attention in the literature.

Despite the extraordinary progress of women in the U.S. over recent decades, measures of subjective well-being indicate that women's happiness has declined both in absolute terms and relative to men, leading to the emergence of a new gender gap favoring men.⁶ Recent research has also drawn attention to another form of trade-off, this time operating across generations.⁷ Under some circumstances, maternal employment may be associated to lower child health and cognitive outcomes, suggesting that the additional income may not compensate fully for the reduction in time investments in children, particularly during the early and critical stages of human development.

This evidence is illustrative of a new set of tensions and challenges for women which, paradoxically, have been made possible by four decades of steady gains. Understanding the nature and sources of tensions for women trying to balance work and family is thus crucial for policy. Today, married women in LAC still participate less in the labor market than their single counterparts and, while having children in the household is associated with comparatively smaller reductions in the likelihood of participation, it does influence sectoral occupations (e.g. whether to work in the public or the private sectors or opt for informal work arrangements) and the intensity of labor supply (e.g. whether to work full or part time).

Establishing whether adherence to traditional gender roles determines these behaviors, or whether they result instead from an efficient division of labor among spouses, is a difficult task empirically because social norms inform and shape preferences. Nevertheless, some insights can be gleaned from the fact that similar behaviors also surface in developed countries, including among those with friendly labor market institutions (e.g., northern European countries). Even highly educated women appear to draw on their spouse's income to accommodate reductions in their labor supply when starting a family and/or to sort into sectors and occupations where age premiums are foregone in exchange for greater flexibility.

Furthermore, the use of the relatively abundant resource (i.e. time) when flexible arrangements are taken advantage of is akin to women's behavior in response to a conditional cash transfer receipt (CCT). Giving women increased control over resources (in the form of income, education, or assets) leads to greater expenditures on their children's health, nutrition, education, and clothing. With low income women spending additional resources on their children, it is by extension not surprising that women's time use (i.e., their supply of wage labor) is responsive to family formation and that women place a premium on more flexible arrangements that are more forgiving of temporary interruptions in salaried labor that result from child rearing.

The struggle to achieve work-life balance reflects the tension exerted by women's identities as mothers and workers, a phenomenon which has informally been given the name "mothers' guilt." In LAC, men and women, whose views about traditional gender roles have remained virtually unchanged since 1990, tend to believe that young children are likely to suffer if their mothers work. However, younger and more educated women tend to deem that a woman's identity extends beyond her role as a housewife and that working mothers can have just as healthy relationships with their children as stay-at-home mothers. These seemingly contradictory beliefs among women are precisely an expression of the tension between the roles and identities they struggle to reconcile.

Interestingly, there is an observable yet lagged parallel between the labor force experiences of

⁶ Stevenson and Wolfers 2007.

⁷ Bernal 2008, and Morrill 2011.

women in LAC and those of women in the US. Specifically, the evolution of labor force participation of single and married women in LAC has closely mimicked that of U.S. women though with a 30 year lag. If the analogy to the U.S. experience is extended, the history of women's experiences in the U.S. could provide a glimpse into the future for LAC, a future that may come sooner than 30 years given the region's current pace of change.

After a century of remarkable gains in economic engagement, female labor force participation started to level off in the U.S. in the late 1990s, despite continued advances in educational attainment. Given that the labor force participation of college-educated women had almost reached parity with that of men in the mid-1990s, this change in trend was particularly disappointing for the women's movement. The phenomenon was characterized in the popular press as one of "opting out"⁸—driven in part by a negative backlash from the workplace that made it difficult for women to reconcile their dual identities as homemaker and "career woman." Among the professional and managerial ranks, where higher incomes afforded a wider range of choices, women became more reluctant to juggle their roles as executives and mothers, and were more willing to forego paychecks and prestige in favor of time with their families. It is conceivable that a similar phenomenon may occur in LAC in the coming decades.

This sentiment was well-articulated by Regan Penaluna in Walravens's (2010) account of "Torn" women:

"My parents raised us with the belief that we could be anything we wanted if we only put our mind to it and now my sister found herself of two minds: she wanted to be a mother raising her baby, but she also wanted to be a successful scientist. Like many modern mothers, myself included, she could not do one without feeling as though she was significantly short changing the other."

Striking the right balance between work and family is perhaps one of the most demanding tasks facing women in the developed economies, and a rising challenge in emerging economies. In the decades to come, any expansion of female labor force participation in the region will disproportionately be concentrated among married women. If LAC continues to follow in the footsteps of the U.S., we might also expect these trends to level off (and perhaps even revert slightly). More importantly, the number of women attempting to balance career and family is destined to rise, such that a set of well-targeted, forward-looking policies may help alleviate the juggling act between professional and traditional identities.

Evidence discussed in the report surrounding the introduction of universal childcare and labor market reforms illustrate women's quest to balance work and family. A recurrent finding across several studies in LAC and OECD countries is that the universal child care provision invariably results in high take up rates, but not in higher maternal labor force participation rates. The significant demand for formal child care services appears largely to result from substitution out of existing arrangements, with women already in the labor force switching from informal child care arrangements (e.g., agreements with extended family members) to the publicly provided child care option. Similarly, in response to Argentina's legalization of part-time work in 1995, a large fraction of married women with children rapidly transitioned from informal jobs to formal part-time jobs, without any appreciable effect on aggregate female participation. While some may view the absence of gains in participation with discouragement or disappointment, these results lend themselves to a more optimistic interpretation. At least in the short run, access to child care and the lack of formal and flexible work options do not represent barriers to entry into the (formal or informal) labor

⁸ Belkin 2003, Wallis 2004, and Story 2005.

force. These policies nonetheless have the potential to raise female LFP in long run.⁹

Policy discussion

Today, the complex environment requires women to balance different roles, identities, and aspirations. Jobs, careers, and family place competing demands on women's time and attention, more so than at any other time, and pose new challenges for them and for policy makers. Gender policy in LAC is at a crucial juncture which calls for an expansion of the policy perspective.

This is in large part the product of success, for there has been substantial progress—amply documented in this study—toward achieving gender parity in key dimensions relating to human dignity, particularly access to basic services (e.g., health, education) and fundamental human rights. These achievements are welcome, as they implicate universal principles that should apply to all humans, independently of sex, race, religion, etc.

Nevertheless, the policy goal of gender parity with respect to basic rights and services has not been fully or uniformly reached across the region. There remains much room for improvement, particularly where chronic poverty is intertwined with precarious access and where certain institutional arrangements and social norms breed systematic “barriers for women”. But the improvements in the circumstances of women in LAC over the past decades are undeniable and call for a reassessment and expansion of the policy focus.

The first generation of gender policies in LAC tended to set quantitative objectives for gender parity—focusing not only on equal access (e.g., to health, education, judicial services) but also on equality in certain outcomes (e.g., equal pay for comparable experience and skills, or equal participation in the labor force, in electoral ballots, or in congressional seats). This is appropriate to the extent that societies are trapped in inefficient and inequitable equilibria characterized by discrimination and abuse of women. In such a context, quantitative gender parity targets to monitor achievements can help societies break free from an unfair status quo.

But as the standing of women improves and their opportunities and choices widen—as is happening in LAC—new issues, tensions, and challenges arise. They point to the need for a second generation of gender policies, one that would still encompass certain (more focused) quantitative targets for gender parity but that would also go well beyond them.

The evidence and analysis presented in this study indicate that women in LAC confront competing demands for their time and energy as they, on the one hand, join the labor force and increasingly see employment a part of a career (rather than a simple source of income) and, on the other hand, seek self-actualization through marriage, motherhood, and family. These complexities have to be brought to the center stage of policy design.

There is of course no one-size-fits-all policy agenda that is well suited to these changing gender realities. Reform agendas have to be adapted to the context of individual countries. But the evidence examined in this study suggests at least three key directions for the new generation of policies.

⁹ These policies can affect female labor force participation in long run by increasing the quality of life of working mothers and, implicitly, by improving the quality of their children's care if the daughters of working mothers are themselves more likely to work and if their sons become more accepting of women in the workforce. Such a mechanism would thus operate across generations and yield an intergenerational multiplier effect (see Fernández, Fogli, and Olivetti 2004).

“The highest equality is equity” - Victor Hugo

First and foremost is the need to revise gender policy’s *goals and expectations*. This follows naturally from the recognition that the equalization across genders of access to basic services and fundamental human rights does not translate mechanically or monotonically into the equalization of outcomes, such as the extent and modality of female economic participation. Nor are outcomes a perfect reflection of wellbeing.

The ascribed role of preferences, household relationships, institutions, and social mores as mediating factors invites change in policy perspective from gender parity (which is akin to gender blindness) to *gender consciousness*. In turn, gender consciousness entails an emphasis on equity over equality. While equality implies sameness and, by definition, ignores differences, equity recognizes differences and engages them to facilitate the realization of each person’s potential to the fullest extent possible—to which gender consciousness aspires.

The emphasis on equity sets the stage for policies that expand women’s freedom, namely the freedom to choose one’s identity and to exercise that choice without facing discrimination or disadvantage. These principles are at the heart of Sen’s notion of freedom as the ultimate end of development. The capability of a person to choose, do and be can be seen as essential determinants of well-being:

“If we adopt the notion of development as process of expanding human freedoms, it is the enhancement of freedoms that allow people to lead lives that they have reason to live” - Amartya Sen

Second, acknowledging that men and women differ in substantive ways and that their differences are mediated through interactions within the household has important policy implications and yields an *expanded menu of policies* to address gender issues. These new policies have the potential not only to affect equity of allocations within the household, but also to increase effectiveness of policy instruments and ultimately elevate the discussion regarding their welfare implications. With the notable exception of conditional cash transfers which are designed on the presumption that money in the hands of women is spent differently, household interactions are seldom exploited in the design of policy. The unexploited richness of (gender) policy instruments represents a missed opportunity that needs correction, by embedding in policy design certain insights on household dynamics.

As discussed in the report, in some cases, intra-household interactions can yield efficient allocations of resources, with both spouses gaining from cooperation. In such instances, policy interventions would be justified only on equity grounds. In noncooperative households, in turn, inefficient and/or destructive outcomes may arise, as in the extreme instance of domestic violence, justifying policy interventions on both equity and efficiency grounds. This discussion emphasizes the value of understanding the types of conditions that affect bargaining positions within the household and that have the potential to curb abusive and nonconsensual behaviors.

Whether directed at women by design or not, any government intervention that may influence women’s control over fertility, their ability to choose a spouse with certain characteristics, and their realized and potential labor market outcomes, etc. can affect the bargaining positions of women within the household and thus the final allocation of resources. Bargaining positions of spouses and their subsequent interactions are not only affected by each spouse’s direct control over resources (income, time or otherwise), but also by their prospects outside of the union, should they leave marriage. Credible exit options raise the incentives for nonconflictual, respectful behavior within existing unions. These policies can thus contribute to reducing the risk of abusive relationships as

well as to widen the scope for self-realization of women within the household. Hence, the expanded menu of policies could extend to reforms that include the provision of social insurance, the legal definition of informal unions (e.g. unmarried cohabitation) and their corresponding parental obligations, the introduction of anti-discrimination laws, any regulation that directly or indirectly affects sectors or occupations dominated by one gender, the modernization of divorce laws, and the enhancement of property rights and even criminal laws.

“Balancing work and family is one of the country’s major challenges. The government wants to change labor laws that have companies help bear the cost of daycare, making women more expensive to hire.” - Carolina Schmidt, Minister of National Women’s Service, in a phone interview.

Third, this study documents women’s need for greater freedom to choose their identities, which manifests itself as an *unmet demand for flexibility*. This puts a premium on policies that help women find an equilibrium among competing demands. Women’s ability to balance their new identities with traditional responsibilities is full of challenges. Whether it is with regards to child care choices, part-time employment opportunities, an unmet demand for flexibility consistently emerges among women who are married and/or have children. Unfortunately, formal labor market institutions are still woefully insensitive to these realities. While some, albeit still limited, progress has been made in LAC in terms regulations concerning maternity leave and the provision of child care services, for instance, formal labor contracts remain unduly rigid compared to women’s needs. While in the short run, these rigidities do not appear to prevent women from entering the labor force, all too often married women in LAC resort to informal employment and trade basic labor protections and career advancement for the job flexibility that facilitates balancing family responsibilities.

Legislation that acknowledges the pressures of motherhood and of the day-to-day demands on households’ time, more generally, can generate important social returns by enabling women to fulfill their identities as mothers and workers, raising the quality of their economic participation, thereby increasing their well-being, as well as that of the entire household.

It is worth noting that the welfare consequences of the afore-mentioned policies may not be limited to the short run. Interventions that alleviate the burden on working mothers and facilitate balancing work and life can afford parents the possibility of higher quality parenting. Providing flexible alternatives that don’t compromise working mothers’ career objectives may attenuate the stress exerted by such trade-offs which have been implicated in the recent emergence of a gap in subjective well-being that favors men in certain industrialized countries. Furthermore, invoking such institutions to foster a healthy equilibrium between work and family can mitigate some of the intergenerational costs that might arise from maternal employment in the event that the children’s health and development benefit from time spent with their mothers.

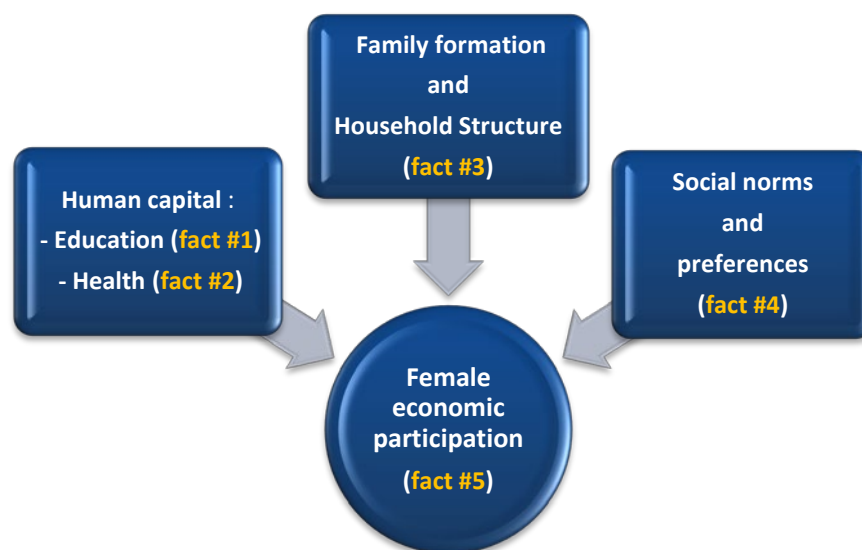
Hence, a key policy message from this study concerns the need to revisit labor market institutions and regulations from the gender conscious perspective that focuses on welfare-enhancing flexibility. Any policy aimed at addressing the new set of issues facing women has to wrestle with (and ideally take advantage of) the fact that women’s outcomes in the labor market—including whether or not to work, how much to work if so, and how to combine work and family—are the result of unobservable household negotiations which depend to a significant extent on individual preferences over work and family. Two women who are outside of the labor market may be so for very different reasons that a gender conscious policy should detect. One may have simply decided to invest more time and energy in her children while taking advantage of her spouse’s income. The other may prefer to work in a job but the lack of flexible contracts in the formal labor market may render it unfeasible for her to fulfill her desired roles both in motherhood and professional realm. Labor

market outcomes alone are not always informative about welfare, because they distinguish only imperfectly between unhindered decisions and institutional barriers (such as discrimination, rigidity in the labor market, social norms, etc.). In this context, policy can play a role by guaranteeing an environment that is devoid of discrimination and provide a richer menu of options in the labor market that recognizes the trade-offs that women face (as their choices widen) in the pursuit of self-realization.

Introduction: The household point of view

Over recent decades the Latin America and the Caribbean (LAC) region has seen a dramatic and virtually uninterrupted rise in female labor force participation (LFP). Women there have increased their participation faster than in any other region of the world, adding nearly 70 million women to the labor force. This evolution occurred in the context of more general progress in women's status. Female enrollment rates from primary to tertiary education have increased to the point of closing or even reversing the gender gap that traditionally favored boys. Family structures have changed markedly, and fertility rates have started to decline. And social norms have shifted toward gender equality.

Figure 1. Key microsocial determinants of female economic participation



This report argues that these changes are interrelated and need to be studied as such. Traditional explanations for low LFP, and for the patterns of employment once women join the workforce, have focused on discrimination or low human capital accumulation. In these views, the policies for generating more opportunities for women focus on labor market institutions or on the quantity and quality of human capital investments. However, the recent literature in developed countries has stressed the role and interaction of microsocial factors in determining economic opportunities available to women and, by extension, the evolution of female economic participation (such as LFP, sectoral choices, family formation).¹⁰ These factors include human capital¹¹ (education and health),

¹⁰ See Goldin (2006) and citations.

social norms and preferences, and family formation and household structure (figure 1).

The present report views the evolution of female participation through this micro lens, drawing on the emerging literature on family formation (marriage and fertility) and household structure, including intrahousehold bargaining. While not negating dismissing the ongoing agenda to assure equal opportunity in the workplace, this approach shifts the focus to household dynamics and decisions about schooling, the allocation of work within the household, and the kinds of jobs each household member should seek. It thus provides a powerful interpretative framework for interpreting the evolution of gender-related patterns.

The framework highlights the importance of understanding how household decisions are made, since different models of the household yield divergent implications for interactions between spouses, for the distribution of resources and its associated welfare, and for the relevant policy margins.¹²

The chapter begins by reviewing current thinking on household dynamics and on interactions between spouses. It then introduces changes in human capital investments, family formation and household characteristics, social norms, and economic participation.

Labor force participation: From an individual to a collective decision

The standard neoclassical view of the family and labor supply explains LFP in terms of the costs and benefits of participation in the labor market. It emphasizes the quantity and quality of human capital investments and considers how they translate into economic participation. In recent years, however, several authors have argued that female LFP cannot simply be captured by an earnings-maximizing rationale.

This newer literature relates the historical process of women's economic integration to three aspects of women's decision-making:

- The horizon over which women's human capital investments yield returns, which depends on whether their involvement in the labor force is long and continuous or short and intermittent.
- The extent to which women consider their work a fundamental part of their identity, which is related to the distinction between jobs and careers.
- The way women's LFP decisions are made within the household: jointly (possibly through bargaining between spouses) or only after men have made their labor force decisions.¹³

The interplay of these three considerations is thought to underlie one of the most widely recognized and uncontroversial stylized facts about female economic participation: the U-shaped relationship between women's LFP and economic development.¹⁴ Similar considerations are not prominent in

¹¹ Human capital is typically defined as the set of skills, abilities, knowledge, and so on that increases individuals' productivity and can be accumulated through investments of time and resources.

¹² Policy margins indicate a dimension of behavior that may be sensitive to or call for policy intervention. It is fairly standard in policy and economics discussions.

¹³ In other words, women may face a constrained optimization problem, which takes income and time allocations of other family members as givens.

¹⁴ See Sinha (1967), Durand (1975), Psacharopoulos and Tzannatos (1989), Goldin (1995), Horton (1996), and Mammen and Paxson (2000), who document this relationship in a variety of settings.

the economic literature on male LFP, which focuses mainly on the traditional tradeoff between leisure and labor, the returns to education, and the potential for earnings.

The leading theory behind the U-shaped relationship starts with the observation that, in very poor countries, female economic participation is high, with women working mainly in farm or nonfarm family enterprises. The first stage of development is associated with a reduction in female LFP, partly because of the rise in men's market opportunities and partly because social barriers constrain women from entering the paid labor force. These barriers can take the form of social norms or even discrimination.¹⁵

As countries continue growing, the development process is associated with investments in human capital, increasing women's education. These gains make it more costly to stay at home, not only through a traditionally positive return to education, but also as the increase in human capital makes available job opportunities that were previously socially unacceptable. As a result, later stages of development tend to be associated with increases in women's LFP.

This argument stresses the neoclassical income and substitution effects typical of labor-supply decisions related to human capital investments. It also stresses culture, as embodied in the availability of socially acceptable forms of employment for women.¹⁶

Unitary and nonunitary models of the family and implications for women's welfare

An important lesson from the U-shape argument is the difficulty of mapping labor-market indicators into women's well-being. Traditional economic models conclude that development unambiguously improves welfare,¹⁷ even when it results in fewer women in the labor force. In this view, increases in women's leisure as incomes rise are a benefit of development, and withdrawals from the labor market are largely voluntary.¹⁸ So, care must be taken when assuming that equality of outcomes is, in fact, the social goal to strive for.

Implicit in this view is that women are part of a larger economic unit—the household—and that families behave as unitary entities, which make no distinction among the well-being of different family members. Under this set of assumptions, a family acts as a single decision-maker, such that individual welfare coincides with that of the household and is always maximized. Unitary models, also known as “common preference” models of the family, imply that the magnitude and composition of family expenditures are independent of which individuals in the household receive income or control resources (figure 2).¹⁹

In this view, it follows that observed outcomes, such as decisions to participate in the labor market or to specialize in home production such as household chores or child rearing, are always welfare maximizing and leave little space for policy intervention, other than to mitigate social barriers and

¹⁵ Goldin 1995.

¹⁶ Goldin 2005; Fernandez and Fogli 2006; Fernandez 2007, 2010.

¹⁷ Lundberg and Pollak 1996.

¹⁸ Mammen and Paxson 2000.

¹⁹ A family's common preferences may be the outcome of consensus among family members or of the dominance of a single family member, but all such models imply that family expenditures are independent of who has nominal control over resources. For a technical treatment of the concepts, see Samuelson's consensus model (1956) and Becker's altruist model (1974, 1981).

discrimination in the labor market. This report, although not focusing on the institutional environment surrounding the gender dimension of labor demand, recognizes its relevance. Unfavorable attitudes toward women have, however, been shown to soften as more women enter the labor force, human capital accumulates and countries' income rises.²⁰

Several empirical studies (some reviewed in chapters 5 and 6) have called into question the credibility of assumptions and accuracy of predictions of the unitary model. These studies have shown that husbands' preferences differ systematically from those of wives, arguing that family decisions are more plausibly the product of:

- Divergent interests or preferences of husband and wives.
- Differences in the extent to which each spouse can assert his or her preferences ("bargaining power"), which emerge from differences in the distribution of resources across spouses and in their ability to negotiate—and from social norms and even biological dissimilarities.

Heterogeneity in preferences and in ability to assert oneself implies, for instance, that the identity of the income recipient matters for its use. In a rapid expansion of South Africa's pension program, school investments and nutritional outcomes of grandchildren were meaningfully influenced by whether they lived with a grandfather or a grandmother.²¹ Among girls living with grandmothers who received the pension, anthropometric measures improved considerably. But no such effects were found when the pension was received by grandfathers. However, children were more likely to be in school when they lived with an eligible grandfather than with an eligible grandmother.²² More generally, women's tastes and actions are more sensitive to context and cues, and women are more averse to competition and more reluctant than men to engage interactions involving bargaining.²³

In a nonunitary model these differences imply that households do not behave as a single decision-maker and require acknowledgment of the possibility that spouses' interactions may lead to inefficient or inequitable outcomes, providing opportunities for welfare-enhancing policy interventions. Such recognition implies that the efficacy of any policy directly or indirectly affecting women (and by extension, households) will be mediated by the household decision-making process. Spouses may cooperate and consult with each other to coordinate solutions that benefit them both—a cooperative bargaining model. Or they may withdraw from coordination and make unilateral decisions that maximize their own welfare, given their expectations about their spouse's (optimal) behavior. In the first case, household decision-making follows a cooperative bargaining model, where collective-household decisions are reached only if both spouses "gain" from cooperation. In the second, family decisions follow a noncooperative bargaining model.

Consider a couple deciding how to adjust their labor supply to manage the care of a newborn child. Because of preferences, social norms, comparative advantages (such as differences in wages, skills, and biological endowments), and the initial distribution of resources, women may opt to reduce their labor supply, if only temporarily.²⁴ With cooperative bargaining, the resulting division of labor between husband and wife is always "efficient" (that is, it would be impossible to improve the well-

²⁰ Goldin 1995; Fernandez, Fogli, and Olivetti 2004; Fernandez and Fogli 2009. See also trends emerging in LAC as documented in stylized fact 4, in chapter 1.

²¹ Duflo 2003 and Edmonds 2005.

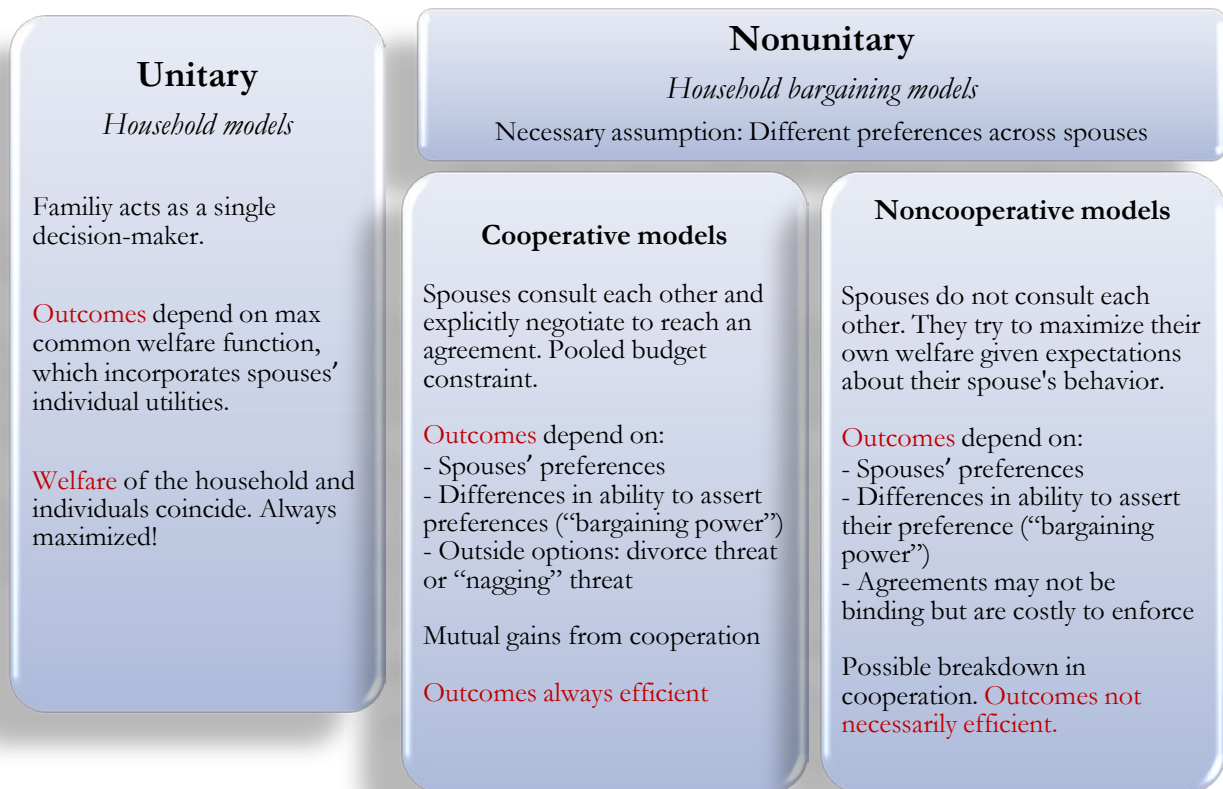
²² Edmonds 2005.

²³ Croson and Gneezy 2009.

²⁴ Bertrand, Goldin, and Katz 2009.

being of one spouse without making the other worse off). It is therefore possible that the cooperative allocation fails to maximize a wife's own utility (for example, she would like to work more than is possible given the demands on her time). In this event she is "compensated" by some reallocation of other resources, including emotional or monetary resources.²⁵

Figure 2. Unitary and nonunitary models in a nutshell



In cooperative models the alternative to coming to an agreement could be divorce (the divorce-threat model of McElroy 1990) or, less radical, a situation in which the marriage is preserved but both parties stop consulting one another and each acts only in his/her own self-interest (the separate spheres model of Lundberg and Pollak 1993). These alternative states of the world, or "outside options" (divorce or cold shoulder), are always associated with lower utility than cooperation, and so are never chosen. They are, however, extremely important in determining the final allocation of resources within the household (such as time and consumption), because the strength of each spouse's bargaining position is directly influenced by the next best option.

In divorce-threat models, for instance, changes in laws defining alimony payments and the division of property after divorce should affect the distribution of bargaining power among spouses. If new

²⁵ In "cooperative" households the alternative to reaching a consensus is a state of the world associated with a minimal level of utility, or reservation utility, that may be improved if the spouses agreed to cooperate. This alternative plays the role of a threat, which could take the form of marital dissolution ("divorce threat" model of McElroy 1990) or an unhappy spouse ("separate spheres" models of Lundberg and Pollak 1993). As long as these threats of divorce or painful marital bliss exists, the outcomes will be a function of resources controlled by each spouse, the distribution of which will also affects the relative well-being of spouses within marriage.

legislation assigned greater protection to women, it would increase a wife's bargaining position, and so could affect the allocation of labor within the household, even without higher divorce rates. These "outside options" or "threat points" are likely to depend on environmental factors that do not directly affect the utility of a spouse when married, such as the conditions in the remarriage market, the income available to divorced men and women, and the social norms for dissolving a marriage.

Although household decisions in cooperative settings are efficient, they may not be equitable, which may suggest a role for policy.²⁶ For instance, if the ability to access credit factors into spouses' outside options, and in practice only men enjoy this right, the cooperative division of labor and consumption decisions is still efficient, but the distribution of bargaining power is inequitable, justifying policy intervention. It is usually only policies that act on spouses' threat points can alter the outcomes of cooperative households' decisions, by redistributing bargaining power within the couple.

It is possible that spouses may agree to cooperate and reach agreement on the distribution of household chores, say, but that one or both spouses fail to follow through, later deciding not to respect the pact. If such agreements and plans between spouses are not binding and cannot be enforced without cost (allowing for "cheap talk"), cooperation could break down. They are important because the majority of decisions for purchases, household chores, care giving, and labor supply are made privately among household members. But many countries either have no institutions to enforce these decisions or have weak enforcement, leading to discordant or destructive unions.

In this noncooperative setting, spouses do not consult one another and simply decide what is best for them given their expectations about their partner's behavior. If both partners prefer to work and not do any household chores, an efficient outcome would be for both of them to work and to hire outside help—or for both to contribute a little to the housework. A situation in which both partners simply do not contribute to the upkeep of the household would be inefficient because both spouses would be bothered by the disarray. Where both spouses value working, a solution where one specializes in home production and the other in market production would be unsustainable and would lead one of the spouses to exercise the "outside option" by exiting the union or to make cohabitation unpleasant.²⁷ In noncooperative households (unlike cooperative households) allocations are not always economically efficient.

Households may appear similar in cooperative and noncooperative models with respect to observable characteristics such as income and education, but choose either an efficient or inefficient allocation of resources and division of labor between market and home production. Whether the ultimate equilibrium is vicious or virtuous is thought to depend on history and culture. Social norms, for instance, may prescribe codes of conduct and gender roles for home production, which favor an outcome that could be improved, from both spouses' perspectives.²⁸ By allowing for the possibility of noncooperative bargaining, whether household decisions are efficient becomes an outcome in itself, and depends not only on the distribution of resources between spouses and their preferences and characteristics (such as socioeconomic status and ability), but also on social norms and

²⁶ Simply changing the distribution of resources within the household may not suffice to alter outcomes if an intervention does not alter the value of the alternative, whether an outside option such as divorce (by, for example, improving the conditions of divorced women, or making divorce more accessible and socially acceptable) or an inside option such as the "cold shoulder."

²⁷ Any other outcome would be inefficient or unsustainable, since spouses may exercise their next-best outside option.

²⁸ Lundberg and Pollak 1994.

institutions for gender and marriage.

For example, there is evidence of inefficiency among West African households in their farming decisions, due to the fact that women and men retain separate property rights to land after marriage.²⁹ Within these unions, spouses tend to act independently and do not constitute a single economic unit. In fact, spouses often have their own individual budgets and make separate consumption and productive decisions.

By contrast, evidence from LAC and developed countries is consistent with efficient household allocations, though the literature assigns an important role to cultural norms in understanding why some households function as cohesive and efficient unions while others are unions only in name.³⁰ If households interact noncooperatively, policy intervention could be justified on grounds of efficiency as well as equity.

In sum: nonunitary models of the household, in which individuals' market and outside opportunities generate bargaining power within the household, can have qualitatively different implications from those of unitary models. For example, an increase in men's wages could in theory make women worse off, even as total household resources increase. If the additional resources tilt the balance of power toward men, that confers more say to the husband in household decisions and weakens the wife's ability to assert her preferences.

Assessing the effects of development on women's well-being thus requires a characterization of how resources are allocated within families, which affects whether welfare-enhancing policy margins can be identified to correct either inequities in the household (in the cooperative model) or inefficiencies (in the noncooperative model).

If women are part of a larger economic unit—the household—men's economic gains may benefit women to the extent that spouses share resources and interact. Studying gender issues—economic participation in particular—through a household lens provides a novel perspective for analysts to understand outcomes and see the margins amenable to policy intervention. Which family behaves according to which model will depend on the cultural context and on the characteristics of the spouses. Ultimately, this is an empirical question. But it is indisputable that the process of intrahousehold decision-making matters and provides alternative policy angles depending on the nature of family interaction. (Chapter 6 provides a more detailed discussion of the different views of intrahousehold dynamics and their implications for resource allocation and welfare, with particular emphasis on consumption, LFP, and the division of labor among spouses.)

Structure of the report

The rest of the report is organized in three parts. Part I (chapter 1) presents the most relevant trends underlying women's economic participation through five sets of stylized facts, focusing in particular on changes in education, health, family structure, norms, and labor market outcomes. The empirical regularities presented in chapter 1 are building blocks for the rest of the report. Over the last four decades, LAC has made great strides in first-generation gender issues. Access to education has equalized and it is now favoring girls. Health indicators including life expectancy have equalized. Women's participation in the labor force has expanded dramatically, particularly among married women. Changes in gender attitudes have accompanied these trends, with significant improvements

²⁹ Udry 1996.

³⁰ Bobonis 2009; Browning et al. 1994; Browning and Chiappori 1998; Chiappori, Fortin, and Lacroix 2002.

in both sex's views regarding the role of women in professional spheres, but women's and men's views toward gender roles in the household have remained fairly stable. While women value family and being involved in the care of their children, they assign increasing importance to work, requiring them to strike an appropriate balance between work and family.

Building on the stylized facts in part I, part II (chapters 2–5) endeavors to further understand trends in women's economic participation, the historical perspective shedding light on the dramatic trends in LAC and its determinants. It presents original and novel analyses characterizing the evolution of female LFP, focusing on progressively narrower features of women's economic activity, beginning with the decision to enter the labor force, moving to occupational choices, and finishing with earnings. Men's and women's views on gender roles within the household are reflected in their LFP decisions: for women, marital status, even more so than presence of children, remains the strongest predictor of their participation, with many fewer married women engaging in work than their single/divorced/widowed counterparts, although this relationship has weakened over time. For married women, the presence of children, while not seeming to affect the decision whether to join the labor force, shapes the intensity and sectoral occupation of women's participation. While single women appear to be “overrepresented” in the formal sector, their shift out of formal work and engagement in the corridor of self-employment and inactivity occurs as they form a family. Women with small children supply many fewer hours than their childless counterparts and appear to value the flexibility afforded them by the informal sector.

A woman's ability to juggle her dual roles in home production and in the labor market ultimately depends on her interactions with other household members, which shape division of labor within the household and between home and market production. This observation motivates the household perspective adopted in this report. In particular, the results that emerge from chapters 2–5 set the stage for part III (chapters 6 and 7). Chapter 6 considers causal relations—not just statistical relations. The chapter sheds light on intrahousehold dynamics and the decision-making processes underlying women's economic participation. It considers changes in women's bargaining positions relative to other household members and the consequences for female economic participation and the allocation of household resources. The lenses for studying these interventions are economic theories of interactions within the household, some of which explicitly allow stakeholders to have diverging interests and preferences. Chapter 7 concludes with policy recommendations and suggestions for future research.

Part I

Chapter 1. Trends in Human Capital, Family Formation, Norms, and Female Participation

Following the organizing framework in the introduction (see figure 1), this chapter presents five sets of stylized facts on gender in Latin America and the Caribbean (LAC), drawing comparisons with other regions and by country in the region where possible. It documents trends in the evolution of human capital, specifically education and health (stylized facts 1 and 2). Such investments are necessary for economic participation but not sufficient, suggesting the need to characterize how preferences over family formation and household structure have changed, if at all (stylized fact 3), and to gain insight on social norms concerning gender blindness in the workplace and the role of women in the household (stylized fact 4). The chapter concludes with a discussion of the evolution of female labor force participation (LFP) and its relationship to economic development (stylized fact 5), postponing to chapters 2–5 a more thorough and novel analysis of female LFP in the region.

1.1 Education

Stylized fact 1: Gender gaps in enrollment, which have traditionally favored boys, have closed and, for the younger generation, switched. Changes in the gap in years of schooling are due largely to increased educational attainment of females at the higher levels. In achievement, some gaps still favor boys, while others favor girls.

Education yields multiple returns. It improves earnings potential and opportunities in the labor market. It is associated with an improved intramarital share of the surplus one can extract in the marriage market—say, by tilting household allocations in one’s favor through higher household income, better marriage prospects, and more desirable spousal roles within marriage. It influences intrahousehold shares by raising the prospects of marriage with an educated spouse, thus raising household income on marriage, and by affecting the competitive strength outside marriage, and the spousal roles within marriage.³¹ Finally, higher levels of education are symptomatic of, and can affect changes in, social norms surrounding women’s economic role in and outside the household.³²

³¹ Chiappori, Iyigun, and Weiss 2009.

³² Fernandez and Fogli 2006; Fernandez 2007, 2010. In addition to labor market returns, women’s education has strong social externalities beyond social norms. A large literature shows that higher levels of education of women contribute to reducing fertility (Schultz (1973) and Cochrane (1979), which in turn decreases infant mortality and increases life expectancy (Behrman and Deolalikar 1988). The literature has also documented the intergenerational effects of maternal education on the education, health, well-being, and adult productivity of their children—Behrman (1997), Schultz (1988, 1993), Strauss and Thomas (1995). Studies of rates of return have also documented the economic benefits of investing in girls’ education (Psacharopoulos 1994).

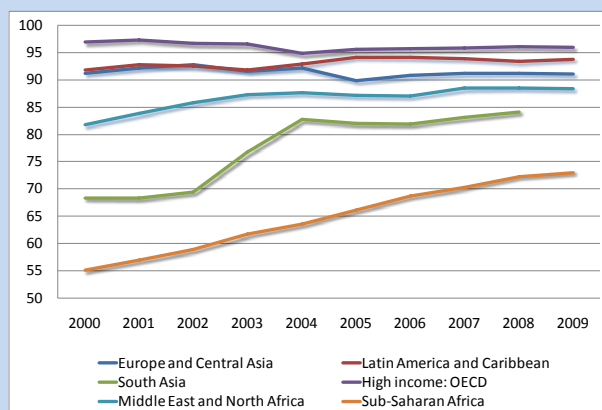
The interplay of these factors has implications for LFP. Until female education levels rise, it may not make economic or social sense for women to move into formal sector employment in large numbers. Several authors have argued that a deterrent to women's engagement in the formal labor market is that low-paying jobs and the stigma associated with them may not make them attractive enough to compensate for the fixed costs of working away from home, though single women may accept them more readily than married women.³³

Countries in LAC have made important progress in women's educational enrollment and achievement, to the point of closing and even overturning earlier gender gaps.

Enrollment. Most countries in LAC have virtual universal enrollment for girls in primary education (figure 1.1), and the gender gap that historically favored boys has disappeared.³⁴ LAC stands out as the region with the narrowest gender gap, reflected in the highest female to male primary school net enrollment rates (figure 1.2).³⁵ Enrollment rates of 6- to 11-year olds were lower among girls than among boys in only four Latin American countries: Bolivia, Guatemala, Mexico, and Peru.³⁶

Figure 1.1. Latin America and the Caribbean has virtual universal primary enrollment for girls

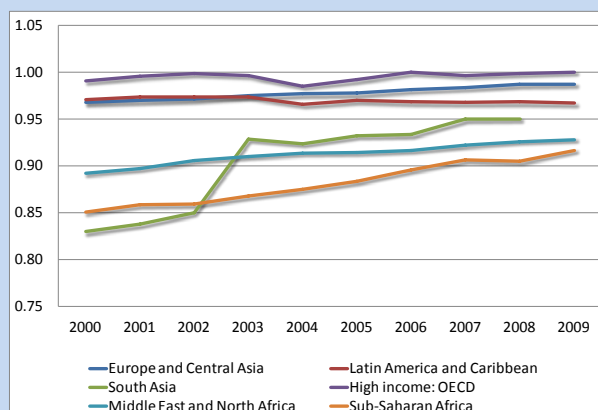
Female primary school net enrollment rates by region, 2000–2009 (percent)



Source: World Bank 2011.

Figure 1.2. Latin America and the Caribbean has the narrowest gender gap in primary enrollment

Ratio of female to male primary school net enrollment rates by region, 2000–2009



Source: World Bank 2011.

At the secondary level, where enrollment rates for both girls and boys are lower, the increase in girls' rates has been greatest in LAC (figure 1.3). The ratio of female to male net enrollment rates shows that the gap in LAC favoring girls is even larger at the secondary than primary level and far exceeds

³³ Goldin 1995; Schultz 1989; Mammen and Paxson 2000.

³⁴ Net enrollment rates compare students enrolled in each grade with persons in the corresponding age cohort. Gross enrollment rates are sometimes higher for boys than for girls due to the higher repetition rates for boys in several LAC countries. See, for example, Behrman, Sengupta, and Todd (2005), for rural Mexico. See also Grant and Behrman (2010), who find that gender gaps in schooling increasingly favor females, on the basis of data from Demographic and Health Surveys in 38 developing countries (World Bank 2011).

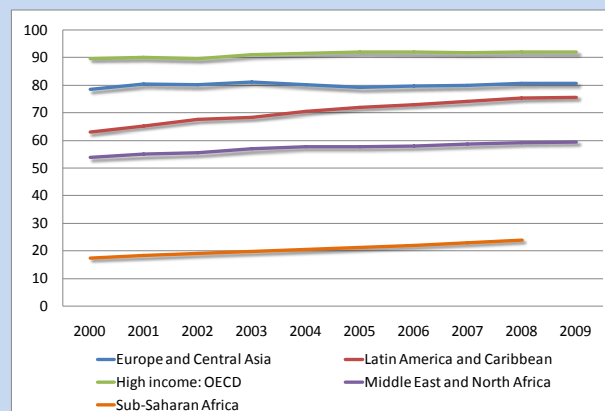
³⁵ Although similar in trend, differences appear among LAC countries in net enrollment rates at all three levels. In primary schooling, the gap ranged from 0.94 in St. Vincent and the Grenadines and 0.97 in Guatemala, to above parity in 17 countries, including the three most populous. At the secondary level, the average ratio was 1.09. In tertiary education, it was 1.39.

³⁶ Marshall 2005.

that of high-income Organisation for Economic Co-operation and Development (OECD) countries (figure 1.4).

Figure 1.3. The increase in girls' secondary enrollment rates has been greatest in Latin America and the Caribbean

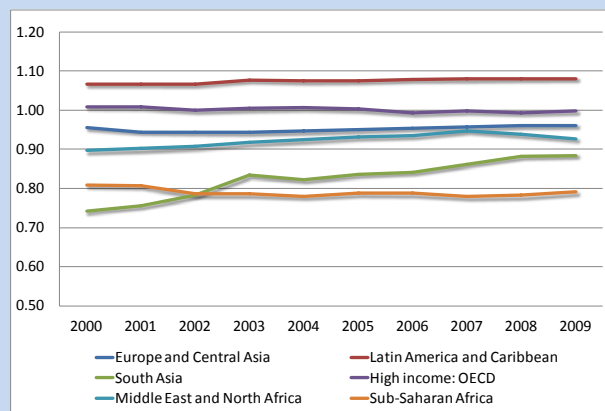
Female secondary school net enrollment by region, 2000–2008 (percent)



Source: World Bank 2011.

Figure 1.4. And favors girls even more than primary enrollments

Ratio of female to male secondary school net enrollment by region, 2000–2009



Source: World Bank 2011.

The data suggest that the pattern of higher female enrollment at the primary and secondary levels also holds at the tertiary level in LAC. Recent studies also confirm that females outperform males in tertiary completion in most countries that record such data, a tendency that has also emerged in developed countries.³⁷

Attainment. Girls today are, on average, achieving more years of education than boys, except for those in indigenous communities in Bolivia and Guatemala.³⁸ For the most part, the gap in years of schooling closed over the past two decades. The education gap closed for the cohort born at the end of the 1960s. Since then, the gap has reversed such that for the cohort born in 1980, girls have an average of 0.25 more years of schooling than boys. For the four decades of birth cohorts in their analysis (1940–1980), the gender gap in attainment has moved in favor of females at a pace of 0.27 years of schooling per decade.³⁹ The changes in the schooling gap are explained mainly by the educational attainment of females at higher levels of education, rather than by improvements in the early years of education. The lower half of Figure 1.5 provides some insight into this finding. In LAC, the gap in secondary completion rates (panel c) has closed since at least the 1950s and has favored girls ever since, with LAC outperforming the other regions. The female-to-male completion rate for tertiary education paints a different picture (panel d). In the 1960s, 2 women completed tertiary education for every 10 men; by 2010, the gap closed entirely, with only Europe and Central Asia keeping pace with LAC's gains. However, LAC's level of human capital for both boys and girls—measured by years of schooling (panel a)—still lags considerably behind that of other regions that

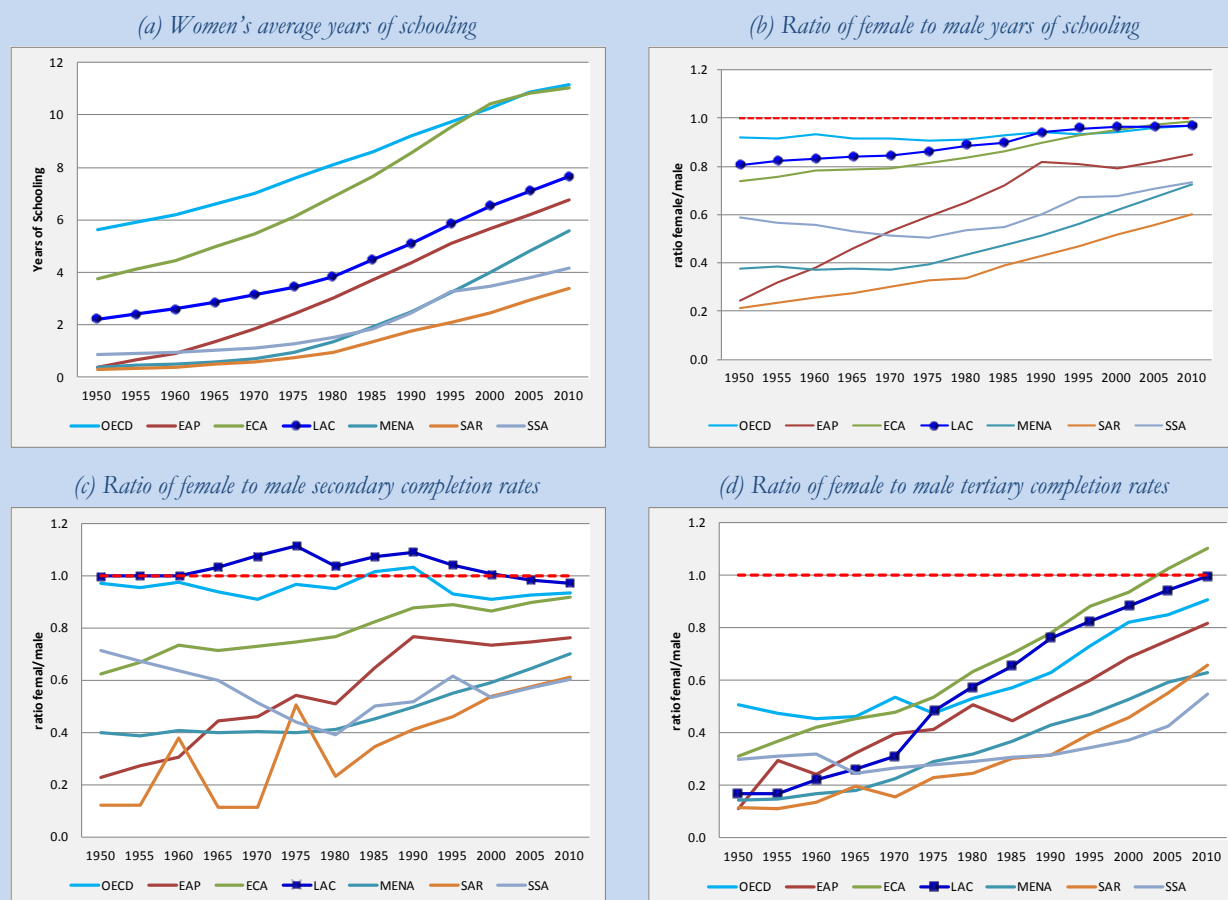
³⁷ Becker, Hubbard, and Murphy (2009) present evidence from a sample of 120 developed and developing countries, which shows that in 67 countries a larger fraction of women than men aged 30–34 years had completed college in the late 2000s, whereas in 1970 women in only five countries in the same sample did, and all five countries had above average levels of GDP per capita. So, the worldwide boom in higher education has been driven by women.

³⁸ Duryea et al. 2007.

³⁹ Duryea et al. 2007.

have reached equality in educational outcomes, such as the developed economies of the OECD and the Europe and Central Asia region.

Figure 1.5. Women's average years of schooling, ratio of female to male years of schooling, and ratio of female to male secondary and tertiary completion rates, 1950–2010 (ages 25 and older)



EAP is East Asia and Pacific; ECA is Europe and Central Asia; LAC is Latin America and the Caribbean; MENA is Middle East and North Africa; SAR is South Asia; SSA is Sub-Saharan Africa.

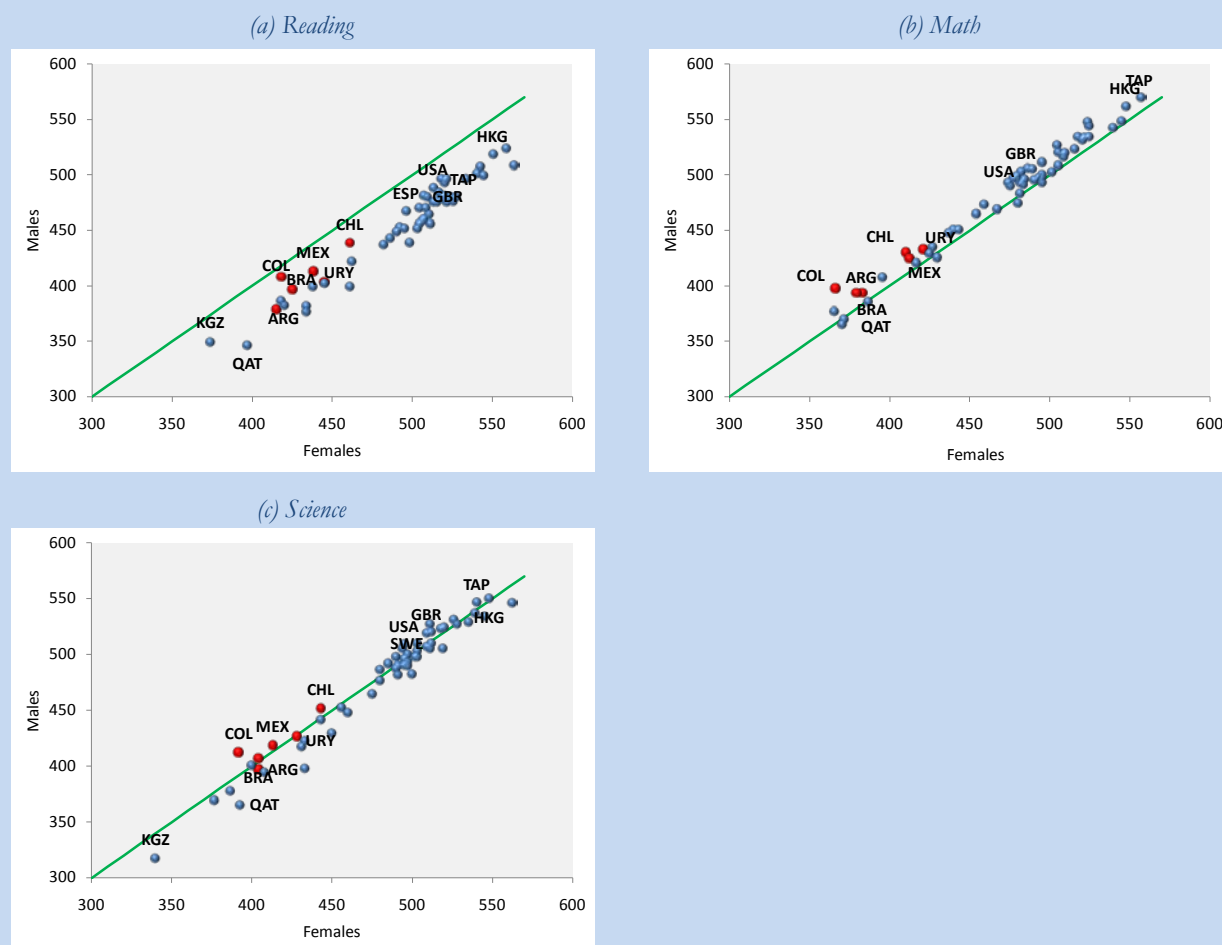
Note: Only men and women aged 25 or older were considered in the construction of these charts, so that investment in tertiary education can plausibly be completed

Source: Own calculations based on Barro and Lee (2011).

Achievement. All education indicators considered so far refer to enrollment or attainment, rather than achievement. It is possible that, while the gender gaps in net enrollment and completion rates now favor girls, a gender gap in achievement still favors boys (though the higher completion rate for girls in primary school and their faster progression through school suggest that this is not the case). The evidence of gender gaps in performance in standardized achievement tests for LAC is scant. For the six LAC countries taking part in the Program for International Student Assessment (PISA) of the OECD in 2009, the average test results show that boys perform better than girls in mathematics and, to less extent, in science, while girls perform better in reading. This pattern is consistent with those in many other countries (figure 1.6).

Figure 1.6. Girls perform better in reading—boys, in mathematics and science

Average scores on the 2009 OECD Program for International Student Assessment, by gender



Note: The green line corresponds to the 45-degree line, or parity. LAC countries, in red, are Argentina (ARG), Brazil (BRA), Chile (CHL), Colombia (COL), Mexico (MEX), and Uruguay (URY). Additional benchmark countries are USA, UK (GBR), Sweden (SWE), Hong Kong (HKG), Chinese Taipei (TAP), Qatar (QAT), and Kyrgyzstan (KGZ).

Source: OECD Program for International Student Assessment 2010.

Disparities in progress. LAC has progressed more than other regions in closing the gender gap in education. It is the developing region with the narrowest education gender gaps in the enrollment and achievement indicators, but the levels are unsatisfactory. Indeed, net secondary enrollment rates in LAC are still well below universality (71 percent on average), even though most LAC countries have laws for compulsory secondary education.

Nor has progress been even across countries or even within countries. Attendance and enrollment rates of girls and boys aged 6 to 18 in Bolivia, Guatemala, Mexico, and Peru—the only countries that have not closed the gap in adult schooling attainment—show several gender differences.⁴⁰ The biggest difference in attendance is among those in the lowest income quintile. The differences are such that boys attend school in higher proportions than girls but still display lower attainment. In Bolivia, Guatemala, and Peru nonindigenous males and females have similar education outcomes.

⁴⁰ Duryea et al. 2007.

But unlike most LAC countries, where girls are less likely than boys to fail a grade and repeat, indigenous girls in these three countries appear to lag behind boys, though the gaps are much smaller than those for enrollment.⁴¹

The quality of education in LAC also remains very low for both sexes, as evidenced by scores on standardized tests (PISA, for example). The gaps persist even after considering the region's lower GDP per capita.

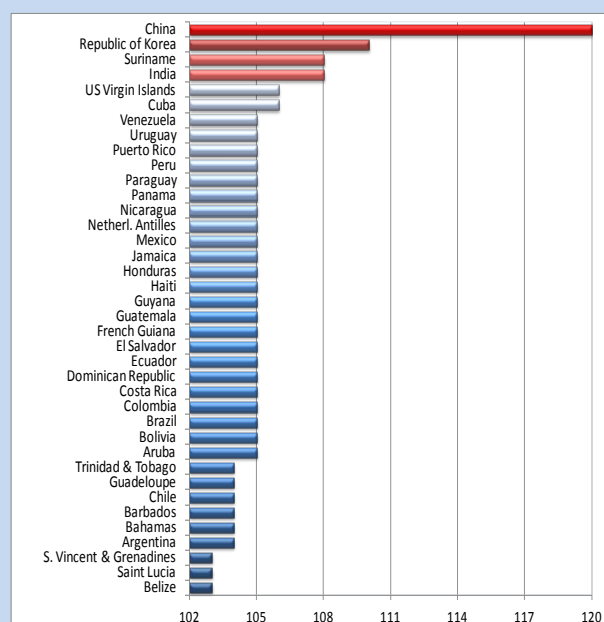
1.2 Health

Stylized fact 2: The female share of the total population has risen in tandem with both female and male life expectancy at birth. The gap in life expectancy has widened in favor of women.

Gender gaps in health begin manifesting themselves early and continue over the life cycle. Health outcomes obviously have an intrinsic fundamental value, but also important repercussions for human capital investments and the ability to take part in economic activity.⁴²

Figure 1.7. No unnatural male-female differences at birth in Latin America and the Caribbean

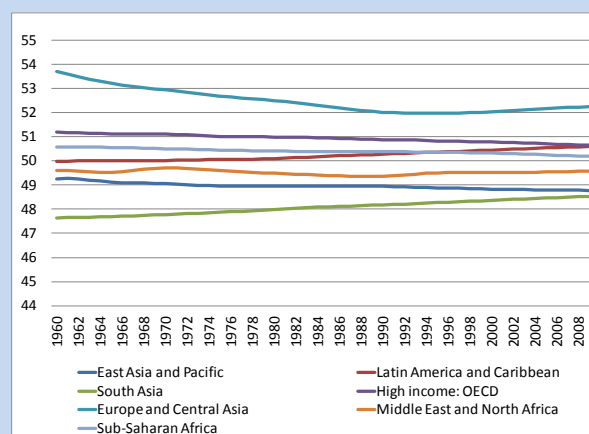
Sex ratio at birth (number of male births per 100 female births, 2005–2010)



Source: UNnited Nations Population Division, World Population Prospects 2006 (International estimate). The regional aggregate figure for Latin America and the Caribbean (dark blue bar) reflects population-weighted averages

Figure 1.8. Latin America and the Caribbean has the highest share of women in the population by region, 1960–2009

Women as a share of the total population by region, 1960–2009 (percent)



Source: World Bank 2011.

⁴¹ Marshall and Calderon 2006.

⁴² Grossman 1972, 2000; Becker 2007.

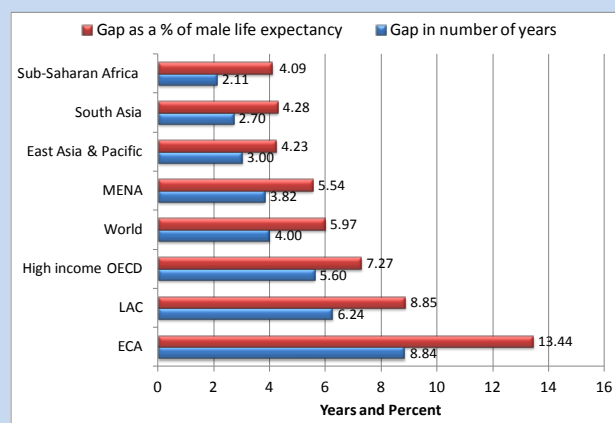
Sex imbalance. One of the earliest differences between the sexes is the imbalance in the ratio of male to female births (figure 1.7),⁴³ although LAC, as Europe and Central Asia and Sub-Saharan Africa, has no evidence of a sex imbalance in the total population.⁴⁴ In fact, LAC's share of women in the total population has been higher than that of men since 1960 and has been increasing since then, unlike other regions such as South Asia and Europe and Central Asia. As a result, among developing regions LAC has the highest share of women in the total population after Europe and Central Asia, on a par with the group of high-income OECD countries (figure 1.8).

Life expectancy. The increase in the share of women in the total population might not be a good indicator of women's health status if it increases as a result of a decline in male life expectancy at birth. In LAC, the share of women in the total population has increased at the same time that both female and male life expectancies at birth have risen. This contrasts with other regions such as Europe and Central Asia and Sub-Saharan Africa, where the share of women in the population has risen while male life expectancy at birth has simultaneously fallen or stagnated.

Life expectancy at birth is a measure of the overall health of a population. Along with the gap in life expectancy at birth between females and males, it is also a useful indicator of gender health disparities. After Europe and Central Asia, LAC stands out as the region with the highest gap in life expectancy, both in absolute terms (number of years) and in relative terms (as a proportion of male life expectancy; figure 1.9).

Figure 1.9. Women in Latin America and the Caribbean live longer than men

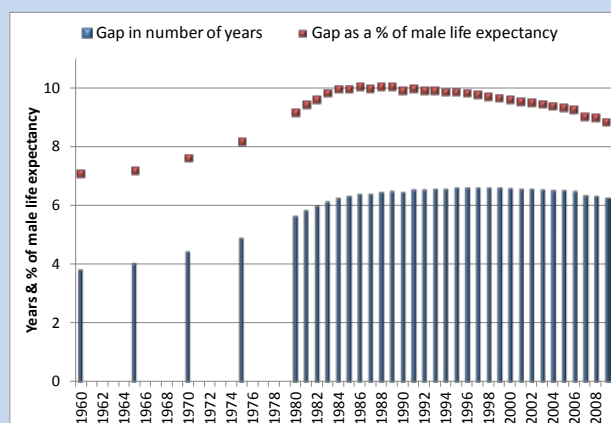
Differences in female and male life expectancy at birth by region, 2009



Source: World Bank 2011.

Figure 1.10. But the gap has narrowed slightly

Evolution of the gap in female and male life expectancy at birth in Latin America and the Caribbean, 1960–2009



Source: World Bank 2011.

⁴³ The biological norm of male to female births is about 105 newborn boys for every 100 newborn girls. Thus, male bias, or sex imbalance, refers to a ratio above this biological norm. The literature has attempted to link these imbalances to parental preference for sons, which manifests itself in greater household time and resource allocated to boys, which increases their chances of surviving and results in excess mortality of girls (Sen 1990, 1992; Das Gupta 2005, 2006, 2008; Lin and Luoh 2008; Lin, Liu, and Qian 2008; Oster (2005, 2006, 2009; Oster, Gang, and Yu 2008). The bias may arise prenatally through selective abortion, particularly among cohorts born during the diffusion of sex determination technologies.

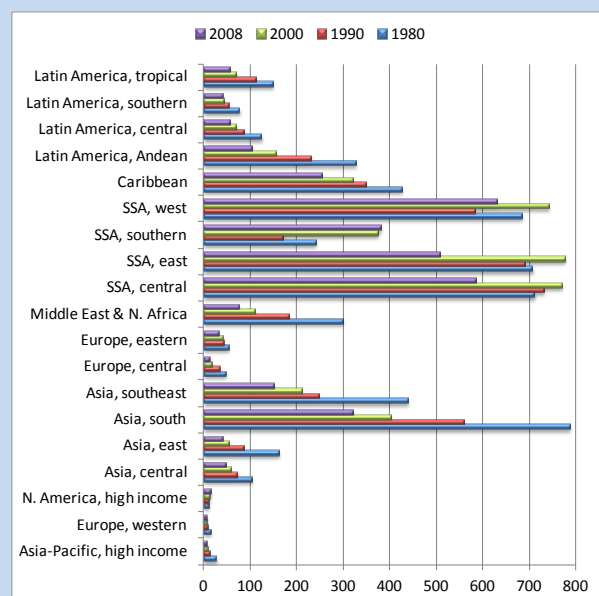
⁴⁴ These figures refer to sex ratios among the total population, not just among newborns.

Further, LAC consistently registered an elevated gap between female and male life expectancy at birth, in absolute and relative terms, during 1960–2009 (figure 1.10). In LAC, the variation across countries in this gap in 2008 was similar to that across regions, again in absolute and relative terms. Notably, it ranged from a low of 3.4 years (or 5.1 percent) in Guyana and 4.0 years (or 5.9 percent) in Trinidad and Tobago, to a high of 10.7 years (or 10.7 percent) in Colombia and 9.5 years (or 14.3 percent) in El Salvador. Argentina and Brazil had two of the five largest gaps: Argentina 7.5 years (or 10.5 percent), and Brazil 7.3 years (or 10.6 percent).

Maternal mortality. The maternal mortality ratio is another important summary statistic of women's health. The death of women during pregnancy, childbirth, or in the 42 days after delivery, though not a gap in itself, is a main reason mortality rates for females of child-bearing age in many developing countries exceed those of males in the same age group. Recent estimates from a large sample of countries show significant reductions in the maternal mortality ratio throughout the past three decades (figure 1.11), albeit at different rates (figure 1.12).⁴⁵ Some exceptions persist: certain Andean countries and Haiti exhibit ratios comparable to those of Sub-Saharan African countries.

Figure 1.11. Maternal mortality in Latin America and the Caribbean has come down significantly

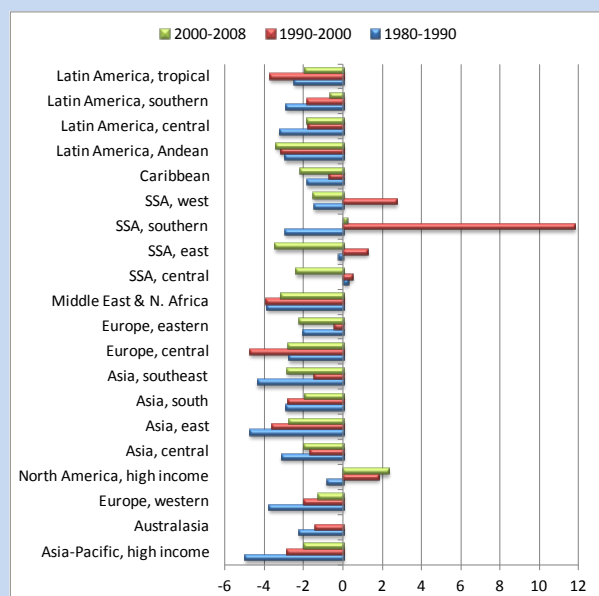
Maternal mortality ratios (number of maternal deaths per 100,000 live births) by region, 1980, 1990, 2000, and 2008



Source: Murray et al. 2010.

Figure 1.12. But at different rates

Average annual change in maternal mortality ratios by region, 1980–1990, 1990–2000, 2000–2008 (percent)



Source: Murray et al. 2010.

Conclusion. Gaps in gender-specific health indicators in LAC are quite narrow relative to those in developed and developing countries in other regions. But, as with education, indicator levels are still too low. For example, even Chile and Uruguay—the countries with the lowest maternal mortality in 2008—had ratios two to three times those of developed countries. Moreover, if the rates of decline between 1990 and 2008 are extrapolated, most LAC countries (aside from El Salvador and possibly Chile) will probably fail to meet Millennium Development Goal (MDG) 3 on promoting gender equality and empowering women, which requires reductions to 75 percent of 1990's maternal

⁴⁵ Murray et al. 2010.

mortality ratio.

Instead, these statistics should be interpreted as suggesting that there is no evidence of women in LAC being systematically worse off than those in other regions. But individual countries show significant heterogeneity in health gaps, similar to that across regions. And for subgroups within countries the progress in closing gender health gaps may have stalled or even reversed.

1.3 Family formation and family structure

Investments in human capital and health are necessary for women engaging in economic activity, but perhaps not sufficient because preferences, social norms, and family structures also determine female participation. These latter factors shape women's family and professional aspirations and influence women's labor supply decisions and allocations of time between home and market.⁴⁶

1.3.1 Fertility rates and age at first child and at marriage

Stylized fact 3a: Fertility rates in Latin America dropped dramatically over the past 50 years, converging to those of high-income OECD countries in the recent years. A distinctive feature of this decline is that it took place without any major changes in the timing of family formation (of marriage and fertility).

Fertility rates. LAC fertility rates declined from 5.9 births per woman in 1960 to 2.2 in 2009 (World Bank 2011), unaccompanied by any delay in the onset of childbearing, the norm in Europe.⁴⁷ In many LAC countries in the early 1990s lower fertility coexisted with traditional patterns of family formation—early nuptials and young motherhood.

The fertility decline in LAC started in the late 1960s and early 1970s, when the total number of births per woman fell from approximately 6.0 to 4.2 in the early 1980s. It then slowed until the 1990s, when it accelerated again, taking the regional fertility rate in 2008 (2.2 births per woman) to those in high-income OECD countries in the mid-1970s (figures 1.13 and 1.14). Although not as steep as the declines in Middle Eastern and North African countries, LAC's decline has nevertheless been impressive.

For one group of countries (including Brazil, Chile, Colombia, Costa Rica, and Panama), the rate dropped rapidly in the early 1970s, and then remained relatively stable until the beginning of the 1990s, when the decline again accelerated, mimicking trends in the rest of the world (see figure 1.13). For a second group (including Ecuador, El Salvador, Haiti, and Paraguay), the trend was more muted at the beginning of the sample period, proceeding to a slower and fairly constant pace over the decades. Both patterns substantially reduced the dispersion of fertility across the region.

Marriage and fertility. Fertility declined in LAC without major changes in family formation, as indicated by fairly stable rates and ages at first marriage and first birth.⁴⁸ Only two other regions have not experienced significant changes in age of first child: in South Asia the mean age at first birth did not change between 1975 and the early 2000s, hovering around 19.8 years.

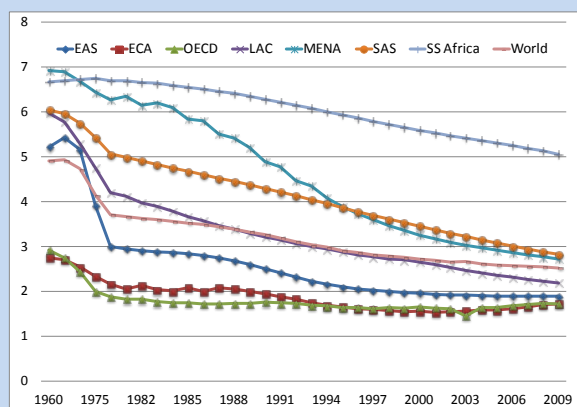
⁴⁶ See, for example, Fernandez and Fogli (2009) and relevant literature on social norms.

⁴⁷ Sobotka 2004.

⁴⁸ Rosero-Bixby 1996 and 2004; Mensch, Singh, and Casterline 2005.

Figure 1.13. Fertility rate declining in the Latin America and the Caribbean region

Births per woman by region, 1960–2009

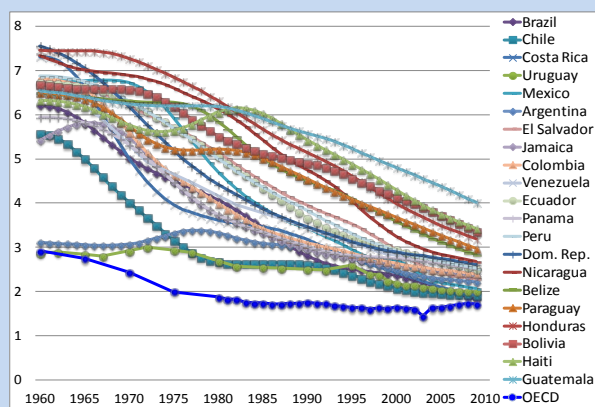


EAP is East Asia and Pacific; ECA is Europe and Central Asia; LAC is Latin America and the Caribbean; MENA is Middle East and North Africa; SA is Southern Asia; SSA is Sub-Saharan Africa.

Source: World Bank 2011.

Figure 1.14. And in Latin America and the Caribbean countries

Births per women in Latin America and the Caribbean, 1960–2010



Source: World Bank 2011.

These magnitudes and dynamics are in line with those of several African nations in 2000 and Sub-Saharan Africa. By contrast, Europe and Central Asia and OECD countries, which are more comparable to LAC in per capita income, have witnessed significant delays in family formation. Europe and Central Asia's age at first child was 22.8 years in the 1970s and reached 24.2 in the early 2000s. OECD countries have seen the largest increases, rising from 24.4 years in 1970 to 28.2 in 2000.

Within LAC, age at first child has been largely stable (figures 1.15 and 1.16). However, there are some notable exceptions. While Caribbean nations like Jamaica, St. Lucia, and St. Vincent and the Grenadines experienced a 2.5-year delay in age at first birth over the period; Chile and Peru recorded opposite trends, with women having children almost a year younger in 2000 than in 1975.

The age at first marriage has remained fairly constant, rising from 21 years on average for women in the 1970s to just more than 23 in the early 2000s (figure 1.17). The increase in the average age at first marriage has been an important part of the fertility decline in most Asian countries (less so in Europe). But the age of first marriage has affected LAC's fertility decline little, if at all, because birth control has been adopted mainly by married women.⁴⁹ The timing of marriage thus appears immune to LAC's demographic and socioeconomic transformations.

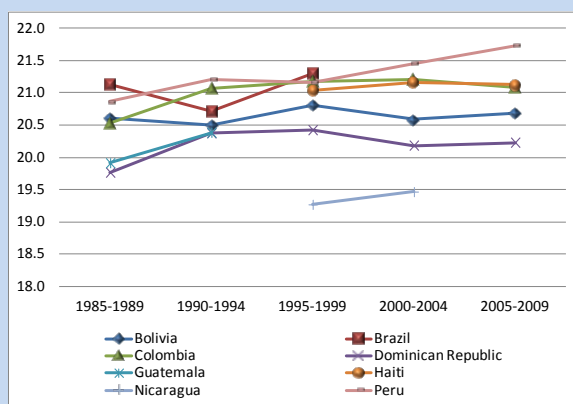
Still, among LAC countries the age of first marriage shows wide diversity. In some Caribbean countries (such as Jamaica and Barbados) women and men are currently marrying later than 30, but in Nicaragua, Guatemala, and Guyana women continue to marry around 20. Among rural women, age at first marriage largely remains below age 20, showing no change since 1985.⁵⁰

⁴⁹ Palloni 2009.

⁵⁰ Demographic Health Surveys 2009.

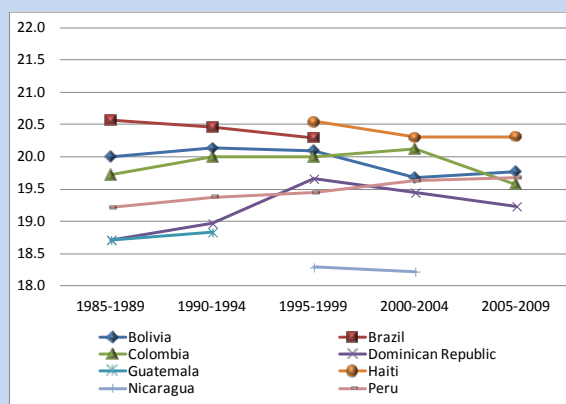
For LAC the constancy of age at first marriage and first child lies in the value placed on family networks, the primary safety net guarding against economic and social instability (figure 1.18).⁵¹

Figure 1.15. Age at first child in selected Latin American and Caribbean countries, 1985–2009 (urban areas)



Source: Own calculation based on Demographic Health Surveys 2009.

Figure 1.16. Age at first child in selected Latin American and Caribbean countries, 1985–2009 (rural areas)



Source: Own calculation based on Demographic Health Surveys 2009.

That would explain the persistence of nearly universal and early family formation, despite major changes in the economic, political, and social spheres (see figure 1.15). The rise in female education and employment, while reflecting a shift in tradition, might put further pressure on some of the region's typical family formation processes. LAC seems to have entered a new stage of the fertility decline in recent years. While the 1990s were characterized by a clear increase in the median age at first birth of almost three years, the proportion of women younger than 30 who have made the transition to motherhood has dropped in most Latin American countries in the past decade.⁵²

1.3.2 Family structure

Stylized fact 3b: Family structure and the onset of family formation have remained largely constant. But over the last decades, there has been a moderate increase in divorce rates in urban areas and a sizable rise in female headship, especially at higher levels of education. These changes could reflect deeper changes in social norms and customs.

Family structure. Marital status has also remained fairly stable since the 1970s, apart from Argentina, which experienced a 16.7-percentage-point drop in the incidence of married women, accompanied by a 12.6-percentage-point increase in the incidence of single and divorced women.⁵³ Although marital dissolution rates are below those in developed countries (Costa Rica and Uruguay are exceptions),⁵⁴ they nonetheless are high, and their trends may reflect changes in both institutions and, more fundamentally, social norms.

⁵¹ Fussell and Palloni 2004.

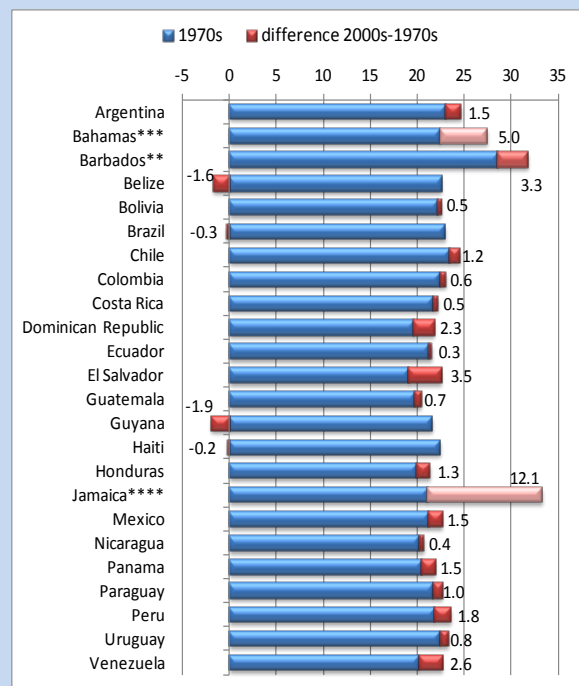
⁵² Fussell and Palloni 2004.

⁵³ Integrated Public Use Microdata Series.

⁵⁴ Costa Rica has a crude divorce rate of 2.1, in line with that of Canada and France; the divorce rate in Uruguay (4.4) is greater than that of the United States (3.7).

Figure 1.17. The age at first marriage has been fairly stable for females in Latin America and the Caribbean

Age at first marriage and 2000s–1970s difference (selected Latin American and Caribbean countries)

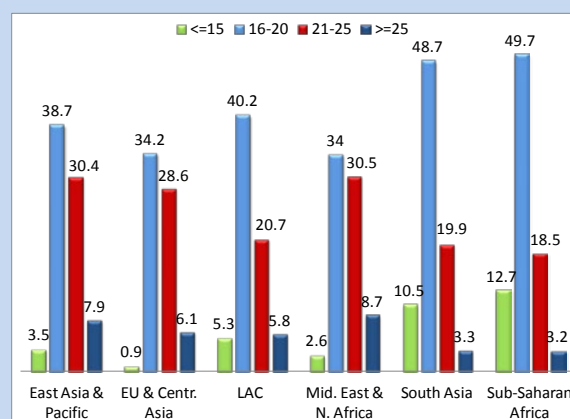


Note: Jamaica, Barbados (only 1980s) and Bahamas survey methodology changed across periods, so the change over time maybe spurious.

Source: UN, Department of Economic and Social Affairs, Population Division (2009). *World Marriage Data 2008*.

Figure 1.18. Constancy in the mother's age at first child in Latin America and the Caribbean reflects the value of family networks

Distribution of mother's age at first child, by region



Source: United Nations 2010; World Fertility Report 2007.

As dissolving marriage becomes more common, the balance of bargaining powers between spouses shifts. For instance, this exit option may change the returns to specialization in household or market production by reducing the time women can expect to spend in marriage and by increasing the returns to investing in one's options outside marriage. Evidence from the US suggests that women increase their LFP in the years prior to a divorce and those who divorce engage in less household specialization.⁵⁵ These studies do not suggest that female LFP causes divorce, but that the anticipation of a higher likelihood of divorce increases female economic participation in the labor market. And women seeking both insurance against divorce and greater bargaining power within marriage are more likely to enter and remain in the labor force.⁵⁶

A related demographic shift that might put pressure on the traditional gender roles is the increase in the proportion of households headed by women in almost all LAC countries, closely mimicking that in developed countries (figure 1.19). The only exceptions are Colombia and Ecuador during the 1980s.

⁵⁵ Johnson and Skinner 1986; Lundberg and Rose 1999.

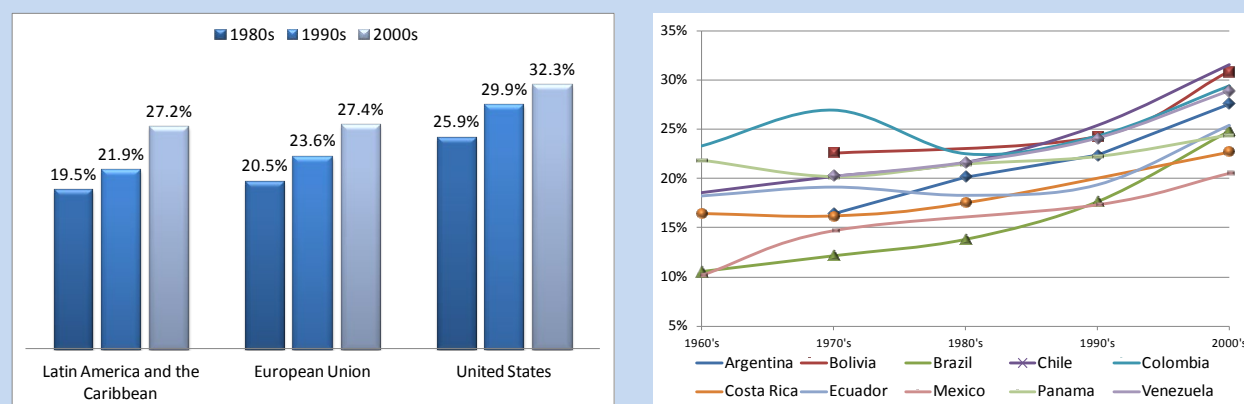
⁵⁶ Stevenson 2008.

Female-headed households are often thought to be poorer than those headed by males, a perception arising in part from the preconception that female headship is related to unfavorable circumstances and life events such as family dissolution and adolescent parenthood. Such households are also thought to be marginalized as a result of social norms and policies that target traditional nuclear family structures.⁵⁷

In LAC the increase in female-headed households is steepest among more educated women. Although female-headed households face a different set of vulnerabilities they do not appear to be worse off than other households.⁵⁸ Because the financial burden falls on their shoulders, the LFP decisions of female heads of household should in principle resemble those of men, and one would expect an increase in female LFP to be related to the higher incidence of female-headed households. The changing prevalence of female headship could also signal changing norms, manifest in the greater acceptance of women in the labor force.

Figure 1.19. The proportion of households headed by women is rising in almost all Latin American and Caribbean countries

Percentage of female-headed households, by country and by region and census year (percent)



Source: Integrated Public Use Microdata Series.

Source: Integrated Public Use Microdata Series.

1.4 Social norms

It is clear from the narrative in this chapter that preferences (and thus decisions) are shaped by social norms, which influence household member preferences over home and market production and the division of labor between spouses. Norms can also present social barriers to female access to the labor market and to certain sectors—say, by influencing the “availability” of socially acceptable jobs for women.⁵⁹

In recent years the economic literature has increasingly considered the role of culture in determining economic outcomes.⁶⁰ Culture and social norms can be nebulous concepts, lending themselves to many alternative definitions. The most frequently cited definition and the one adopted in this report

⁵⁷ Whitehead 1978; Handa 1996.

⁵⁸ Aritomi, Orlando, and Rubiano 2010.

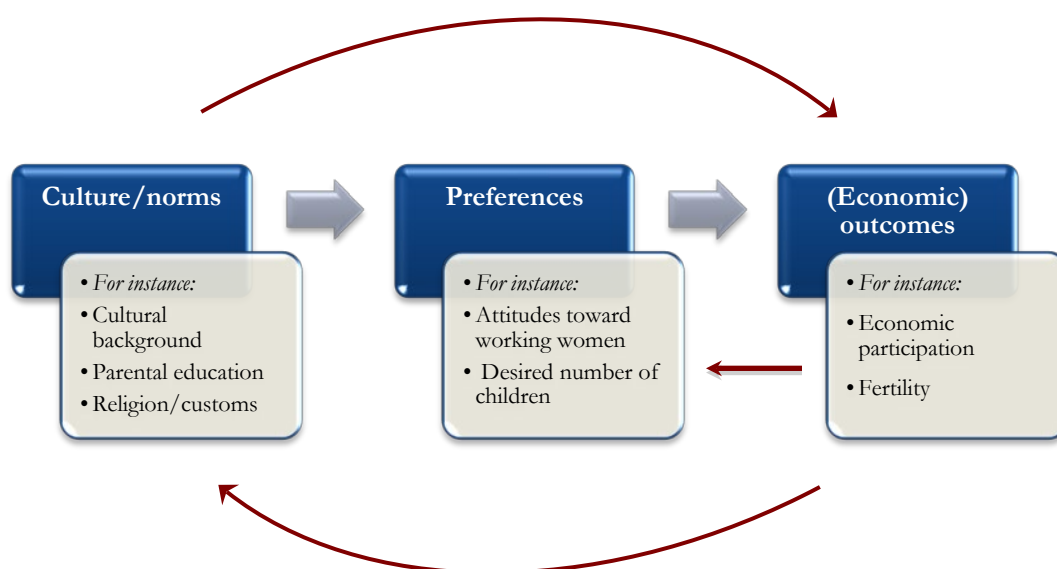
⁵⁹ Goldin 1995; Fernandez 2008.

⁶⁰ See Guiso, Sapienza, and Zingales (2006) and Fernandez (2010).

is: (a) “the integrated pattern of human knowledge, belief, and behavior that depends upon one’s capacity for learning and transmitting knowledge to succeeding generations”; (b) “the customary beliefs, social forms, and material traits of a racial, religious, or social group.”⁶¹

Traditional perceptions of gender roles and the family (where the man is the principal bread-winner and women tend to the home and care for children) and societal prescriptions on women’s place in the labor market are likely to shape a woman’s decisions about education, family formation, and participation in the labor market over her life cycle. This simple observation manifests itself through two relationships. The first is the impact of culture and norms on expectations and preferences; the second translates those expectations and preferences into economic outcomes (figure 1.20).⁶²

Figure 1.20. Social norms, preferences, and (economic) outcomes



Recent studies have considered the relationship between women’s labor market behaviors across adjacent generations.⁶³ They provide evidence of culture shaping a woman’s labor supply by documenting its correlation with the economic participation of women in their country of ancestry. Women’s labor market experiences correlate positively not only with those of their daughters but also with those of their daughters-in-law. By assigning the direction of causality from the older to younger generations, the studies argues that women’s roles in the labor market—and, by extension, in the family—are passed on from generation to generation.

This section turns to data from the World Values Survey⁶⁴ to present an overview of attitudes

⁶¹ Fogli and Fernandez 2009; Merriam-Webster Dictionary 2002. A similar definition was also employed by Guiso, Sapienza, and Zingales (2006), who identify culture as “those customary beliefs and values that ethnic, religious, and social groups transmit unchanged from generation to generation.”

⁶² In much of the literature, culture is assumed roughly “constant” within a given generation, allowing for feedback between outcomes and culture and preferences only across generations (Guiso, Sapienza, and Zingales 2006).

⁶³ Fernandez, Fogli, and Olivetti 2004; Fernandez 2007, 2010; Fernandez and Fogli 2007; Fogli and Veldkamp 2011; Vella and Ferre 2007.

⁶⁴ The World Values Survey is a worldwide network of social scientists studying changing values and their impact on social and political life. In collaboration with the European Values Study, it carried out representative national surveys in 97 societies containing almost 90 percent of the world’s people. These surveys show pervasive changes in what people

toward gender roles and work values in LAC and the rest of the world. It focuses on two sets of indicators:

- *The extent of egalitarian views toward women in the labor market and professional arena.* Among other questions, male and female respondents were asked to agree or disagree with the following questions: “When employment is scarce, men should have more right to a job than women;” “Men make better political leaders/executives than women;” and “A university education is more important for a boy than for a girl.”
- *Perceptions of women’s role in the household, likely formed in youth and relate to cultural and religious ideology.* Questions capturing these types of norms—again, put to men and women—include: “Being a housewife is just as fulfilling as working for pay;” “A working mother can establish just as warm and secure a relationship with her children as a mother who does not work;” and “A preschool age child suffers with a working mother.”

The paucity of data limits our ability to cover all LAC countries. Within LAC, the World Values Survey collects data only on Argentina, Brazil, Chile, Mexico, and Peru, so comparisons with OECD countries and the rest of the world will be limited to these countries. The most recent wave of the survey (2005–07) shows systematic differences of opinion across sexes, ages, and levels of education, regardless of country or region (table 1.1).

- Women tend to have more egalitarian and progressive views of their role in the household, with a positive gradient in age and education. In addition, gender differences attenuate as education increases.
- Attitudes have changed greatly, as documented by several waves of the survey, the first covering 1989–93. Over the decade and a half, the views of both men and women have become more egalitarian and inclusive in LAC, a trend mirrored in OECD countries.
- Among the least educated (those with primary education or less), LAC’s views are more similar to the rest of the world than to the OECD—that is, more conservative. But among the most educated (those with some tertiary education), LAC’s views mimic those of the OECD and are more progressive than those in the rest of the world.

LAC is an outlier in two respects. First, although men and women in LAC almost universally believe that both spouses should contribute to household income, they are significantly less concerned with job quality, as captured by good (that is, convenient) hours: only about 30 percent of respondents in LAC agreed that good hours were important, compared with 52 percent in the rest of the world and 71 percent in the OECD. This may reflect the greater availability of help and of extended family in caregiving in LAC. The exception: less educated women, who likely face more binding budget and resource constraints and so value flexibility more.

Second, LAC appears more accepting of women as single parents, with about 88 percent approving compared with 60 percent for the rest of the world and 70 percent for the OECD. This statistic may reflect either a departure from traditional norms or the increasing prevalence of female-headed households documented in the previous section, supporting the notion that outcomes may influence opinions toward traditional household structures.

want out of life and what they believe. To monitor these changes, the World Values Survey and European Values Survey have executed five waves of surveys, from 1981 to 2007.

Table 1.1. Social norms, by region, gender, and education (percent)

Region	Gender	Education	Scarce jobs: Men should have more right to a job than women	University education is more important for boys than girls	Important in a job: Good hours	Men make better political leaders than women	Men make better executives than women	Approve of woman as a single parent	Child relationship with working mother as good as with nonworking mother	Husband and wife should both contribute to income	Problems if wife earns more income than husband
LAC	Male	Lower	39	28	29	46	41	87	63	88	31
LAC	Male	Middle	21	16	28	34	27	87	65	91	34
LAC	Male	Upper	10	11	28	26	15	89	71	94	28
LAC	Female	Lower	27	20	40	31	25	89	69	92	46
LAC	Female	Middle	15	9	27	18	12	88	69	93	48
LAC	Female	Upper	9	6	20	13	8	88	80	94	33
ROW	Male	Lower	44	30	50	55	50	63	69	72	33
ROW	Male	Middle	35	22	46	5	43	61	73	72	13
ROW	Male	Upper	29	17	47	4	39	63	75	69	10
ROW	Female	Lower	38	23	52	46	40	63	78	74	33
ROW	Female	Middle	27	13	57	35	29	64	82	70	26
ROW	Female	Upper	19	9	56	30	22	63	84	70	18
OECD	Male	Lower	24	17	67	30	26	68	75	62	33
OECD	Male	Middle	14	10	62	27	23	69	81	60	13
OECD	Male	Upper	10	8	65	21	20	68	80	57	10
OECD	Female	Lower	24	12	69	26	19	70	86	64	33
OECD	Female	Middle	12	6	77	16	12	70	87	56	26
OECD	Female	Upper	8	3	79	13	8	72	87	62	18

ROW is rest of the world.

Note: LAC is Latin America and the Caribbean. LAC countries are Argentina, Brazil, Chile, Mexico, and Peru. Lower, middle, and upper education levels correspond to some primary, secondary, and tertiary education, respectively (completed or not). Each cell shows the percentage of respondents agreeing with the statements in the table's top row.

Source: World Values Survey 2005–07.

1.4.1 Egalitarian views

Stylized fact 4a: Proxies of social barriers to women's LFP and of acceptance of their role in professional environments have greatly improved in the region. Discriminatory views have significantly softened among younger cohorts and more educated individuals.

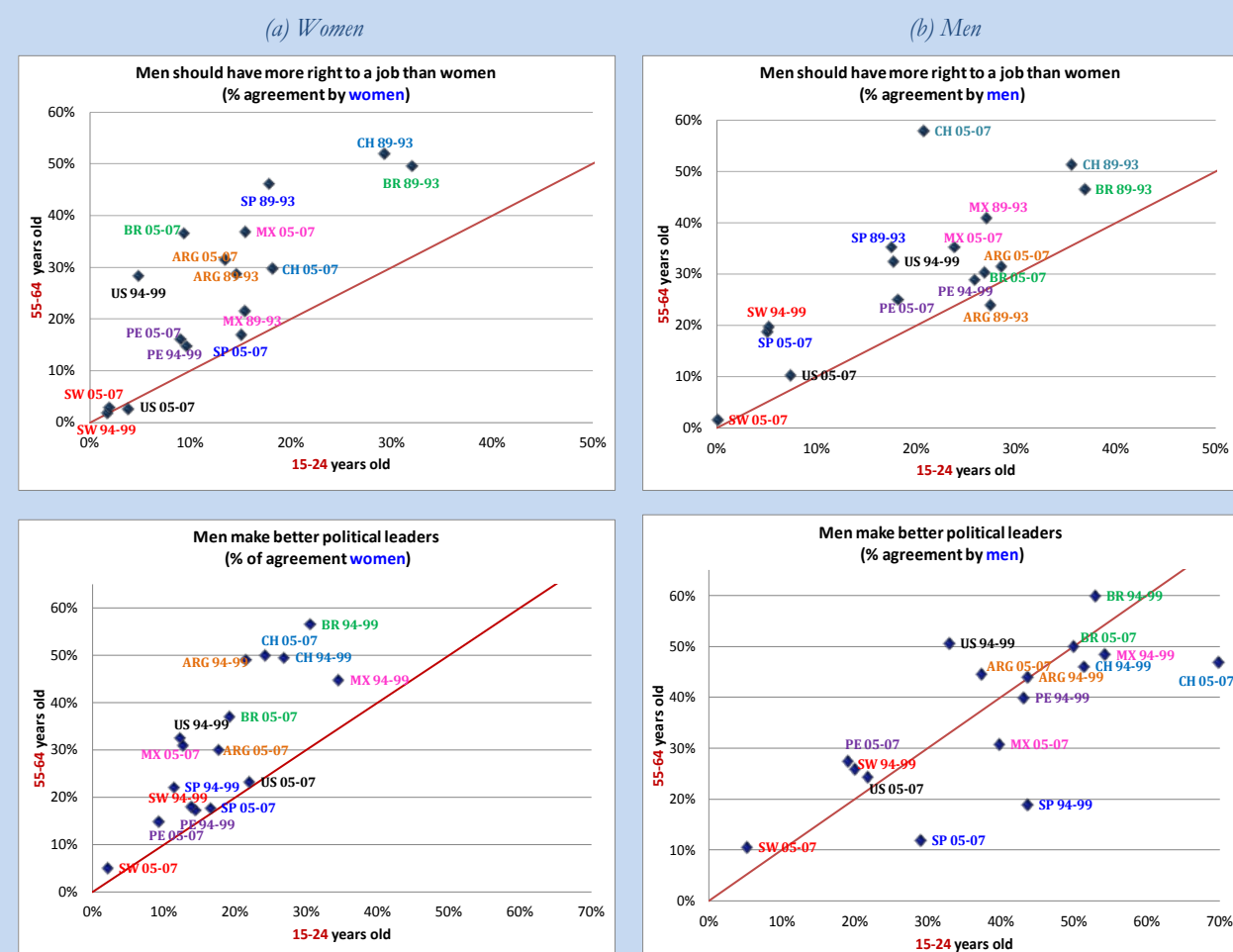
The term “egalitarian” is used here to describe attitudes that are not biased against women in the workforce or in positions of authority. Empirically, these sentiments across countries are most predictive of the prevalence of female LFP, though causality may go in both directions.⁶⁵

Older and less educated respondents have less egalitarian views on women in the workplace. Stated beliefs on the right to a job when employment is scarce remain unevenly distributed across men and women and across generations. In the early 1990s, between 25 percent (Peru and Argentina) and

⁶⁵ Fortin 2005; Campa, Casarico, and Profeta 2009.

40 percent (Brazil and Chile) of men thought that jobs were a male prerogative, though a younger generation already in the 1990s had more progressive views, roughly 10 percentage points lower (figure 1.21).

Figure 1.21. Views on “Right to a job” and “Men make better political leaders,” by survey wave, age, and sex



Note: Each data point corresponds to a country surveyed in 1994–1999 or 2005–2007. For any given country and survey wave, the percentage of 15–24 year olds agreeing with the statement is read on the x-axis, and the percentage of 55–64 year olds on the y-axis. Argentina (ARG), Brazil (BR), Chile (CH), Mexico (MX), Peru (PE), Spain (SP), Sweden (SW), and United States (US).

Source: World Values Survey 2005–07 and 1994–99.

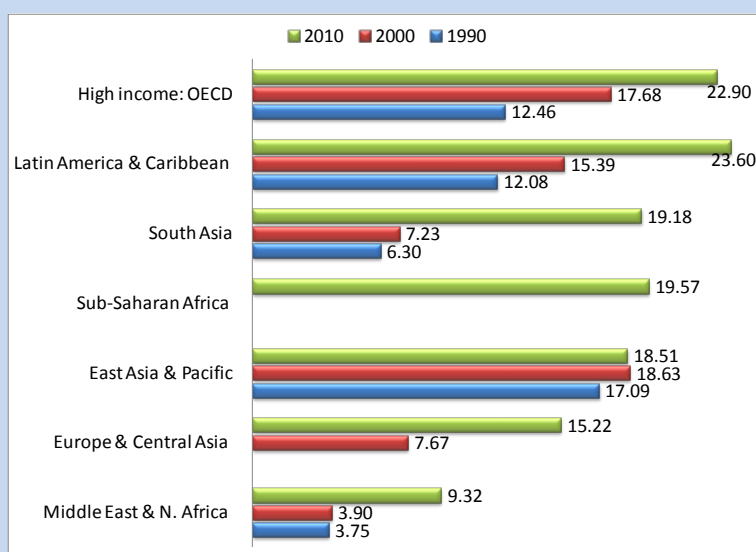
The response to this question might be interpreted either as a judgment about the presence of women in the workforce or, as hypothesized by Goldin (1995), as a reflection of a powerful social norm that “societies frown upon husbands who are unable to provide for their families, as if it were a sign of indolence and being negligent of his family.”⁶⁶ Across waves, regardless of sex, all countries but Argentina moved toward a more egalitarian view, especially the younger generation, with views catching up those in developed countries.

⁶⁶ Goldin 1995.

In LAC 33 percent of women with higher education consider it problematic if they earn more than their husbands (last column of table 1.1), while men appear a bit less concerned about the source of income (around 30 percent across all education levels). (These figures are in line with those of less educated men and women in the OECD and in the rest of the world, all at 33 percent.) Among LAC women with lower and middle education, the rates are much higher—around 47 percent. The conservative pattern in LAC is consistent with the expectation that husbands should provide for their families, and with the perception that the distribution of resources among household members matters for the dynamics of their relationship and affects how they interact, possibly in a noncooperative fashion (as discussed in the Introduction in reference to intrahousehold bargaining).

Concerns about the gender distribution of earnings in the household do not, however, translate into unfavorable attitudes toward women contributing to family income. In fact, almost universal in LAC is the expectation that both spouses should contribute to household income (roughly 90 percent for men and women, regardless of education), considerably higher than in the OECD (60 percent) and the rest of the world (70 percent).

Figure 1.22. Share of parliamentary seats held by women (percent)



Source: World Bank 2011.

Another dimension of egalitarian opinion relates to beliefs about differences in the ability of men and women, particularly for holding positions of authority (figures 1.22 and 1.23). Respondents in LAC are more skeptical about women's abilities as political leaders (see figure 1.21) and business leaders, although these concerns attenuate with education and for younger cohorts.

At lower levels of education, men in LAC are roughly 15 percentage points more likely than their OECD counterparts to believe that men make better political (46 percent) and business (41 percent) leaders than women. Among the more educated, however, this gap shrinks to 5 percentage points. The views of women in LAC more closely mimic those of their OECD counterparts at all levels of education (see table 1.1). These attitudes could either explain or be a byproduct of the past decade's successes at the ballot box among LAC women. Indeed, women's participation in politics in LAC

has grown steadily in the last 20 years. Their share of parliamentary seats has risen from an average of 12 percent in 1990 to 24 percent in 2010 (see figure 1.22).⁶⁷

In all regions with data, women's share of parliamentary seats rose in the two decades since 1990, with particularly dramatic changes in Europe and Central Asia, LAC, and South Asia. LAC is the region with highest present-day female political representation—edging out even high-income OECD countries—despite its higher resistance to women in positions of authority, particularly among lesser educated men.

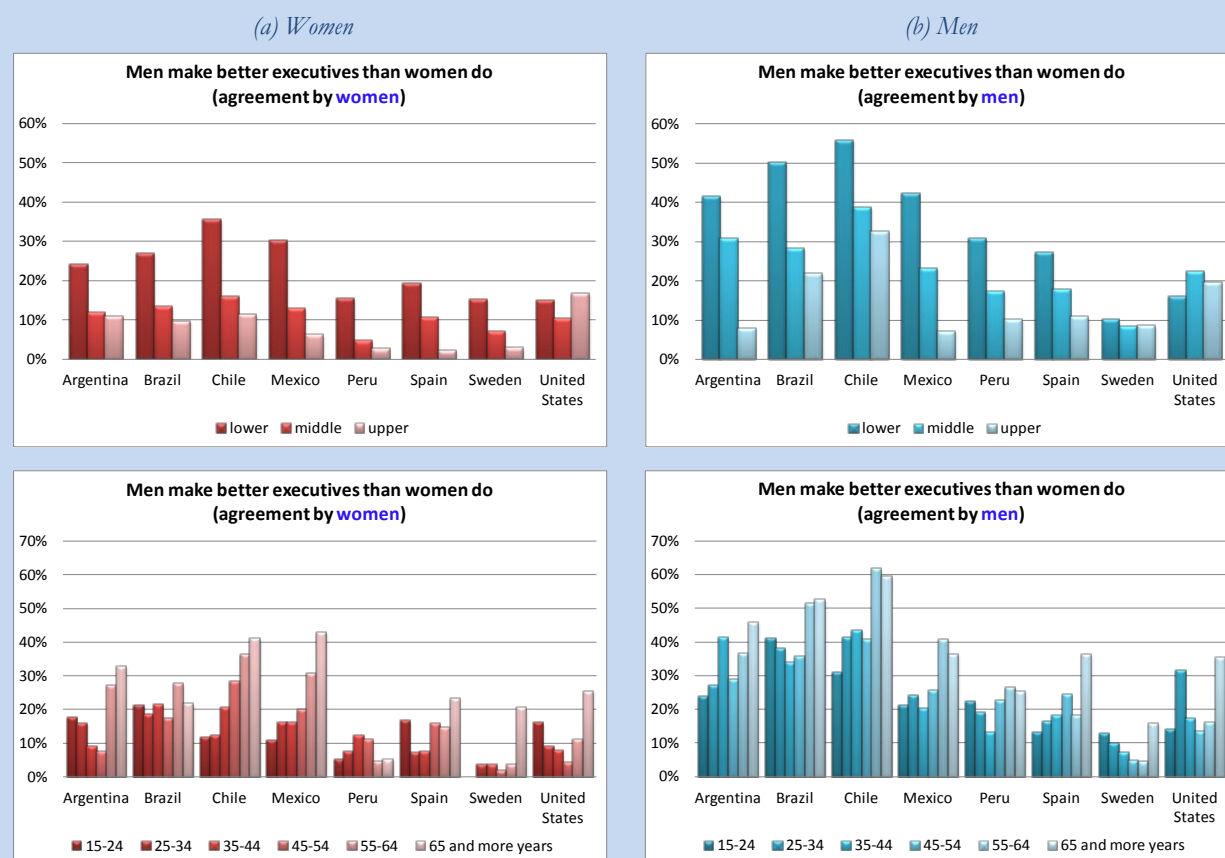
The changes in sentiment over time and between generations are dramatic in LAC, even among women. In the early 1990s LAC was quite conservative on women's aptitude for leadership (except Peru): 40–60 percent of women age 55–64 and men of all ages agreed that men make better political leaders than women.

By the 2005–2007 wave, however, the proportion of older women with unfavorable opinions of female politicians declined by an average of 20 percentage points in Argentina, Brazil, and Mexico. Among men the changes were much more varied, perhaps owing to divergent experiences with female politicians. In Argentina older men in 2005–2007 remained as skeptical as those in 1989–1993, while younger men became 10 percent less unfavorable. The opposite was true in Brazil, with only small changes in younger men's opinions and a 10-percentage-point decline among older men. In Mexico and Peru the proportion agreeing that men make better politicians declined between 15 and 25 percentage points among both younger and older men. Chile is an outlier, with older men barely changing opinions from the early 1990s, but younger men becoming almost 20 percentage points more conservative in 2005–2007, (see lower right panel in figure 1.21: “Men make better political leaders”).

While more muted than sentiments toward female politicians, opinions about female executives in LAC are more conservative than in the OECD (Peru is again something of an exception, resembling Spain; see figure 1.23). Among the least educated in 2005–2007, 40–55 percent of men and 20–35 percent of women believe that men make better executives than women. Although this group is unlikely to influence managerial hiring decisions, these figures are revealing of their views about women in the professional arena. Nevertheless, there is a sizable gradient in education across countries and among both sexes, with those having at least some secondary education often 20 percentage points less conservative than those with primary education or less. In summary both men and women welcome the idea of a dual earner household, women express a greater concern surrounding the scenario in which they would be earning more than their spouse. These concerns that could be linked to departure from traditional gender roles within the households and consequent tensions generated by the social expectation that a suitable husband should be able to provide for his family.

⁶⁷ Htun and Piscopo 2010. In Latin America, quota schemes have been on the rise since the early 1990s and have mainly taken the form of legislated candidate quotas: parties are required by law to reserve a certain number of candidacies for women. First adopted by Argentina in 1991, this type of quota has since been implemented in 11 other Latin American countries: Bolivia, Brazil, Costa Rica, the Dominican Republic, Ecuador, Guyana, Honduras, Mexico, Panama, Paraguay, and Peru. Countries with voluntary party quotas (parties committing voluntarily to nominate a certain percentage of female candidates for electoral lists) include Chile, El Salvador, Guatemala, and Nicaragua. The quota adoption process was facilitated by the consolidation of democracy in the 1980s, which fostered the emergence of women's associations and other civil rights groups (Pande and Ford 2011; Piscopo 2006). The 12 adopting countries have improved their worldwide ranking for female parliamentary representation: 8 rank in the top 50 percent of parliaments worldwide, and 2—Argentina and Costa Rica—rank within the top 10 percent (Piscopo 2006).

Figure 1.23. Views on “Men make better executives than women do” in selected countries, by age, education level, and sex



Note: Lower, middle, and upper denote primary, secondary, and tertiary levels of education (whether completed or not).

Source: World Values Survey 2005–07.

Disparities across countries in LAC are also wide: anti-egalitarian views on female executives remain sizable among the most educated in Chile (about 30 percent) and Brazil (about 20 percent), but in Argentina, Mexico, and Peru the corresponding rates are all below 10 percent (or much lower than 20 percent in the United States). Differences across generations are pronounced, too: older generations (men and women) are often twice as likely to believe that men make better executives, with the notable exceptions of Brazil and Peru, where the age profile is close to flat.

Similar gradients in education and age are found in response to other questions on egalitarian views (such as those on the right to a job and women as political leaders). Because of generational shifts in norms, increased investments in education, and the higher incidence of women in the labor force, younger cohorts tend to be more gender-blind. This trend is likely to continue if, as documented in the literature, these attitudes are carried forward to future generations.⁶⁸ This optimism is partially corroborated by the trend toward egalitarian views across survey waves.

In sum, the LAC men and women have the expectation that both spouses should contribute to household income, more so than in any other region, including high-income OECD countries. They

⁶⁸ Fernandez (2010) and citations there.

thus hold fairly liberal views toward women's participation in the labor force, with the caveat that roughly a third of less educated individuals, both male and female, feel that men should be granted the priority for employment when it is scarce. Whereas two-thirds of LAC men see no problem with earning less than their wives, roughly half of women see earning more than their husbands as problematic.

On women's employment, LAC men and women remain somewhat more conservative than their OECD counterparts in that they deem men better suited for positions of authority in business and politics. Yet, despite this sentiment, LAC currently enjoys the highest share of female parliamentary representation than any other region, suggesting that this stated preference may be weak.

Opinions about gender differences in professional roles have been interpreted as measures of "social barriers" and even, in some instances, of discrimination against women in the labor market.⁶⁹ In this light, the encouraging trends documented here indicate a softening of these social barriers, with the education and cohort gradients providing evidence that norms are not immutable. They can evolve over time, and cultural differences may attenuate with individual characteristics.⁷⁰

1.4.2 Perceptions of women's role in the household

Stylized fact 4b: Men's and women's views about traditional roles remain fairly stable, less susceptible to change. Women value family and caring for their children; they assign increasing importance to work, requiring them to negotiate a balance between work and family.

As documented earlier, the prevalence of discriminatory views continues to weaken with time and higher education. But a second dimension of social norms is relevant for women's economic participation: their role in the household.

The literature assigns key roles to two interrelated shifts in women's attitudes as drivers of their greater integration in the labor force.⁷¹ The first is women's inclination to view their economic participation as including a career, rather than merely a transition until marriage and family formation ("changed identities," in Goldin's [2006] terminology). This change lengthens the horizon for women to tailor their human capital investments to prepare for longer working lives and greater attachment to the labor force ("expanded horizons," according to Goldin).

In a similar vein, some commentators interpret agreement with statements like "Being a housewife is as fulfilling as working for pay" and "Women want a house and children" as markers of women's aspirations and identities. For example, the greater the rate of agreement with such statements, the greater the adherence to traditional gender roles and identities.⁷² Illustrating the importance of these attitudes, the gap between men and women in agreeing with such statements predicts gender wage gaps in OECD countries.⁷³ Because the upward-trending gap is driven largely by changes in men's attitudes, men's increasing support for housewifery represents a societal counter-current for women, who continue to "swim upstream" in the sense of Blau and Kahn (1997).

⁶⁹ See, for example, Fortin (2005).

⁷⁰ See, for example, Vella (1994), Fernández, Fogli, and Olivetti (2004), and Farré and Vella (2009), who discuss mechanisms underlying the intergenerational transmission of attitudes.

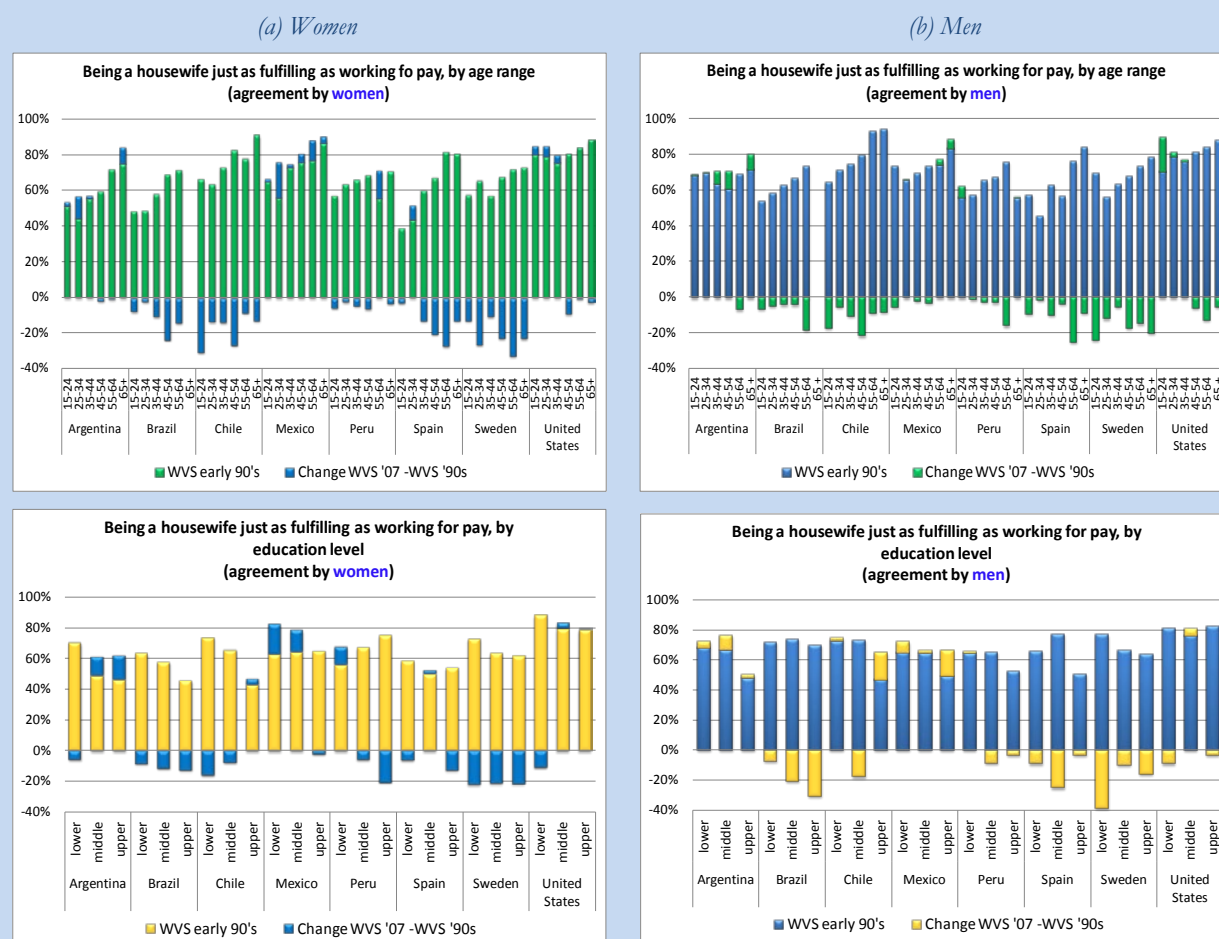
⁷¹ Akerlof and Kranton 2010; Fortin 2009.

⁷² Fortin 2005; Fernández 2007.

⁷³ Fortin 2005.

The upper half of figure 1.24 reports the rate at which respondents in the 1990s agree that housewifery is as fulfilling as paid employment by age category and gender, as well as its change since the 90s. The lower panel provides a disaggregation by educational attainment.

Figure 1.24. Views on “Being a housewife is just as fulfilling as working for pay” in selected countries, by age, education level, and sex



Source: World Values Survey, various waves.

In the 2005–07 wave of the World Values Survey, 55 percent of 15–24 year olds in LAC agreed with the statement that housewifery is as fulfilling as paid employment, compared with 70 percent among those older than 55 (see figure 1.24). Younger cohorts are more inclined to assign intrinsic value to women’s attachment to the labor force, consistent with the view that a career contributes to one’s identity.⁷⁴ By this measure, LAC countries remain more traditional in their gender attitudes than the European countries used as benchmark (Spain and Sweden).⁷⁵ Though modest, gradients in age were

⁷⁴ Akerlof and Kranton 2010.

⁷⁵ The United States is an exception among OECD countries, with women of many age and education categories revealing themselves to be more conservative than American men as well as women and men in Western Europe and many LAC countries. By this measure both young men and women in the United States have become more conservative in the last 15 years.

more pronounced in the early 1990s than in the 2000s, and young and old respondents are now more likely to share the same opinion.

Perceptions of women as homemakers are remarkably similar between the sexes, with changes in men's attitudes over the last 15 years largely mirroring those of women. For most countries these movements are only modest, in contrast to the rapid changes in anti-egalitarian views seen earlier. This pattern is consistent with Fortin (2005), who also notes that perceptions of women's role as homemakers are more persistent over time than anti-egalitarian views in OECD countries. With her finding that such perceptions are associated with labor market outcomes, she speculates that the perceptions could be implicated in the recent slowdown of the convergence in pay across genders.

By further contrast to anti-egalitarian views, which have uniformly improved across countries, age ranges, and education levels, changes in attitudes toward homemakers are far less monotonic and systematic. Chile and Brazil have progressed toward further acknowledging the importance of careers to women, but Argentina and Mexico have moved in the opposite direction, with both younger and older cohorts and highly educated women more frequently affirming traditional gender roles and identities in the 2000s than in the 1990s. Countries with views toward traditional gender roles attenuated most over the last 15 years. Chile and Brazil also experienced the steepest ascent in female LFP over the same period, as will be documented in the following chapters, but this is of course far from definitive evidence that changing attitudes caused greater female LFP.

The country with the strongest traditional values in LAC at baseline, Chile, saw the largest declines in those views among women and men over the last 15 years. Young and middle-aged women, more than 60 percent and 80 percent of whom supported housewifery in the 1990s, have since both experienced declines of more than 20 percentage points in those views.

The belief that a woman's identity extends beyond her role as a housewife exhibits greater—though still modest—variability with age than with education. Although their signs remain consistent with the notion that more highly educated individuals adhere less to traditional gender roles, the education gradients are remarkably flat. This is surprising in that education is viewed as a long-term investment in human capital directed at building future competencies for the labor market.

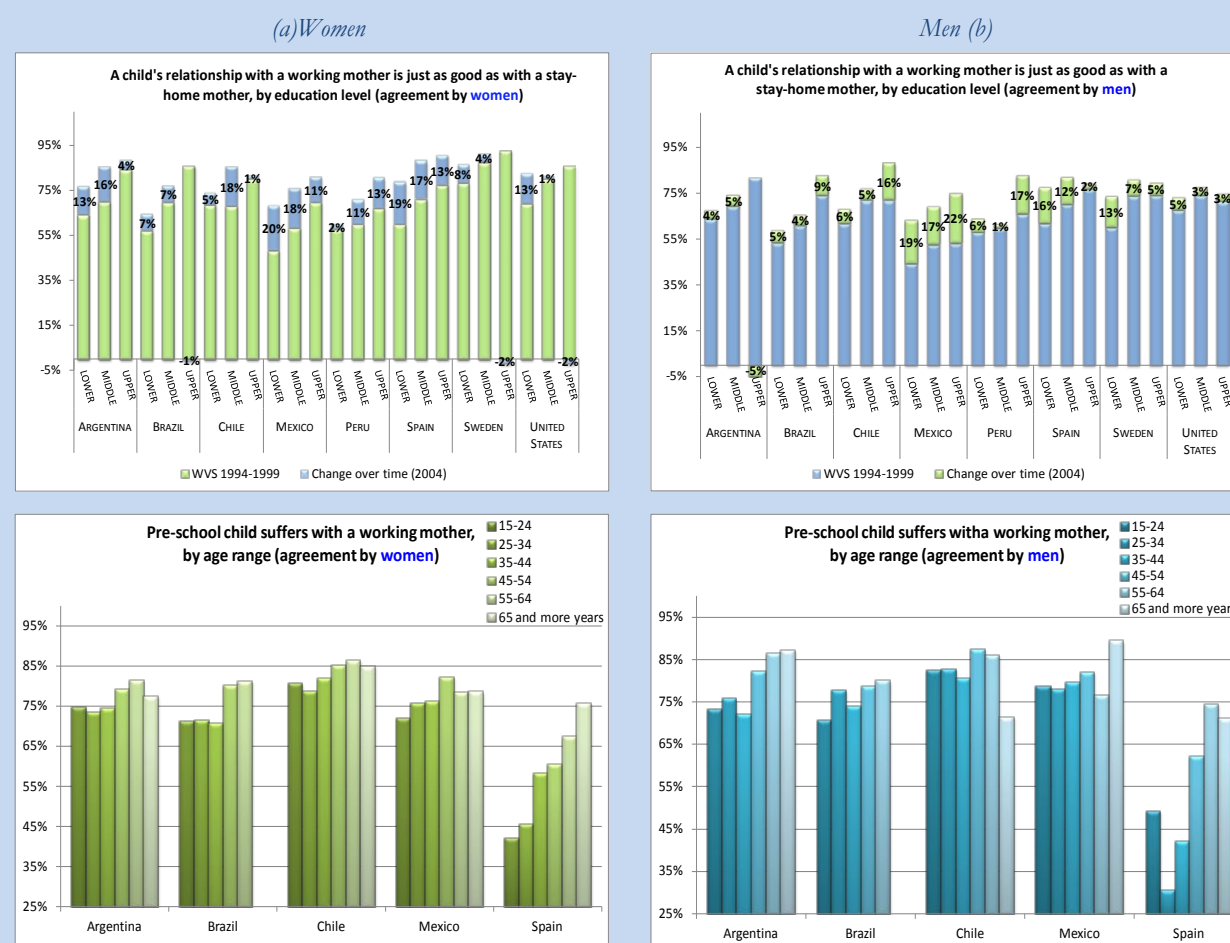
One possible reason for support for housewifery to remain high in LAC is that women believe children are harmed by their mother's participation in the labor force, or that the bond between mother and child is somehow weakened. In that event, one would expect women in LAC to disagree with statements such as, "A working mother can establish just as warm and secure a relationship with her children as a mother who does not work" and "A preschool child is likely to suffer if his or her mother works." This is not the case, however (figure 1.25).

In LAC, both women and men agree—at rates between 55 percent and 85 percent, respectively—that the relationship between a mother and her child can be just as secure if she works, with a moderate gradient in education, which is relatively uniform across countries. Since the early 1990s this sentiment has only strengthened, with many countries experiencing at least a 10-percentage-point rise in agreeing with such statements across all education levels. Relative to the mid-1990s, women and men in Mexico both agree, by almost 20 percentage points more, that working mothers can establish equally warm and secure relationships with their children. This timing coincides precisely with the steep acceleration in married Mexican women's participation in the labor market.

A large majority of both women and men believe that young children are likely to suffer if their mother participates in the labor force but agree that working mothers have relationships just as healthy as stay-at-home mothers. Are there insights to be gained from this apparent contradiction?

Growing inner conflict for women, termed by some as “mothers’ guilt,” may well be the answer.⁷⁶ This conflict has real implications for women’s LFP and the gender wage gap among OECD countries.⁷⁷

Figure 1.25. Views toward working women’s relationship with own children in selected countries, by age, education level, and sex



Source: World Values Survey 1994–1999, 1999–2004.

Contrary to the case of egalitarian norms, men’s and women’s views of women’s role in the household are remarkably similar. Differences of opinion are on average less than 7 percentage points, contrasting with the previous section, where discrepancies across sexes could reach 30 percentage points. Furthermore, for LAC countries in the sample, gradients for age and education are less pronounced—and nearly flat in some instances—implying some stability of these values. Variation over time is also more muted, confirming the higher persistence of the set of values relating to women’s role in the household compared with egalitarian views.^{78 79}

⁷⁶ Buttrose and Adams 2005.

⁷⁷ Fortin 2005.

⁷⁸ Fortin 2005; Alesina and Giuliano 2011.

⁷⁹ Pande and Ford 2011; Piscopo 2006.

The growing “inner conflict” in women, whereby their continued support for housewifery and family values clashes with increasingly egalitarian views, is consistent with shifting identities, as careers become more important to women beyond wages earned, with implications for women’s LFP and the gender wage gap in OECD countries.⁸⁰ As participation becomes less economic and more related to identity, women’s labor supply (hours worked) is expected to become much less responsive to wages, as in the United States, where the elasticity of married women’s labor supply declined 50–56 percent from 1980 to 2000.⁸¹

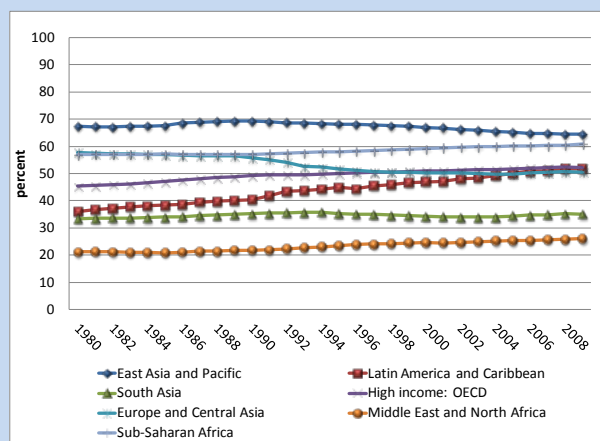
1.5 Female economic participation

1.5.1 Labor force participation

Stylized fact 5a: Female LFP rates have climbed sharply in almost all LAC countries over the past few decades, more so than in any other developing region. The average rate in LAC is slightly above what its level of development would predict.

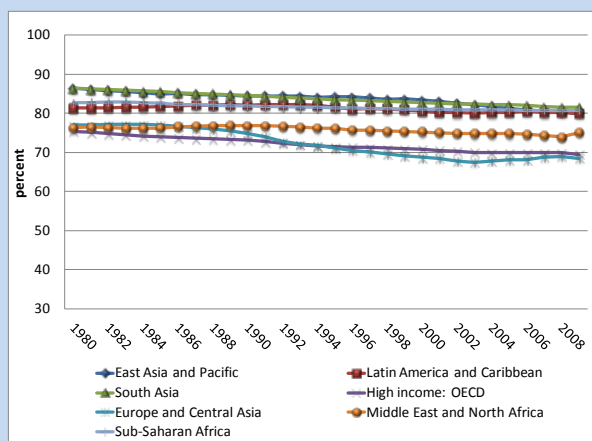
Female LFP in LAC over the last three decades has risen faster than in any other region, jumping from roughly 36 percent in 1980 to more than 52 percent in 2009, (figure 1.26). This increase is equivalent to nearly 70 million additional women in the region’s labor force.

Figure 1.26. Female labor force participation by region, 1980–2009, aged 15 and above (percent)



Source: World Bank 2011.

Figure 1.27. Male labor force participation by region, 1980–2009, aged 15 and above (percent)



Source: World Bank 2011.

Only two other regions registered sizable gains in female LFP: the Middle East and North Africa (MENA) and the high-income OECD countries (and most of MENA’s rise from 21 percent in 1980 to 26 percent in 2009 took place after 1990). In MENA, traditional and legal barriers have slowly eroded, increasing economic opportunity. The drivers behind high-income OECD countries’ rise, from 45 percent to 52 percent in 2009 over the same period, are very different, given their more mature stage of development.

⁸⁰ Fortin 2005.

⁸¹ Blau and Kahn 2007.

Female LFP in South Asia and in Sub-Saharan Africa rose only moderately (respectively from 33 to 35 percent and 57 to 61 percent in 2009). It fell slightly in East Asia and the Pacific (EAP) (from 67 percent to 64 percent), and significantly in Europe and Central Asia (ECA) (from 58 percent to 50 percent).

Male LFP declined moderately in most regions except Europe and Central Asia, where it tumbled from 77 percent in 1980 to 68 percent in 2009 (largely reflecting the structural changes on the breakup of the former Soviet Union). In LAC it fell marginally, from 81 percent to 80 percent (figure 1.27).

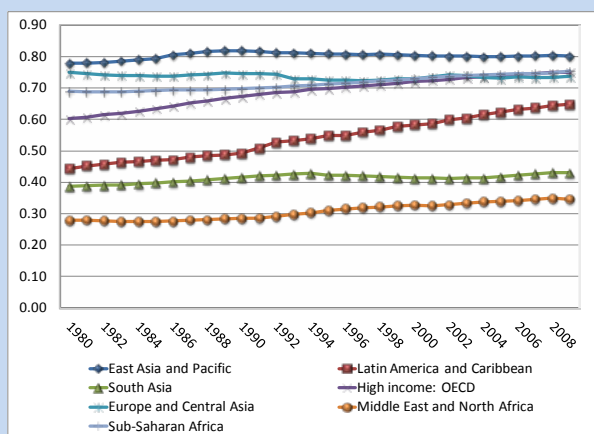
Regional trends in LFP reveal large differences between men and women (see figures 1.26 and 1.27). Male LFP exhibits a slight downward trend, distributed narrowly around 80 percent, and the dispersion appears related to the level of regional development, human capital investments, and regional economic cycles and fluctuations. Female LFP rates, trending upward in almost all regions, are characterized by a more pronounced and steady dispersion. The exception of LAC's steeper rise and Europe and Central Asia's post-communist transition (linked to changes in ideological prescriptions, which informed female economic participation) stand out. The observed gender specific variation is consistent with the notion that the differences in social norms for female participation are larger than those for males labor market decision.

1.5.2 Gender gap in participation

Stylized fact 5b: Largely as a result of the fast paced growth of female LFP, the gender gap in LFP has narrowed faster in LAC than in any other developing region.

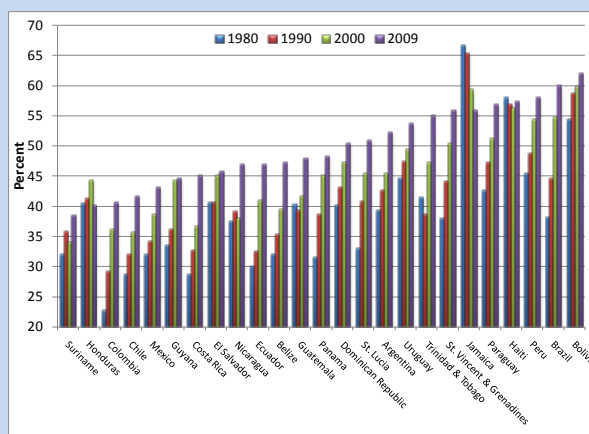
Given the main trends in LAC—the sharp increase in female LFP and the near constancy in the male rate—the gender gap has narrowed considerably (figure 1.28). Similar, if less dramatic, patterns are also observed in MENA and in high-income OECD countries. In other regions the ratio of female to male LFP stayed roughly constant.

Figure 1.28. Ratio of female to male labor force participation rates by region, 1980–2009, aged 15 and above



Source: World Bank 2011.

Figure 1.29. Female labor force participation rates in selected Latin American and Caribbean countries, 1980–2009, aged 15 and above (percent)

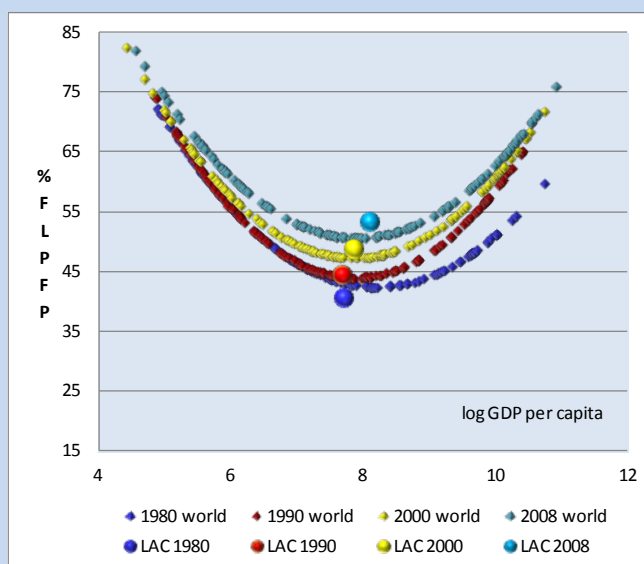


Source: World Bank 2011.

LAC has significant variation in the ratio of female to male LFP, mainly because of differences across countries in female rates (figure 1.29). In fact, in 2007 average male LFP rates were tightly concentrated around 79.1 percent, while the female LFP rate averaged about 50.3 percent, with a sizeable dispersion across countries, twice that of males.

LAC has been “on the move.” In 1980 its female LFP resembled those of MENA and South Asia, the regions with the lowest LFP. But the past decades have witnessed rapid convergence toward the regions with the highest female LFP. For every 100 men in the labor force in 2007, 83 women were working in East Asia and the Pacific, 75 in Sub-Saharan Africa and in high-income OECD countries, 74 in Europe and Central Asia, and 66 in LAC.

Figure 1.30. Latin America and the Caribbean’s relationship between female labor force participation and GDP per capita (2000 US\$)



Note: Each colored dot represents Latin America and the Caribbean’s position in a given decade, with the log of per capita income measured on the horizontal axis and the rate of female LFP on the vertical axis. Each U-shaped curve corresponds to a separate decade’s predicted relationship between (log per capita) income and female LFP, estimated from the cross-section of all countries in the world.

Source: Own calculations based on World Bank 2009 (GDP per capita data) and ILO (female labor force participation).

The observed trend and the position of LAC relative to other regions may in part be explained by differences in the rate and level of development, proxied by per capita income. Indeed, the economic literature has extensively documented a robust U-shaped relationship between the level of economic development and adult women’s LFP (figure 1.30).⁸² When income is extremely low and agriculture dominates the economy, women are to a large extent in the labor force. They are traditionally unpaid workers on family farms and in household businesses and are almost completely in charge of home production such as child rearing or household chores.

⁸² See Goldin (1995) and Mammen and Paxson (2000), who present evidence from a cross-section of countries that female LFP first declines and then increases as income rises. See also Sinha (1967), Psacharopoulos and Tzannatos (1989), and Horton (1996).

Development initially moves women out of the labor force, partly because of the rise in men's market opportunities and wages, and partly because of social barriers against women entering the paid labor force. As countries develop and women become more educated, the opportunity cost of their staying out of the labor force rises, such that they eventually move back in.⁸³ The following set of graphs is meant to illustrate the evolution of female LFP in LAC over time relative to the predicted U-shaped relationship between per capita income and female LFP, which is estimated from a panel of countries over four decades. In figure 1.31, LAC's regional experience is compared with those of other developing regions and high-income OECD countries.

Figure 1.30 illustrates the sense in which LAC has been “on the move” over the last decades. At the beginning of the sample in the 1980s, LAC locates itself below the level of female LFP predicted by its average per capita income and to the left of the lowest point on the corresponding decade's estimated curve. Female LFP then grew so rapidly in LAC as to rise above the curves corresponding to each subsequent decade, while output grew at a more moderate pace. Nevertheless, income growth was sufficient to exceed the curve's minimum by 2000, which places LAC in the segment of the horizontal axis where income growth is related to growth in female LFP.

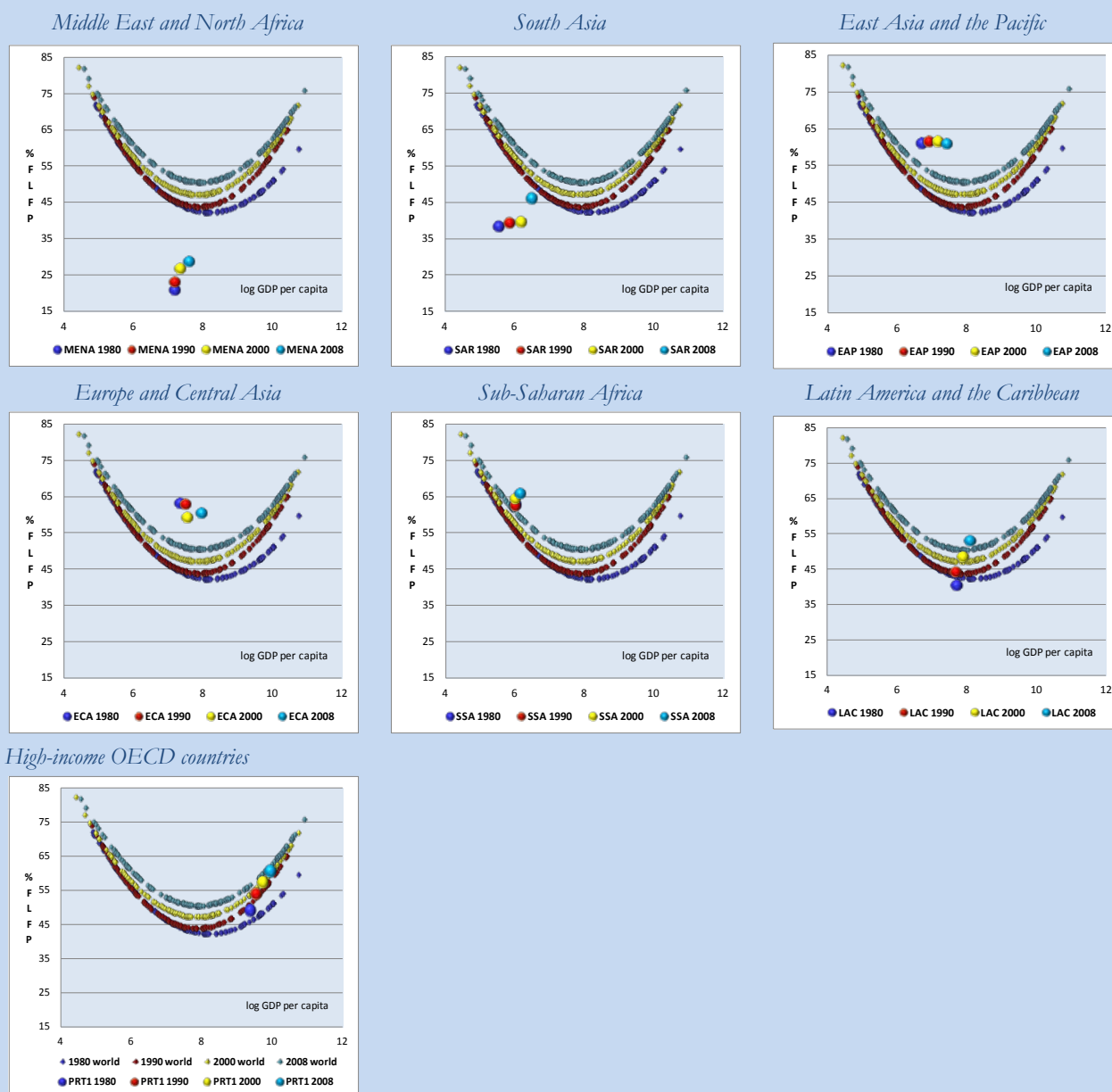
Figure 1.31 demonstrates that similar rates of female LFP are consistent with very different levels of income. For instance, the more rural economies of Sub-Saharan Africa exhibit female LFP comparable to those of industrialized economies. In turn, with LAC's income falling between these two regions, its women are engaged in the labor force at a lower rate.

The observation that very different levels of national income are related to similar levels of female LFP highlights the nonlinear relationship between development and female LFP rates. The relationship is further corroborated by the consideration that welfare assessments based on participation rates would be somewhat incomplete and misleading and as will be discussed later in the report, the ability to “choose” is what matter

While seemingly robust, the U-shaped relationship between female LFP and income is only approximate and does not perfectly predict female LFP. Much of the variation in female LFP remains unexplained by income, in all likelihood because of cultural and institutional characteristics that differ across regions and that are unaccounted for in the relationship. MENA, for instance, has per capita incomes comparable to LAC, but its female LFP rates are half those of LAC.

⁸³ Several factors underlie female LFP, notably the opportunity cost of her time and unearned income, which can include spouse's income (if she is married) as well as safety net transfers and transfers from other family members. If men's wages rise with their increasing productivity, such that her spouse's income rises, for instance, then a woman may be less likely to participate in the labor force. If rising male productivity is accompanied by more elevated female productivity, however, such that the opportunity cost of her time also rises, her increased wages in the labor market may induce her to enter the labor force if the substitution effect from her own rising wages outstrips the income effect from her spouse's higher income.

Figure 1.31. Relationship between female labor force participation and GDP per capita (constant 2000 US\$), by region



Note: Each U-shaped curve corresponds to a separate decade's predicted relationship between (log per capita) income and female LFP, estimated from the cross-section of all countries in the world.

Source: Own calculations based on World Bank 2009 and International Labor Organization (female labor force participation).

Part II

Chapter 2. The regional trend: Two paths to the labor market

Building on the set of stylized facts presented in chapter 1, this chapter aims to further understand women's economic participation. The historical perspective undertaken sheds new light on the dramatic trends that have seen Latin America and the Caribbean (LAC) transition from one of the regions with the lowest female participation to one that outpaces the growth in participation of all the other developing regions.

The most striking characteristic of its transition is the segregated nature of the trajectories of single and married women in the region. Just as in the United States at the beginning of the 20th century, marital status in the 1960s virtually defined the economic role of women in LAC, with wives dominating the domestic realm and their husbands being the bread winner. As both single and married women's participation grew over the past four decades, the gender specialization broke down progressively, with married women joining the labor force at unprecedented rates.

This feature of the evolution of female labor force participation (LFP) rates further supports the household perspective adopted in this study, buttressed by other findings in the next three chapters. These findings consider narrower features of women's economic activity: the decision to join the labor force, the choice of occupation, and the level of earnings.

- Of the several factors the literature identifies as key determinants of women's decisions to enter (and stay in) the labor force, education and family formation decisions explain nearly two-thirds of the region's evolution since the 1960s.
- Participation in the labor market can take different forms and transitions across occupational states (formal employment, informal employment, unemployment, and out of the labor force) and shed light on additional aspects of female LFP. This issue is considered in the fourth chapter and will identify a particular relationship between fertility and marital status and the choice of occupation.
- The evolution of the gender earnings differentials and the principal drivers are interpreted in light of the earlier findings in the report and other research, which both question the notion that maximizing earnings adequately describes the labor supply decisions of women, as illustrated in the introduction of the report.

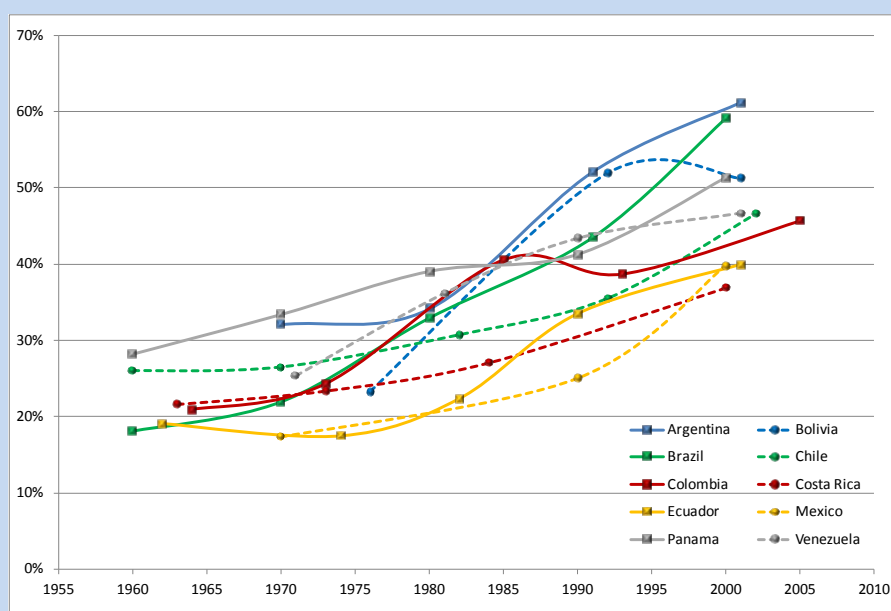
2.1. A historical account of women's economic participation

The second half of the 20th century witnessed a dramatic transformation in the economic role of women in LAC, clearest in the sharp increase in the prevalence of women in the labor force. Over the last four decades the rise in female LFP has been steep and nearly uninterrupted (figure 2.1),

outpacing all other regions of the world and resulting in nearly 70 million additional women in the labor force.⁸⁴ The female LFP rate rose from roughly 36 percent in 1980 to more than 51 percent in 2008 (53 percent in 2007), or a nearly 34-percent increase. Although social and economic revolution for women in the United States, Europe, and other developed countries has spawned a vast literature, corresponding shifts in LAC have not. The main reason has been limited data: lacking repeated cross-sectional household surveys over long stretches of time, studies of the economic role of women have largely relied on snapshots at a single point in time or on analyses of short-term changes.⁸⁵ Chioda and Demombynes (2010) begin to fill this gap by analyzing the rise in female LFP in LAC and its determinants.⁸⁶ Their analysis relies on newly available microdata from 43 censuses in 10 Latin American countries over 1960–2000. The countries covered in their sample account for about 80 percent of the region’s population.⁸⁷

Figure 2.1. The rise in female labor force participation has been steep and uninterrupted

Evolution of Female Labor Force Participation in Latin America and the Caribbean among Women Aged 25–55, 1955–2010 (percent)



Source: Chioda and Demombynes 2010; Integrated Public Use Microdata Series.

In the typical country, the percentage of women in the labor force doubled between the early 1960s and the early 2000s (table 2.1). The increase has ranged from 18 percentage points in Costa Rica to a

⁸⁴ Chioda and Demombynes 2010.

⁸⁵ See, for example, Leon (2000) and Dureya, Edwards, and Ureta (2001), who focus on 1980–1990.

⁸⁶ Employment, as used by Chioda and Demombynes (2010), is measured by the Integrated Public Use Microdata Series variable, *EMPSTAT*, which indicates whether the respondent was part of the labor force—working or seeking work—over a specified period. Depending on the sample, *EMPSTAT* can also convey additional information. The combination of employed and unemployed yields the total labor force. Employment status is sometimes referred to in other sources as “activity status.”

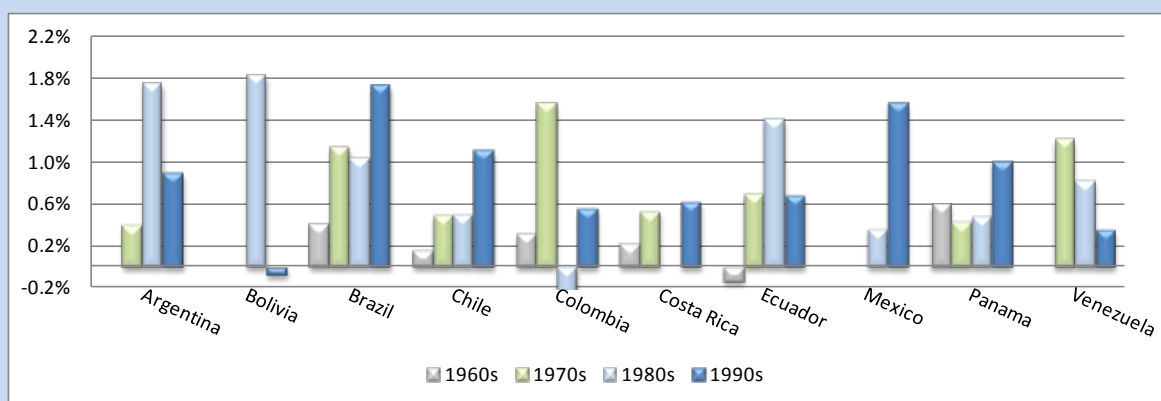
⁸⁷ Chioda and Demombynes (2010) restrict the sample to women and men aged 25–55 to minimize biases induced by workers transitioning in and out of the labor force either because their schooling is not complete or because they are retiring.

staggering 43 in Brazil, where the presence of women in the workforce nearly tripled. And it occurred in both upper middle-income and low-income countries.

Table 2.1. Labor force participation rates in selected Latin American and Caribbean countries, 1960–2005 (women aged 25–55)

Country	Year	% of Women in Labor Force	Rate of Change (Percent Points Per Year)	Country	Year	% of Women in Labor Force	Rate of Change (Percent Points Per Year)
Argentina	1970	29%		Costa Rica	1963	19%	
	1980	33%	0.4%		1973	21%	0.2%
	1991	52%	1.8%		1984	27%	0.5%
	2001	61%	0.9%		2000	37%	0.6%
	For Entire Period:				For Entire Period:		
	Total Change	32%	1.0%		Total Change	18%	0.5%
Bolivia	1976	23%		Ecuador	1962	19%	
	1992	52%	1.8%		1974	17%	-0.1%
	2001	52%	-0.1%		1982	23%	0.7%
	For Entire Period:				1990	34%	1.4%
	Total Change	29%	1.1%		2001	41%	0.7%
Brazil	1960	17%			For Entire Period:		
	1970	21%	0.4%		Total Change	23%	0.6%
	1980	32%	1.1%	Mexico	1970	17%	
	1991	44%	1.0%		1990	24%	0.4%
	2000	59%	1.7%		2000	40%	1.6%
	For Entire Period:				For Entire Period:		
	Total Change	43%	1.1%		Total Change	23%	0.8%
Chile	1960	23%		Panama	1960	26%	
	1970	25%	0.2%		1970	32%	0.6%
	1982	30%	0.5%		1980	36%	0.4%
	1992	35%	0.5%		1990	41%	0.5%
	2002	47%	1.1%		2000	51%	1.0%
	For Entire Period:				For Entire Period:		
	Total Change	22%	0.5%		Total Change	25%	0.6%
Colombia	1964	20%		Venezuela	1971	23%	
	1973	23%	0.3%		1981	35%	1.2%
	1985	41%	1.6%		1990	43%	0.8%
	1993	39%	-0.3%		2001	47%	0.4%
	2005	46%	0.6%		For Entire Period:		
	For Entire Period:				Total Change	24%	0.8%
	Total Change	26%	0.6%				

Female Labor Participation, yearly rate of change



Source: Chioda and Demombynes 2010; Integrated Public Use Microdata Series.

The countries experiencing the largest changes are at opposite ends of the per capita income spectrum: Bolivia, which is relatively poor, and Argentina and Brazil, which are relatively rich. But there is considerable heterogeneity across countries in both the magnitude and the timing of the changes. The peak rate of change in women's work rates was in the 1970s for Colombia and Venezuela; the 1980s for Argentina, Bolivia, and Ecuador; and the 1990s for Brazil, Chile, Costa Rica, and Mexico (see table 2.1). These heterogeneous rates of change result in an increased end of the sample dispersion in LFP relative to the beginning of the sample.

For LAC countries with available data, the female employment rate rose from about 20.5 percent in the 1960s to about 48 percent at the beginning of the 2000s. To put this in perspective, the LAC region as a whole experienced a rise in female LFP over the past four decades comparable to that of the United States between 1890 and 1990 (figure 2.2). In 1890 U.S. female LFP hovered around 19 percent, in line with the levels of all LAC countries in table 2.1 in the first available decade. Nearly a century later, in 1980, the U.S. LFP rate reached 51 percent.⁸⁸ Certain countries even outpaced the United States' 1890–1980 gains over the last four decades. For instance, Brazil's female LFP grew from 16.6 percent to 59.2 percent.

The pattern of entry into the labor market by women in LAC has been remarkably similar to that of women in the United States, with a lag of roughly 30 years. The remarkable gains in female LFP over the last half century were achieved by both married and unmarried women, as illustrated in figure 2.2., which contrasts the average LAC regional trends with those of the United States. To showcase the regional heterogeneity, the lower panel in figure 2.2 portrays the country disaggregate participation rates for married women (green and blue lines) and single women (red and orange lines), starting in the early 1960s. In both panels, as benchmarks, the regional average LFP rates of married and unmarried men in LAC are also reported, along with the rates for U.S. women starting in 1890. The historical trends appear to segregate along the lines of marital status. While both married and unmarried women achieved large gains in LFP, they began the sample at very different baseline participation rates, with single women on average more than four times more likely to be in the labor force as their married counterparts in 1960.

Single women's LFP has risen steadily since the 1960s—a trend that likely started in previous decades—with a slight acceleration in the late 1990s. Although single women's economic participation exhibits very low dispersion around 45 percent in the 1960s, the subsequent rise is accompanied by greater variability across countries. There is thus considerable heterogeneity around the upward trend across countries and over time within a country, the latter correlated with nation-specific economic fluctuations, and resembling the idiosyncrasies of their male counterparts' LFP.

The region's average annual percentage-point increase in single women's participation over the last four decades is 0.94. Argentina registered annual growth of nearly 1 percentage point over the entire period, with the very high 1.31 percentage points a year among single women in the 1980s balanced by a symmetrical decline during the economic contractions of the early 2000s.⁸⁹ At the other extreme, Venezuela, Mexico, and Brazil enjoyed yearly growth over the period of 1.48 percent, 1.38 percent and 1.23 percent, respectively. Despite the heterogeneous growth rates in the 1990s and early 2000s, single women in these countries participated in the labor force at similar rates in 2005: 68 percent in Argentina, 69 percent in Mexico, 62 percent in Venezuela, and a staggering 76 percent in Brazil.

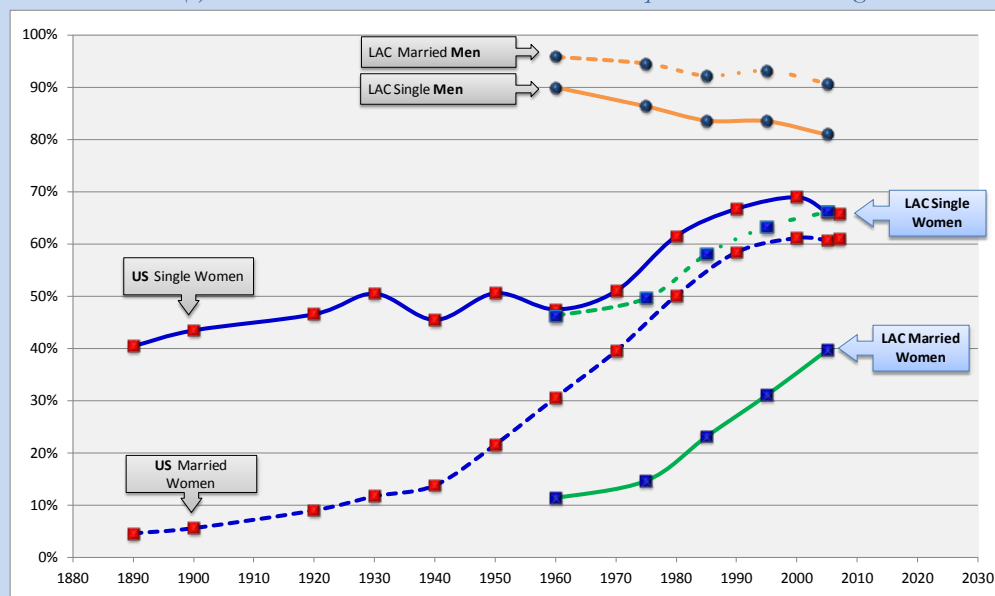
⁸⁸ Goldin 1990.

⁸⁹ Chioda and Demombynes 2010.

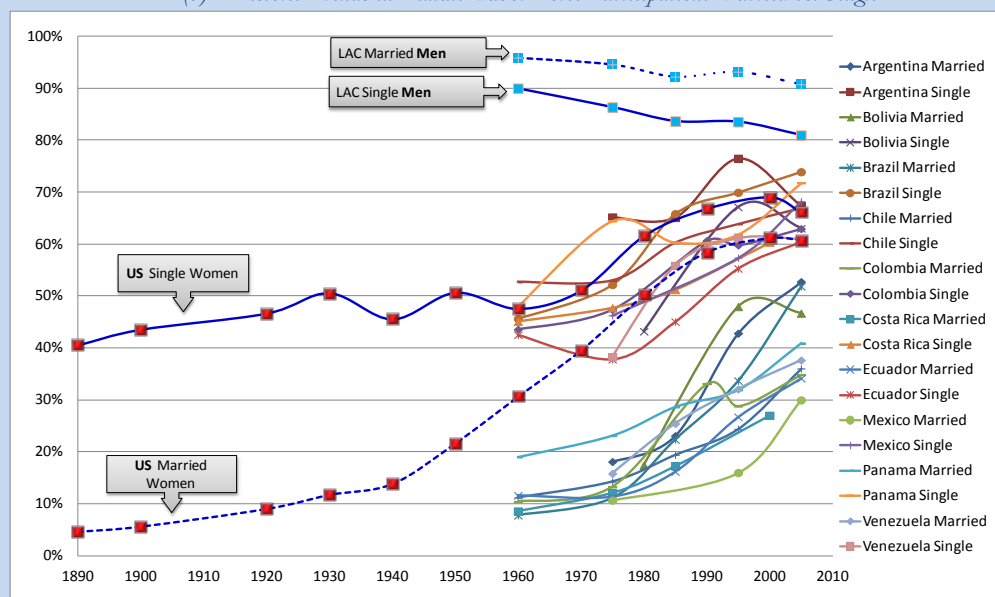
Figure 2.2. The four decade rise in Latin America and the Caribbean is comparable to the U.S. rise between 1890 and 1990

Female Labor Force Participation in selected Latin America and the Caribbean countries and the United States, by marital status

(a) Historic Trends in Female Labor Force Participation: Married vs. Single



(b) Historic Trends in Female Labor Force Participation: Married vs. Single



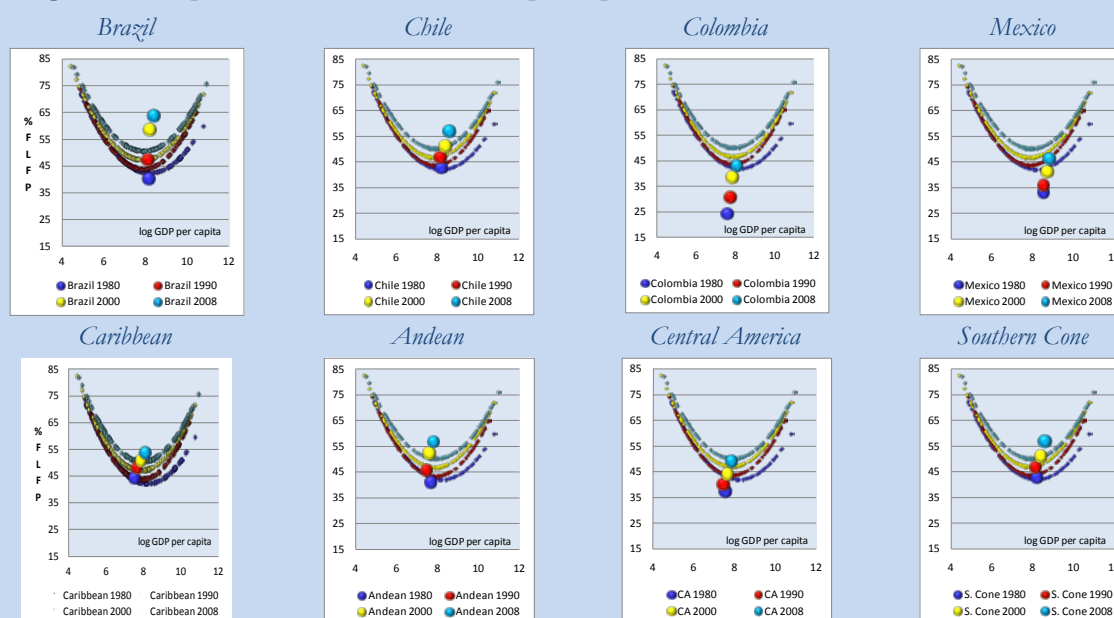
Source: Chioda 2011; Integrated Public Use Microdata Series for Latin American and the Caribbean and U.S. figures based on CPS and U.S. Census data.

During the late 1970s to the mid-1980s, Colombia enjoyed an impressive annual growth rate of 4.4 percent in female LFP (7.1 percent for married women and 2.1 percent for single women), though the country falls short of the average LFP predicted by its per capita income on the U (box 2.1).

Box 2.1. Economic development and female labor force participation in Latin America and the Caribbean

Development, as measured by per capita GDP, can only partially explain the dynamics of labor force participation (LFP) over the past decades. The box figure, analogous to figure 1.31 in chapter 1, illustrates the evolution of the relationship between female LFP and per capita GDP in the region. As documented in chapter 1, LFP rates in Latin America and the Caribbean have been higher than would be predicted by per capita GDP. This also holds true for all the subregions, except Central America, which in 2008 appears in line or slightly below the female LFP rates predicted by its level of development.

Box Figure. Development and female labor force participation in Latin America and the Caribbean



Note: Each U-shaped curve corresponds to a separate decade's predicted relationship between (log per capita) income and female LFP, estimated from the cross-section of all countries in the world

Source: Authors' estimates based on World Bank 2009 (GDP data) and ILO (female LFP data).

During the late 1970s to the mid-1980s, Colombia enjoyed an impressive annual growth rate of 4.4 percent in female LFP (7.1 percent for married women and 2.1 percent for single women), though the country falls short of the average LFP predicted by its per capita income on the U. Similarly, while Mexico ranks among the highest in single women's LFP rate in the early 2000s (68 percent), it also falls well short of the level predicted by its GDP per capita, due largely to the low participation among married women (34 percent), in which it ranks second to the last in the Chioda and Demombynes (2010) sample.

This again confirms that development alone fails to explain a large part of the evolution of women's economic participation. The substantial amount of noise around the GDP-LFP relationship can thus be interpreted as evidence of the importance of additional omitted factors in explaining the evolution of female LFP. It is worth noting that the Andean region has a sizable agriculture sector. Female participation since 2000 has exceeded that predicted by the Andean's region GDP, a fact that has caught the attention of researchers and led them to wonder whether a feminization of the agricultural sector is taking place in this subregion.

Similarly, while Mexico ranks among the highest in single women's LFP rate in the early 2000s (68 percent), it also falls well short of the level predicted by its GDP per capita, due largely to the low participation among married women (34 percent), in which it ranks second to the last in the Chioda

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Over this same period, men's LFP declined slightly. Since 1960 married and unmarried men's LFP fell by 6 and 8 percentage points, respectively. These declines have been observed elsewhere and are not uncommon in the development process. But their magnitudes are dwarfed by the concomitant advances by women, such that women cannot merely be replacing men one-for-one in the labor force. Changes in the value of education to LFP across sexes are largely responsible for this the shrinking gap.⁹⁰

Understanding trends is intrinsically more involved for married women than for single women. In addition to the jointness of household labor supply decisions between husbands and wives, the distinction between home and market production in the early stages of economic development can be blurred, because of farm work and family enterprises, for instance. As a result, the measurement of economic participation among married women is complicated—and is plausibly underestimated. Even so, marital status more than any other characteristic defined women's economic roles in the 1960s and 1970s. Only 11.5 percent of married women were active in the labor market. Except for Panama (where married women's LFP was 19 percent in 1960), all countries in the sample were tightly clustered around 9 percent in the 1960s, with little regional dispersion. Early stages of development and urbanization tend to be associated with high degrees of specialization, not only in the economy but also in the household.⁹¹ As younger men and unmarried women are drawn into the paid workforce and away from sharing household chores, the work and home spheres become more separate. Starting in the 1960s and 1970s, participation rates among married women grew with every subsequent decade, both in absolute terms and relative to single women (figure 2.3).⁹² Indeed, for the region: married women joined the labor force at a staggering annual rate of 3.2 percent, compared to 0.95 percent for single women.

Differences in growth rates of LFP between single and married are sizable, so much so that the gap between their LFP rates is visibly shrinking over time, reflecting both the natural diminishing returns to the growth process at higher LFP rates, as the pool of single women who can become employed diminishes, and the extraordinarily fast paced changes experienced by married women over the last four decades. However, as figure 2.3 (a) illustrates, there is considerable heterogeneity in the growth rate of married women's LFP across countries, owing in particular to heterogeneity in the *timing* of the acceleration of their entry into the labor force, such that they are staggered across decades. For Brazil and Colombia the decade of steepest growth in married women's LFP is the 1970s, for Argentina, Bolivia, and Ecuador the 1980s, and for Chile and Mexico the 1990s.

⁹⁰ Chioda and Demombynes 2010.

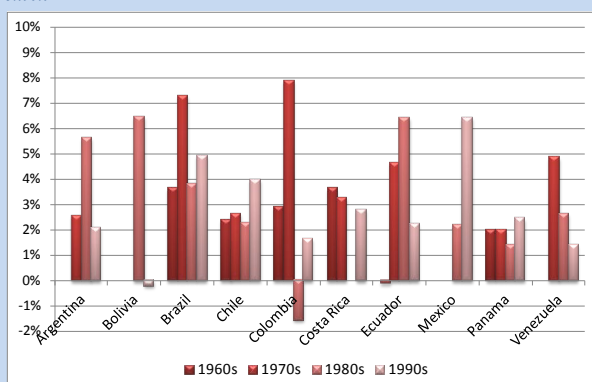
⁹¹ Goldin 1995; Mammen and Paxson 2000.

⁹² The exception is Colombia, which declined for married women in the late 1980s and early 1990s. Some authors attribute this fact to the same events that led to these years being known as the “Age of Narco-Terrorism.”

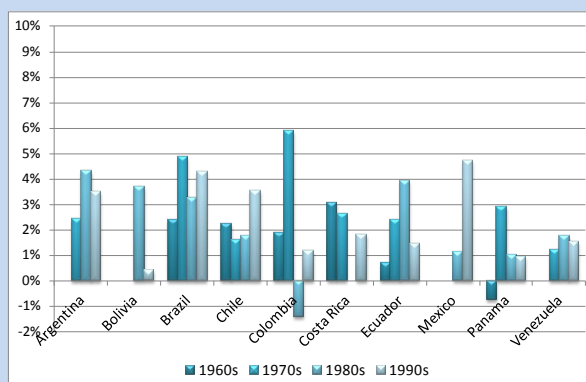
Figure 2.3. Labor force participation rates grew rapidly for married women

Annual growth rates, female labor force, by country and by decade, women aged 25–55 years

(a) *Female labor force participation annual growth rates, married women*



(b) *Annual growth rate differences (married and single)*



Note: The exact period defined for each decade varies with the census year for each country. See table 2.1.

Source: Chioda 2011; Integrated Public Use Microdata Series.

2.2. The relationship between trends in female labor force participation and social norms

As described above, the pace of this change has been uneven. Female LFP increased at a moderate pace in the 1960s, then more rapidly during the 1970s, and accelerated dramatically between 1980 and the 1990s. While married women's participation rates are still growing, those of single women appear to have slowed down during the last decade. The interplay of these components has contributed to an S-shaped trend in total female LFP in LAC⁹³ (see figures 2.1 and 2.2) and in the United States.⁹⁴

The S-shaped trend in female LFP has reminded some authors of the S-shaped pattern commonly observed in models of technological diffusion⁹⁵ and led Fernández (2008) to conjecture that similar learning mechanisms to those of information diffusion could also underlie the path of women's economic decisions. The egalitarian views documented in chapter 1 indicate that women's (market) work has historically been contentious. The decision to enter the formal labor force requires carefully balanced economic, household, and societal considerations, rather than a simple trade-off between earnings and leisure. Fernández (2008) posits that women possess private valuations of the costs associated with entering the labor market, which are related to their human capital investment and their beliefs about the costs of working (such as marital stability and their children's well-being). However, as illustrated in figure 1 in the introduction, their decision is also influenced by cultural factors, including societal beliefs and norms regarding female economic participation, of which women observe only a noisy signal. It is not implausible to imagine that the public signal is a function of the proportion of women who participated in the labor force in the previous generation. This information is used by women to update their prior beliefs and help them decide whether to

⁹³ Chioda and Demombynes 2010.

⁹⁴ Goldin 1995.

⁹⁵ For a review of the literature on learning and technology adoption, see Chamley (2004).

work.⁹⁶ In this manner, beliefs evolve endogenously through intergenerational learning. Alternatively, women learn about the effects of their participation in the labor force on children by observing employed women around them. So, when few women are in the labor force, information is scarce and participation rises only slowly at first. As information accumulates, the effects of maternal employment become known with more certainty, and more women enter the labor force.⁹⁷

2.2.1 Rural and urban trends

The introduction and chapter 1 introduced the U-shaped relationship between development and married women's LFP, which was documented empirically by exploiting cross-sectional income variation *across* countries. Alternatively, this shape might approximate the relationship between married women's economic participation and income *within* a country as it progresses through different stages of development. The same reasoning underlying the U-shape can help explain differences between urban and rural married women's LFP within a given country at a given point in time.

Urban married women's LFP rate is significantly higher than that of their rural counterparts, reflecting not only greater opportunity but also more progressive norms and traditionally higher human capital (figure 2.4). The evolution of LFP rates among single women in urban areas is much less steep than the national, beginning the sample just short of 60 percent in the 1960s and ending near 70 percent in the 2000s. By contrast, the trend in urban married women's LFP is steeper than the national, accelerating in recent decades, thereby tracing the beginning of an S-shaped profile consistent with learning about social norms—norms thought of as less conservative in urban centers.

In accordance with the U-shaped theory relating female LFP and growth, rural female participation is lower for both single and married women, and the dynamics are much more nuanced, possibly reflecting more conservative norms, lower human capital, and fewer economic opportunities. In addition, in (typically poorer) rural areas the distinction between labor for home and market production is often blurred. Even so, the relative rankings of countries in the participation of single and married women is preserved, despite the higher variability in single female LFP across countries. Married rural women's LFP rates are more muted than in urban areas, the “married women revolution” appearing to have started almost a decade later than in urban areas and to have proceeded at a significantly slower pace. Instead, the LFP of rural married women remains fairly flat until the 1990s, starting from a regional average of 7.8 percent in the 1960s and moving to only 27 percent in 2005. When Argentina, Brazil, and Bolivia are excluded, the 2005 average drops to 18.5 percent.

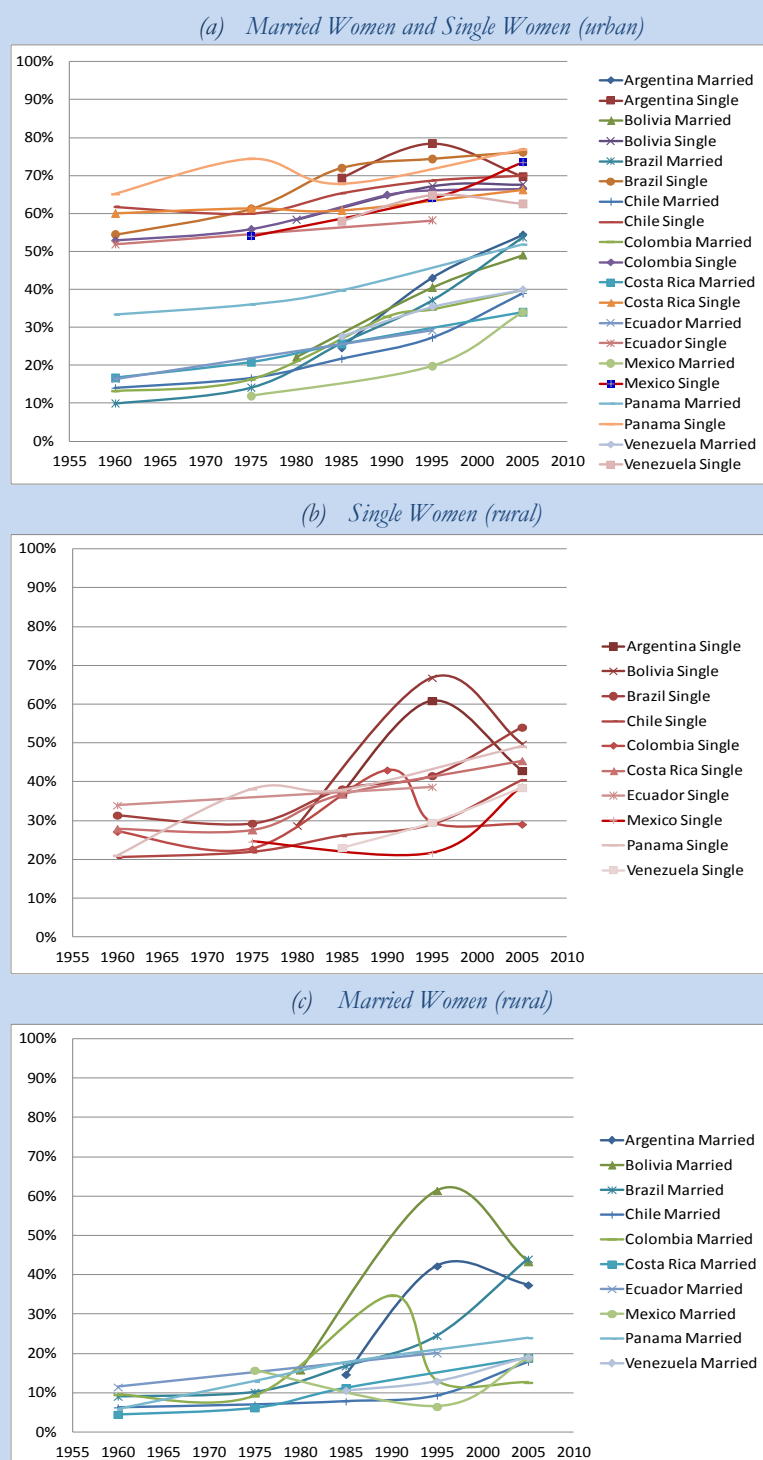
In accordance with the U-shaped theory relating female LFP and growth, rural female participation is lower for both single and married women, and the dynamics are much more nuanced, possibly reflecting more conservative norms, lower human capital, and fewer economic opportunities. In addition, in (typically poorer) rural areas the distinction between labor for home and market production is often blurred. Even so, the relative rankings of countries in the participation of single and married women is preserved, despite the higher variability in single female LFP across countries.

⁹⁶ Fernández 2008

⁹⁷ Fogli and Veldkamp 2011.

Figure 2.4. Urban labor force participation rates are higher than the rural

Urban and rural female labor force participation rates among women aged 25–55, 1955–2010



Source: Chioda 2011; Integrated Public Use Microdata Series.

Married rural women's LFP rates are more muted than in urban areas, the "married women revolution" appearing to have started almost a decade later than in urban areas and to have

proceeded at a significantly slower pace. Instead, the LFP of rural married women remains fairly flat until the 1990s, starting from a regional average of 7.8 percent in the 1960s and moving to only 27 percent in 2005. When Argentina, Brazil, and Bolivia are excluded, the 2005 average drops to 18.5 percent. Another interesting pattern is the relationship between the gaps in participation between married and single women in urban and rural settings (see figure 2.4). Not only do rural women lag their urban counterparts in the timing of the revolution in female LFP, but the differences in participation according to marital status are also much milder. Whereas single urban women participated in the labor force at a rate that exceeded married women by upwards of 40 percentage points in 1960s, this gap narrowed to 20–25 percentage points by 2005. In rural areas the single-married gap began near 20 percentage points in the 1960s and was roughly halved by 2005.

But in contrasting outcomes across urban and rural women, one must acknowledge that differences in female LFP are likely also to reflect compositional changes over time given that migration to urban areas tends to accompany development. Selective emigration from rural areas may result from greater economic opportunities in urban centers, or from women who place a high value on attachment to the labor force selectively migrating to where female participation and careers fall within the norm. Either mechanism—as well as others—complicates and confounds urban-rural comparisons.

2.2.2 Cohort and age profiles

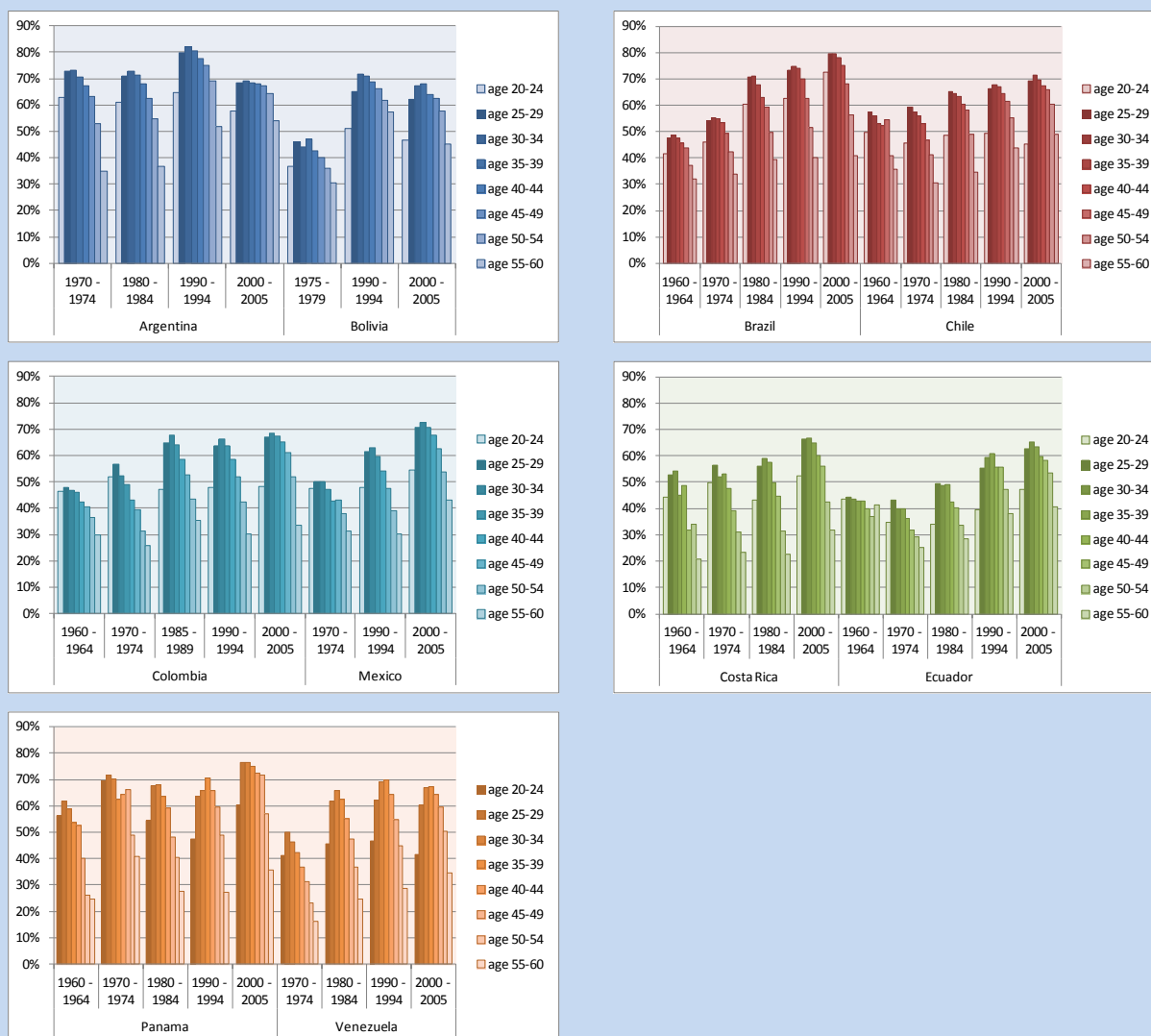
Thus far, the analysis has considered the entire population of adult women over time. An alternative approach is to consider changes across censuses by birth cohorts, which has several advantages. First, it makes it possible to observe the average changes in working patterns over the life cycle of particular generations of women, which cannot be understood from cross-sectional changes. Second, it allows studying the timing of changes in female LFP—for the cohorts with the most dramatic changes. Because increases in female LFP are likely to be enduring—once women start working, they tend to be in the labor force at later ages—the generational shifts for cohorts may be more important than the shifts for the entire adult female population.

Contrasting the age profiles of single and married women, single women have entered the labor market at a fairly constant rate across ages, without much of a gradient until retirement age (figures 2.5 and 2.6). While the process has been fairly uniform over time, it is very smooth when increasing, as in Brazil and Colombia. The rise in LFP in Argentina, Bolivia, Brazil, and Panama has been such that the rates of participation among single women between 25 and 34 reached 80 percent during the 1990s and early 2000s.

The picture for married women is very different. The level of their participation, as discussed earlier, is significantly lower than for single women, but the rates at which married women have joined the labor force across years has been rapid across all age ranges. Married women's participation rates nearly doubled in two decades, irrespective of age. But for women aged 30–44, their participation tripled and even quadrupled in Argentina, Brazil, and Chile. In these countries LFP rates for this age range rose 10–20 percent—to nearly 60 percent. The rapid increase emerges as a regional feature, especially following the mid-1980s. Costa Rica and Ecuador were the only exceptions, with more muted gains in female LFP.

The differences for single and married women of the age when LFP is at its maximum are instructive. For single women the age of maximum participation is consistently in the late 20s or early 30s. For married women it is 5–10 years later, perhaps following child bearing.

Figure 2.5. Evolution of age profiles of single female labor force participation in selected Latin American and Caribbean countries

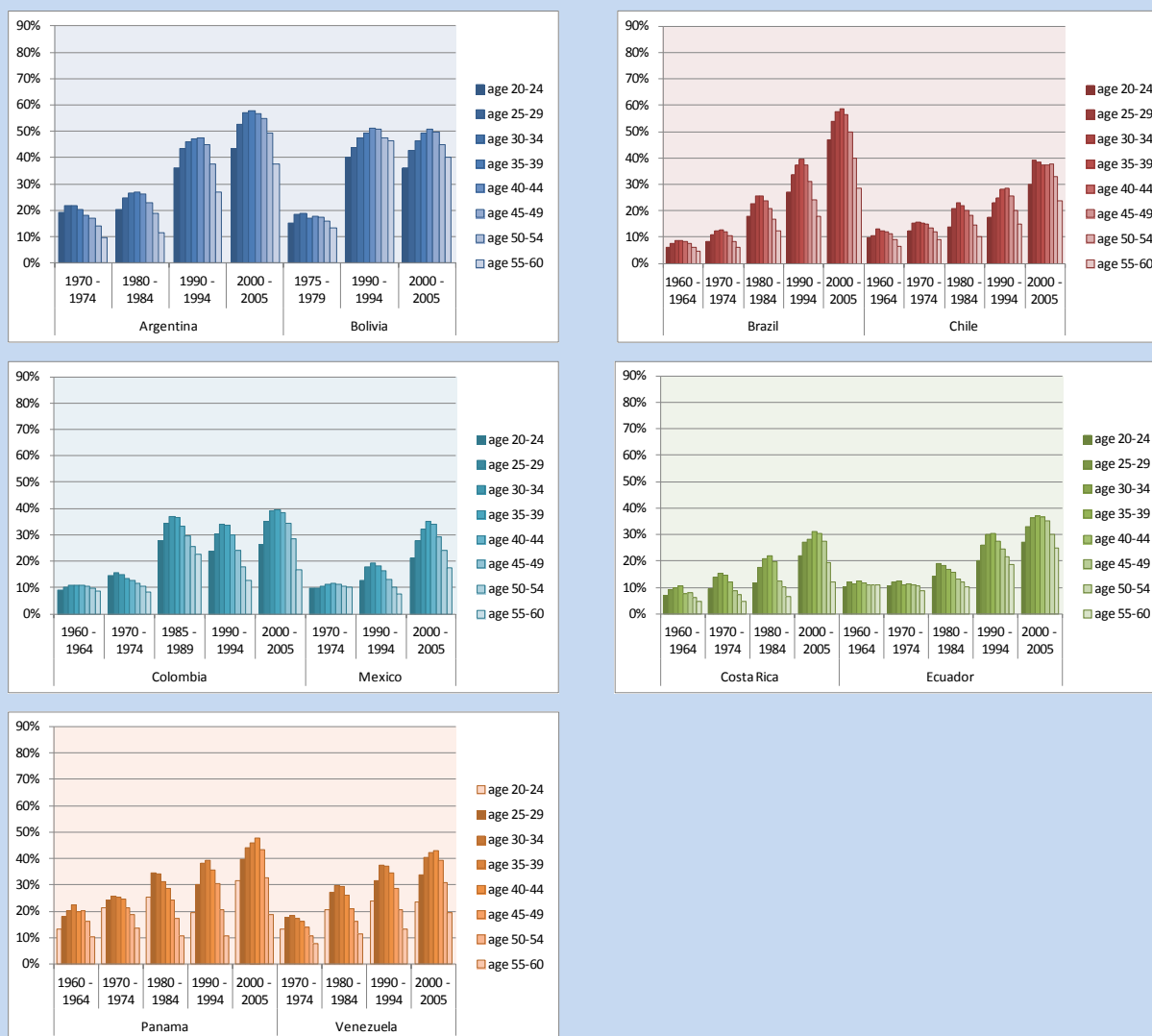


Source: Chioda 2011; Integrated Public Use Microdata Series.

The age effects between women aged 20 and 35 are relatively small; in some instances, the lines are virtually indistinguishable, especially for the most recent years (figure 2.7). The two exceptions are Panama and Venezuela, where there is greater heterogeneity particularly at the end of the sample period. In many countries considered here, the profile for youngest age group (20–24) appears systematically to dip in the 2000s, possibly a mechanical result of young women’s increasing level of education, such that they delay entry in the labor market until later in their 20s.

Countries in the region can roughly be grouped into two sets of age profiles. The first group exhibits uniform cohort effects irrespective of age range. Graphically, these are countries for which the lines remain approximately equally distanced over the over time (or such that the lines are parallel between censuses) and include Argentina, Bolivia, Chile, Costa Rica, and Venezuela. They appear to experience a uniform upward shift in female LFP in every generation born after 1929, so the LFP of successive cohorts always rises.

Figure 2.6. Evolution of age profiles of married female labor force participation in selected Latin American and Caribbean countries



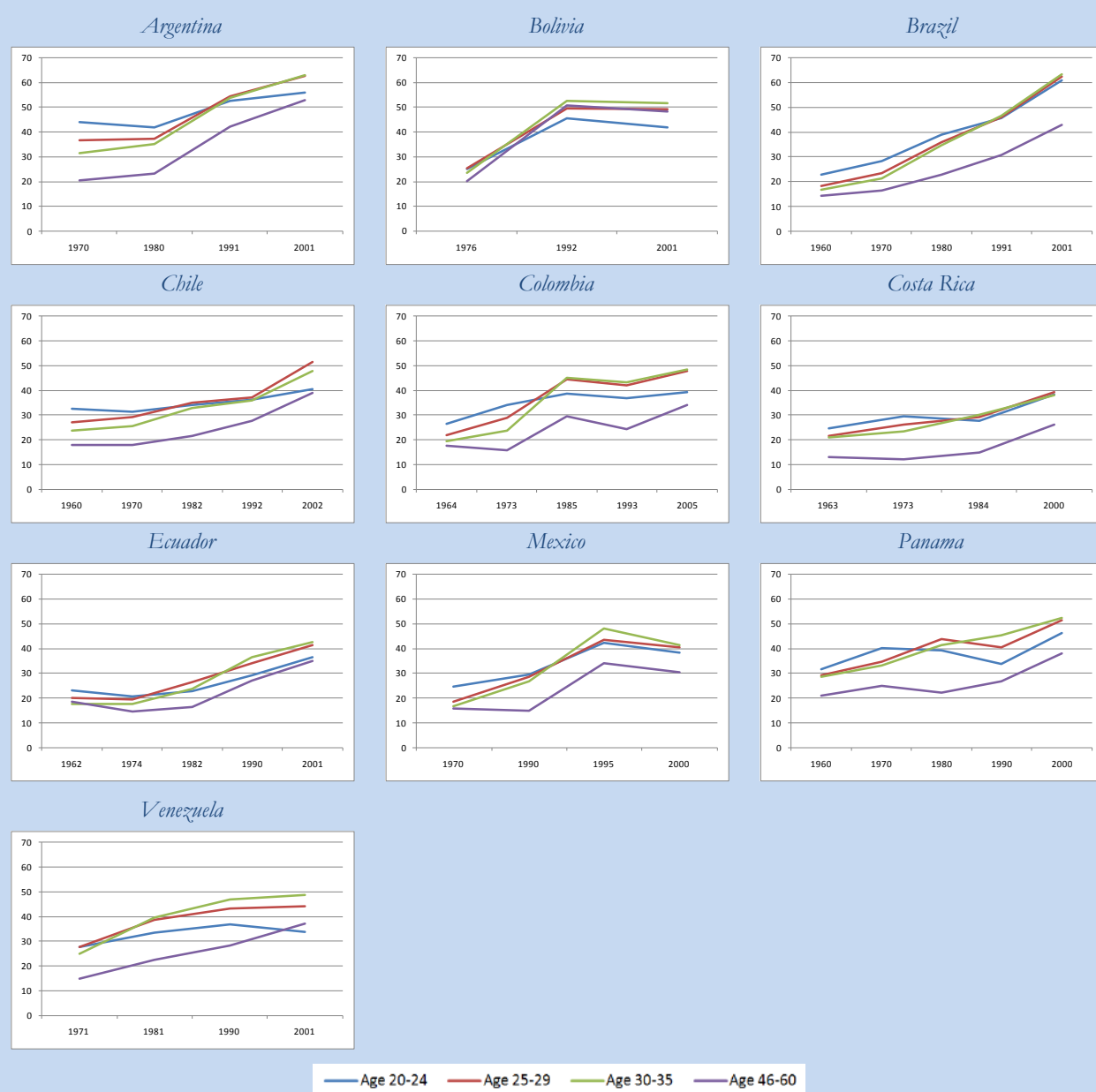
Source: Chioda 2011; Integrated Public Use Microdata Series.

The second set of countries is characterized by heterogeneous cohort effects over the life cycle, a widening of age effects, and the emergence of convex profiles as time progresses for some age ranges, with more recent generations of younger women joining the labor force at increasingly accelerating rates.

Cohort effects for married women are larger than those for single women. Age effects are negligible for the majority—but when present, are small but suggest increases in their labor force attachment through the life cycle.⁹⁸

⁹⁸ Chioda 2011a.

Figure 2.7. Cohort profile female labor force participation in selected Latin American and Caribbean countries (in percent).



Note: The figure presents female participation rates by age and census year for selected age ranges. Each line represents individuals within a constant age range, with each data point corresponding to the LFP rate of that specific age group in a given census year. Movements along a given line capture the cohort effects (cohort effects can be read from the charts as vertical differences between consecutive points on a given line). In turn, the vertical distance between two different lines on a same census year provides a measure of age effects: it embodies the difference in participation rates between two distinct age groups at a given point in time.

Source: Chioda 2011; Integrated Public Use Microdata Series.

Overall, the LFP of married women has risen, with successive cohorts entering in the labor market at higher rates but tending to remain fairly constant over the life cycle within the cohort. Single women's LFP dynamics are almost entirely dominated by age effects, with discrepancies in the rate

of LFP between young (25–34) and old age groups (46–60) nearing 20 percentage points, confirming the intuition that the motives for LFP among discrepancies in the rate of LFP between young (25–34) and old age groups (46–60) nearing 20 percentage points, confirming the intuition that the motives for LFP among single women differ substantially across the two age groups.

The remarkable differences in the labor market behavior of married and single women documented here provide a compelling case for the perspective adopted in this study: that of the household. These stylized facts imply that any future increase in women's participation will disproportionately be concentrated among married women. Policies intended to increase women's LFP will therefore need to target this group. This recognition requires acknowledging that labor market policies will be mediated by interactions among household members and must therefore take household dynamics specifically into account.

The next sections shed light on the determinants of these historic trends and gain further insight on dimensions of economic participation other than the dichotomous decision to be active in the labor force (extensive margins), considering gender-specific transitions in and out of formality and gender wage gaps. A consistent message emerging is that families matter and that married women's decisions do not simply conform to an objective of maximizing earnings.

Chapter 3. Determinants of the historical trends: hints of a “quiet revolution”

What underlies the dramatic increase in female labor force participation (LFP)? The literature that considers the rise of female economic activity in developed countries describes *evolutionary* and *revolutionary* phases.⁹⁹ As with the narrative of the previous chapter, it argues that much of the growth in female LFP has resulted from long-run changes in economic opportunities (urbanization and the greater availability of acceptable jobs for women) as well as from advances in education, changing norms, and the diffusion of time-saving household technologies. The evidence presented in this chapter suggests that Latin America and the Caribbean (LAC) has been experiencing a transformation analogous to that of the United States, which Goldin (2006) characterizes as a “quiet revolution.” That is, over time, women entering the labor market underwent significant changes stemming from shifts in the horizon over which women’s human capital investments yield returns. This horizon depended on whether their involvement in the labor force is long and continuous or short and intermittent and on a redefinition of women’s identities whereby women consider their work a fundamental part of their persona, which is related to the distinction between jobs and careers. These factors reinforced the ongoing changes in women’s bargaining power and ultimately contributed to altering the decision-making process within the household.

As Goldin (2006) remarks, explanations for the rise in women’s participation generally fall into two categories. The first emphasizes the labor supply function, including changes in preferences, family responsibilities, and shifts in fertility. The second emphasizes the time cost of producing household goods (food, clothing), as well as income and the resources of other family members. Factors operating on the demand side of the labor market may involve sectoral changes, advances in technology that increase the substitutability between male and female labor, and shifts in employers’ tastes towards married women’s employment. Those on the supply side include increases in formal education and family formation.

For female economic participation the distinction between demand and supply factors, respectively, map into distinctions between constraints and choices, and the interplay between those factors may shed light on whether the constraints facing women changed or whether instead women modified their behavior.¹⁰⁰ In some instances, the distinction between demand and supply constraints and choices is blurred. For example, a decrease in fertility can be viewed either as a shift in preferences or a result of constraints lifted—say, if access to family planning and contraceptives is frowned upon or unavailable. Ultimately, the evolution of women’s participation results from the interplay of these forces, as constraints and choices change concomitantly.

⁹⁹ See Goldin (1990, 1995, 2004, 2006), Fernández (2007), and Fogli and Veldkamp (2011).

¹⁰⁰ Goldin 2006.

The literature implicates five sets of factors in the rise of female LFP rates: rising education levels; changes in marriage patterns and declining fertility; urbanization; increases in the use of labor-saving household technology; and changes in the sectoral structure of the economy. The interplay of these factors is believed to shape the evolution of female LFP. Implicit in the choice of these factors is a transformation at a more primitive level that involves fundamental changes in household technology; and changes in the sectoral structure of the economy. The interplay of these factors is believed to shape the evolution of female LFP. Implicit in the choice of these factors is a transformation at a more primitive level that involves fundamental changes in perceptions about women's participation, for instance the shift in women's attitudes toward employment from "jobs" to "careers"¹⁰¹—ranging from individuals who work out of necessity to those who are employed because their occupation in part defines their identity.¹⁰²

This change in perspective has important implications both for the horizon over which human capital investment decisions are made and for household choices concerning home or market production. Careers extend the horizon over which educational investments reap dividends. They also weaken the concept of a working wife merely as an additional source of income with weak attachment to the labor force by endowing her not only with long term earnings but also, importantly, with broader options outside her marriage. Thanks to more credible outside options, she gains bargaining power within the household and greater control over the allocation of resources.

The revolution in women's roles has been documented and studied by rich literatures in the United States and Europe.¹⁰³ But despite the salient trends documented in the earlier chapters, relatively little analysis of the LAC region exists.¹⁰⁴

Using the Integrated Public Use Microdata Series, Chioda and Demombynes (2010) explain the changes in female LFP in terms of the five categories of drivers between the 1960s and the early 2000s.¹⁰⁵ Their figures should be interpreted as informed correlations and do not pretend to identify the exact magnitude of the causal effects of each factor.

A marked pattern emerges from the sample of countries considered by Chioda and Demombynes (2010).¹⁰⁶ As illustrated in figure 3.1, their (nonlinear) Oaxaca-type decompositions indicate that approximately two thirds of the changes in female LFP are explained solely by changes either in women's education and household characteristics or in their returns over time. Here, household characteristics encompass variables such as marital status, fertility, and the presence of young children. In figure 3.1 the sum of positive bars less negative bars represents the total change in female participation rates (in percentage points) experienced by each country over the past four

¹⁰¹ Goldin 2006.

¹⁰² Akerlof and Kranton 2010.

¹⁰³ Goldin 2006; Greenwood et al. 2005; Fernández, Fogli, and Olivetti 2004; Cardia 2009; Mammen and Paxson 2007.

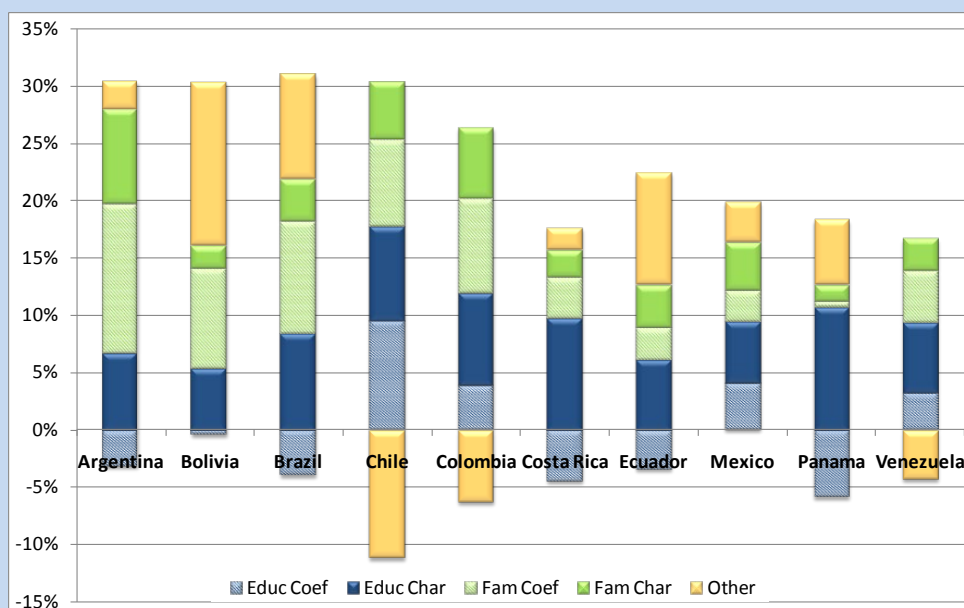
¹⁰⁴ Exceptions include Leon (2000) and Duryea, Cox-Edwards, and Ureta (2001), which focus on the 1980s and 1990s.

¹⁰⁵ Due to limitations on available variables in some of the earlier censuses, in most cases the period covered by the decomposition does not begin with the year of the first census used for the summary figures in table 2.1.

¹⁰⁶ The authors consider five sets of drivers underlying the rise in female labor force participation: urbanization, rising education levels, changes in marriage patterns and declining fertility, increased use of labor-saving household technology, and changes in the sectoral structure of the economy. To summarize the roles played by these factors, they employ an extension of the Oaxaca-Blinder decomposition to nonlinear models based on Fairlie (2005) and Bauer (2007). The authors complement the decompositions with a synthetic cohorts panel analysis (Deaton 1985) to examine how changes in labor force participation by five-year birth cohort relate to measures of the five factors, controlling for a number of other characteristics.

decades. Solid bars embody the fraction of the total change that is explained by changes in the characteristics of women (say, if they become more educated over time), while shaded bars denote the portion of the change that results from changes in the returns to the corresponding characteristic over four decades.

Figure 3.1. Decomposition of changes in female labor force participation, 1960s to 2000s, women aged 25–55



Source: Chioda and Demombynes 2010; Integrated Public Use Microdata Series.

3.1 Education

Changes in women's education consistently account for large shares of changes over the four decades in female LFP across countries—between 18 and 81 percent.¹⁰⁷ Human capital accumulation not only increases the opportunity cost of home production but is also associated with more progressive views toward the roles of women and may ultimately reflect the joint decision to pursue family and career, as part of their changing identity (Goldin 1995; Akerlof and Kranton, 2010).

In addition to presenting the contributions of human capital and family characteristics to explaining the total gap, figure 3.1 further disentangles the explanatory power of these two sets of variables into shifts in endowments (that is, shifts in the characteristics of the population) and shifts in their marginal returns in terms of LFP. The decomposition thus addresses whether the increase in economic participation occurred mainly because the pool of women is more educated, say, or because the marginal value of education in terms of labor supply has changed. For instance, in Argentina the increasing level of female education explains roughly 7 percentage points of the total

¹⁰⁷ Chioda and Demombynes (2010) restrict the sample to women and men aged 25–55 to minimize biases induced by workers transitioning into the labor force or exiting it, either because their schooling is incomplete or because of retirement.

change of about $(30 - 3) = 27$ percent, while changes in the *value* of education to LFP between the 2000s and the 1960s predict a widening gap. This occurs, for instance, if more education predicts a greater likelihood of participating in the labor force in both time periods, but the coefficient on education declines over time, such that a woman in 2000 is *less* likely to work than an equally educated woman in 1960, all else equal.

As documented in the chapter 2, women in LAC have made sustained gains in education along several dimensions of achievement.¹⁰⁸ The changes in women's educational attainment have translated into higher LFP for all 10 countries in the sample, with some heterogeneity in the magnitude (between 5 and 10 percentage points).

Changes in the marginal contribution of an additional year of education to LFP are more subtle. For Chile, Colombia, Mexico, and Venezuela, changes in the returns to education have widened the gap between women's LFP in the two time periods. The implication is that, in contrast to the Argentina example, the returns to education in participation terms have increased in these countries. In Chile the growth in the returns to an additional year of education dominates the contribution of higher average educational attainment, such that the shaded blue bar is (positive and) taller than the solid blue bar. As with Argentina, however, in the remaining countries, the marginal effects of education have declined over time, such that they would predict narrower changes in female LFP than was actually observed. Interestingly, declines in "returns" to education tend to be recorded in countries with the largest gains in female participation and where their levels in 2000s are highest, such as Argentina and Brazil. This suggests the possibility of diminishing returns to education whereby the larger the female workforce, the less the returns in LFP to an additional year of schooling. We revisit this hypothesis later in the context of a theory in which women overinvest in education to compensate for discrimination they may face in the labor market as a signal of ability and productivity to prospective employers. We also consider the possibility that human capital investments pay off for women not only in the labor market, but also reap benefits in the marriage market, where more education secures a "higher quality" husband.

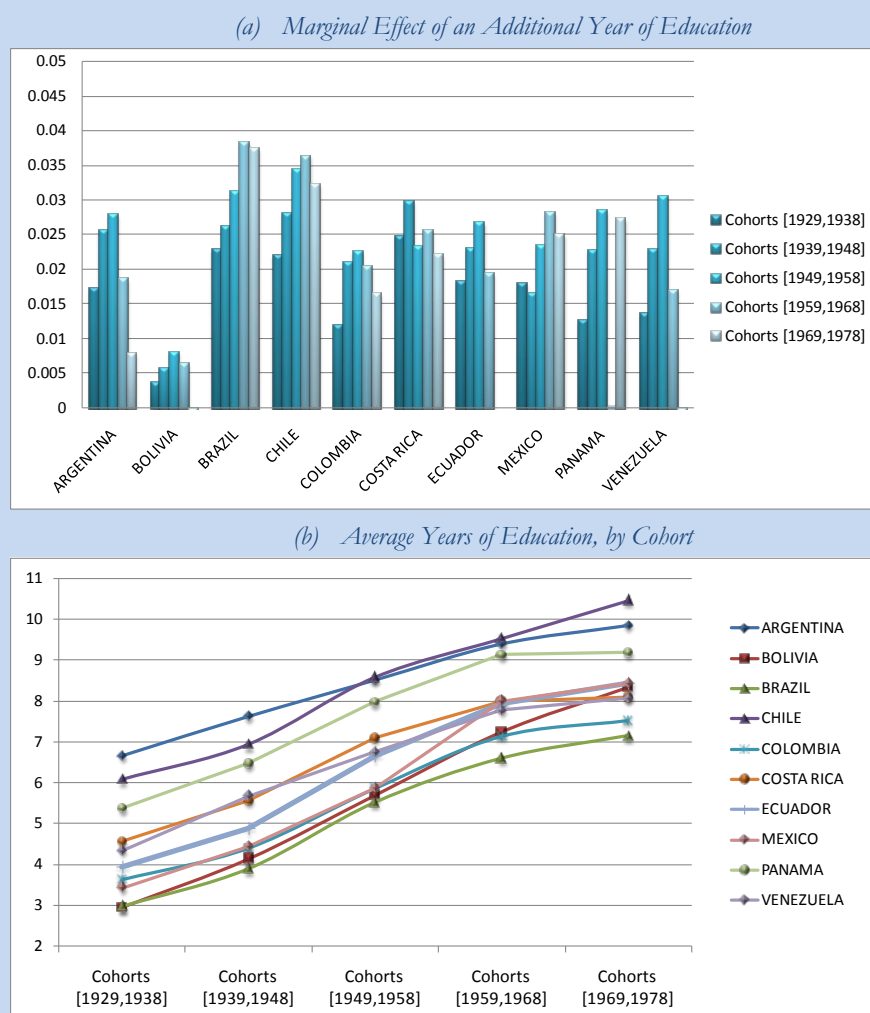
To further investigate the role of education in economic participation, Chioda and Demombynes (2010) undertake a synthetic cohorts analysis and compute the LFP returns to various factors across cohorts, including to education. While the decomposition exercise describes how changes in FLFP over time have been achieved as a function of changes in the factors considered, the synthetic cohort analysis sheds light on an alternative form of heterogeneity, disentangling aggregate changes over time into differences across cohorts in women's baseline propensity to work, and in the shape of that propensity over their life cycle.

A noteworthy result is the relative stability of the participation returns to an additional year of schooling: the effect hovers around 2 and 3 percentage points per year for all countries in the sample (figure 3.2). The exception is Bolivia, for which education is weakly correlated with economic participation. This is the case even across cohorts, with only moderate differences in the likelihood of entering the labor force for a given level of education: the oldest cohort (born between 1929 and 1938) is 2 percentage points more likely to enter the labor force with each additional year of schooling in Brazil and Chile, for instance, where the cohort gradient is steepest, while the

¹⁰⁸ Note that for the purposes of labor force participation, the educational achievement of women in the latest census waves are not relevant since many women will not have completed their education, so their current status in the labor force can be misleading. For this reason, earlier waves of the World Values Survey are more instructive than the latest one.

corresponding figure is 3 percentage points for younger cohorts.¹⁰⁹ The relatively stable effect of education across countries and cohorts is at first glance puzzling, particularly in light of the heterogeneous group of countries and trends presented in chapters 1 and 2.

Figure 3.2. “Returns” of an additional year of education in terms of likelihood to economic participation



Source: Chioda and Demombynes 2010; Integrated Public Use Microdata Series.

This heterogeneity extends to the average level of education across countries, which represents an important complementary piece of information for understanding the role of education and its correlation with the likelihood of entering the labor force. Staggering differences emerge across countries and cohorts (see figure 3.2). In Bolivia, Brazil, Colombia, Costa Rica, Ecuador, Mexico, and Venezuela, women born between 1969 and 1978 had twice the level of education as those of the earliest generation, born between 1929 and 1938. In turn, women in the oldest Argentine cohort are twice as educated as their contemporaries in Brazil and Bolivia. These observations provide intuition for the results of the decomposition exercise that a sizable portion of the gains in female LFP over

¹⁰⁹ The estimated returns for the youngest cohort (born between 1969 and 1978) may be misleading as some women may not have completed their education as of the date of the latest census wave.

the last four decades was driven by large increases in the average level of education, with only minor contributions from the marginal effects of an additional year of education, which remained fairly constant over this period.

Higher investments in education do not translate mechanically into higher economic participation. Brazil has among the lowest levels of education (yet the steepest gradient), yet it ranks among the top performers in the region in terms of growth and female participation. Chile, by contrast, which leads the region in educational attainment and cohort specific returns to education, has had middling female LFP rates, on par of slightly below the levels predicted by its degree of development, as discussed in the box 2.1. Thus, education is only an imperfect predictor of female LFP and cannot alone account for all of its variation.

Figure 3.3. “Returns” to educational attainment and the likelihood of economic participation, women aged 25–55



Note: In Mexico, education levels are completed, so the omitted category is no education. Charts indicate marginal coefficients from probit models, expressed in percentage points.

Source: Chioda and Demombynes 2010; Integrated Public Use Microdata Series.

Human capital investments are cumulative, implying that the gains from an additional year of education depend on the accumulated stock of human capital. In other words, the benefits of participation for an individual who acquires an extra year of schooling after completing her 4th year will plausibly differ from that of an individual who decides to complete her 10th year of schooling, having just completed the 9th. In other words, the cumulative nature of human capital investments

suggests that the relationship between education and LFP is nonlinear.

Further, an additional year of schooling plausibly has a stronger impact on earnings, and consequently the likelihood of participation, if it corresponds to the completion of a diploma or degree. The argument is that employers may use the information embodied in a degree as a positive signal of a worker's unobserved productivity relative to those who do not obtain a degree. Degree completion may be informative if it indicates, for example, a worker's perseverance, motivation, and discipline, all of which enhance productivity.¹¹⁰ As a result, diploma effects also imply a nonlinear and discontinuous relationship between education and labor outcomes (participation and earnings).¹¹¹

These conjectures find support in figure 3.3, which presents the probability of being in the labor force as a function of primary, secondary, and higher education.¹¹² Differences across levels of education are sizable. Tertiary education (completed or not) is associated with an increase in the probability of LFP ranging between 25 and 42 percentage points, while the average return to completion of primary education is only approximately 5 percentage points.

Of course, it is important to remember that the process that induces different individuals to select into various levels of education is driven by differences in their unobservable or intangible characteristics. Women who decide to invest in tertiary education tend to differ along such dimensions as ability and aspiration and thus in employability, which results in their higher labor force attachment rates. Indeed, differences in (implied yearly) returns across education levels may capture heterogeneity reflecting progressively stronger motivation which leads women to view economic participation less as merely a job and more as a career.¹¹³ These women necessarily have stronger attachment to the labor force not just because of the quality of their job or because of weaker social stigma attached to their occupation, but because attachment to the workforce forms part of their identity. This conjecture receives some support from the evidence on norms in chapter 1. For instance, substantial proportions of women, particularly in Brazil and Chile and among highly educated women, disagree that being a housewife is as satisfying as being in the labor force, suggesting that they assign intrinsic value to employment.

Consider cohort differences in the returns to educational attainment. Many exhibit an inverted-U pattern or are decreasing across cohorts such that the participation returns to education are declining in more recent cohorts (see figure 3.3). This is an alternative illustration of the results from Chioda and Demombynes' (2010) decompositions, which indicate that the changing returns to education narrowed the gap in female LFP between the early 2000s and the 1960s—that the returns to education in the early decade exceeded those of the later decade. This drop in returns is plausibly related to the rapidly increasing levels of education in LAC. The opposite phenomenon has been documented in the United States, where the rising wage returns to education among young males is due to the increasing scarcity of highly educated young men.¹¹⁴

These patterns can also be interpreted as sheepskin effects and the ability of degrees to reveal

¹¹⁰ Weiss 1995.

¹¹¹ See Hungerford and Solon (1987), Belman and Heywood (1991), Jaeger and Page (1996), and Park (1999) for the United States. See Ferrer and Riddell (2002) for Canada, Patrinos (1996) for Guatemala, Schady (2003) for the Philippines, and Pons (2006) for Spain.

¹¹² All regression specifications include additional controls ranging from indicators for urban/rural status to proxies of income and household characteristics such as marital status and the presence of children in the household.

¹¹³ Goldin 2006.

¹¹⁴ Card and Lemieux 2001.

information about intangible worker characteristics. Between 1982 and 2004 the sheepskin effect for Brazilian workers effectively disappeared for primary school and fell for secondary school and college degrees.¹¹⁵ This evidence is consistent with a rising supply of more educated workers in the labor force, diluting the importance of a higher degree as a signal of higher productivity. Even so, a fading sheepskin effect does not invalidate the value of education, since the estimated earnings gains associated with the completion of these degrees remained elevated in 2004.

As documented in chapter 1, one of the most salient trends in recent decades is the increased investment in education by women and the closing and reversal of the education gender gap, not only in LAC but also among several developed countries.

With positive market returns to schooling, it is not surprising that women's demand for education has risen. Puzzling, however, is that the differential response of men and women to changes in the returns to schooling. Women's investments in education have outpaced those of men, despite of the fact that they receive lower wages in the labor market and spend more time at home than men, although these gaps have narrowed over time, as will be discussed in the next chapters. In light of the existing wage gap and of the reductions in participation associated with marriage (see figures 3.4 and 3.5 and the discussion around it), one might argue that women are overinvesting in education and should accumulate less human capital than men, since education appears to be a less profitable investment because of their disproportionate time spent in home production and because of inadequate market remuneration.

Chiappori et al. (2010) develop a framework to explain how the reversal of the education gap can be thought of as a response to both market incentives (including but not limited to wages) and intrahousehold dynamics. The essence of their framework considers education as a signaling device to the market about ability, which facilitates escaping discrimination. So, although women today still receive lower wages than men and spend more time in the household, they may acquire more schooling because discrimination is lower at higher levels of education. Discrimination against women in the labor market can take several forms. It can be taste-based, such that employers have a preference for working with and hiring men. Or it can be statistical, whereby employers believe (correctly or not) that women have a different level of productivity (attitudes, human capital) or incur more frequent absences than men. In that case they prefer to hire men exclusively on productivity grounds.

The notion that education has a signaling value for employers is not new. Why then do we observe these shifts in education and participation behaviors only recently? The second key ingredient in the Chiappori et al. framework is that, in addition, education reaps benefits in the marriage market and in the labor market, so that more education implies matching with a more educated spouse, and being able to extract more marital surplus as a result of greater prospects outside the marriage. This enhanced bargaining power weakens traditional gender roles and divisions of labor in the household, which had women spending more time at home, irrespective of their educational attainment. As figures 3.4 and 3.5 illustrate, women's economic role changed dramatically at marriage. Until recently, marriage predicted more than a 20 percentage point drop in a woman's likelihood of participating in the labor force in many countries. In this light the increasing female education in LAC can be seen as related to weakening conservative values, as documented in chapter 2, and to the "married woman revolution." Indeed, Chiappori et al. (2010) provide a theory underlying the causal mechanism that runs from education to norms.

¹¹⁵ Crespo and Cortez 2009.

3.2 Family formation

At the beginning of the 1960s marital status determined women's engagement in the labor force almost entirely. The shifts in social norms and identities, as hypothesized by the literature, shaped the evolution of female participation. An indirect proxy for this transformation is provided by the importance of family formation (marriage and fertility) in the decompositions summarized in figure 3.1. Family formation variables make a uniformly positive contribution in explaining the observed trends in female LFP over the four decades. Changes in family characteristics and in their marginal returns to LFP explain between 18 and 31 percent of the change in female LFP between the 1960s and the early 2000s. In Argentina, Bolivia, Brazil, and Colombia, which experienced the largest gains female LFP in the region, the net effect of family formation variables is as large or larger than the effect of education alone.

More precisely, changes in the marginal effects appear larger than those of endowments, implying that along this margin of economic participation, family formation, traditionally associated with reductions in economic participation, has a smaller negative effect on the decision to participate in the labor market. In all countries but Ecuador, Mexico, and Panama, changes in the importance of family characteristics to female LFP are more important than the changes in characteristics themselves.

The reduction in the propensity to withdraw from the labor force as a result of marriage or fertility is consistent with a shift in both norms and job opportunities that are compatible with both marriage and caregiver responsibilities. These shifts often result from the changing sectoral composition of output as countries grow.¹¹⁶ In the initial phases of development, women initially move out of the labor force as the economy transitions from agriculture to manufacturing. As countries continue to grow, the nature of jobs available to and acceptable to women tends to change, with the expansion of white or clerical collar jobs.¹¹⁷ As women invest in more education in response to the greater prevalence of white collar jobs, the opportunity cost of withdrawals from the labor force upon marriage and family formation increases, be it through the immediate forgone earnings or through forgone future earnings that result from life-cycle interruptions in the accumulation of experience or tenure. This is the heart of the tradeoff that women face at the time of family formation: drop out of the labor force to specialize in home production and in the provision of household public goods such as child rearing, with possible benefits to children's development to their relationship with them, at the expense of forgone present and future wages.

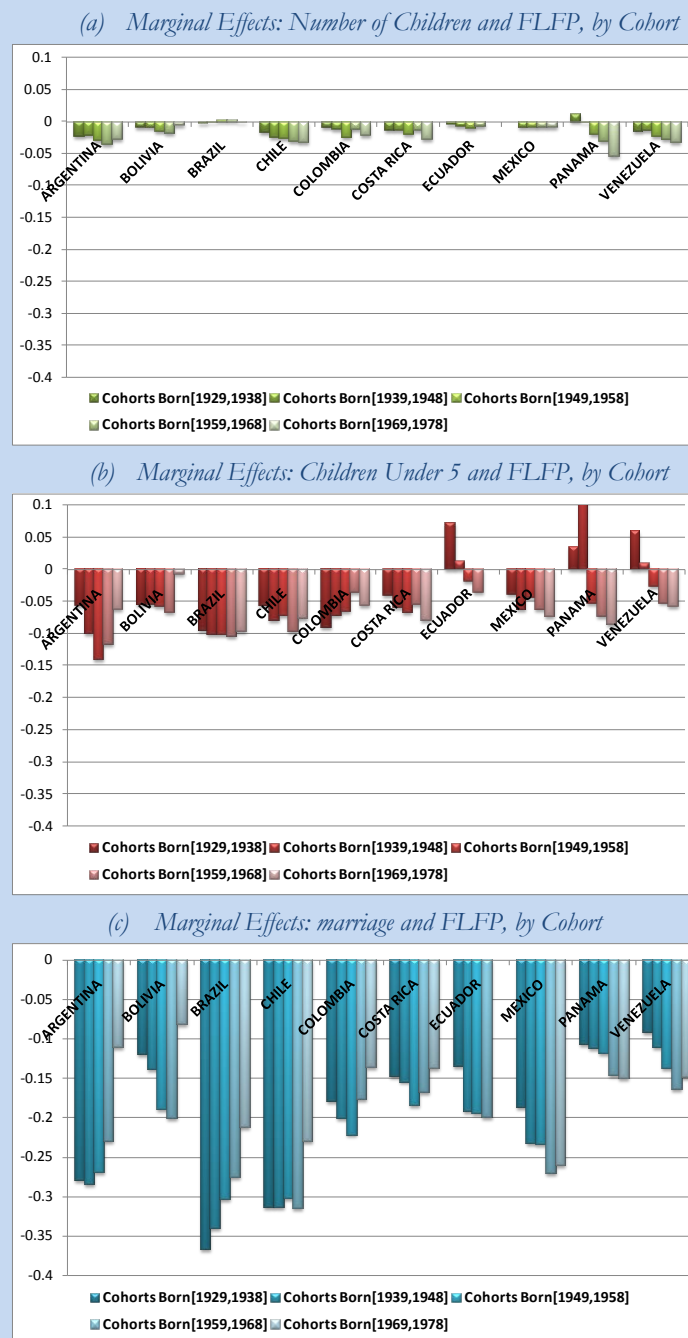
While the contributions of changes in family characteristics (fertility and marital status) are smaller than those of changes in their marginal effects in explaining the change in female LFP over time, they are not negligible, ranging from a modest 1.4 percentage points in Panama to 8.3 percentage points in Argentina. These figures enrich the evidence summarized by stylized fact 3 from chapter 1. A distinctive feature of the region's fertility decline is that it took place without any major changes in the timing of family formation. More generally, family structure and the onset of family formation have remained fairly stable. This trend is especially relevant in light of women's increased educational investments, which typically delay certain milestones in family formation. In contrast, the "revolution" among married women in the United States and much of Europe was typically

¹¹⁶ Mammen and Paxson 2000.

¹¹⁷ Goldin 1995.

accompanied by substantial delays in fertility.¹¹⁸

Figure 3.4. Family formation and labor force participation (marginal effects, in percentage points), women aged 25–55



Source: Chioda and Demombynes 2010; Integrated Public Use Microdata Series.

¹¹⁸ Goldin 1995, 2006.

It is often argued that labor force differentials between men and women are due not to gender alone, but to the fact that women disproportionately face the responsibilities of bearing and raising children. However, the negative association between fertility and female labor supply should not be taken as causal if they are jointly determined, for which there is considerable evidence,¹¹⁹ or if there are unobserved factors that affect both. For instance, career-minded women may choose to have fewer (or no) children, while women with strong preferences for children may also prefer homemaking, so the negative relationship between fertility and LFP could be spurious. With these caveats in mind, figures 3.4 and 3.5 present the relationship between family characteristics and female economic participation by cohort and by level of education, respectively, controlling for other demographic characteristics.

The marginal effect of an additional child on LFP is negative, as expected, and ranges between declines of 2.5 percentage points in the likelihood of being in the labor force in Argentina and Chile—where fertility is lowest in the region, with 1.9 and 2.1 children per household,¹²⁰ respectively—and declines of less than 0.8 percentage points in Mexico and Ecuador, and are even positive in Brazil where fertility rates are highest (2.69, 2.84 and 3.08 children per household in Mexico, Ecuador, and Brazil, respectively). Further, these effects are (mildly) increasing for younger cohorts.

Whether these correlations reflect causal relationships is open to question, as credible causal evidence on the effect of fertility on LFP is limited. In studies that exploit multiple births (such as twins or changes in fertility induced by preferences for a mixed sibling-sex composition), the negative causal relationship between participation and fertility is much smaller than the raw correlation but remains statistically distinguishable from zero. Following Angrist and Evans' (1998) strategy of exploiting parents' preferences for the sex composition of their children, Cruces and Galiani (2005) conclude that Angrist and Evans' U.S. results generalize both qualitatively and quantitatively to the populations of Argentina and Mexico. For Argentina, having more than two children reduces maternal labor supply by about 8.1 percentage points, with slightly smaller effects in Mexico (6.3), both close to Angrist and Evans' (1998) U.S. estimates for 1990 (8.4 percentage points). While these are close to twice the correlations reported in figures 3.4 and 3.5, it is worth clarifying that the margins that Angrist and Evans' (1998) and Cruces and Galiani (2005) identified are quite different from those reported here. The former authors identify an average causal effect of having an additional child that is specific to women with two or more children, all of whom are the same gender. This margin likely differs substantially from the one in figures 3.4 and 3.5, which is an average correlation across all women and which is not purged of simultaneity and omitted variables biases.

In addition, these figures are based on a model that conditions on an indicator for whether a child in the household is under age 5, which is not the case in Angrist and Evans (1998) or in Cruces and Galiani (2005). This indicator is likely to soak up much of the effect of fertility on maternal labor supply at the expense of the number of children in the household since it is generally for the care young children—which is more time-intensive—that mothers interrupt their participation in the labor force. This is consistent with the hypothesis that new mothers have a preference for and enjoy spending time with their newborns. In the United States, for instance, the demand for formal care increases only after the second year of an infant's life, while informal home-based care is preferred

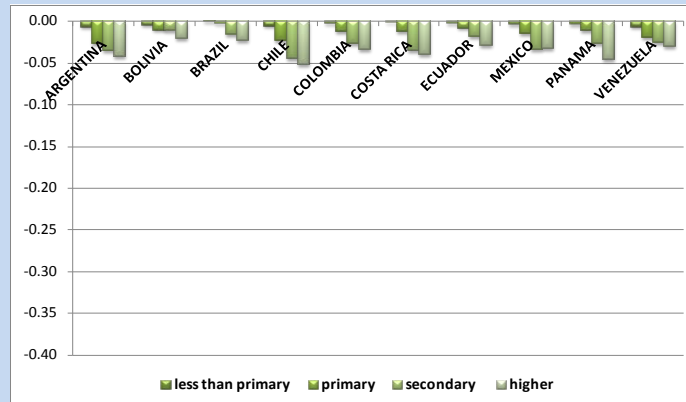
¹¹⁹ See Rosenzweig and Wolpin (1980), Schultz (1981), Moffitt (1984), and Goldin (1990).

¹²⁰ Chioda and Demombynes (2010) compute fertility statistics based on Integrated Public Use Microdata Series data.

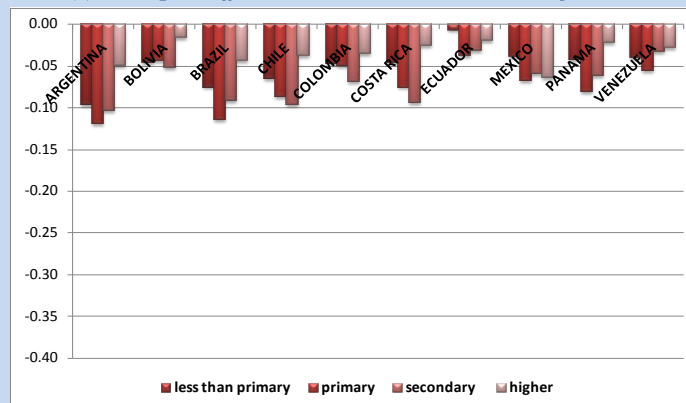
for infants.¹²¹

Figure 3.5. Family formation and labor force participation, by education level (marginal effects, in percentage points), women aged 25–55

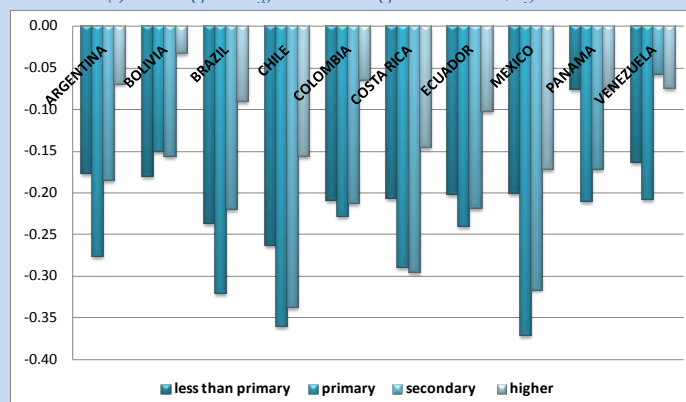
(a) Marginal Effects: Number of Children and FLFP, by Educ Level



(b) Marginal Effects: Children under 5 and FLFP, by Educ Level



(c) Marginal Effects: Marriage and FLFP, by Educ Level



Source: Chioda and Demombynes 2010; Integrated Public Use Microdata Series.

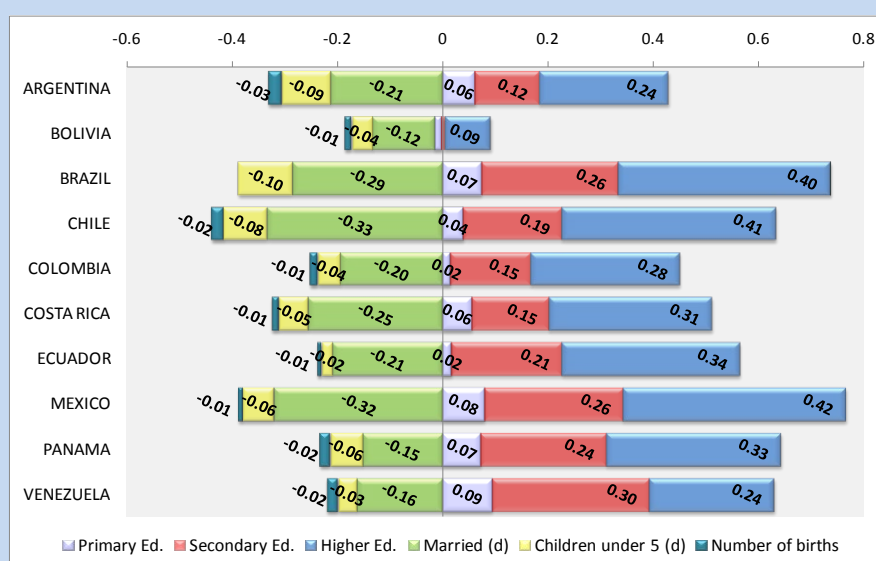
¹²¹ Leibowitz, Waite, and Witsberger 1988; Leibowitz, Klerman, and Waite 1992.

In addition, re-entry into the labor force is delayed by higher household income, which is consistent with a maternal preference for forming early and durable bonds with their children, afforded by higher levels of income. More generally, it is consistent with the possibility that time spent with children is a “normal good.”

As hypothesized, it appears that having a child under 5 in the household is, in many countries in the sample, related to reductions in LFP. The size of the effect is close to 10 percentage points in several countries, which more closely resembles the magnitudes of Angrist and Evans (1998) and Cruces and Galiani (2005; see figure 3.5). In Argentina, where fertility is lowest, the effect exceeds 10 percentage points for three of the cohorts (figure 3.4), reaching almost 15 percentage points for women born between 1949 and 1958. Although it is mild, a slight positive gradient appears, with younger cohorts more responsive to small children. In Ecuador, Panama, and Venezuela young children are associated with increases in labor supply among the oldest cohorts, consistent with a more pressing need for a second source of income among this cohort. All told, while the effects of fertility and family formation can be large, they are often more than offset by the gains from higher education (figure 3.6).

Figure 3.6. Labor force participation returns to education, marriage, and fertility, women aged 25–55

Participation Returns (expressed in probability percentage points)



Source: Chioda and Demombynes 2010; Integrated Public Use Microdata Series.

As mentioned, multiple births studies capture a particular dimension of the impact of fertility on economic participation. One might argue that the impact on a mother’s labor supply of the third or higher birth order child would be more muted than that of her first or second child. The behavior of women who already have at least two children may be less responsive to an additional child if they have de facto already specialized in home production. Alternatively, they may be more elastic if the newborn’s older siblings are enlisted in child care and ease the demands on mothers’ time or if an additional child places pressure on the household budget, so that a second income is indispensable.

An alternative margin of interest is the impact of fertility on mothers with and without children. To

tackle this issue, Agüero and Marks (2008) exploit infertility shocks.¹²² Infertility appears to be virtually random, in its incidence is unrelated to a woman's background characteristics, allowing the authors to credibly identify this causal effect of fertility on female LFP in Bolivia, Colombia, the Dominican Republic, Guatemala, Nicaragua, and Peru.¹²³ Infertile women resemble their fertile counterparts along several dimensions. Their LFP rates, their childhood backgrounds, and the age they became sexually active are all statistically indistinguishable from one another. When asked about their desired fertility, there is no difference across fertility statuses.

In Agüero and Marks' (2008) sample, the raw correlations between female LFP and fertility is such that each additional child is associated with a 3.2 percentage point decline in the likelihood of participation in the labor force, in line with the figure reported in Chioda and Demombynes (2010). However, Agüero and Marks's (2008) estimate that the causal effect of fertility on labor supply is zero, consistent with a situation in which unobserved characteristics of women, such as career ambition, are important.¹²⁴ They argue that their identification strategy may be applicable to a broader population than the Angrist and Evans (1998) approach. Indeed, it appears as if women who have a preference for a mixed sibling-sex composition are systematically different from the population at large,¹²⁵ whereas infertility shocks affect women irrespective of their preferences and circumstances, which helps explain the different conclusions across the two approaches.

The discrepancies in estimates between the Angrist and Evans (1998) and Agüero and Marks' (2008) approaches, and the divergent populations over which they identify their estimates suggest a discussion about the information content of changes in LFP precipitated by fertility. What are the welfare implications of observing women withdraw from the labor force at the time of child birth? If single mothers and household heads withdraw at much lower rates than married women with children and are in fact as active in the labor force as men—as they appear to be in the recent years of Chioda and Demombynes's (2010) sample—what information does this carry about the constraints on women?

Conceptually, it is not straightforward to draw welfare conclusions based on these outcomes alone. On a purely revealed preference basis, married women leaving the labor force after childbirth suggests that such withdrawal is their welfare-maximizing option (in the absence of norms and discrimination), which they can presumably afford because their spouses have not also withdrawn. One reason for a married mother—who may have a comparative advantage in child rearing relative to her husband—to exit the labor force is that child care and child rearing are enjoyable to her, and her spouse's income affords her the possibility to specialize to some degree in home production while he takes on the role of main bread winner. This gender heterogeneity in preferences and the additional resources (time) invested in children is consistent with evidence from conditional cash transfers, where women's additional resources (cash) translate to more spending on their children. An alternative explanation for a married mother's exit from the labor force is related to intrahousehold bargaining theories. For instance, both parents would prefer to remain in the labor force, but because her husband has a relative advantage in market production (perhaps because of higher wages or better outside options), he also holds greater bargaining power. In a world without

¹²² The medical literature defines infertility as the failure to conceive after a year of regular intercourse without contraception.

¹²³ Joffe and Barnes 2000.

¹²⁴ The instrumental variables point estimate (0.003) is close to zero and statistically insignificant, suggesting that the parameter estimated by ordinary least squares is overstated.

¹²⁵ Cruces and Galiani (2007) find that women who are induced to have a third child in Mexico and Argentina out of a desire for a balanced sibling sex mix are less likely to participate in the labor force.

frictions or constraints—norms and stigmas related to maternal employment, for example—one would observe maternal withdrawals from the labor force if the husband compensated his wife enough (monetarily or otherwise) to make her at least as well off as she would be if she returned to the labor force and gained a wage. In both cases the mother's withdrawal from the labor force is welfare-maximizing and efficient.¹²⁶

In either scenario, the household is the economic entity that mediates all decisions and plays the critical role in molding outcomes, such as through intramarital transfers of surplus between spouses. As evidence of the relevance of transfers between household members, Amuedo-Dorantes et al (2010) observe that among couples who pool their incomes and specialize—one earns income while the other engages exclusively in home production—the shared resources should correlate positively with the price of substitutes to home production, such as commercial child care. In other words, a primary earner should, in theory, compensate his specialized spouse in line with her potential wage if she provided child-care services outside the household. In Denmark, income pooling is more prevalent where outside domestic services are more expensive.¹²⁷

Alternatively, the degree to which household members rely on one another for income and other support may depend on the nature of the relationship between the household heads. In particular, in two-headed households with at least one small child, the maternal labor supply may depend on the characteristics of the second household head and the mother's relationship with him or her. The elasticity of a woman's labor supply to financial need and child-care pressures is responsive to the nature of her relationship to the other household head. Married mothers are better able to draw on the earnings of their partners to reduce their work hours than mothers in other household situations.¹²⁸

Although this evidence does not directly relate to LAC, it suggests that (unobserved) compensating transfers across household members—and spouses in particular—helps shape maternal labor supply, complicating direct comparisons between working and nonworking mothers for welfare purposes. As a caution against the desirability of maternal participation in the labor force, Piras and Ripani (2005) report that in their sample of households in Bolivia, Brazil, Ecuador, and Peru, the youngest mothers (14–25 years old) participate 10 percentage points more than their equally aged nonmother counterparts. Among those unmarried, the difference in LFP rates reach 27 percent in Bolivia and Peru. These differences may be driven by the economic needs of unmarried young women who must work to support their children.¹²⁹

The complicated association between participation and welfare is further illustrated by certain patterns that emerge from figure 3.5, some of which are familiar. First, across all countries, the negative association between marriage and female LFP is mild at low levels of education, rises (in magnitude) for women with primary or secondary education, and then declines again to its lowest levels for women with tertiary schooling. The U-shaped relationship between the sensitivity of LFP to marriage with respect to education (or socio-economic status, more broadly) is thus reminiscent of that between development and female LFP, referenced in previous chapters. The similarities go beyond the shape of the relationship and may extend to their underlying mechanisms. Among women with the least education, who on average have low wages and equally poorly educated

¹²⁶ Alternatively, if the relationship between parents is noncooperative, a loss in efficiency (and hence welfare) or equity could arise.

¹²⁷ Amuedo-Dorantes et al. 2010.

¹²⁸ Abroms and Goldscheider 2002.

¹²⁹ Piras and Ripani 2005.

spouses, husband's income may not be sufficient to permit their exit from the labor force. If the LFP of low socio-economic status women is somewhat insensitive to marriage, it may plausibly be out of necessity. Those who completed primary and secondary education, on the other hand, are less likely to face such binding budget constraints as their spouse's income is on average more elevated, as is their own prior to marriage. Greater household resources afford them a wider set of options, including the opportunity to reduce their labor supply. The literature has hypothesized a number of possible channels: social norms, preferences (including identities that are more intimately tied to the family), opportunity costs and broadly defined comparative advantage in home production. Whichever the precise reason, the income effect on women's LFP (from greater spousal resources) is negative, large, and outweighs the substitution effect (from forgone own wages).¹³⁰ In turn, high socio-economic status women, who invested more in their human capital, are by definition more career-minded and more intrinsically attached to the labor force. Furthermore, the opportunity cost of exiting the labor force (measured in forgone wages) is on average considerably higher for women with tertiary education. As a result, marriage is much less likely to draw them out of employment: across all countries, their LFP is the least sensitive to marriage of the four categories of education.

A similar pattern of associations emerges between the sensitivity of LFP to the presence of children under 5 in the household and education (middle panel of figure 3.5), again plausibly for similar reasons. In interpreting these patterns, it is useful to consider the presence of a young child in the household as representing a rigid demand on someone's time given the associated demands of child care. For women with low levels of education, the foregone income implied by withdrawal from the labor market when a young child is present is high enough that many remain employed. For these women, formal child care options are unlikely to be affordable, such that they might seek informal (e.g. older siblings or extended family) arrangements. Highly educated women withdraw at even lower rates, perhaps out of a preference for not interrupting their careers and because their more elevated household income implies that formal (non-familial) child care is within their means. In turn, those women in the middle range of education face less stringent resource constraints than low socio-economic status mothers. If educational investments not only define opportunities in the labor market, but also reflect women's aspirations and identities, then primary and secondary education may reveal weaker preferences for attachment to the labor force, and thus higher exit rates labor force at much higher rates than their less and more educated counterparts.

If education is viewed as a (rough) proxy for household income, then these patterns become the within country analog of U-shaped relationship between per capita income and female LFP, emerging from cross countries analysis.

A final remark on figure 3.5 relates to the top panel, which depicts the sensitivity of maternal LFP to the number of children in the household across different categories of maternal education, holding constant marital status and the presence of young child in the household. In this instance, the relationship with education is remarkably similar across countries and no longer U-shaped. As education increases, so do the negative association of LFP and presence of children. This provides an additional nuance in the labor supply behavior of women in response to fertility. In particular, whereas their LFP decisions are relatively unresponsive to marriage and to having a child under age 5 in the household, highly educated women are instead the most responsive to the *number* of children across all education groups. In some countries, they are as much as 5 percentage points less likely to work for each additional child. One contributing factor in this behavior is that, having not scaled back their labor supply in response to either marriage or an infant in the household, highly educated

¹³⁰ Goldin 2006.

women have considerable room for reductions in labor supply (i.e. they have high baseline LFP relative to less educated women). Furthermore, of all education categories, these women are on average the least income constrained such that, as mentioned earlier, child care options outside the home are in all likelihood within their means. Yet, despite this, they are most likely to scale back their labor supply with each additional child. These observations, coupled with the fact that their LFP response to the presence of young children—who represent a considerable demand on caregivers' time—is relatively muted, suggest that the labor force withdrawals related to additional births are largely *voluntary* among high socio-economic status women (in line with the labor supply and fertility behaviors of elite professionals documented in developed countries). This pattern contrasts sharply with the labor supply responses of the least educated women, for instance, whose (in)sensitivity to family structure is likely driven by necessity, complicating interpersonal welfare comparisons on the basis of labor force participation.

The most striking feature of figures 3.4 and 3.5 is the relative magnitude of the effects associated with marriage and fertility, whether number of children or presence of children under age 5. All else equal, marriage implies an average reduction in the probability of LFP of 23 percentage points, or 3 times the effect of children under age 5 and 10 times the effect of the number of children in the household. These marriage effects are *net* of fertility, and the models on which the diagrams are based control for the number of children and the presence of young children in the household. So the large declines associated with marriage cannot be attributed to fertility.

In Brazil each successive cohort experienced a smaller decline in LFP following marriage, falling from a 37-percentage-point decline among the oldest cohort to a 20-percentage-point decline among the youngest. Further, excluding Bolivia, Brazil, and the last cohorts in many countries (who may be too unrepresentatively young to support general inferences), most countries' profiles have remained remarkably stable and in many instances have even sloped upward, suggesting that marriage is still important in shaping women's labor supply. These effects are interesting because marriage itself should not, after controlling for children in the household, alter the household burden and crowd out the time allocated to market activities so dramatically as to justify large reductions in LFP. A possible explanation lies in the social norms discussed in chapter 2. For instance, an important feature of the Chilean labor market over recent years is its relatively low level of female participation, despite its high income per capita and the fact that women in Chile are among the most highly educated in LAC.

Starting from this apparent puzzle and the inability of a standard human capital model to explain the low incidence of women in the labor force, Contreras and Plazas (2010) posit that female labor supply is affected not merely by economic factors but by cultural ones as well. In Chile “machista” cultural values are relatively strong even among women, and beliefs about the sexes' social roles, including those transmitted intergenerationally by different ethnic groups (Fernández, Fogli, and Olivetti 2004; Fernández and Fogli 2009) have important predictive power in explaining women's LFP decisions. These findings are analogous to Fortin (2005), which document a negative association between self-reported conservative beliefs about gender roles and female labor supply. Similarly, the more a woman internalizes traditional cultural values, the less likely she is to join the labor market.¹³¹ These effects are strong enough to more than compensate for the positive effects of women's high average levels of education.

Similarly, Araujo and Scalón (2005) present a summary of evidence on cultural characteristics in

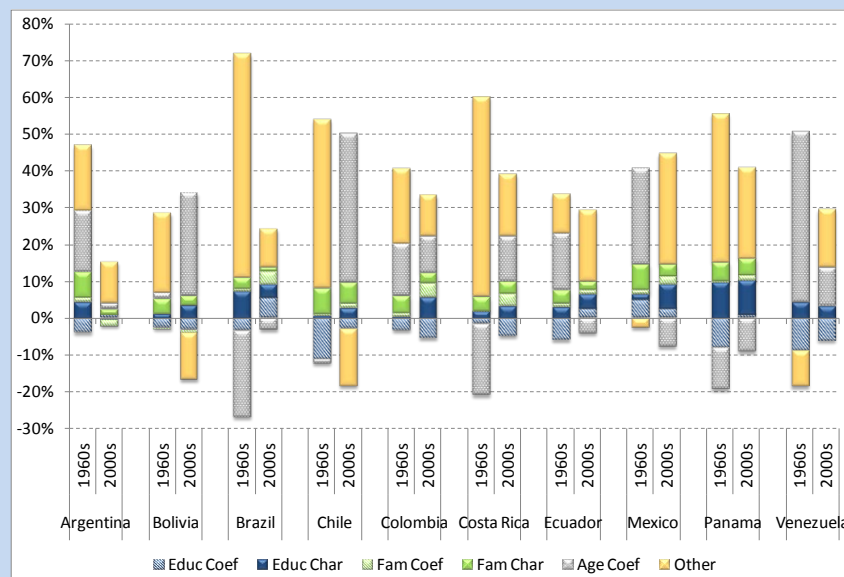
¹³¹ Contreras and Plazas 2010.

Brazil. Cultural aspects are so deeply entrenched that they are resistant to change. However, there are important changes in the organization of family and gender relations among younger generations.

Box 3.1. The single versus married gap in female labor force participation

The labor force participation (LFP) gap between single and married women has uniformly shrunk over time for all countries in the sample, as shown in the differential growth rates for married and single women (box figure).

Box figure. Decomposition of single and married gap in female labor force participation (1960s & 2000s)



Source: Chioda and Demombynes 2010; Integrated Public Use Microdata Series.

Differences in both endowments and coefficients associated to fertility contribute to the gap between single and married women's LFP. The reasons are multiple. Not only has the region experienced an increase in female-headed households with children but, conditional on fertility, married women tend to withdraw from the labor market. By contrast, single women with children, especially in urban areas, increase their participation, possibly reflecting tighter budget constraints because income cannot be pooled with a second earner.

In addition, it is likely that single mothers or female-headed households systematically differ from married women in some unobservable manner, such as having more progressive views toward gender roles or placing more importance on their careers. These women may feel less social stigma about their labor supply, which may also play a more central role in their identity. Similar arguments about binding budget constraints and diminished social stigma associated to LFP rationalize the much higher participation rates of African American women in the United States since the early 1900s.

Source: Chioda and Demombynes 2010; Goldin 1977, 2004.

As a result, there is less adherence to traditional attitudes toward gender roles in Brazilian society.¹³² A substantial proportion of the population maintains more conservative cultural positions toward the societal and familial roles of men and women. Preliminary evidence shows that cultural values

¹³² Araujo and Scalón 2005.

younger generations are in transition and that they affect decisions by both men and women about domestic work and the labor market. These dynamics are corroborated by Chioda and Demombynes (2010), even though for the youngest cohort in Brazil, marriage is still associated with a drop in the likelihood of LFP of 21 percentage points. Nonetheless, the correlation between female education and traditional gender attitudes is negative.¹³³ The more educated the female population, the lower the prevalence of women who self-report as having traditional gender attitudes (in the sense discussed in chapter 1).

3.3. A closer look at the interaction between family formation and education

The importance of education in married women's LFP decisions is evident not only in the specific LFP returns to education for the married subsample but also in contrasts with those of the single subsample (figure 3.7).

Primary education has a much weaker relationship with married women's LFP than with single women's, as evidenced in figure 3.7(b), where the difference in returns between married and single is charted. Several mechanisms could be at play, including more (unobservable) traditional views among married women about the division of labor between spouses. Married women also face lower opportunity costs associated with withdrawals from the labor force given the presumably positive income of their husbands. Married women may, however, face differential stigma in the labor force relative to single women and face a shorter menu of "socially acceptable" jobs, as was the case in the United States around the early and mid-twentieth century. For instance, in many countries it is common for young unmarried women to enter the manufacturing sector of the labor force, where they sometimes account for sizable shares of production workers.¹³⁴

For secondary education, the differences in returns across single and married women tend to be small and unsystematic. By contrast, higher education unequivocally benefits married women more, with tertiary education on average predicting a 40-percentage-point increase in the likelihood that a married woman will be in the labor force, essentially doubling the marginal effects of singles.

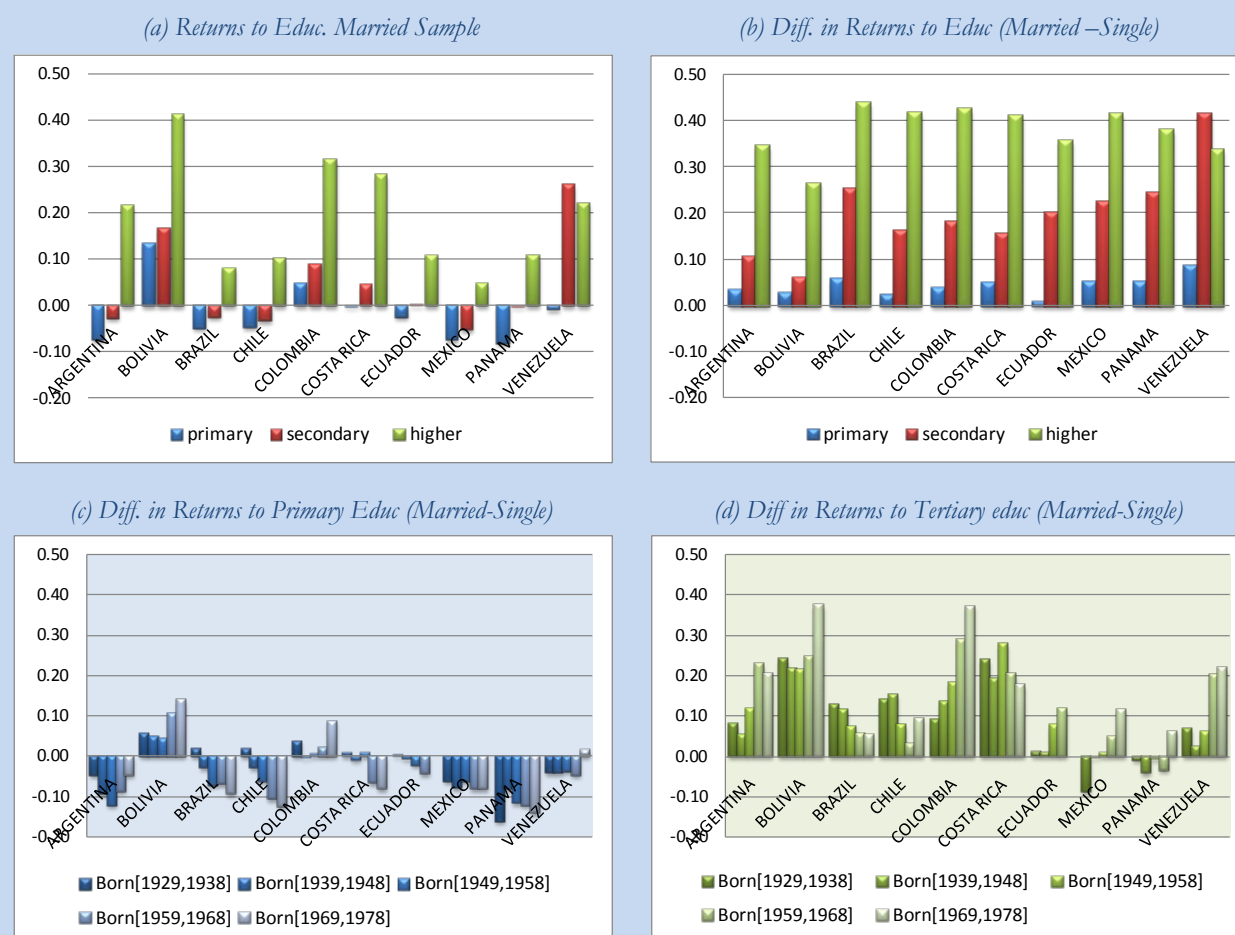
An analysis of the married or single differences in returns to education disaggregated by cohort is also instructive (figure 3.7, panels (c) and (d)). Except for Bolivia and Colombia, primary education has higher correlation with participation not only to singles but also to younger cohorts of singles, so there is an increasing gradient in cohort. Among women with some tertiary education, cohort patterns are less systematic.

It would be wrong to conclude that married women with tertiary education work more in percentage terms than the rest of the sample. On the contrary, nonmarried women's (single, widowed, or with absent spouses) participation rates are considerably higher than their married counterparts, who are less sensitive to education in their labor supply decisions. By contrast, married women exhibit significantly more heterogeneity in their LFP decisions. The results in figure 3.7 merely indicate that attachment to the labor force among married women is on average significantly higher at higher levels of education than at lower levels of education, and that married women are more responsive to higher education in their LFP decisions than single, highly educated women.

¹³³ Araujo and Scalón 2005; Fortin 2005; Contreras and Plazas 2010.

¹³⁴ Mammen and Paxson 2000.

Figure 3.7. Difference in “returns” to education levels in terms of likelihood of economic participation, married sample marginal effects compared with singles or total sample effects, women aged 25–55.



Note: In Mexico, education levels are not necessarily completed; the omitted category is no education; marginal coefficients are expressed in percentage points.

Source: Chioda 2011; Integrated Public Use Microdata Series.

As noted earlier, the literature identifies five sets of factors driving the rise in female LFP: rising education levels, changes in marriage patterns and declining fertility, urbanization, increases in the use of time-saving household technology, and changes in the sectoral structure of the economy. Changes in education and in family formation account for two-thirds of the changes in LFP between the 1960s and the 2000s. The relationships between LFP and the remaining factors—urbanization, household technology, and sectoral structure of the economy—are precisely estimated by Chioda and Demombynes (2010) and speak to the tradeoffs that women face.

3.4. Urbanization, household technology, and sectoral structure of the economy

3.4.1 Urbanization

Over the twentieth century, LAC has evolved from predominantly rural and agricultural economies to largely urban ones. Urbanization—the progressive concentration of people in urban areas—has changed the economic opportunities available to women and may have changed social norms, facilitating an increase in the female labor supply. At the same time, urbanization implies a weakening of the extended family, especially for individuals who relocate from rural areas to cities. A social network weakened by a loss of geographic proximity to extended family means a loss of economies of scale in home production, such as household chores and child rearing. Some analysts have even hypothesized that migration of women from rural areas created a mismatch between demand and supply of skills and contributed negatively to female LFP trends.¹³⁵

In Chioda and Demombynes's (2010) analysis, urban settings appear to increase the likelihood of female LFP in the region (excluding Bolivia) by around 7 percentage points conditional on the other four key drivers. Excluding Ecuador, for which the distinction between urban and rural is available only in the latest census year, women in urban settings are between 6 and 13 percentage points more likely to engage in economic activities for pay. As a benchmark, these effects are somewhat larger in absolute value than the (negative) marginal effects associated with the presence of a child under age 5 in the household.

In urban centers, adherence to traditional gender roles may be weaker, and low-income households may face tighter budget constraints (if the cost of living is higher in urban centers, for instance). All else equal, both of these factors should contribute to higher female LFP in urban areas. In turn, higher socioeconomic status households simultaneously face higher opportunity costs from withdrawing from the labor force if wages are higher and economic opportunities abound.

Comparisons of the upper (full sample) and lower (married sample) panels of figure 3.8 indicate that there is also a negative and significant association between marriage and urban LFP, because the marginal effects of the urban indicator are milder in the married sample than in the full sample. As already hypothesized, weaker social norms regarding women in the work force and a wider menu of economic opportunities in urban settings are both consistent with this observation. This effect, however, tends to be smaller than the more general marriage effects documented earlier. Although not reported here, the impact of urbanization on the LFP effect of a child under age 5 in the household is ambiguous. This result could be a reflection of the counterbalancing LFP forces of working more in an urban setting than in a rural one, but less when needing to fulfill child-care responsibilities. The interactive effect of being married and having children is both positive and significant. This may reflect additional budget pressures, though the impact of this interaction in urban settings remains unclear.

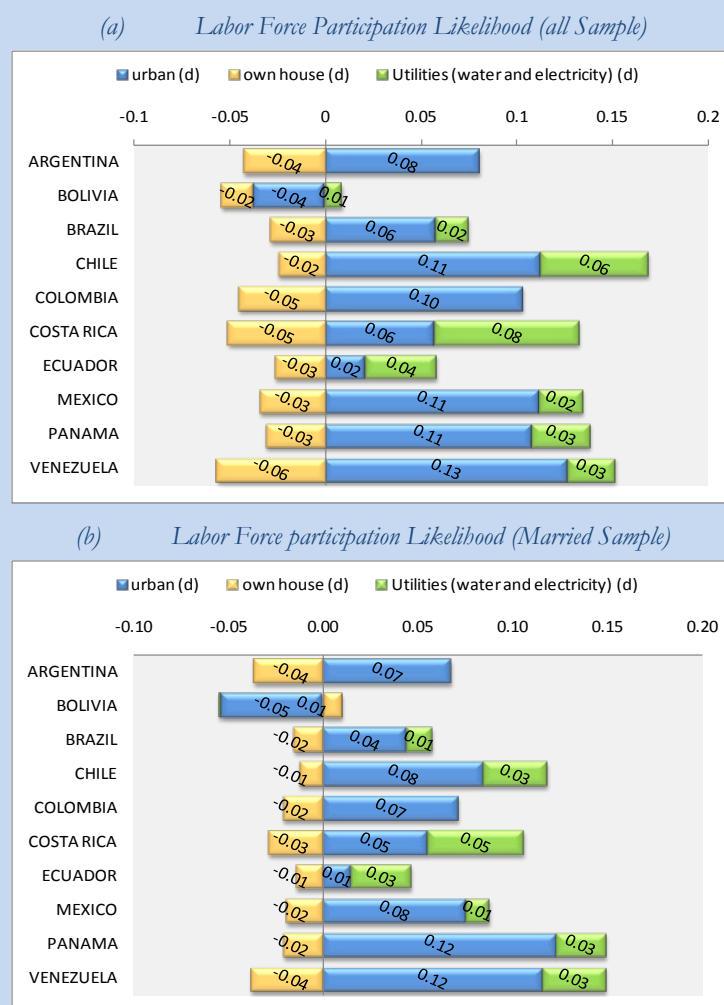
3.4.2 Household production technology

At the outset of economic development, specialization in the economy manifests itself as economic specialization within the household, where the division of labor in home production is shaped by traditional gender roles. As a result, the burden of home production tends to fall disproportionately

¹³⁵ See Kemal, Naci, and Gundogan (2007).

on women. The diffusion of time-saving technology (household appliances like washing machines and microwaves, for example) can increase female LFP, as these technologies reduce the demands on homemakers' time and increase the opportunity cost of remaining out of the labor force (figure 3.8).

Figure 3.8. Economic participation returns with respect to urban status, house ownership, and time-saving technology, women aged 25–55



Note: The variable access to water and electricity is not present in the Colombia and Argentina's Integrated Public Microdata Series standardized censuses, thus it is omitted.

Source: Chioda and Demombynes 2010; Integrated Public Use Microdata Series.

The household technology revolution played an important role in increasing female LFP rates during the twentieth century.¹³⁶ The decline in the relative price of home appliances alone accounted for about 10 to 15 percent of the increase in female LFP in the United Kingdom from 1975 to 1999.¹³⁷ In the United States the decline in home appliances prices accounted for nearly 8.6 percent

¹³⁶ Greenwood, Seshadri, and Yorukoglu 2005.

¹³⁷ Calcavanti and Tavares 2008.

of the rise in female LFP over the last half century.¹³⁸ Chioda and Demombynes's (2010) investigation of the hypothesis that the increasing availability of home appliances was a significant force in the rise in female labor supply is limited by the availability of data in the integrated census. In particular, they can only proxy household production technology with access to electricity and running water, which are necessary inputs to these appliances.¹³⁹ This indirect measure is likely to underestimate the real effects of time-saving technologies on female LFP, since it is far from a perfect proxy. Further, one could argue that availability of piped water and electricity in several developing countries also constitutes an indirect measure of household income. To mitigate the confounding effects and attempt to disentangle income effect from home production technology, an indicator of home ownership is included in Chioda and Demombynes's set of controls.

Access to water and electricity is unambiguously associated with a higher likelihood of participation in the labor market. While modest, the effects are not negligible, ranging between 2 percentage points and 8 percentage points in Costa Rica (in Bolivia they are indistinguishable from zero). To put these figures in perspective, the average reductions in LFP associated with the presence of a child younger than five and the number of children in the household hover around 6 and 1.5 percentage points, respectively. The effects of availability of water and electricity capture LFP decisions for fairly disadvantaged households. Comparisons of married and nonmarried samples reveal only very slightly larger effects for the nonmarried group (approximately 1 percentage point). An important caveat is that the relationship between LFP and access to electricity and running water may be subject to reverse causality if home ownership is only an imperfect measure of income: being active in the labor market implies earning income with which one can purchase access to electricity and water. Nevertheless, these correlations are instructive and at a minimum, the analysis confirms that they are as expected.

To the extent that home ownership is a decent proxy of income, its effect on female LFP can be thought of as a kind of income effect, which would be expected to be negative if leisure is a normal good. This intuition is confirmed with the marginal effects of homeownership across countries ranging between 2 percentage points and 6 percentage points and little difference between the married and single samples.

3.4.3 Structure of the economy

From the onset, this study has invoked social norms and their potential role in shaping female LFP, in particular among married women. The notion of a "socially acceptable" job that differs according to women's marital status, in LAC as in other developed regions, needs to be internalized asymmetrically by single and married women. For some women, these constraints will be binding. Describing the complete specialization of genders between home and market production at the beginning of the twentieth century in the United States, Goldin (1990) states, "The new ideal of womanhood gave rise to what has been called 'the cult of domesticity.' This process left the wife in charge of the domestic realm and her husband in charge of supporting the family." In this environment a married woman's employment signaled that her husband was unable to provide adequately for his family and, consequently, most women exited the workplace upon marriage.

This stigma does not attach to white-collar work, since the women in these jobs typically have more educated (and white-collar) husbands who are adequate providers. Further, the growing

¹³⁸ Leukhina 2005

¹³⁹ The variable indicating access to water and electricity is not available in Colombia's and Argentina's Integrated Public Use Microdata Series standardized censuses.

concentration of educated women has diminished the signal that women in the labor force are unequivocally motivated by money and could deflect the perception of inadequate income generated by the husband.

Changes in the sectoral structure of the economy—such as the expansions of tertiary and public sectors relative to manufacturing—are considered one of the main demand-side factors responsible for trends in female LFP in developed countries. These sectors are less bound by the strictures of social norms in manufacturing, so female employment could grow with fewer constraints set by norms. The shift of economies to larger shares of services may thus create more employment opportunities for women.

Unfortunately, the ability to adequately investigate this hypothesis is limited by the available data and by narrow variation in sectoral shares. The details of the Integrated Public Use Microdata Series data permit exploiting only within-country time-series variation in these variables. Nevertheless, with these caveats in mind, a limited set of results are offered here. In Argentina, Bolivia, and Brazil, the sectoral composition of the labor force is unrelated to female LFP, whereas in Chile, Colombia, and Costa Rica, the proportion of workers in the tertiary sector predicts a roughly 15- percentage- points increase in female LFP. In turn, expansion in the public sector contributes to female LFP in Ecuador, Mexico, Panama, and Venezuela.

Chapter 4. Family formation and patterns of duration & transition across occupational states

The decision to participate in the labor force is an important margin and one that remains very sensitive to education and family circumstances. It is particularly elastic to changes in marital status. By contrast, participation patterns of single women, whether with children or not, have been catching up to those of men at a fairly steady pace—from the onset of the “quiet” revolution in the 1970s and 1980s.

So far we have focused on labor force participation (LFP) without distinguishing between the various occupational states. To deepen the understanding of female economic participation, this chapter considers the extent to which women and men differ in their patterns of transition across occupational states (such as formal employment, informal employment, unemployment, and out of the labor force) and in the amount of time they spend in each occupational state.

The distribution of workers across sectors can have multiple causes. Differences in occupational choices can be traced back either to issues of human capital or to differences in preferences over job characteristics.¹⁴⁰ Together, these lead to differences in the comparative advantages across jobs that a well-functioning labor market will allocate differentially across sectors. Alternatively, employers may discriminate explicitly against women, effectively rationing them into less desirable jobs. In fact, these two hypotheses are not mutually exclusive. Different levels of human capital that appear to drive occupational choice may actually be driven by low expectations of possible job opportunities. Women’s preferences for certain types of jobs may be driven by social norms concerning, but not limited to, traditional division of labor within the household.¹⁴¹

These considerations lead to the debate in the literature surrounding the informal sector, defined as workers not covered by formal labor benefits. The informal sector accounts for roughly half of Latin America’s labor markets. One view, broadly analogous to the dual labor market literature in the United States, sees informality as disguised unemployment. In this view, the informal sector receives workers who have comparative advantage in formal sector jobs but have lost one or are unable to find one, perhaps because of discrimination. An alternative view sees workers as indifferent toward formality—transitioning between it and informality to take advantage of profitable opportunities.¹⁴²

Marital status and fertility decisions appear to play crucial roles in explaining the gender differences in transition and duration patterns. Men experience different transitions and durations than married women but similar transitions and durations to single women. Family formation is negatively

¹⁴⁰ Boeri, Del Boca, and Pissarides 2005; Dolado 2002.

¹⁴¹ Akerlof and Kranton 2000.

¹⁴² See Lucas 1978.

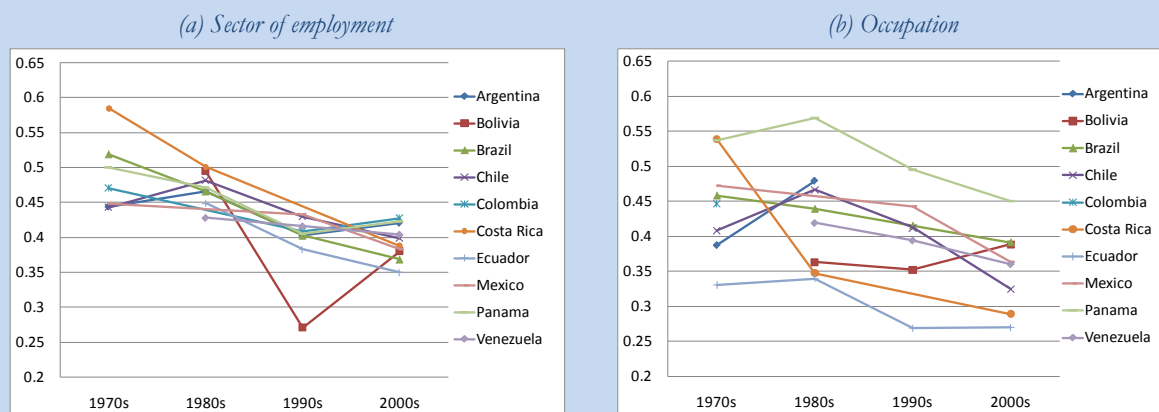
correlated with formal sector participation but is positively correlated with informal self-employment. These empirical regularities further corroborate the household perspective approach undertaken here, highlighting the importance of intrahousehold allocation of resources and implicitly assigning relevance to the underlying decision-making processes.

Box 4.1. Gender sectoral and occupational concentration

Two important indicators of gender inequality in labor market outcomes are the shares of male and female employment in given sectors. The exceptional increase in female labor force participation (LFP) rates in Latin America and the Caribbean (LAC) has not been limited to traditional sectors or occupations but has included increasing integration into new areas.

Making use of harmonized data from the Integrated Public Use Microdata Series, segregation measures can be computed. The box figure presents the evolution of the Duncan Index of gender segregation in sector of employment and worker occupation. The value of the Duncan Index ranges from 0 (no segregation) to 1 (total segregation). Its value has a natural interpretation, which is the percentage of workers that need to switch sectors or occupations to obtain an equal distribution of employment. Thus, a value of 0.60 implies that 60 percent of women would have to change jobs for the employment distribution be equal. Between 1970 and 2000, gender segregation in sector of employment and occupation have decreased significantly in all countries in LAC: on average, the Duncan Segregation Index for sector of employment decreased from 0.49 in 1970 to 0.39 in 2000 (panel a), while the index for occupation fell from 0.45 to 0.35 (panel b).

Box figure. Duncan Segregation Index, selected Latin American and Caribbean countries



Source: Author's estimates using data from the Integrated Public Use Microdata Series.

Compared with a selected group of high-income OECD countries (Canada, France, Portugal, Spain, and the United States), the level of sectoral segregation in LAC remains about 10 percentage points (30 percent) higher, though, as previously mentioned, the index has fallen 10 percentage points since 1970. The level of occupational segregation in LAC is about the same as that of the comparison group of OECD countries. In summary, indexes of gender segregation by sector of employment and by occupation in LAC have decreased significantly over the past three decades. Gender segregation by sector of employment in LAC is still high relative to high-income OECD countries, whereas occupational segregation is now at comparable levels.

Given the high share of informal workers in LAC, caution should be exercised when comparing segregation indexes across regions. Nevertheless, the levels and evolution of these indexes, together with the remarkable increase in female LFP over the same period, imply that women in LAC have entered the labor force without being confined to sectors traditionally dominated by women.

The rest of this chapter presents evidence of gender heterogeneity across occupational states. It then explores these gender differences and attempts to discern whether the observed patterns of mobility

reflect discrimination against women or underlying patterns of comparative advantage.

4.1 Do men and women differ in their transitional behaviors?

The perceived overrepresentation of women in informal jobs (compared with formal jobs) is a leitmotif in the gender literature in developing countries.¹⁴³ On the one hand, female participation in informal jobs may result from barriers to formal jobs, such as discrimination. On the other, the internalization of traditional gender roles, comparative advantage, and economic efficiency may shape the household decision-making process, leading women to specialize in home production. In particular, child rearing may constrain economic participation in the formal sector, largely through the need for flexibility to tend to household responsibilities. In this view, women have a comparative advantage in informal labor.

Bosch and Maloney (2010) characterize transition and duration patterns for Argentina, Brazil, and Mexico (box 4.2).¹⁴⁴ In particular, the authors examine how patterns of labor market mobility differ between women and men and why this might be. They look at whether barriers to the formal sector force women into the informal sector or whether, in the household decision-making process, women become responsible for child rearing, which constrains their participation in formal jobs largely through the resulting need for flexibility.

Box 4.2. Definitions and sample

Bosch and Maloney (2010) develop a search model to inform a set of statistics useful for examining labor market dynamics. In particular, it nests two competing views of the informal sector within a simple search model that can also incorporate household constraints that workers may face.

Definitions: The authors follow the International Labor Organization in dividing employed workers into three employment sectors: informal salaried (I), informal self-employed (SE), and formal sector (F).

The remainder of the sample is divided into two nonemployment groups identical to those in the advanced country literature: those outside the labor force (OLF) and the unemployed (UNM). As is standard, these groups are distinguished by whether the individuals are actively looking for a job.

Sample: The sample is divided into three age groups: less than 24 years of age, 24 to 40 years of age, and more than 40 years of age. The surveys are sampled monthly for Brazil, quarterly for Mexico, and biannually for Argentina and yearly transitions are computed as the common transition interval.

This analysis requires panel data, and the number of countries covered is therefore limited. Argentina, Brazil, and Mexico account for 70 percent of the Latin American work force and include a range of potentially segmenting labor market legislation and institutions that would lead to queuing, such as minimum wages and union power. Generalization to the rest of Latin America may

¹⁴³ See Cunningham (1999).

¹⁴⁴ The exercise can easily be extended to other countries, but the need for panel data limited the regional coverage. Data sources were Argentina: Permanent Household Survey, 1993–2001; Brazil: Monthly Employment Survey, 1985–2002; and Mexico: Urban Employment Survey, 1987–2002. All surveys have yearly periodicity. The analysis of gender differences in labor market dynamics is akin to the revealed preference approach in microeconomics and to revealed comparative advantage in international trade. This approach is generally favored over a parametric one when sufficient data are available, since it relies on observed behavior and fewer behavioral assumptions.

not be straightforward, but Argentina, Brazil, and Mexico are not obviously outliers among developing countries and their experience is likely to be relevant.¹⁴⁵

Several patterns emerge, suggesting that women are substantially different from men in their transition behavior:

- Women spend substantially more time out of the labor force.
- Women transition less often into formal employment than into self-employment.
- Women experience a particularly dynamic channel of transition between informal self-employment and being out of the labor force.

These findings are consistent both with a theory of discrimination against women in formal employment and with the hypothesis that women's comparative advantage (in this case, preference for distinct types of jobs) changes with family formation. The next section attempts to disentangle the relative importance of the two hypotheses.

The role of family formation. Bosch and Maloney (2010) divide the female sample into several subcategories of single or married, and with or without children.¹⁴⁶ If family considerations—*not* discrimination against women—drive these patterns, it might be expected that single women would have mobility patterns similar to men.

As with economic participation decisions, Bosch and Maloney find that both the sectoral allocation of women and their patterns of transition vary greatly with marital status and fertility decisions. Single women are overrepresented in formal employment by perhaps 15 percentage points. These figures considerably weaken the argument that women are uniformly discriminated against in the labor market. Married women (with and without children), however, tend to be underrepresented in the formal sector (*preference discrimination* in Becker's terminology). The search intensity summary statistics of single women now very closely mimic those of men. Most of the difference in the duration of time spent outside the labor force can be explained by marital status. In fact, Argentine single women now spend less time outside the labor force than men. In Mexico single women spend 3.13 years outside the labor force, compared with 5.1 for their gender overall, far closer to the mean spell of men, at 2.57.

Further, transitions from self-employment to inactivity seem correlated with family formation, suggesting either a changing comparative advantage or possibly discrimination. For instance, if an employer observes that, on average, women, with children are more likely to be absent and thus less productive, the employer might prefer to hire men or other women, given a choice (*statistical discrimination* in Becker's terminology). Alternatively, because of social norms and even economic circumstances, women may consider it optimal to increase home production, by fully specializing or opting for a more flexible work arrangement afforded by the informal sector in the absence of "legal" part-time work arrangements.

¹⁴⁵ See Botero et al. (2004) and Heckman and Pages (2004).

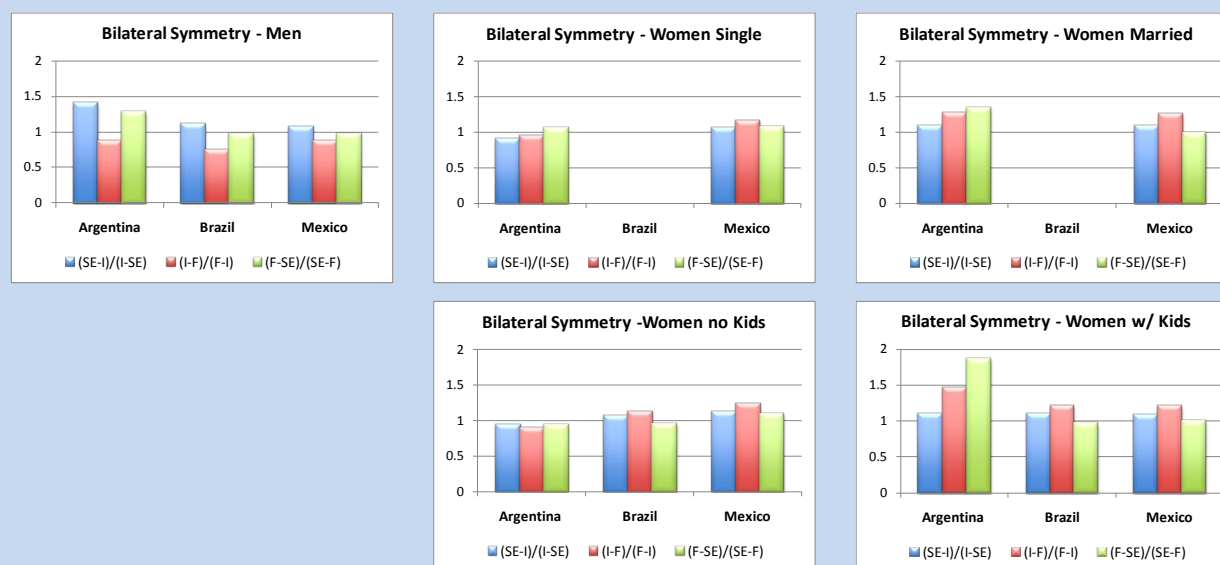
¹⁴⁶ Ideally, one would simply have a division of single, married, and married with children, but the Brazil data do not include a marital status variable.

4.2 Do the flows between the informal and formal sectors reflect rationing or choice?

A simple comparison of transition probabilities would not distinguish between rationing and choice. Hence, Bosch and Maloney (2010) build a comparative advantage statistic (C-statistic), which intuitively rescales the raw transition probabilities by controlling for search intensity (separation probabilities) and openings of employment opportunities in the “receiving” sectors.¹⁴⁷

The alternative views of the role of the informal sector suggest the shape of flows between states of employment. If, for instance, women are rationed out of formal employment for reasons of discrimination such that the informal jobs they take are inferior, there should be flows toward formal jobs but few in the reverse direction.¹⁴⁸ If, on the other hand, flows are driven by households’ calculations that determine the comparative advantage a worker has in each sector, there should not be such asymmetries of flows. Thus, the symmetry of the Cs offers a potential test between the two views of informality (figure 4.1).

Figure 4.1. A test for bilateral symmetry based on comparative advantage statistics



SE is Self-employed; I is Informal salaried; F is Formal sector employed.

Note: Each bar corresponds to the ratio of comparative advantage statistics for the bilateral movements between two sectors. For Brazil the married-single distinction is not available.

Source: Bosch and Maloney 2010.

For competitive markets where workers have allocated themselves freely across sectors, a high *C*-statistic for the self-employment sector for a worker working in the formal sector implies that the

¹⁴⁷ *C*-statistic can be seen as the worker’s probability of transiting from sector *k* into sector *l* over its probability of leaving sector *k*, relative to the analogous ratio for all the sectors. Thus, the *C*-statistic approximation takes the same form as Balassa’s (1965) measure of revealed comparative advantage in trade, where the measure is a country’s exports of a good over total exports relative to the global analogue.

¹⁴⁸ If markets are segmented we should see relative *C*s capturing largely unidirectional flows from informality into formality: Workers are born, enter informality, graduate to formality, and retire.

worker has a comparative advantage in the self-employment sector. Symmetry should be expected across sectors: whatever preferences, abilities, or household constraints led a worker who chooses self-employment to have a comparative advantage in formal sector employment should also lead to an equivalent measure of comparative advantage from formal sector employment to self-employment.

This symmetry would not necessarily occur in the presence of barriers to mobility or gender discrimination where one sector dominates the other. The distortion alters the C-statistic by changing the relative attractiveness of formal and informal positions. If markets are segmented, relative C's capturing largely unidirectional flows from informality into formality should be observed. The symmetry of the Cs is thus informative in determining which of two views of why women are found more in the informal sector as they marry and have children is likely to explain the sectoral distribution of men and women.

Figure 4.1 presents a graphical test of symmetry, emerging from the comparison of comparative advantage statistics for both bilateral flows for two given sectors (the ratio of C-statistics from the formal to the informal salaried sector, divided by the C-statistics for the reverse movement). Symmetry in the bilateral movements implies a ratio in the neighborhood of one.

For *men*, the ratio of C-statistics for all the cross-sectoral transitions is close to one, suggesting reasonably unobstructed flows, with the exception of Argentina, where breaking into self-employment seems difficult. In all three countries, the ratio of comparative advantages for transitions between informal and formal sector is less than one, suggesting perhaps some queuing to enter formal employment from informal employment.

Disaggregating women by family status does not reveal dramatic asymmetries in most cases. The transition of greatest interest—between the ubiquitous self-employment and formal sector employment for single women and women without children—is symmetrical in all cases and greater than one, suggesting that women do not face even the queuing that males do in Argentina. When women marry or have children, things change somewhat, but only in Argentina. The ratio for married women rises from 1.07 to 1.35 and then, with the arrival of children, jumps to 1.86. This suggests that in Argentina women with family responsibilities find themselves increasingly behind in the queue. By contrast, no such evidence appears in either Mexico or Brazil, where symmetry appears to be the rule.

The ratios present some interesting results. For single women in Argentina and Mexico, access seems easier than for men, perhaps reflecting a preference for some unobservable skills, such as discipline, if young women are on average more disciplined than young men.¹⁴⁹

What is surprising is that for married women in Argentina and Mexico, and women with children in all three countries, the ratios strongly favor transitions from informal self-employment to formal employment, suggesting, if anything, a barrier to the flows into informal self-employment. The consistency of the result across countries and the steady rise in Argentina are puzzling. The surprisingly low ratios for women with no children may reflect some mix of coupled but unmarried women in this category. The ratios reflect a high degree of symmetry, even in Argentina, suggesting few barriers to mobility between the two sectors of informality, regardless of family structure.

¹⁴⁹ Sklair 1993; Tiano 1994.

This exercise sheds additional light on the finding that patterns of mobility change according to family structure. The relative symmetry across family structures in Mexico and Brazil suggest that this is not due to a sudden lack of access to formal jobs, for instance.

In OECD countries, Boeri (2005) documents a strong relationship between household formation and part-time work (see chapter 6). The analogy to the developing country case is strong on all points. Using cross-sectional data from Mexico, Cunningham (1999) found single women to be overrepresented in the formal sector but married women to be underrepresented, suggesting that household formation may play an important role. The labor code restrictions on part-time work (that are common across the region) have also been postulated as a reason for the low LFP of women in Chile. In the same way that such restrictions lead to higher rates of self-employment and family labor in Southern Europe, they may likewise lead to informal employment in developing countries. In a companion paper discussed in detail in chapter 6, Bosch and Maloney (2011) find support for this hypothesis in Argentina. Using a difference-in-difference approach to exploit the legislation liberalizing part-time work, they find that women with children were 5 percentage points more likely to shift into formal part-time work than married women without children after the legislation was enacted.

4.3 Evidence across the business cycle

To further test the robustness of their results, Bosch and Maloney (2009) exploit time-series variations across the business cycle as an identification strategy, since a standard segmentation view would suggest that during upturns there is increased access to formal jobs and fewer flows back into informality. They find this standard view not to be supported by evidence for men in Mexico. Rather, flows are overall symmetrical and procyclical, consistent with rematching across sectors, as has been found in industrialized countries with cyclical rematching within formal employment. Replicating this exercise for women, the pattern holds and does not weaken with childbearing.¹⁵⁰

More generally, women's patterns across the business cycle are broadly consistent with those of men and with Bosch and Maloney's (2009) view on adjustments in Latin American labor markets. Inactivity is highest among married women and women with children, is relatively acyclical, and shows a secular decrease between 1987 and 2005, consistent with an increase in female LFP rates documented earlier in this report (see stylized fact 1 in chapter 1).

Unemployment patterns in the aggregate are broadly similar for men and women, though single women and women without children show higher levels than men, perhaps reflecting their apparent comparative advantage for formal work and hence a reluctance to take on informal work.

Women exit all sectors of employment and become inactive at much higher rates than men; for self-employment, the female exit rate is higher than the male rate by a factor of 10. There is also evidence of greater cyclical volatility among women, consistent with added worker effects whereby women hold onto their jobs in downturns to supplement family income.

Women also share the countercyclical movements in separations into unemployment and the sectoral patterns of volatility. For men, formal employment is the state with the least volatility in separations, whereas informal salaried employment is the state with the highest volatility.¹⁵¹ Women

¹⁵⁰ Insufficient data make it impossible to test this in Argentina, where one might expect a different outcome.

¹⁵¹ Bosch and Maloney 2010.

exhibit more muted cyclical patterns across all sectors. There is no evidence, at least in Mexico, that women are disproportionately dismissed in downturns.

Consistent with recent research, the patterns of accession to employment—in this case formal employment—are what drive overall aggregate movements, not separations.¹⁵² For men, hiring into formal employment from outside the labor force is far more volatile than either of the other two sectors, or of separations. The same is true for accessions from unemployment. So what drives the movements in relative shares across the business cycle is not the increase in separations, which is relatively invariant, but the fact that formal employers cease to hire while informal employment continues.

The pattern for women is similar, but with a twist. There is a clear secular increase in transitions from outside the labor force to both informal sectors. This drives both the decline in the incidence of being outside the labor force as well as the falling formality rates: the rising participation is largely into the informal sectors. Abstracting from this trend, again, it is clear that formal hiring adjusted most during the 1995 downturn. If anything, accessions from unemployment are slightly more muted among women, although they do not appear to share fully in the post 2000 recovery.

In sum, behavior across the business cycle reveals two points. First, in Mexico and Brazil, women's extreme relationship to self-employment—and its shift with family status—is a function of changing comparative advantage, not discrimination. In Argentina, there is evidence of queuing and that increased family responsibilities may delay selection from the queue. Second, the evidence from Mexico does not suggest that women behave particularly different across the business cycle, either in separations from formal employment or in accessions to formal employment from outside the labor force and unemployment. Once the different average rates of transition are acknowledged, the proportional movements do not seem particularly different between the two genders.

4.4 What explains young women's overrepresentation in formal employment?

The finding of an absence of rationing, along with the overrepresentation of single women in formal employment, suggests that single women are perceived as being better suited for formal employment. In fact, in the tourism, teleservices, and in-bond (or *maquila*) industries, women are employed in higher proportions than men, and the literature suggests that this is in response to employer demand.

In Mexico's *maquila* industry, women were perceived as “docile and dexterous,” traits necessary for a highly competitive, repetitive assembly process.¹⁵³ In the teleservices industry in Jamaica, young women are assumed to be more productive at secretarial work due to their greater patience, dexterity, and flexibility in learning new skills.¹⁵⁴ In the tourism industry, women are assumed to be more productive because of their presumed docility, reliability, punctuality, flexibility, diligence, patience, domestic skills, cooperative disposition, and willingness to take orders.¹⁵⁵

¹⁵² Shimer 2006, 2009.

¹⁵³ Sklair 1993; Tiano 1994.

¹⁵⁴ Pearson 1997.

¹⁵⁵ Chant 1991.

The shift from formal work and into self-employment and inactivity occurs when women form families. Differences in LFP and sector of employment can be heavily influenced by norms.¹⁵⁶ If these norms exist, they appear to apply to wives but not to unmarried women or at least to be less binding for unmarried women. In many countries it is common for young unmarried women to work in factories, where they sometimes account for sizable shares of production workers.

Why should social norms dictate that white-collar jobs are acceptable for married women, whereas blue-collar jobs are not? One explanation is that women dislike factory work and avoid it if possible; norms may simply reflect women's preferences. Descriptions of long work hours and poor health standards in Mexican maquiladoras could render marriage and exit from the labor force relatively attractive.¹⁵⁷ Nonetheless, factory work does confer some financial independence on women that may not otherwise be available, and it is not clear why factory work should be inherently more distasteful to women than to men.

Another explanation is that societies stigmatize the husbands of women in blue-collar jobs.¹⁵⁸ In the view of the prevailing culture, "only a husband who is lazy, indolent, and entirely negligent of his family would allow his wife to do such labor." Why would such a stigma exist? Goldin (1995) hypothesizes that this stigma reinforces a "powerful social norm that obliges men to provide for their families." A wife who takes a blue-collar job signals that her husband is shirking his obligations. The stigma does not apply to white-collar work, since women in these jobs typically have more educated (and white-collar) husbands who are adequate providers.

¹⁵⁶ Mammen and Paxson 2000; Goldin 1995.

¹⁵⁷ Cravey 1998.

¹⁵⁸ Goldin 1995.

Chapter 5. Gender differences in earnings

A striking feature of the physiognomy of the trends in female labor force participation (LFP) in Latin America and the Caribbean (LAC) since the early 1960s is the separate trajectories of single and married women. Further analyses of the underlying determinants of participation (Chioda and Demombynes 2010) and occupational states (Bosch and Maloney 2010) confirm that the decision regarding labor market participation is intertwined with that of marital status and fertility.

This chapter aims to shed light on the dimension of economic activity embodied by market wages, which ultimately determine the market returns to human capital investments and represent the opportunity cost of specialization in home production. Market wages are one of the major ingredients in decisions regarding occupational sector and ultimately, participation. The standard neoclassical view of the family and labor supply would explain LFP in terms of the costs and benefits of participation in the labor market. While this framework constitutes a good approximation to male LFP, several authors have argued that female labor force decisions hinge on more complex tradeoffs, as discussed in the introduction of the report. After documenting a large drop in the own-wage elasticity of labor supply of married women in the United States between 1980 and 2000 as well as a decline in its responsiveness to husband's wages, Blau and Kahn (2006) conjecture these declines may result from factors like changing identities and career-mindedness, as described by Goldin (1990).

Wage comparisons across different sets of occupations can be misleading. There are numerous other important characteristics (pecuniary or otherwise) that workers value and take into account when making their labor supply and sectoral decisions. These characteristics include, but are not limited to, riskiness, stability over the business cycle, opportunities for promotion, career advancement, learning, and on-the-job training. All of these elements are reflected in differences in the age-earnings profile and, perhaps most important for women, the flexibility associated with each job.

Fortin (2005), for instance, finds that nonwage characteristics of jobs are better predictors of women's employment in a sample of OECD countries. Specifically, women value whether a job is "useful for the society" and, in the case of part-time occupations, a job's "working hours." In contrast, "good pay" is not correlated with the labor market participation decision. In a later study, Fortin (2008) investigates the role of greed and altruism in explaining the gender wage gap. She relies on longitudinal data that allow her to capture premarket psychological attributes and therefore minimize ex-post rationalizations by respondents. Women tend to score higher on most of the factors that are predictive of financially less attractive labor market outcomes. For example, women hold more altruistic values than men and rank opportunities to "help others or be useful in society" higher in their career selection.

These observations provide insight and help contextualize the evidence described below, but also set the stage for a discussion of recent research proposing a new set of explanations for gender

differences in labor market outcomes: differences in men and women's psychological attributes and preferences that may make some occupations more attractive to women and others more attractive to men.

Finally, unfavorable attitudes toward women have been shown to soften as countries grow and more women enter the labor force (Goldin 1995; Fernandez, Fogli, and Olivetti 2004; Fernandez and Fogli 2009; stylized fact 4 in chapter 1). Bosch and Maloney (2010) and Chioda and Demombyens (2010) present additional evidence consistent with the hypothesis. In fact, single women's participation rates and behavior in the labor market are very similar to those of men, suggesting that even if a discrimination argument can be made, it does not apply to *all* women. This report does not downplay or dismiss the role of discrimination in the labor market nor its policy relevance, but we highlight alternate theories because they are relevant for policy and welfare and essential to understanding gender differences in participation, even in the desideratum of no discrimination.

In light of these caveats, it is difficult to interpret gender earnings gaps as evidence of discrimination against women, whether outright or statistical, since the unexplained component of earnings will include differences due to the unobserved characteristics of both workers and jobs.

5.1 Recent findings on gender wage gaps in Latin America and the Caribbean

For nearly two decades the increase in female LFP was accompanied by a slow but steady rise in wages¹⁵⁹ relative to men and in market returns to education, such that women in most countries contribute around one-third of households' incomes.¹⁶⁰

In an analysis of 15 countries in the region with data covering the end of the 1980s, Psacharopoulos and Tzannatos (1992) show that human capital accounts for one-third of gender wage differentials, leaving a large portion of wage gaps unexplained. By the middle of the current decade, however, most Latin American countries had closed the gender gap in educational attainment,¹⁶¹ motivating in part an updated analysis of the current gender wage gap.

Most studies agree that to manage their housework and child-care responsibilities, women may permanently or temporarily withdraw from the labor market or choose occupations with flexible or fewer working hours.¹⁶² To a certain extent, the results from the previous chapters call for a more nuanced view, since fertility is not a perfect predictor of participation.

Hoyos and Ñopo (2010) undertake a comprehensive analysis of the wage gaps¹⁶³ in 18 countries in LAC (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, Paraguay, El Salvador, Uruguay and

¹⁵⁹ The analysis of gender wage gaps is easier in countries whose labor markets are dominated by formal salaried employment. To the extent that most workers are either self-employed, employees in family enterprises, or are employers, the analysis of gender wage gaps is less comparable to the literature from developed countries, where most of the labor force is employed in formal salaried positions. In particular, some of the earnings reported by self-employed workers and employers may not correspond just to labor earnings, but may include capital income.

¹⁶⁰ Duryea et al. 2004.

¹⁶¹ Duryea et al. 2007; Hausmann, Tyson, and Zahidi 2008.

¹⁶² Tenjo 2006.

¹⁶³ Throughout the report the terms "gender wage gap" and "gender earnings gap" are used interchangeably. In the analysis, the measure used corresponds to hourly earnings, which include wages for salaried employees and income from self-employed workers and employers.

Venezuela) which, together, account for almost 90 percent of the region's population.¹⁶⁴ The authors repeat the exercise in 1992 and 2007 in order to study changes over time.¹⁶⁵

Table 5.1. Relative wages for different segment of the population

	Period 1 (CIRCA 1992)		Period 2 (CIRCA 2007)	
	(Base: Average female wage = 100)		(Base: Average female wage = 100)	
	Male	Female	Male	Female
All	116.32	100.00	108.80	100.00
Age				
15 to 24	78.37	72.55	71.07	69.11
25 to 34	120.99	110.50	106.01	101.00
35 to 44	139.17	115.86	121.00	109.24
45 to 54	134.37	105.91	132.53	114.14
55 to 64	113.43	86.68	119.01	104.66
Education				
None	61.98	52.61	55.83	52.31
Primary Incomplete	90.71	65.14	73.96	61.17
Primary Complete	104.76	80.56	84.07	67.25
Secondary Incomplete	106.40	83.56	87.85	72.95
Secondary Complete	147.98	124.23	116.23	90.65
Tertiary Incomplete	193.79	157.42	156.70	132.21
Tertiary Complete	271.56	214.88	242.63	203.57
Presence of Children in the Household				
No	119.37	102.25	110.92	101.52
Yes	100.29	82.56	86.97	79.18
Presence of other wage earner in the Household				
No	124.37	107.84	109.75	103.91
Yes	111.09	98.09	108.30	98.94
Urban				
No	78.37	66.12	71.69	69.24
Yes	130.44	107.21	116.98	103.83
Type of Employment				
Employer	197.83	181.85	195.88	187.87
Employee	113.57	103.66	107.42	102.43
Self - Employed	104.54	83.04	92.22	81.45
Time Worked				
Part time	148.27	121.04	130.43	114.87
Full time	120.80	102.38	111.34	101.17
Over time	96.98	61.13	93.47	69.66

Note: The “time worked” category denotes whether the worker is employed full-time or part-time, with part-time defined as working less than 35 hours per week.

Source: Hoyos and Ñopo 2010.

Table 5.1 shows relative labor earnings of males and females during the two periods in the study. In each year, earnings are normalized so the average for females is set to equal 100. The average male

¹⁶⁴ The samples are representative of each country's total population, except in the cases of Argentina and Uruguay, where they are only representative of the urban population.

¹⁶⁵ The decomposition is undertaken only after hourly earnings in local currencies are converted to 2002 dollars using purchasing power parity exchange rates and nominal GDP deflators—to express them in a common, constant currency. The same observable characteristics are used in every country to match women and men, such that the components of the wage gap are comparable across countries. The econometric procedure employed by Hoyos and Ñopo (2010) follows the methodology of Ñopo (2009), which is an extension of the Blinder-Oaxaca decomposition using a nonparametric matching approach. In its application to gender gaps, women and men are matched when they have the same combination of observable characteristics.

earnings (minus 100) can then be directly interpreted as the gender wage gap. Between 1992 and 2007 the average male earning dropped from 16.3 percent to 8.8 percent of average female wages. Note that the table provides average relative earnings for different segments of the labor markets without controlling for any observable characteristics that are presumably linked to productivity (and hence earnings). In that sense, the table shows only referential information about how relative wages are distributed across the labor markets for males and females.

Analogous figures for the United States help place these gaps in context. Since the 1990s women in the United States have earned roughly 75 cents for every dollar earned by men. In the metric employed by Hoyos and Ñopo (2010), this represents a gender gap of 33 percent. The latest census statistics (released September 16, 2010) imply that the gap had declined very slightly to 30 percent, based on the median earnings of full-time, year-round workers in 2009. For the European Union and the United Kingdom, the corresponding figures are 22 percent and 26 percent, respectively.

It is interesting to note the life-cycle pattern of earnings and earnings gaps. Working youth show the lowest earnings and lowest earnings gaps, perhaps reflecting in part no differences in experience at the beginning of their working lives. As individuals age, however, earnings improve up to a maximum and decline slightly thereafter. As expected, there is also a clear pattern of increasing earnings in educational attainment (figure 5.1).

The presence of children (6 years old or younger) in the household is related to lower labor earnings for both men and women, with women's earnings staying roughly constant, and men's earnings declining. However, while for men the presence of another wage earner in the household implies higher earnings, a second wage for women implies lower earnings.

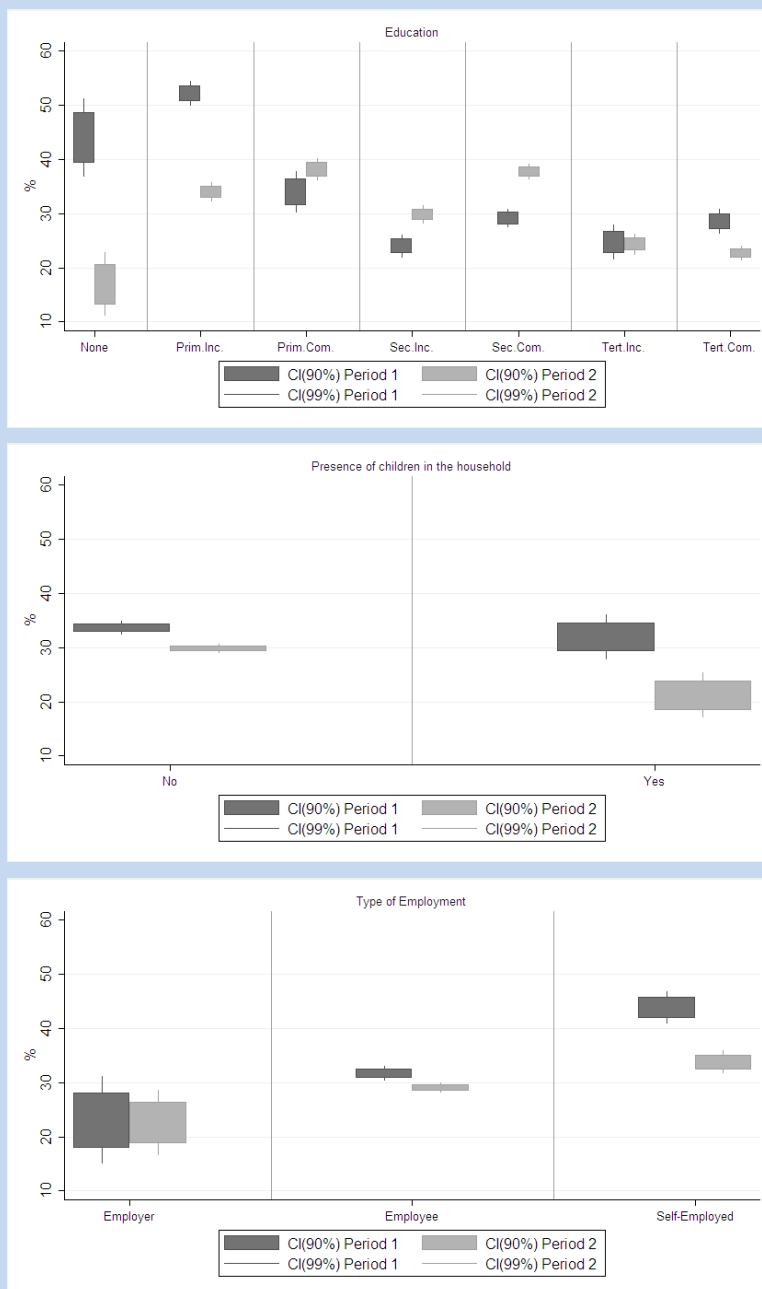
Hourly earnings are consistently higher in urban areas for both genders, nearly twice those of their rural counterparts. More important, the large urban gender gap of 23.23 percent in 1992 dropped dramatically to 13.15 percent in 2005. Part-time wages are dramatically higher than the average, with the gap still favoring men, which may signal that part-time arrangements are more common for workers at the top of the earnings distribution. High part-time wages may also signal that informal workers may be working more than 35 hours per week, or are less likely to report that they are working less than 35 hours per week.

5.1.1 Results

The overall wage gap dropped from 16.32 percent of average female wages to 8.8 percent over this 15-year span. The reduction of the unexplained earnings gaps during the 15-year span is statistically significant and robust to different specifications. The reductions in unexplained earnings gaps can arise from a uniform trend of narrowing gaps for all segments of the labor markets or from changes over time in the distribution of individuals' observable characteristics. Hoyos and Ñopo (2010) provide evidence that in the hypothetical situation of no changes over time in the distribution of characteristics across men and women, the drop in unexplained earnings gaps would have been even greater than was actually observed.¹⁶⁶

¹⁶⁶ There is also significant heterogeneity across countries in the magnitudes of both the unconditional gender earnings gaps and the unexplained component of the earnings gaps. Brazil, Dominican Republic, Honduras, Nicaragua, Peru, and Uruguay register the greatest unexplained wage gaps, while Colombia, Ecuador, and Paraguay register the lowest.

Figure 5.1. Confidence intervals for the unexplained gender wage gap for different subgroups of the population: education, presence of children under 7 in the household, and employment type.



Note: Confidence intervals for the unexplained wage gaps are shown, controlling for full set of characteristics.

Source: Hoyos and Ñopo 2010.

Going beyond the average difference, Hoyos and Ñopo (2010) cut the sample along several dimensions and analyze how earnings differentials have evolved for specific subgroups. In their matching methodology, gender gaps can then be decomposed into four parts: (1) differences in observable characteristics of matched males and females (denoted ΔX); differences in the characteristics of [2] males that cannot be matched to females (ΔM) and of (3) females that cannot

be matched to males (ΔF); and (4) a residual ($\Delta 0$), which cannot be attributed to differences in observable characteristics and could result from discrimination (table 5.2).

Table 5.2. Gender wage gap decompositions for period 1 (circa 1992) and period 2 (circa 2007).

Period 1 (CIRCA 1992)							
	Age	+ Education	+ Presence of Children in the Household	+ Presence of Other Wage Earner in the Household	+ Urban	+ Type of Employment	+ Time Worked
Δ	16.32%	16.32%	16.32%	16.32%	16.32%	16.32%	16.32%
$\Delta 0$	13.44%	25.17%	25.42%	23.96%	25.00%	23.99%	33.68%
ΔM	0.00%	0.39%	0.50%	0.80%	0.02%	2.23%	1.29%
ΔF	0.00%	-0.01%	0.05%	-0.02%	0.13%	0.26%	-1.43%
ΔX	2.88%	-9.23%	-9.65%	-8.41%	-8.83%	-10.16%	-17.22%
% CS Males	100.00%	99.46%	98.20%	93.47%	89.34%	79.62%	65.55%
% CS Females	100.00%	99.88%	99.52%	98.88%	97.40%	92.79%	80.66%
Period 2 (CIRCA 2007)							
	Age	+ Education	+ Presence of Children in the Household	+ Presence of Other Wage Earner in the Household	+ Urban	+ Type of Employment	+ Time Worked
Δ	8.80%	8.80%	8.80%	8.80%	8.80%	8.80%	8.80%
$\Delta 0$	9.73%	22.21%	22.21%	21.88%	22.56%	20.75%	29.56%
ΔM	0.00%	0.03%	0.04%	-0.25%	-0.89%	-0.33%	-2.07%
ΔF	0.00%	0.01%	0.02%	0.07%	0.16%	0.37%	0.43%
ΔX	-0.92%	-13.44%	-13.47%	-12.90%	-13.03%	-11.98%	-19.12%
% CS Males	100.00%	99.86%	99.26%	97.42%	95.28%	89.61%	79.42%
% CS Females	100.00%	99.97%	99.78%	99.41%	98.74%	96.36%	89.04%

Note: Time worked label denote whether the worker is employed, full-time or part-time, in particular part-time workers working less than 35 hours per week.

Source: Hoyos and Ñopo 2010.

The results show that the gender gaps decreased for all age groups, but especially for those between 25 and 44 years old, possibly because social norms are less ingrained in younger workers. In education, the earnings gaps increased for those in the middle of the distribution of educational attainment and dropped for those at the extremes, most dramatically among those with no education, for whom the confidence interval for unexplained wage gaps dropped from 40–49 percent to 13–21 percent of female wages. Finally, the unexplained gaps declined significantly among people with children under 6 at home, in rural areas, and among self-employed and part-time workers.

As in previous work, Atal, Ñopo, and Winder (2009) show that the unexplained gender wage gap widens after taking into account gender differences in observable characteristics. In particular, when controlling for education, the portion of the gap that is not accounted for by differences in characteristics increases by 12 percentage points in both periods.

How might we interpret this result? A gap that widens after controlling for education implies that women and men in the labor force differ systematically in their educational attainments. It is well-established—see previous chapters and existing literature—that more highly educated women are more likely to join the labor force. This is corroborated by the summary statistics of Hoyos and Ñopo (2010), which confirm that LFP rates are higher among the more highly educated.

Controlling for the level of education is equivalent to answering the following counterfactual question: what would happen to the wage gap if women and men had comparable education? A

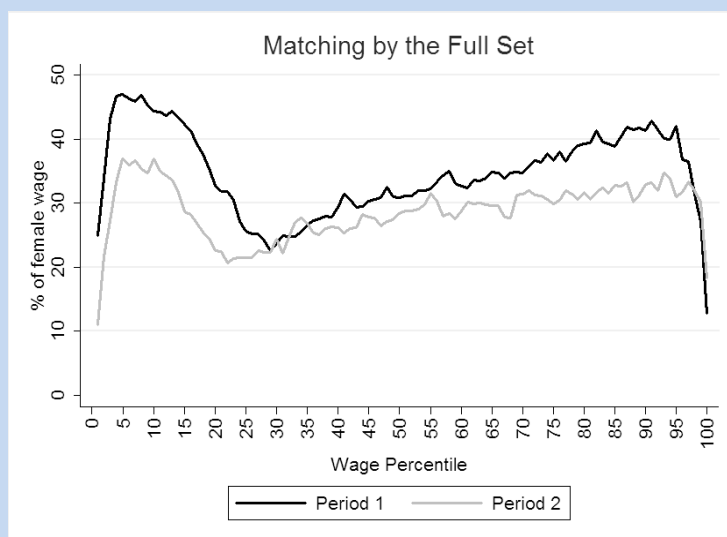
widening of the wage gap implies that women on average receive lower wages than men of similar education, bringing the education-adjusted wage gap to 25 percent in 1992 and 20 percent in 2005.

The literature on gender wage gaps, however, has demonstrated the importance of the *type* of education (technical fields and major field of study) in addition to the quantity of education. For instance, an individual with 16 years of education who studied finance in tertiary education is not expected to earn the same wage as a person with 16 years of schooling focused on literature classics. The fact that this information is not observed here implies that the identified gaps may overstate the true gaps that account for field of study.

The unexplained gender wage gap is lower among those with tertiary education, possibly because of the wider menu of working options offered to individuals with higher degrees of education. In addition, higher educational attainment plays a key signaling role in relation to the labor market, resolving potential employers' uncertainty about candidates' preferences over attachment to the labor force. As noted, the value of this signal may be higher for women,¹⁶⁷ implying that returns to education may go beyond the actual wage rate. A complementary explanation might be that more educated women fill positions in firms where there is less room for discretionary wage-setting.

When accounting for differences in work arrangements (part-time compared with full-time), the gender earnings gaps increase by approximately 3 percentage points in 1992 and 4 percentage points in 2005. Controlling for additional household characteristics such as the presence of children and additional wage earners leaves the gap virtually unchanged.

Figure 5.2. Unexplained gender wage gap by percentiles of the wage distribution of males and females (all countries).



Source: Hoyos and Ñopo 2010.

Atal, Ñopo, and Winder (2009) are able to explore a richer set of controls by limiting their analysis to 2005 and their results complement the previous findings. In particular, controlling for job-related characteristics (type of employment, formality, occupations, and small firms) only slightly reduces the unexplained component of wage gaps. These findings challenge the popular belief that

¹⁶⁷ Chiappori et al. 2010.

occupational segregation positively contributes to measured gender wage gaps, reinforcing previous evidence on this matter.¹⁶⁸ If we restrict the analysis to informal workers and those in small firms, we observe much larger gaps in earnings between men and women, which further contradict the view that occupational segregation matters when measuring gender earnings gaps.

The gap along the earnings distribution. Turning to the distribution of the unexplained components of the earnings gap, figure 5.2 compares the unexplained gaps along the percentiles of the earnings distribution for the two periods. This figure suggests that most of the decline in the average unexplained gender wage gaps in Latin America results from declines at both extremes of the earnings distribution. The unexplained gender earnings gaps at the middle of the distribution (between percentiles 35 and 60) are mostly unchanged.

The gaps at the bottom of the distribution dropped around 10 percentage points (for instance at the fifth percentiles of the distributions of earnings, the unexplained gender gaps dropped from 48 to 38 percent of average female earnings in the 5th percentile). In turn, the gaps at the top of the distribution dropped between 3 and 9 percentage points (for instance, at the 90th percentiles of the distributions of earnings, the unexplained gender gaps dropped from 42 to 33 percent of average female earnings in the 90th percentile).

The V-shaped curve of unexplained gender earnings gaps that was relatively clear in 1992 has smoothed somewhat in 2007 and is now more homogenous along the distribution. Nonetheless, there is still a pattern of higher unexplained earnings gaps at the bottom of the distributions of earnings. It therefore appears from the regional averages that gender wage gaps are associated with poverty and low income.

Heterogeneity within LAC. While figure 5.2 reports the mean wage gaps (across countries in the sample) along the distribution of income, the regional averages mask substantial heterogeneity both across and within countries. In most countries, the mean gap fell between 1992 and 2007, although Argentina, Mexico, Nicaragua, and Venezuela are exceptions. In Nicaragua, the deterioration has been especially severe, with the unexplained gap rising from roughly 10 percent of female wages in 1992 to 25 percent in 2007. In Guatemala, the gap has been virtually eradicated since the early 1990s. Whereas El Salvador and Guatemala have average unexplained gender gaps below 10 percent, in Brazil it is of the order of 40 percent in 2007. With this exception, the gender wage gaps in all countries reported in figure 5.3 are currently exceeded by that of the U.S., where women earn 78 cents for each dollar made by a man (though this figure represents the raw gap, unadjusted for worker characteristics).

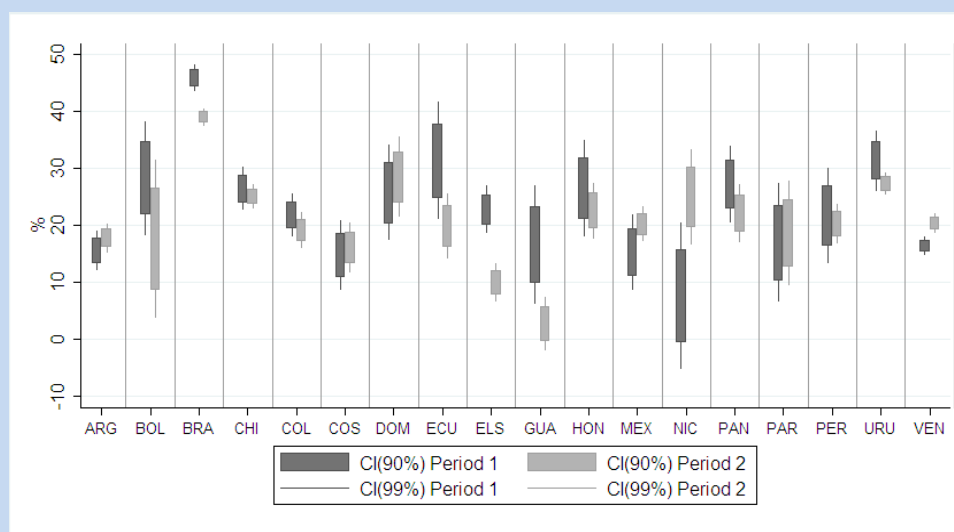
The heterogeneous experiences of countries is further highlighted by country-specific versions of figure 5.2, wherein the unexplained wage gap in each country is plotted at every percentile of the wage distribution. The subset of countries portrayed in figure 5.4 provides a snap shot of typical shapes and dynamics of wage gaps as a function of the earnings distribution.

The regional averages of figure 5.2 most resemble the patterns in Brazil, which also exhibits a (slightly) V-shaped gap in both 1992 and 2007, and experienced its greatest improvements at the low end the wage distribution. In many other countries, the change in mean wage gap over time was similarly driven by equalizations at the lowest end of the wage distribution (Ecuador, El Salvador, Honduras, Paraguay). As an illustration, the wage gap in Ecuador was hump shaped at the low end

¹⁶⁸ Barrientos 2002. Gender segregation in economic sectors is not by itself the source of wage differentials. The authors conjecture that the results could potentially be driven by males' overrepresentation in agriculture, which in turn is the sector with the lowest average wages.

of the distribution, with men at the 15th percentile earning close to 70% more than their female counterparts. By 2007, however, that difference had fallen substantially, leaving a 20 percent gap.

Figure 5.3. Unexplained gender wage gap in Latin America and the Caribbean Countries



Note: 90 and 99 percent confidence intervals for the unexplained gender wage gaps in 1992 vs. 2007 are shown, controlling for full set of characteristics

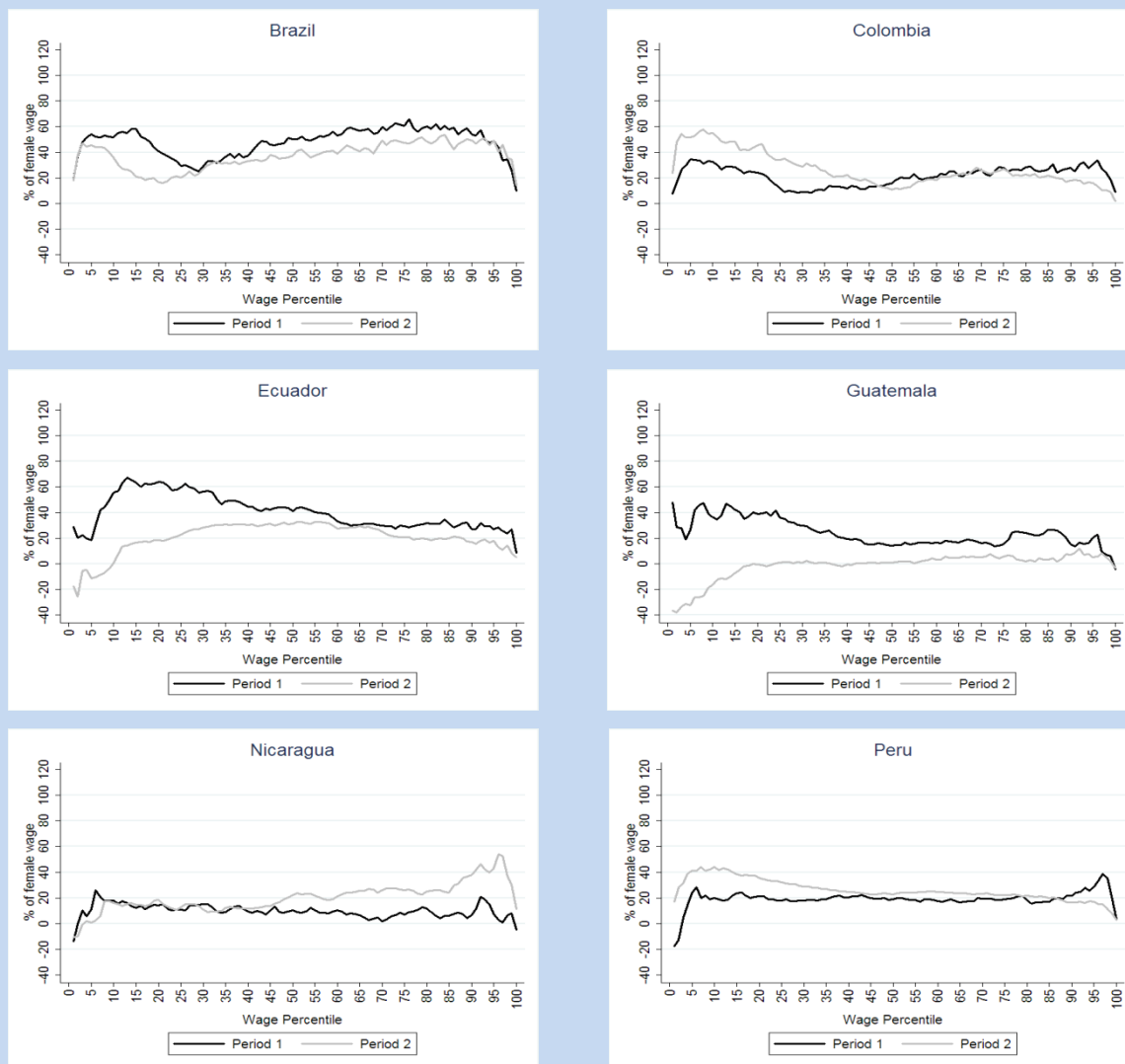
Source: Hoyos and Ñopo 2010.

In other countries, the converse relationship holds: deteriorations in the wage gap at the low end of the distribution are largely responsible for stagnation in the mean gap in Argentina, Colombia, and Peru, for instance. In turn, Nicaragua's widening gap is driven entirely by progressively stronger erosion in the upper half of the wage distribution: below the median wage, the gender gap in 2007 was unchanged relative to 1992 but opens up by roughly 10 percentage points at the 50th percentile and is 20 percentage points more elevated than in 1992 at the 95th percentile.

As a final remark on country-specific gender gaps, it is interesting to note the relationship between the wage and education gaps. In particular, as noted earlier (chapter 1), there is an enrollment gap among 6- to 11-year olds that favors boys in only four LAC countries: Bolivia, Guatemala, Mexico, and Peru. In three of these countries (Peru in 1992, and Mexico and Guatemala in 2007), the wage gap surprisingly favored women at the bottom of the wage distribution such that women received a premium over men. In Guatemala, the female wage premium is as large as 40 percent at the 1st percentile and persists until at least the 15th percentile of the wage distribution, while it disappears much faster in Mexico and Peru.

Arguably, the education and gender gaps may be related: since low skilled women receive a higher wage than their low skilled male counterparts, this premium constitutes a disincentive for them to pursue further education, as they are more readily drawn out of school and into the labor force. This in turn may explain girls' enrollment deficits relative to boys in these countries.

Figure 5.4. Unexplained gender wage gap by percentiles of the wage distribution of males and females by country (selected countries)



Source: Hoyos and Nopo 2010

The role of experience. In the literature on gender pay gaps, information on actual labor force experience is scarce, but makes a significant difference to the measured size of the gap. Several studies that include true measures of work experience conclude that experience can explain roughly a third of the difference in earnings.¹⁶⁹

Gender differences in labor market experience are generally attributed to biological differences between men and women, which are further reinforced by traditional divisions of labor within the household. It is clear, for example, that it falls on female workers to take time off from work for child birth and child care in the first few months of newborns' lives. But an alternative explanation highlights the role of gender discrimination in the workplace and cultural biases in the allocation of family duties. For example, in the presence of returns to experience in the labor market and in home

¹⁶⁹ See Blau (2007).

production, gender discrimination can result in substantial differences in the labor market experiences for men and women, even in the absence of any inherent gender differences in productivity.¹⁷⁰ Empirically, it is difficult to distinguish between truly exogenous differences between men and women and the endogenous responses to gender-specific labor market conditions.

With this caveat in mind, Hoyos and Ñopo (2010) peer into the relationship between wage differentials and attachment to the labor force. Data on job tenure for the studied period limit the analysis to 6 of the 18 countries in their sample (Brazil, Ecuador, Nicaragua, Panama, Paraguay, and Uruguay). Job tenure may not fully capture the role of experience accumulated over longer periods of time, but it can be seen as a proxy for labor force attachment.

The total gender earnings gap for this subsample is similar to that for the whole sample in the first period but slightly higher in the second period (table 5.3). In this case the drop in total earnings gap for the 15-year span is 5.5 percentage points instead of 7.5. Similarly, the 15-year drop in unexplained earnings gaps after controlling for different sets of observable characteristics is smaller for the 6-country subsample than for the whole 18-country sample. The leitmotiv of this table, however, is the last column, which uses job tenure as a matching variable on top of the previous characteristics. The table shows that the addition of job tenure reduces the unexplained gender gap in earnings by 7.35 percentage points for period 1 and 4.88 percentage points for periods 2. Gender differences in job tenure seem to explain a substantial part of gender earnings gaps.

Table 5.3. Distribution of the female and male labor force by job tenure

Tenure	Period 1 (CIRCA 1992)		Period 2 (CIRCA 2007)	
	Males	Females	Males	Females
Less than 1 year	19.53	21.81	19.39	22.96
1 year	12.20	13.87	11.59	13.18
1 to 5 years	28.81	31.27	27.67	29.54
5 to 10 years	16.51	15.58	16.31	15.00
10 to 20 years	14.85	12.70	15.38	12.66
More than 20 years	8.10	4.77	9.65	6.66

Source: Hoyos and Ñopo 2010.

5.2 Why is there a wage gap or why should there not be a wage gap?

As mentioned in the introduction to this chapter, wage gap analysis does not consider two key elements:

- First, wage gap analysis does not account for the underlying selection process that led women to invest in human capital and participate in the labor market, and the circumstances of their participation (sector, field, degree of career interruption, and so on). In essence individual participation in the labor market entails a series of complicated choices that reflect one's preferences and existing or perceived constraints.

¹⁷⁰ That is, if greater experience in either the labor market or home production makes someone more productive in that particular endeavor (perhaps through a process of learning by doing), discrimination that forms an initial barrier to women's entry into the labor market may reinforce occupational segregation, as both men and women become more productive in their respective sectors despite not having an initial comparative advantage in either. As a result, men's and women's labor market experiences may differ considerably.

- Second, jobs are bundles of characteristics, and wages comparisons are somewhat limiting. This problem would only be partially overcome by accounting for all those characteristics (time arrangements, leadership, sector of employment, and quality of peers, among others), simply because a key piece of missing information is the private valuation that each individual assigns to the various job characteristics.

The bundled nature of occupations and the selection process complicate the analysis and interpretation of wage gap studies, since their effects on results depend on the preferences, norms, and constraints of the specific context.

The literature on gender differences in developed countries has recently moved to complement traditional decomposition-based analyses with studies that attempt to shed light on gender differences in the primitives that underlie economic decisions, such as preferences. Over the last decade new classes of explanations for gender differences in labor market outcomes have gained popularity. Particularly relevant for labor market outcomes is the finding that men and women differ significantly in psychological traits and preference parameters, rendering some occupations inherently more attractive to women than to men and vice versa. In particular, attitudes toward risk, competition, and negotiation, as well as the strength of other-regarding behavior, appear to differ systematically between men and women (Bertrand 2011). As a result, the field is provocatively leaning toward a rephrasing of the core question surrounding gender wage gaps, away from the traditional “why is there a wage gap?” to “why shouldn’t there be a wage gap?”

As an illustration of the importance of differences in risk preferences to labor market outcomes, Bonin et al. (2007) show that more risk-averse individuals tend to select occupations with less variable earnings. These safer occupations typically pay less due to compensating wage differentials in uncertain environments, whereby workers are rewarded with higher average earnings for assuming more risk. For instance, if women tend to sort into low (wage and health) risk positions, such as in the education sector, while men more readily accept risky environments, such as on offshore oil platforms, men will command a wage premium for the additional risks they bear. In other words, risk preferences may play an important role in the determination of wages (and wage gaps), above and beyond the traditional factors typically included compensation studies.

There is a rich literature in experimental economics and psychology on gender differences in risk preferences, as shown by Croson and Gneezy’s (2009) thorough review. Croson and Gneezy hypothesize that systematic gender differences in emotional or affective reaction to risk may affect the utility that one experiences while making choices under uncertainty, providing an explanation for gender differences in risk preferences. Women exhibit more stress, fear, or dread when faced with the uncertain prospect of a negative outcome. According to Fehr-Duda et al. (2006), women’s apparent higher risk aversion can be sourced to a greater tendency than men to underestimate large probabilities of gains. This would be consistent with Loewenstein et al. (2001) hypothesis of “risk as feelings,” in which women’s stronger emotional reaction to a risky decision manifests itself as pessimism. A similar pessimism may likewise induce women to overestimate the likelihood of negative outcomes, as in Flynn et al. (1994).

Related to the discussion of gender differences in risk attitudes is the gender discrepancy in overconfidence. While both sexes are prone to overconfidence, men are particularly overconfident

when it comes to tasks that they perceive as more masculine in nature,¹⁷¹ which may render them more inclined to enter riskier situations.

There are also documented gaps in the sexes' tendencies to negotiate. Conceiving of negotiation as a competition over the distribution of resources between parties, several authors have placed increasing importance on situational or contextual factors in explaining gender differences in negotiation.¹⁷² For instance, Bowles et al. (2005) document that negotiating intensity depends upon whether subjects are told that they are negotiating for themselves or for others, with women's performance improving substantially when negotiating for someone other than themselves. In turn, the performance of men is unaffected by whether they negotiate for themselves or for others. In their sample of close to 200 working adults, Babcock et al. (2006) report that men initiated wage negotiations two to four times more frequently than women. Among MBA students, more than half the male students negotiated their job offer, compared with only 10 percent among female students. The differences in the aggressiveness with which the sexes pursue compensation, whether inherent or socialized, have important implications for interpretations of the measured gender gaps in wages.

Different labor market trajectories may also result from the biological differences that distinguish the sexes. For instance if men are comparatively better suited to physically demanding occupations, we would expect a certain degree of occupational segregation along gender lines, with corresponding differences in earnings. Links have also been established between biological differences and gender differences in life-cycle experience profiles. Child birth, for instance, necessarily entails disruptions and discontinuities in women's labor force experiences which, in turn affect their outcomes. Some studies have demonstrated the value of medical progress by documenting that technologies that mitigate the effects of such biological differences have helped close the gender gaps in education and LFP.¹⁷³

In Europe, women take approximately 7.6 more sick days per year than men of the same age with the same occupation and level of education. In the United States and Canada the corresponding figures are 3.1 and 5.2 days. While family-related commitments explain part of this gender gap in absenteeism, even among unmarried workers with no children, women still take significantly more sick days than men. Taking these observations as a starting point—and exploiting the personnel dataset from a large Italian bank, which contains the exact date and duration of every employee absence from work—Ichino and Moretti (2009) document that the likelihood of an illness-related absence increases significantly for females relative to males 28 days after the previous absence. The authors show that absences with 28-day cycles explain roughly one-third of the gender gap in days of absence and more than two-thirds of the overall gender gap in the number of absences, and conclude that these differences have small but nontrivial consequences for women's careers and earnings.

Whether physical or preference-related, these differences between genders can translate into sizable career and earnings differentials, even among individuals with elite education or at the top of the potential wage distribution. Bertrand, Goldin, and Katz (2009) assess the wage gap and career choices of elite MBA students in the United States. Top MBA graduates are likely to be very similar along several unobservable dimensions, including high motivation and ability, and have strong career orientations. Although male and female MBAs have comparable labor incomes at the outset of their careers, a gap soon opens. Five years after completion of their MBA, men's annual earnings are 30

¹⁷¹ Beyer and Bowden 1997.

¹⁷² Walters et al. 1998; Stuhlmacher and Walters 1999.

¹⁷³ Goldin and Katz 2002; Bailey 2006; Albanesi and Olivetti 2009.

percent higher than women's, a difference that nearly doubles in another five to 10 years. The proportion of female MBAs who are out of the labor force also rises substantially in the decade following MBA completion.

Bertrand, Goldin, and Katz identify three main factors underlying the large and rising gender gap in earnings: differences in training prior to MBA graduation, differences in career interruptions, and differences in weekly hours worked. The authors document that the presence of children in the household is the main reason for these women's more frequent career interruptions and more modest job experience, as well as their shorter work hours. While differences in the productive characteristics of male and female MBAs are small at baseline, the wage penalties from shorter hours and career discontinuities are large.

It is worth noting that women who select into elite business schools in all likelihood have relatively progressive views of home production and the division of household labor, as likely do their spouses. Furthermore, given these women's expected (favorable) position in the income distribution, it is probable that they could afford high-quality child care by relying on the dual incomes of the spouses that would result from not withdrawing from the labor force. Nevertheless they opt to leave the labor force, choosing to incur the pecuniary penalties documented by Bertrand, Goldin, and Katz (2009).

To economists, this may appear paradoxical and puzzling. These women could have it all. Of course, common sense suggests that women attach value to raising their children and the rewards from doing so are not comparable to a salary. In the United States, trends in female LFP show that it began to level off in the mid-1990s, peaking around 72 percent in the late 1990s, before retreating below 70 percent in 2004. This phenomenon has received considerable press recently.

On the option to withdraw from the labor force, Wallis (2004) writes, "For most mothers—and fathers, for that matter—there is little choice but to persevere on both fronts to pay the bills. Indeed, 72 percent of mothers with children under 18 are in the work force ... But in the professional and managerial classes, where higher incomes permit more choices, a reluctant revolt is under way. Today's women execs are less willing to play the juggler's game, especially in its current high-speed mode, and more willing to sacrifice paychecks and prestige for time with their family. Most of these women are choosing not so much to drop out as to stop out, often with every intention of returning. Their mantra: You can have it all, just not all at the same time." Here, the ability of mothers to choose to stay home and afford to care for their children themselves is framed as a luxury.

Similar evidence comes from Sweden, which is traditionally invoked by economists and social scientists as the gold standard in child-care provision, parental leave policies, and family-friendly employment policies. Sweden is also lauded for its progressive views on gender parity. Despite these achievements, only 1.5 percent of senior managers are women, compared with 11 percent in the United States. Three-quarters of Swedish women work in the public sector, while three-quarters of men work in the private sector. Among the most-cited reasons for these choices are the availability of part-time opportunities, a relatively flat wage scale with respect to tenure, and the ease of transitions in and out of the sector. Even full-time positions tend to have fairly light loads in terms of hours. Media commentators (including *The Atlantic* and *The Economist*) have concluded, "As the allure of public-sector and part-time work reveals, women make professional choices based on more than just their qualifications!"¹⁷⁴

¹⁷⁴ Allan 2010.

These two examples are particularly compelling. Even when they do not face binding budget constraints, women with career aspirations reduce their labor supply and consequently incur wage penalties from lost experience. This is consistent with Hoyos and Ñopo's (2010) results: women on average seem to be paid less because of sorting and less accumulated labor force experience.

If women at the very top of the income distribution are willing to forego experience (one of the key determinants of the gender wage gap) or chose professions that pay less to benefit from more flexible arrangements, then the same logic should apply to women who face lower opportunity costs (lower wages) and who, as Wallis (2004) points out, simply cannot afford that option.

Beyond the inescapable biological differences between the sexes lies the question of whether more subtle gender differences—such as differences in preferences and personality traits—also have biological origins (“nature”) or whether they are the products of environmental influences (“nurture”). Evidence suggests at least some role for environmental influences, which implies a margin of behavior amenable to policy intervention to improve women's labor market outcomes.

Part III

Chapter 6. A Closer Look at Dynamics within the Household

In the analysis of previous chapters, family formation emerges as important in shaping female economic participation, along several dimensions. Transitions in and out of the labor market, across sectors, and between formality and informality are all affected by marriage and fertility decisions, providing a compelling reason to improve our understanding of household decision-making.

In recent decades, households in Latin America and the Caribbean (LAC) have faced structural and policy changes that are likely to have affected their labor force decisions and the allocation of their resources. As documented in the previous chapters, female labor force participation (LFP) has risen steadily, providing women with a direct source of income. Investments in education have also grown steadily, with important consequences not only for women's earnings potential, but also for their identities and aspirations. Education also affects their prospects in the marriage market and ultimately their bargaining positions within the household: greater earnings potential implies that women's options outside the couple are better and broader, thus commanding greater leverage in the current household. In addition, over the last two decades, several countries in the region have adopted poverty reduction policies that directly or indirectly benefit women's access to income and economic assets, such as conditional cash transfer (CCT) programs, expansions of microcredit programs targeting women, and changes to the institutional environment that promote gender equality.

Studying household decision-making is complicated by the fact that it is difficult to alter experimentally the bargaining power of one spouse and then follow how households later redistribute resources (consumption, leisure, and so on). For instance, women who have more progressive views and who value their careers more are more likely to invest in their human capital and ultimately have higher earnings. And they are then more likely to marry a spouse with higher education and more liberal views. In essence, the empirical difficulty with studying household decisions is that many outcomes, including female LFP and income, are often the result of decisions earlier in life that reflect both spouses' preferences and expectations, rather than random variation in present-day resources or bargaining power. So, these differences confound comparisons across individuals.

This chapter explores the determinants and consequences of female economic participation and sheds light on the mechanisms through which they operate, focusing on interactions within the household. It exploits social policies and interventions that exogenously relax women's constraints (time and budget) either by endowing them directly with additional resources or by manipulating the prices and opportunities they face.

The lenses for studying these interventions are economic theories of the family, some of which explicitly allow stakeholders to have diverging interests and preferences. Why is it worth understanding how households operate and providing an accurate theoretical description of interactions within households? Understanding household dynamics and decision-making is essential to shed light on the evolution of LFP and to make statements about welfare—but it is also essential for policy purposes. Intrahousehold decisions mediate the effects of policy, such that insights about how decisions are made and resources allocated can illuminate the path for effective policy.

As discussed, different assumptions on the household decision-making process and on the household members' potentially conflicting interests predict very different household behaviors and allocations, particularly in the face of policies. If the interests of household heads do not align, the distribution of bargaining power across spouses may affect household choices. In that event, public policy might generate both desired and perverse outcomes depending on whom the policy targets and how. The policies considered here are of interest precisely because they alter the bargaining position of women, sometimes experimentally, thus shedding light on the consequences of female economic empowerment.

CCTs are one such policy. They generally disburse income to families with children on the condition that eligible children attend school and regularly visit health clinics. They explicitly place the additional resources in the nominal control of women on the assumption that mothers make better decisions for their children than fathers and that the transfers endow mothers with greater authority in allocating household resources. Does this assumption bear out? Does nominal control over resources enhance women's bargaining position relative to her spouse in making consumption and labor supply decisions? Are there any costs, intended or otherwise, of reducing men's say in household choices?

Child-care subsidies can also improve women's position in the household indirectly by making a market option to self-provided child care more affordable and increasing the opportunity cost of time spent in home production. A couple that takes advantage of the subsidy frees the time otherwise spent on child care, relaxing the household's time constraints, particularly women's, since responsibilities for child rearing typically fall on women. What are the responses to cheaper market provision of child care? By reducing demands on their time, do subsidies indirectly give women more control in allocating their time and facilitate their integration into the labor force?

Legislation that permits part-time employment in environments in which it was previously prohibited operates similarly by increasing opportunities for formal employment while preserving some flexibility to meet demands at home. Although such legislation in principle applies to both sexes, in practice it affects female household members, who typically carry the load of domestic production. How do these work arrangements affect women's labor supply? Do they draw women who otherwise specialize in home production into the labor force by allowing them to combine market work with family responsibilities, at least partially realizing their earnings potential? Do they instead segregate the labor market into full-time and part-time work along gender lines? Or are part-time positions filled by informal sector workers, who have already committed to participation in the labor market but place a high value on flexibility?

Finally, with positive the labor market returns to education, exogenous increases in educational attainment due to changes in compulsory schooling laws render women more productive and their time in the labor market more valuable, again boosting the opportunity cost of remaining out of the labor force. Do these policy-induced changes in education afford women more opportunities in the labor market? Do they make women more likely to join the labor force or increase their labor

supply? Are there nonmarket gains to education in the form of “better” suitors in the marriage market—or of improved bargaining power within their relationships, including greater control over their fertility?

This chapter analyzes these (and other) themes in LAC, exploiting policies which, while not designed to address such inquiries, permit researchers to study them. It begins by reviewing theories of intrahousehold allocation, emphasizing their implications for observed household choices and measuring them against the existing empirical evidence, pointing to the importance of intrahousehold dynamics in shaping policy outcomes. Building on this analytical framework, it then tries to gain more insight into intrahousehold decision-making and women’s economic participation by exploiting exogenous variation in resources and opportunities.

The chapter first reviews theories of intrahousehold allocation, emphasizing their implications for household outcomes and labor supply. It then reviews the empirical evidence, highlighting the role of intrahousehold dynamics in shaping policy impacts. It then turns to policy interventions that exogenously alter household endowments and the tradeoffs between women’s specialization in home production and participation in the labor force, considering the impact of exogenous changes in:

- Economic resources nominally controlled by women (CCTs).
- The opportunity costs of specializing in home production (subsidized child care).
- Labor market rigidities (part-time work legislation)

6.1. Intrahousehold allocations: Theory and practice

As referenced in the introduction, classical economic models of consumer demand and labor supply begin (uncontroversially) with a single individual choosing actions and consumption bundles that maximize his or her welfare within what is permitted by his or her budget. In reality, however, people tend to exist, work, and consume within the context of families and households, where resources and household production may be shared, and decisions taken collectively. How to reconcile the individualistic theory of the consumer with this collective reality? A first pass is to treat the family as if it were a single decision-maker, with a single pooled budget constraint and a single utility function that includes the consumption and leisure time of every family member. This is the “unitary” or “consensus” approach.¹⁷⁵

6.1.1 Unitary models and income pooling: how do they fare in practice?

The basic unitary model of a two-person household assumes that each partner has an individual utility function that depends on his or her private consumption of goods, but that, by consensus, they agree to maximize a common welfare function incorporating their individual utilities, subject to a joint budget constraint that pools the income received by the two spouses. The result is an aggregate household expenditure pattern that resembles an individual demand function and that can be analyzed in the classical way, as though the family were a single agent maximizing a single utility function, yielding a set of demand functions that depend only on prices and total family resources.

In this theory of the household, an increase in women’s market wages affects outcomes only in that it relaxes the family budget constraint, increasing the total amount of household consumption

¹⁷⁵ Samuelson 1956; Becker 1974, 1981.

(among normal goods). In turn, a part of this increase may be passed on to women and children through a higher allocation for them. Thus the unitary model's assumption that all household resources are mechanically aggregated into a single budget constraint, referred to as "income pooling," implies that only total income will affect demand and that changes in women's earnings affect intrahousehold allocations only through changes in the overall family budget constraint.

How does the unitary model fare as a description of household behavior? It is the income pooling hypothesis that provides much of the basis for testing the validity of the unitary model, since it asserts that the identity of the income earner is immaterial to ultimate allocations and demand functions: the impact on household demand for goods and services of an additional unit of income earned by wives should precisely match that of an additional unit of income contributed by husbands. Equivalently, household demand functions should be invariant to redistributing income nominally controlled by husbands to their wives since such redistribution leaves total family income unchanged.

Empirical tests of pooling invariably conclude that income controlled by husbands and wives have significantly different effects on family behavior, whether measured by expenditures on categories of goods and services, such as food, or by outcomes, such as child health.¹⁷⁶ In Brazil, resources in the hands of mothers improve children's health significantly more than those in the hands of fathers and that differences can be sizable: the effects of mothers' unearned income on child survival probabilities is almost 20 times that of fathers' incomes.¹⁷⁷ Interestingly, the effects differ according to the sex of the child: fathers' income affects mostly boys' health while that of mothers improves the health of girls. This heterogeneity is interesting not only because it refutes the unitary model's income pooling postulate but also because it points to parents' unequal concerns for their children along gender lines. Similar findings of gender differences in expenditure patterns using comparable methods are also found in French data and Canadian data.¹⁷⁸

Though these results are intriguing, one might be concerned that differences in unearned income might reflect not just random differences across households but also unobserved family background, entrepreneurship, or preferences. Several studies have subsequently considered the income-pooling hypothesis with data from a variety of countries, making clever use of policies and natural shocks that effectively make observationally equivalent households face different environments.

Lundberg, Pollak, and Wales (1997), for instance, examine the effects of a curious policy in the United Kingdom that transferred a substantial child allowance from husbands to wives in the late 1970s. The transfer provides an almost ideal setting to test the unitary model's income-pooling requirement. That is, it left each household's total budget constraint unaltered, but by making transfers "from the wallet to the purse," it expanded wives' nominal control. The authors find robust evidence that greater expenditures on women's and children's clothing coincided with this income redistribution, contradicting the unitary model's premise that the distribution of income within the household is irrelevant. As noted in the introduction, these gender-specific preferences

¹⁷⁶ Testing the pooling hypothesis requires a measure of the husband's and wife's relative (nominal) control over resources. Relative labor earnings might seem a natural candidate for this measure, since labor income is frequently the largest component of family income, and earnings data are readily available measured. But the trouble with this approach is that earnings are the product of wage and hours worked, the latter being a choice variable in the household's time allocation decisions. As a result, households with different ratios of the wife's earnings to husband's earnings are likely to face different wages and prices and have different preferences. In that event, relative labor income would reflect differences across households in prices or preferences rather than the desired degree of control over resources.

¹⁷⁷ Thomas 1990.

¹⁷⁸ Bourguignon et al. 1993, for French data; Browning et al. 1994, for Canadian data.

appear to be persistent and to span generations. They operate not only from parent to child but from grandparent to grandchild, as shown by Duflo (2000, 2003) and Edmonds (2005), who investigate the effects of an extension of the South African Old Age Pension on children's health, nutrition, and educational attainment. While there are measurable benefits of making these payments to grandmothers, they may also be associated with (opportunity) costs. Although Duflo (2000, 2003) does not identify any benefits along anthropometric measures of granddaughter's health, Edmonds (2005) estimates some human capital benefits of disbursement to grandfathers. He considers the impact of the reform on schooling and education investments by comparing the school enrolment of adolescents in families where there is an elderly member eligible for the pension with that in families where there is an ineligible elderly member. He finds that, compared with children in families with ineligible elders, children are more likely to be in school when they live with an eligible man than with an eligible woman. Thus, the identity of the income holder matters, and an apparent trade-off emerges, with men making investments in the education of their grandchildren and women making nutritional investments in their granddaughters. Both results reject a unitary framework for multigeneration families and provide a nuanced picture of how children benefit from male versus female control of household resources. This evidence calls for theoretical alternatives to the unitary (or consensus) model. The most common alternatives are spousal bargaining models that explicitly model the diverging interests of spouses.¹⁷⁹

Under an alternative (bargaining) hypothesis, males and females may have conflicting preferences and unequal bargaining powers, such that the same lump-sum redistribution of income can improve the woman's ability to tilt outcomes according to her preferences.

In Mexico's Oportunidades, the source of income matters, with changes in female-controlled CCT income having a substantial positive impact on expenditures on food and on children's goods—and changes in income driven by rainfall shocks having a smaller influence on household public goods outlays.¹⁸⁰ In Ecuador's Bono de Desarrollo Humano, an unconditional cash transfer program targeting rural mothers, women favor spending on nutrition.¹⁸¹

Several studies of the expenditure patterns of CCT recipients in LAC have identified a surprising regularity among CCT beneficiaries, namely that the food share of total spending remains invariant to total income. This would be of little interest were it not for Engel's Law, which holds that there should be a negative relationship between total expenditures and the budget share of food. It holds almost universally in the developed world.

According to Engel's Law, the expectation is for food budget shares to fall following exogenous expansions in household income, consistent with a unitary model in which food is a necessity. Why then are recipient households of CCTs the exception? Among these households, the income effect (that is, the expected drop in food budget share) appears to be offset by some other aspect of the program, such that the net effect of the CCTs on the share of food is nil or, in some cases, positive.

¹⁷⁹ A necessary condition for the unitary model to break down is differences in preferences across spouses. As illustrative evidence that men and women differ in their preferences (and therefore in their self-interest) see Croson and Gneezy (2009) and Bertrand (2011). Both authors offer a review of experiments and existing evidence on gender differences in tastes. Briefly, report systematic and sizeable differences in tolerance for risk and in social preferences (altruism, inequality aversion, reciprocity, and trust).

¹⁸⁰ Bobonis 2009.

¹⁸¹ Schady and Rosero 2007.

After an analysis of Mexico's Oportunidades program, in which they give several data and methodological obstacles particular attention, Attanasio and Lechêne confirm the observation that food commands equal or greater shares of spending among program beneficiaries.

They then consider the following long set of mechanisms that could account for the observed changes: an increase in the price of food in response to CCT receipt; food being a luxury; homothetic preferences; changes in preferences leading to the purchase of better food; differential “labeling” of money (for example, mental accounts); and changes in decision-making among beneficiary households. Their analysis rejects all but the last hypothesis, pointing to a failure of the unitary model among Oportunidades's beneficiaries.

They show that CCTs have a dual effect on choices. The first, induced by the addition to total household income, is the expected drop in the budget share of food (in accordance with Engel's Law), having shown that food is a necessity. The second is to raise the budget share of food by an amount matching the decrease induced by the above income effect.¹⁸² The only aspect of CCT (and similar programs) that can resolve the puzzle is that the transfer is placed in the hands of women, who appear to have greater concern for nutrition. CCTs, often designed to place nominal control over resources in the hands of mothers, appear to alter the balance of control such that women's preferences are better represented in consumption. This assumption underlies some of the gendered targeting in CCTs.

Cooperative bargaining models of marriage from game theory typically consider a family consisting of two members, a husband and a wife. Each has a utility function that depends on his or her consumption of private goods.¹⁸³ If agreement is not reached on the consumption allocation, each receives a payoff represented by their “threat point”—the utilities associated with their best outside option of divorce.¹⁸⁴ This dependence is the critical empirical implication of bargaining models: family demands depend not only on prices and total family income but also on determinants of the threat point. In an alternative bargaining model, the “separate spheres” model, the threat point is internal to the marriage, not external as in divorce-threat bargaining models, with divorce being the ultimate threat available to marital partners in disagreement.¹⁸⁵ Unlike unitary models, cooperative bargaining does not necessarily imply income pooling.

Bargained outcomes depend on the threat point, and the income controlled by husband and wife will affect family behavior (and the relative well-being of men and women within marriage) assuming that this control influences the threat point. Critically, this dependence implies that public policy (for example, taxes and transfers) need not be neutral in their effects on distribution within the family. In addition, changes in welfare payments available to divorced mothers, or in the laws defining marital property and regulating its division on divorce, can affect the distribution of allocations between men and women in two-parent families through their effect on the threat point.

In sum, the model that best approximates household behavior can have important implications for policy since alternative models imply different allocations to household members. These include not

¹⁸² Attanasio and Lechêne 2010. This paper was part of the background material prepared for this report.

¹⁸³ Manser and Brown 1980; McElroy and Horney 1981.

¹⁸⁴ The threat points depend on a set of exogenous factors that influence individual well-being in the event of divorce. Through a process of (Nash) bargaining, these factors—which may include individual wages, unearned incomes, and the resources of prospective mates in the remarriage market—in turn determine each spouse's demands. The utility received by husband or wife in the bargaining equilibrium depends on the threat point: the higher one's utility at the threat point, the higher one's utility in the Nash bargaining solution.

¹⁸⁵ Lundberg and Pollak 1993.

only consumption but also labor supply and investments in the human capital of the next generation.

In the following subsection, another margin of control among female beneficiaries of CCTs is examined—their decisions regarding time allocations and LFP.

6.2. Does additional control over resources increase female labor force participation? Economic resources nominally controlled by women

As discussed in the previous, empirical tests of income pooling using based on data from a variety of countries, are invariably rejected. Resources nominally controlled by the husband and wife have substantial bearing on family behavior, whether measured directly by the composition of expenditures or indirectly by such outcomes as children's health. This accumulation of evidence represents powerful refutation of the view that households behave as a single individual would, and instead favors a perspective that individual family members can have conflicting interests and exert independent power on household decisions. Their bargaining power determines how much the individual influences outcomes, and the evidence suggests that an important determinant of this influence is the share of household resources under their nominal control.

Discrepancies in bargaining power linked to control over resources appear to emerge from the gendered division of labor within the family and, in particular, to the allocation of responsibility for the care of children to mothers. This can arise from a model of marital gains to specialization and exchange among spouses that is directly analogous to models of international trade that define comparative advantage and the gains from trade. If a two-person family produces and consumes two types of outputs—market and nonmarket (such as home production)—and one family member is relatively more productive in one sector than the other (because of endowments, previous investments, or how they are remunerated by the market), at least one member will completely specialize, and devote all of his or her time to either market or nonmarket production. In these traditional models of specialization, even minute differences between otherwise identical spouses can generate completely gender-segregated divisions of labor.

To the extent that women continue to perform more household work than their spouses, and to earn lower market wages as a result, nonunitary models of the family predict that they will receive a smaller share of household resources than they would in the absence of gender specialization. But what if their resources were inflated for reasons unrelated to their behavior? According to these nonunitary models, CCTs can reverse some of these consequences of gender specialization by targeting women directly, exogenously endowing them with a greater share of resources.

With their increased bargaining power, how do CCT recipients respond in terms labor supply? Do increases in unearned income lead women to seek further improvements in bargaining power by joining the labor force and earn yet more income? Do they exercise their increased power by way of reductions in their involvement in home production?

In the present section, we consider how an exogenous transfer of resources, nominally assigned to women, may alter the division of labor within the household. In principle, the increased resources controlled by mothers can affect female labor supply through three channels:

- *Income.* Theoretically, one might expect a reduction in labor supply in response to an exogenous increase in nonlabor income through its income effect on leisure. To the extent that leisure is a normal good, greater income should result in greater consumption of leisure, in the form of either reduced hours or no further participation in the labor force. So, a pure income effect would predict an unambiguous reduction of labor supply, larger for wives than for husbands as a result of their increased bargaining power.
- *Increased shadow price of home production.* This exogenous change in income controlled by women is associated with conditionalities such as children's school attendance and visits to health clinics (as with Mexico's Oportunidades), which impose certain demands on household members' time and limit eligible children's role in home production. Thus remaining household members must reallocate the extra responsibilities among themselves. If mothers assume these responsibilities, one might mechanically expect a reduction in their labor supply.
- *Women's bargaining power.* The additional resources (and bargaining power) provided by CCTs could "buy" women more discretion in the allocation of their time. Women who previously specialized in home production might try their hand in the labor market or in entrepreneurship. In this view, the CCTs offer an option to further increase their household bargaining position by seeking yet more earnings in the labor market.

Several studies have considered the effect of CCTs on female LFP. By and large, they find no effect on LFP among CCT recipient households.¹⁸⁶ Maluccio and Flores (2005) exploit a randomized, community-based intervention in Nicaragua (the Red de Protección Social) and find no negative impact on female LFP. Skoufias and Di Mero (2006), exploiting the experimental design of PROGRESA—a school subsidy program in rural Mexico—consistently estimate that the program has no significant impact on adult labor supply.

But households participating in Mexico's Oportunidades increase investments in productive enterprises and expand their income generating opportunities. The program raised the probability of female microenterprise activity by roughly 3 percentage points, a significant increase from the mean baseline of 5.1 percent.¹⁸⁷

6.2.1 Conditional cash transfers and heterogeneity in women's labor supply responses in Peru

In 2005 Peru introduced Juntos, a CCT program, in rural areas. Like other CCTs in the region, Juntos disburses a fixed monthly amount to mothers—roughly \$33, about 13 percent of monthly household income—if their children comply with basic education and health requirements.¹⁸⁸ Families are in the program for a maximum of four years.¹⁸⁹ Program conditions include regular health visits for pregnant women and children aged less than 5 years, at least 85 percent school attendance for children aged between 6 and 14 years who have not completed elementary education, and completion of identification documents for women and children covered by the program. Eligible households are identified in three stages: geographic targeting, household targeting, and a

¹⁸⁶ Maluccio and Flores 2005.

¹⁸⁷ Gertler, Martinez, and Rubio-Codina 2006.

¹⁸⁸ Perova and Vakis 2009, 2011.

¹⁸⁹ Most of the difference in employment rates between women in Juntos and those in control groups is concentrated among women with low education; the difference for the highest quartile is not statistically significant. Single mothers are more likely than women in couples to be employed in both Juntos and control samples, not surprising since single mothers are the breadwinners for their households.

process of community validation of potential beneficiaries. Roughly 450,000 families in 638 districts were eligible for the program.¹⁹⁰

A short-term evaluation of Juntos' impact on a number of outcomes reveals no effect on employment rates or hours worked.¹⁹¹ But women who have been in the program for more than a year (13–25 months) have a 9-percentage-point higher probability of being employed; there is no similar impact for men.

What stands out is that the average employment rate of women in this rural Peru sample (about 70 percent) is much higher than that of women in the evaluation samples of the Mexican and Nicaraguan programs.¹⁹² In the poor communities targeted by CCT programs, women's LFP rates are typically very low. In Mexico, Parker and Skoufias (2000) report that female LFP rates prior to the introduction of the program were 15–18 percent (women aged 18 and older).¹⁹³ Similarly, in Nicaragua, Maluccio and Flores (2005) report baseline female LFP rates of 25 percent (among women aged 15 and older) in treatment and control communities in Nicaragua.¹⁹⁴ Male LFP rates, on the other hand, were close to 90 percent.

In line with the previous research, Sinha and Montes (2010) find no impact of Juntos on men's employment rate but that it raised female rates by a significant 4.5 percentage points.¹⁹⁵

This central tendency, however, masks considerable heterogeneity in the age and education of household heads. The largest impacts, roughly an 8.5-percentage-point increase, are for 14–19 and 20–30 year olds. Individuals in these two age groups play different roles in the household. The 20–30 year olds are likely young mothers, potentially benefiting from additional time made available by the improved health of their children or the diminished requirements of child-rearing activities due to their children's young ages, coupled with the additional source of income, is associated with increased economic participation, mainly in terms of informal occupations and self-employment.

In turn, the 14–19 year olds are likely older siblings of eligible children. So, even if they older siblings are not eligible for the CCT program, they may be affected by the conditionality to the extent that their younger (eligible) sibling's attendance at school frees up their own time by not having to care for them during the day. That additional time may be filled by joining the labor force. Siblings may also indirectly benefit because of the additional resources the CCT program brings into their household. However, if resources are not equally allocated within the household, the benefits to ineligible siblings might be limited; or worse, parents may decide to concentrate most of their educational investments on eligible children, possibly leading to adverse outcomes for those who are not eligible.¹⁹⁶ These results are consistent with a reallocation of academic opportunities and labor market responsibilities across family members. In Bogotá, Colombia, siblings (particularly sisters), of treated students work more and attend school less than students in families that received no assistance, implying that the decisions of parents reinforce, rather than compensate for, unequal human capital investment opportunities among sibling children.¹⁹⁷ Barrera-Osorio et al. (2008)

¹⁹⁰ Perova and Vakis 2009.

¹⁹¹ Perova and Vakis 2009.

¹⁹² Sinha and Montes 2010.

¹⁹³ Parker and Skoufias 2000.

¹⁹⁴ Maluccio and Flores 2005.

¹⁹⁵ This result is likely related to the afore-mentioned high baseline female participation rate in Peru, which has the potential to render the response to Juntos' incentives [more detectable because there are plausibly more women at the margin of participation.

¹⁹⁶ Blundell, Chiappori, and Meghir 2005; Oster 2007.

¹⁹⁷ Barrera-Osorio et al. 2008. In Cambodia, Ferreira, Filmer, and Schady (2009) find that the ineligible siblings of CCT

investigate the magnitude of peer effects within the household and across households, in the context of the Conditional Subsidies for School Attendance (Subsidios Condicionados a la Asistencia Escolar) pilot established by Bogotá, Colombia, to improve student retention, lower dropout rates, and reduce child labor. While the authors document positive spillover effects across neighboring households, they find some evidence that the subsidies can cause responsibilities to be reallocated within the household.

6.2.2 Unintended consequences: Domestic violence

The overwhelming evidence from countries' experiences with CCTs is that women's control over additional resources improves outcomes for children and, in some cases, for the women themselves. But it is not obvious that the increased bargaining power of women yields only dividends. The subsequent reductions in the influence of men may come at the cost of emotional or physical well-being if husbands react to their loss with threats or acts of violence.

Theoretically, reliance on the assumption of Pareto-efficient outcomes within the household requires good information-sharing within families (or at least that it not be asymmetric) and that members be able to make binding, costlessly enforceable agreements and commitments regarding household allocation of goods and responsibilities. But since legal institutions do not provide external enforcement of contracts for consumption, labor supply, and the distribution of resources and welfare within marriage, the binding-agreement assumption may not be desirable or appropriate.

As a result, economists have invoked arguments from noncooperative game theory that focus on self-enforcing agreements and that can achieve Pareto efficient outcomes under certain conditions. Indeed, one of the benefits of modeling interactions within a marriage as a noncooperative game is the opportunity to treat efficiency endogenously, such that it results internally from the bargaining environment and potentially depends on the institutions and social context of the particular application—and on the characteristics of the marital partners.

The prevalence of such destructive phenomena as domestic violence and child abuse, as well as the demand for marriage counseling and family therapy, provide compelling evidence that family behavior is sometimes inefficient, a possibility that must be considered in a theory of the family that accounts such events.

Some researchers have pointed to gender segmentation in many countries—even in the presence of gender-specific comparative advantage in the management of businesses or agricultural plots—as evidence of an essentially noncooperative, and possibly inefficient, family environment. Udry (1996) provides one piece of evidence, finding that in Burkina Faso the marginal product of land controlled by women is less than that of land controlled by men. This fact violates notions of efficiency, which require these marginal productivities to equalize. The author concludes that the household allocation of inputs to male- and female-controlled agricultural plots is inefficient. A further source of inefficiency is that household members cannot always provide insurance for each other. In Côte d'Ivoire, women and men grow different crops and are thus affected differentially by the same rainfall. Some years are good for men, while others are good for women. If the household is efficient, household members fully insure each other against short-term variation in individual income. Therefore, nonpersistent, idiosyncratic (across spouses within the household) income shocks should not result in differences in the allocation of resources within the household. Yet in

recipients were unaffected by the program.

years when the production of women's crops is greater, the household spends a larger share of its budget on food and private goods for women. In years when the production of men's crops is greater, the household spends a larger share on alcohol, tobacco, and private goods for men.¹⁹⁸

Gelles (1976) pioneered work on women's income and violence against women, finding that women with fewer resources are less likely to leave an abusive relationship. The study, as well as many that have followed, ignores the potential endogeneity of women's income in this context. In particular, omitted variables associated with both women's wages and the likelihood of being in an abusive relationship (such as education) might explain the negative relationship with violence. Alternatively, the relationship may simply reflect reverse causality, with declines in abuse increasing a woman's productivity and earnings.¹⁹⁹

The background paper by Bobonis and Castro considers the long-term effects of CCT receipt on the incidence of family violence. The shift in control over household resources, induced by gendered CCTs, may come at an unintended cost if—for instance, it also increases the incentives of male partners to use threats of violence to (re)gain control over household decision-making.²⁰⁰ Researchers have identified two patterns of domestic violence in Mexico's Oportunidades program. In the short run, women in beneficiary households experienced a 33 percent drop in the incidence of physical abuse, but a 60-percent increase in the incidence of emotional abuse (with no associated physical abuse) relative to nonbeneficiary women.²⁰¹ In the longer run, however, five to nine years after the start of the program, women in beneficiary households appear equally likely to experience physical, sexual, or emotional abuse as women in nonbeneficiary households.²⁰²

One candidate explanation for these patterns is the possibility that marital selection—selective survival and dissolution of marital relationships as a result of the program—plays an important role. In the short-term experimental evaluation of the PROGRESA program, the predecessor to Oportunidades, couples eligible for the program experienced a modest increase in marital dissolution rates, with most of the effect concentrated among young and relatively educated women's households.²⁰³

The patterns of marital dissolution and subsequent formation in response to CCT-induced improvements in control over household resources are consistent with the cooperative bargaining models of household behavior that treat divorce as the external threat point, as well as the noncooperative, separate spheres variants in which the threat is instead a breakdown in cooperation without necessarily dissolving the relationship. In either case, the relative increase in the wife's

¹⁹⁸ Duflo and Udry 2004.

¹⁹⁹ Aizer 2010.

²⁰⁰ Bobonis and Castro's (2010) paper was part of the background material prepared for this study.

²⁰¹ Bobonis, Castro, and Gonzalez-Brenes 2006; Angelucci 2008.

²⁰² Bobonis and Castro 2010 (background paper).

²⁰³ Bobonis 2009. As an informal check on the consistency of this hypothesis, a comparison of socioeconomic and demographic characteristics of beneficiary and nonbeneficiary households in 2003 and 2006 suggests that there are important changes in their distributions. Over this period, gaps are observed between beneficiary and nonbeneficiary women in age, in their ethnic background and in that of their partner, and in schooling attainment. Moreover, the gap in the proportion of partners who witnessed spousal violence during childhood narrows. The background paper also provides evidence that reported levels of emotional violence among beneficiary couples formed subsequent to the start of the program are more than 50 percent lower than those of nonbeneficiary couples. This accords with the hypothesis that those couples more likely to suffer emotional abuse have dissolved and abuse in newly formed couples is less prevalent.

control over resources improves her options and welfare in the event of dissolution, lowering the threshold for dissolution and increasing its frequency.²⁰⁴

This has implications for policy, since it provides a mixed view of CCTs' effects on women's condition in the household and highlights some unintended consequences of shifting the locus of power in marital relationships, especially where the option to exit a union is either unfeasible or prohibitively costly (perhaps because of social norms or because the legal framework for marital dissolution is missing).

Recently, Aizer (2010) emphasized the relevance of what the household bargaining theory refers to as “potential outside options.” Bargaining power is determined not only by the actual distribution of resources among household members, but by their potential earnings outside the union, i.e. in the outside option. A shrinking wage gap in a woman's the local labor market, driven by an increased demand of goods in sector of the economy traditionally populated by women, is associated with declines in domestic violence in the U.S. These findings highlight the importance of relative labor market conditions of women in general measured by the wage rate, rather than women's actual earnings. Within this framework improvements in women's labor market conditions have the potential to alter household bargaining power and decrease violence even in households where women do not work.²⁰⁵

These observations and evidence urge caution and mindfulness of the cultural context in which programs are implemented. In the short-run, Oportunidades had the effect of increasing women's exposure to violent threats by 60 percent, which is likely to compromise their emotional health and other aspects of their well-being. But in the long run, endowing women with greater control over household resources may have empowered them to dissolve abusive relationships and establish healthier new ones. These effects may not generalize to other countries, and their magnitude may depend on social attitudes toward domestic violence and on the institutional environment—such as the existence of a legal framework that allows marital dissolution and on the enforcement of domestic violence laws. For instance, a shift in the locus of control to women may have much more severe repercussions in societies where there is a stronger tradition of male control and dominance—and where domestic violence is tolerated more.

6.3. Time is money: competing demands on women's time and economic participation

Bargaining positions in the household are affected by more than control over monetary resources. In collective bargaining models (both cooperative and noncooperative), spousal decisions and the allocation of resources depend on the threat points and outside options. For instance, spousal education, divorce laws, the ability to control fertility, arrangements and technologies that alter productivity in home production, child rearing, and in the labor market all can affect spousal dynamics and the subsequent allocation of resources in the household. Influencing the outside options are legislation governing marital dissolution and women's property rights and even labor market legislations, among other things in the institutional environment. Interventions that affect the value of and demands on women's time include subsidized child care, compulsory schooling laws (box 6.1), and part-time employment legislation.

²⁰⁴ Bobonis and Castro 2010.

²⁰⁵ Pollak 2005.

Box 6.1. Compulsory schooling in Colombia

In 1991 Colombia promulgated a new constitution, which made education compulsory for children from 5 to 15 years old and recommended one year of prekindergarten training, without mandating completion of secondary schooling. Starting in 1992, all children enrolled in school the previous year had to complete at least 10 years of schooling. This institutional change arbitrarily raised the probability that children born in 1977 would complete at least 10 years of schooling relative to those born in 1976. The law thus generated an exogenous change in younger cohorts' education.

The new law had little impact on the average educational attainment of men, but increased women's completed education by roughly 0.85 years. This coarse policy change thus appears to have benefited women disproportionately. In addition, there is evidence from quantile regressions that those most affected by the law were those at the lower centiles of the conditional education distribution; that is, the law raised the "education floor."

This exogenous increase in schooling allows Chioda (2011) to evaluate the causal effect of education on a variety of outcomes among women in Colombia using. She finds that there are nonzero returns to education in both the labor and marriage markets:

- Female labor force participation rises by 3.4 percentage points from a base of 49.8 percent in response to an additional year of schooling.
- While an additional year has no measurable effect on women's hourly wages, it causes a 3.1-hour increase in the number of hours worked per week, or an increase of 14 percent off a base of 22 hours a week, implying a 14 percent increase in weekly earnings.
- There is little causal evidence that an additional year affects either the likelihood of being married, the probability of having children, or the number of children in the household, independent of marital status.
- Conditional on being married, an additional year of schooling yields large returns to women. In particular, married women have improved fertility outcomes (the number of children in the household falls on average by 0.12), and their husbands have better characteristics, suggesting that education improves prospects in the marriage market: Their husbands have 0.7 more years of education and, while their corresponding hourly wages are no higher, they work on average 6 more hours per week.

Thus an additional year of schooling yields multiple dividends for women in household earnings, since they are more likely to be employed, and both their weekly hours and those of their husbands increase (without reductions in wages).

When repeating the analysis with census data, Chioda (2011) faced with a trade-off between the number of observations (and thus the precision of estimates) and the detail of individual information. Overall, the above results are confirmed and seldom strengthened. For the full aggregate sample:

- The change in compulsory schooling increases the average years of schooling of the younger cohort of girls by 0.38 years. This is associated with a 7-percentage-point increase in their likelihood of being employed in 2005 (where the baseline participation rate was 30 percent). The effect is both statistically and economically significant.

The impact of the reform on fertility is also important. The causal effect of an additional year of schooling is a 0.25 reduction in the average number of children per woman in 2005. The size of this effect is all the more surprising given the local nature of the identifying variation, which compares women born just one year apart.

Source: Chioda 2011b.

The focus here is on women's labor market outcomes, to enhance understanding of decisions to participate in the labor market and form a family.

6.3.1 *Public provision of child care and women's labor supply*

As shown in earlier chapters, the presence of children in the household has a stable and statistically significant correlation with the likelihood of women's participation in the labor market. Parenthood reduces aggregate household involvement in the labor market by increasing the value of time spent at home relative to time in the market.

Whether by choice (desire to care for and rear their children) or comparative advantage (resulting from biological or market conditions), an efficient division of labor in the presence of children tends to be affected, by reduced market wages resulting from potential lost experience and forgone tenure due to withdrawals from the labor force to care for children and the competing demands on working mothers. In a collective bargaining model, this leads to some segmentation of market and home production activity between spouses due almost entirely to gender characteristics. In practice, however, the optimal amount of specialization in a marriage depends on the relative productivities of husband and wife in market and home endeavors, their preferences, and their ability to substitute market inputs for home time. As their real wages rise and their opportunities in the market improve, married women may prefer to allocate more time to market work and less to home production, reducing marital specialization.

As documented earlier, the substantial advances in female LFP over the last decades have been concentrated among married and better educated women. Further, the labor supply behaviors of men and women without children are increasingly similar (especially among singles). But substantial husband-wife specialization persists among couples, and couples with children, especially in households with women with primary or secondary education. Husbands and wives tend to specialize into gendered roles—into market and home production, respectively. Marriage is associated with a drop in the probability of being in the labor force of roughly 20 percentage points among the majority of countries, while the presence of children under five reduces this probability to a much smaller (yet still economically significant) degree, between 5 and 10 percentage points.²⁰⁶ With an average baseline LFP rate of 50 percent among married women, the presence of children under age 5 represents a 10-percent reduction in female LFP. Further, some of these negative correlations are larger for women with primary and secondary education, but are considerably lower for women with tertiary education.

An interesting feature of the relationship between family formation and women's likelihood of being in the labor force is its remarkable stability across age cohorts and over time, suggesting the stability of the underlying reasons, including preferences and social norms. The negative correlation between fertility and the likelihood of being in the labor force exhibits moderate variation across levels of education. In accord with the importance of fertility and family formation in the labor market, the penalties associated with fertility are far from restricted to low socioeconomic status women, or to women with limited career prospects. Even among highly educated women (MBAs from highly selective U.S. schools), who are unlikely to be resource constrained, the presence of children is associated with less job experience, greater career discontinuity, and fewer work hours. As a result, while disparities in the productive capacities of male and female MBAs are small or nothing, the pecuniary penalties related to family formation from fewer work hours and career discontinuities are sizable.²⁰⁷ Where choices are likely not constrained, the reduction in current and future wages can be interpreted as monetized valuation (shadow price) for rearing their children.

²⁰⁶ Chioda and Demombynes 2010.

²⁰⁷ Bertrand, Goldin, and Katz 2009.

6.3.2 Impact of child care on attachment to the labor force—evidence from Latin America and the Caribbean

The persistent negative correlation between fertility and women's LFP, along with the (mixed) evidence from a number of OECD countries that large-scale expansions in the market supply of child care can encourage female LFP, have contributed to the view that the main obstacles to women's economic participation are the difficulties balancing it with the demands of child care and home production. This view seems to be confirmed by results from the Bolivian Enterprise Survey as well as focus groups of women beneficiaries of a program in Mexico (box 6.2).

Box 6.2. Mexico's Programa Estancias Infantiles para Apoyar a Madres Trabajadoras

The main objectives of the program are to provide support for working mothers and single parents with preschool children to gain access to or continue in the labor market (or school) by expanding the supply of day-care centers and providing subsidized care for children.

An impact evaluation is still in progress, but the following preliminary results have emerged from a qualitative study based on focus groups:

- Cultural barriers feature prominently in program take-up with many feeling that “it is the responsibility of women to raise their children.” These sentiments vary widely by location and are strongest in the south.
- Among participants, the benefits most cited are affordability and greater flexibility to look for work, especially in the formal sector, which has more rigid work schedules.
- Among the employed, the benefits most cited are higher productivity on the job, given fewer concerns about children; a feeling of empowerment and more flexibility in allocating household income; and more quality time with children.

Source: Gertler and Martinez 2010.

The belief in the efficacy of child-care provision as tool to foster female LFP has also found support in a handful of simulation studies, whose findings have to be carefully interpreted because they are often based on efficient provision. For instance, in Chile, political interest in the Bachelet administration's dramatic expansion in the supply of day-care centers stimulated ex-ante evaluations of the measure, which often report large impacts on female LFP.

Bordón (2007), for example, uses a Chilean household survey to characterize the determinants of female labor supply. She predicts that doubling the supply of day-care centers (the Bachelet plan expanded them by 240 percent between 2005 and 2007) would increase women's LFP by 5.7 percentage points. This represents a sizable effect, considering the low baseline participation rate among Chilean women (43.3 percent in 2006).

Using a survey designed to measure the potential use of day-care facilities, Bravo, Contreras, and Puentes (2008) find that a subsidy of about US\$100 with a copayment of US\$35 would increase female LFP by 15–20 percentage points—again, a large effect.

Ex-post evaluations of the same program differ in their conclusions, however. Medrano's (2009) evaluation of the impact of the dramatic expansion in the supply of day-care centers after 2005 reveals no evidence of an effect on female LFP. She hypothesizes that the expansion instead induced women already in the labor force to substitute formal day-care arrangements for informal day-care arrangements, though the data do not permit a formal assessment of this conjecture.

The apparent incongruence of these empirical results underlines the importance of carefully identifying and estimating the effects of these policies.

In a household bargaining perspective, fertility-induced changes in the total hours of market work of husbands and wives reflect the degree of substitutability between own and market-provided child care—and the household’s perceptions of the relative costs of these two alternatives. Thus both households’ preferences (including their perceptions regarding outsourcing child care) and market conditions (including the availability, affordability, and quality of care, and the conditions faced by women in the labor market) play roles in the decision to rely on formal day-care arrangements. Is limited access to child care the obstacle to women’s economic participation and to a more equitable division of responsibilities among spouses? Would an increase in the availability and affordability of child care facilitate and encourage women’s entry into the labor force? Do preferences and social norms play a role in the observed division of labor within the household?

In principle, the public provision or subsidization of child care has the potential to provide more equitable access to quality child care and may indeed confer benefits in the form of higher labor supply among households’ secondary earners. But the effectiveness of such policies in fostering maternal labor supply depends on the answers to two questions. First, does public financing affect the quality or quantity of care provided, or does it merely lead to substitution from one form of care to another? Second, should a net increase in child care use result, is it accompanied by increases in LFP of parents?

The credible empirical evidence of access to day-care facilities and female LFP is inconclusive or often contradictory. While the evidence from developed nations is richer than that from developing countries, both sets tell intriguingly similar stories.

Studies of the elasticity of female labor supply to child-care costs in the United States deliver estimates that vary greatly, ranging between -0.36 and 0.06 .²⁰⁸ This variability exists not only across studies that employ different data sources but also within studies depending on the econometric specification and subsample in question. The uncertainty surrounding the size of the elasticity is disquieting from a policy perspective because meaningful design of interventions intended to improve women’s opportunities in the labor market depends on this parameter.

A closer look at the factors governing child care and female LFP decisions reveals the importance of social norms—and the feasibility of substituting between formal (market-provided) and informal (provided by a family member or friend) child-care arrangements. Also important is distinguishing between labor supply responses along the extensive margin (whether or not to participate) and intensive margin (how many hours to work, conditional on participating) margins.

Overall, the impact of universal provision of child care on utilization appears to be sizeable. But these effects are attenuated considerably or eliminated almost entirely once substitution between informal child-care arrangements and the new, cheaper, formal option is taken into account. Thus the large demand for formal child care appears to come from women who have already made the decision to participate in the labor market and who merely readjust their existing child-care arrangements in favor of the cheaper form of formal care.²⁰⁹

The labor supply responses to expansions in child-care facilities or subsidies are nuanced. It is often found that the maternal response is along the intensive margin (hours worked) rather than along the extensive margin (participation). This is because previously working women appear not only to favor subsidized child-care options to informal arrangements but also to work more hours in response.

²⁰⁸ Blau and Currie 2006.

²⁰⁹ See Baker, Gruber, and Milligan (2008), Fitzpatrick (2010), and Havnes and Mogstad (2009), who consider subsidies or changes in child-care provision in Canada, the United States, and Norway, respectively.

In Argentina, while maternal participation in the labor market is not especially elastic to the availability of child care, hours worked appear quite responsive: conditional on working, mothers are 19.1 percentage points more likely to work more than 20 hours a week (that is, more time than their children spend in school) and they work on average 7.8 more hours per week as a consequence of their youngest offspring attending preschool.²¹⁰

These results are in line with what is documented in focus groups, especially among mothers who already participate in the labor force: conditional on having made the decision to enter the labor market, improved access to formal child care affords them increased flexibility and potentially allows them to seek employment in the formal sectors. Consistent with this explanation, in Guatemala City negative relationship between hours worked and cost of formal day care.²¹¹

While expanding availability of child care appears to fulfill an unmet demand for formal child-care services among previously working mothers, it does not seem to induce those not in employment to enter the labor force. The evidence from experimental or quasi-experimental interventions thus challenges the widely held belief that lack of access to formal child care is the primary barrier to maternal employment across a number of LAC countries, but supports the argument that improved access relaxes a constraint on those mothers already in the labor force by enabling them to work more hours.

A closer look at the determinants of day-care choice by type reveals that household structure and a child's age are important determinants of the type of child-care arrangements. In the United States the demand for formal care increases after the second year of life, while informal home-based care is preferred for infants.²¹² Interestingly, although it is accelerated by higher wages, re-entry into the labor force is delayed by higher household income, which is consistent with a maternal preference for forming early and durable bonds with their children, afforded by higher levels of income. These observations are consistent with findings by Cascio (2009). She documents a large positive effect of an implicit Kindergarten subsidy for single women whose youngest child is at least 5 years old, but no effect among single mothers with younger children or married women. Taken together, these patterns suggest that the decision to enter the labor force may not be constrained by price or availability of child care among single women with young children and married women—at least

²¹⁰ Berlinski, Galliani, and McEwan (2008) adopt a regression discontinuity design to overcome the major empirical challenge to identifying the causal effect of preschool attendance on parental labor supply (that is, the nonrandom selection into early education and disentangling whether maternal labor supply responds to the provision of child-care services or vice versa). It relies on the plausibly exogenous variation in preschool attendance that is induced when children are born on either side of Argentina's enrollment cutoff date of July 1. Similar results along the intensive margin are found in Gelbach (2002), who makes use of children's quarter of birth as an instrument for the year they are allowed to attend public schools. An alternative strategy has been developed in the context of limited public day-care subsidies, where it is possible to compare the behavior of mothers who were eligible for the program with the behavior of those on waiting lists. For example, Berger and Black (1992), with data from the Kentucky subsidies programs, find a positive impact on hours worked as well as on the quality of the day care used.

²¹¹ Hallman et al. 2005; Quisumbing et al. 2007. An exception to the expected negative relationship between labor force participation and the cost of child care is found in Attanasio & Vera-Hernández (2009), who study Hogares Comunitarios, a large child-care and food nutrition program in Colombia. In their analysis of the production function of nutritional status, they consider the program as one of its inputs, as well as female labor supply and food intake. Although it is not their ultimate object of interest, they establish in first stage regressions that distance to the nearest Hogares Comunitarios facility and median child-care fees are highly predictive of both day-care use and maternal labor supply (participation, more so than hours worked). But these relationships are counter-intuitively of the wrong sign: their first stage estimates imply a positive relationship between measures of access to child care (both price and distance to nearest facility) and child-care use and LFP and intensity.

²¹² Leibowitz, Waite, and Witsberger 1988; Leibowitz, Klerman, and Waite 1992.

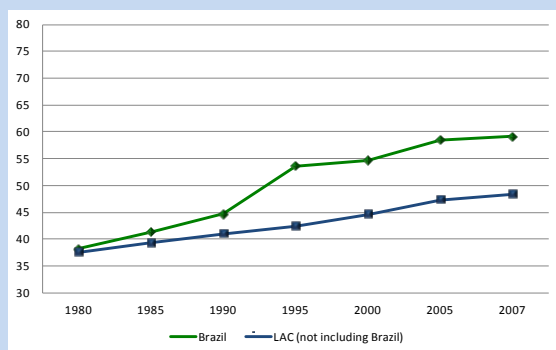
not in the United States in the three decades ending in the early 1990s).²¹³ Analogously, Hallman et al. (2005) study the correlates of mothers' LFP and child-care use. In the slums of Guatemala City, using a survey of randomly selected mothers with preschool children. They document that higher household wealth reduces a mother's likelihood of being in the labor force but does not significantly affect her hours of work. Staying at home and caring for young children therefore thus shares properties of normal goods, in that its "consumption" rises with income.²¹⁴

6.3.3 Female labor force participation and subsidized child care in Rio de Janeiro

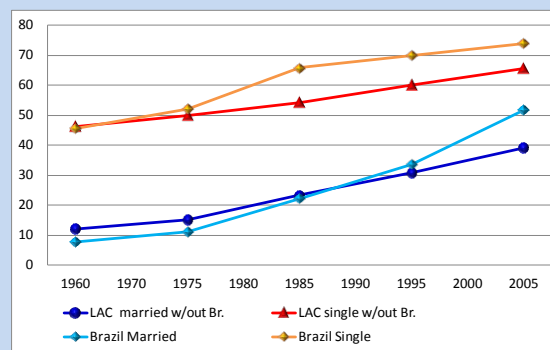
Brazilian women have entered the labor force quickly in the past few decades, but especially since 1990. The LFP rate for women aged 15 and older rose from 38 percent in 1990 to 59 percent in 2007 (figure 6.1), driven mainly by married women²¹⁵ and women with children, including small children.²¹⁶ The trend has not been offset by a decline in the proportion of working fathers. Women in Brazil participated in the labor market at almost the same rate as those in the OECD (65 percent), and at much higher rates than most other Latin American countries at similar incomes (only 44 percent in Chile and Mexico). The quality of Brazilian women's participation in the labor force remains an issue, however. Gender wage gaps remain high in Brazil by regional standards.²¹⁷ Informal employment is much more common among women than men: 53.1 percent versus 46.2 percent.²¹⁸ And unemployment is higher among women, particularly young women.

Figure 6.1. Brazilian women have rapidly entered the labor force since 1990

Female labor force participation in Brazil and in Latin America and the Caribbean (not including Brazil), 1980–2007 (percent)



Source: World Bank (2011).



Source: Chioda 2011a.

While there has been no evaluation of the impact of actual access to child care on labor supply, earlier studies have looked at the negative effects of the presence of children on maternal LFP and how this interacts with having alternative caregivers in the household.²¹⁹ Generally across the region, the presence of children has a negative impact on mother's LFP, mediated by the presence of other

²¹³ Cascio 2009.

²¹⁴ Hallman et al. 2005.

²¹⁵ Soares 2002.

²¹⁶ Brischini and Lombardi 2003.

²¹⁷ Salas and Leite 2007; Atal, Ñopo, and Winder 2009.

²¹⁸ CEDLAC 2007.

²¹⁹ Sedlacek and Santos 1991; Connelly et al. 1996.

adult females in the family. In addition, estimates of the correlation of LFP, child-care services, and earnings in low-income areas in Rio de Janeiro suggest that expanding the supply of low-cost child care could increase mothers' LFP and earnings.²²⁰ These studies do not, however, provide robust measures of the impact of unmet child-care needs on women's decision to work and on earnings. By estimating the impact of child care indirectly through the composition of the household, they most likely are overestimating the impact of unmet child-care needs on females.²²¹

A key limitation of the evidence in Latin America—especially in light of the current push to expand child-care coverage—is the lack of studies that jointly estimate the economic impacts and the impacts on children's development outcomes.²²² Carvalho et al. (2010) exploited a randomized experiment to analyze the relationship between Rio de Janeiro's subsidized child-care program and female LFP. The public day-care program is an integrated early childhood development program for children aged up to three years living in low-income neighborhoods. To improve knowledge about good parenting, it has 244 well-equipped and properly managed day-care centers in most of these neighborhoods, including full-time day care, health services, food, and instructional toys and materials for children.

In 2007, as in previous years, demand for these slots far outstripped supply: more than 25,000 families applied for 10,000 new slots. To ensure equality of opportunity, a lottery assigned the slots among all eligible applicants (about 24,000 of the 25,000). New beneficiary children started receiving services in March 2008.

A first round household survey was carried out between April and June 2008. If one ignores the imbalance in the preprogram LFP of women²²³ and considers only post-program information, a 17-percentage-point impact on female LFP is found. That is, while 48 percent of women in the treatment group worked at least once after the program started in March 2008, and before the end of the survey in August 2008, only 31 percent of women in the control group did. Note, however, that this estimated 17-percentage-point impact on female LFP is very similar to the 16-percentage-point preprogram difference obtained with recall data.²²⁴ A double-difference approach indicates that the program had no statistically significant impact on female LFP.

For the subpopulation of women who did not work before the program in 2007,²²⁵ the estimated impact on female LFP was 8 percentage points. While 17 percent of women in the treatment group who did not work in 2007 were found working in 2008, the figure was only 9 percent for women in the control group.

²²⁰ Deutsch 1998.

²²¹ However, demographic composition is likely endogenous and determined by the same unobserved household (or women's) characteristics that determine employment, compromising the identification of causal effects.

²²² Carvalho et al. (2011), a background paper for this study, documents the effect of subsidized child care on female economic participation.

²²³ This instrumental-variables estimate is statistically different from zero at the 5 percent level.

²²⁴ The 16-percentage-point preprogram difference is obtained via instrumental variables estimation. That is, it "corrects" for the noncompliance by many control children.

²²⁵ Some of the results for the subpopulation of women who did not work before the program should be interpreted with some caution. In fact, 42 percent of women in the treatment group reported working at least once in the second semester of 2007, while only 35 percent of women in the control group reported this. A possible explanation is that many subjects interviewed may have realized that the survey was related to the day-care program and therefore misrepresented what really happened before the program. For instance, mothers in the control group may have believed that if they responded that they had never worked because of lack of access to day care, they would be more likely to gain acceptance into the treatment group.

In sum, the results did not show an increase in overall female LFP, but they appear to indicate that access to free day care induces women who did not previously work to enter the labor force. However, because of the apparent baseline imbalance in preprogram female LFP, it cannot be robustly concluded that access to day care keeps women in the labor force.

Preliminary results on the intensive margin reveal a positive but insignificant effect of access to child care on mothers' number of hours worked. A closer look at the diary data from field work confirms this finding, such that the new child-care arrangement appears associated with a roughly four-hour reduction in time that mothers previously spent with their children. It is unclear whether the newly available time is now spent commuting to work, substituting between jobs with better characteristics, or simply dedicated to search of new job. Once again, there is a significant substitution effect between informal or private child care and the new public subsidized option.

6.3.4 What do social norms have to do with female labor force participation and child-care services?

Values and attitudes that reflect a combination of preferences and social norms play a key role in explaining economic activity and employment decisions in the presence of children. A large empirical literature has argued that such attitudes and beliefs, broadly defined as culture, are an important determinant of LFP.²²⁶ Of course the (un)availability of detailed and reliable data has complicated the task of applied economists attempting to understand the nature of the joint decision to work and use formal child care. Van Dijk and Siegers (1996) formalize the link between child-care use, LFP, and social norms. They find evidence that social norms and positive attitudes toward women's active roles in the market place influence actual LFP and that this in turn generates demand for child-care services. They fail to find evidence of reverse causality: the supply of day-care centers does not appear to increase women's LFP.

Similar results are found in Nicodemo and Waldmann (2009), who analyze the relationship between child care and female LFP in southern European countries. They argue that social norms in southern Europe play a large role in the persistently low LFP rates of women, who continue to take the traditionally gendered role of child care. The apparently large elasticity of female labor supply to child-care use is driven by the availability of informal child-care arrangements (mainly relatives), rather than by the presence of subsidized child-care options, especially for younger children. These results echo those of Deubush (1998) in Brazil and of Hallman et al. (2005) for Guatemala. Child-care arrangements, particularly informal ones involving grandparents, are correlated with having more time to participate in the labor market. But in other countries, such as Greece, Italy, and Spain, children spend few hours in paid child care. However, if there is a response to child-care provision, it seems to appear at high incomes and wages, suggesting a possible weakened influence of social norms at higher incomes and de facto crowding out of informal arrangements.

In Latin America the evidence on the relationship between child-care provision and female LFP is growing rapidly and benefiting from expanding the impact evaluations of large-scale early childhood development programs. The growing literature has documented benefits of early childhood development on children's outcomes.²²⁷ However, evidence of their indirect effects on female LFP paints a more subtle picture. Evidence from LAC (Colombia, Chile, Guatemala, Argentina, and Brazil), while more limited, is consistent with the patterns described above: the correlations between

²²⁶ See Fernandez and Fogli (2005); Fernandez, Fogli, and Olivetti (2002); Fortin (2005).

²²⁷ See Heckman (2009), Cuhna and Heckman (2007), and Vegas and Santibanez (2010) for reviews in developed and developing countries.

LFP and child-care provision shrink once causal relationships are isolated. In particular, after taking into consideration the likelihood that expansions in some of the child-care services are endogenously placed to respond to existing demand for these types of services, significant impacts along the extensive margin are no longer observed. Instead, considerable substitution from informal to formal or subsidized child-care arrangements are found, sometimes coupled with an increase in hours worked.

In OECD countries, education and the absence of children appear to have strong positive effects on LFP, whether controlling for stated preferences for traditional gender roles or not.²²⁸ These preferences have significant and negative effects and contribute a great deal of explanatory power to a regression model. The patterns and stylized facts emerging from the World Values Survey suggest that the aggregate effects of social norms on female LFP may be sizable even in the LAC region. While LAC has experienced significant improvement in terms of the so-called discriminatory views, both men and women in the region show a strong attachment to more traditional views of women in the household and child rearing.

Finally (and interestingly), the stated belief by women that working women aren't perfect substitutes for their nonworking counterparts in providing child care and rearing children has a negative and significant effect on LFP. This suggests that economic costs of child care, such as price and availability, will play a bigger role for women who have already sorted into the labor force based on their values and preferences for economic participation. In fact, job characteristics and wages play at best a minor role in explaining their participation.²²⁹

Although social norms tend to move slowly, they are by no means static or predetermined, and their dynamics are a potential interesting margin along which to design effective policies. On the effects that a woman's decision to work has on her children and their beliefs, the extent to which LFP trades off her children's future utility is unknown.²³⁰ However, there is strong evidence in the United States that women pass on their beliefs about the importance of nurture to their children. Each generation updates those beliefs, using a set of observations on other children's outcomes.

But observations are only informative about the cost of LFP if women from the previous generation work. Initially, very few women participate in the labor market; information about the role of nurture diffuses slowly, and beliefs are nearly constant. As information accumulates and the uncertainty surrounding the effects of LFP dissipates, more women participate, learning accelerates, and LFP rises more quickly. As beliefs converge to the truth, learning slows down and participation levels off. In this view of the intergenerational transmission of beliefs, a mother's position in the household and her ability to make her own decisions about economic participation is important in the dynamics of social norms. To the extent that policies such as CCTs and child-care subsidies facilitate women's economic participation and endow them with more control over their economic lives, they may also generate momentum in changing social norms, though their effects would appear in the long run.

²²⁸ Fortin 2005.

²²⁹ Fortin 2005.

²³⁰ Fogli and Veldkamp 2011.

6.4. Labor market rigidities: Part-time work arrangements and economic participation

Sweden is traditionally invoked by many economists as the standards in terms of child-care provision, parental leave policies, and its family-friendly employment policies. It is also lauded for its progressive views on gender parity. Despite this, only 1.5 percent of senior managers are women, compared with 11 percent in America. Three-quarters of Swedish women work in the public sector; three-quarters of men in the private sector. Why is the public sector so popular for women? Among the most cited reasons are the availability of part-time opportunities, a relatively flat wage scale with respect to tenure, the ease of transition in and out of the sector, and fairly light loads in terms of hours, even in full-time positions.

The presumed female comparative advantage in home production can be attributed to a gender gap in market wages and to a productivity advantage in household activities, including the care of children. These may come from biological factors, preferences, or early training in domestic tasks. In the bargaining model, women's preferences for flexible work arrangements can be ascribed to the attempt to achieve an optimal division of time between market and home production and to social norms and attitudes toward traditional or progressive gender roles. Cultural factors, such as *machista* or conservative values, reduce female LFP in Chile.²³¹ Fernandez, Fogli, and Olivetti (2004) stress the importance of intergenerational transmission of norms and attitudes: wives of men whose mothers worked are more likely to work, either because the husband is less averse to his wife working, or because he is more willing to share or is more productive at housework.²³² For any given set of social norms, the initial gains to specialization will be reinforced over time as husband and wife acquire skills specific to the market or domestic sectors in which they specialize. This will be true particularly if labor market institutions are so rigid as to force full specialization—say, by inhibiting occasional or part-time market work by the spouse specializing in the domestic sphere. So, the specialization in the household is also influenced by options in the labor market and by the extent to which it is feasible to make choices along the intensive margin of labor supply—that is, by whether there is flexibility in choosing how many hours to engage in market work. This section sheds new light on part-time institutional arrangements and their impact on female LFP. The evidence on flexible work opportunities comes largely from OECD countries, with relatively little work on LAC, where few countries offer regulated part-time options. As such, this case study of Argentina provides insight on the importance of flexible labor market institutions.

This section asks the following questions. Is the informal sector enabling women to balance demands on their time between market and home production, and thus avoid full specialization in one sector or the other? Is there demand for part-time work arrangements? Are part-time employment and informality substitutes that offer solutions to balancing competing demands on women's time?

Women experience substantially longer spells out of the labor force, transition less often into formal employment, and experience particularly dynamic transitions between informal self-employment and being out of the labor force.²³³ These features of gender transitions appear largely related to family formation and household structure (and the very presence of the informal sector). Single women, in fact, are far more similar to men in their transitions and are generally overrepresented in the formal

²³¹ Contreras and Plaza 2008.

²³² Fernandez, Fogli, and Olivetti 2004.

²³³ Bosch and Maloney 2011.

sector relative to married women. It has been hypothesized that the restrictions on part-time work embedded in the labor codes of many countries in the region contribute to their low female LFP rates and to the overrepresentation of women in the informal sector. This would be consistent with static findings that women are underrepresented in jobs protected by labor legislation, termed “formal,” and overrepresented in those that are not (informal jobs).²³⁴

6.4.1 Who is working part-time in OECD countries?

In several European countries, the percentage of women who work part-time because of family responsibilities (which include child care and care for elderly family members) is quite high, exceeding 40 percent in Austria, Germany, Switzerland, and the United Kingdom.²³⁵ Thus, the option of part-time employment may play a role in the LFP of women who face such circumstances. This observation is likely to hold outside Europe—and particularly in LAC, where the responsibilities for family and household production fall disproportionately on women.

The reasons underlying different gender-specific occupational representations can broadly be broken down into human capital endowments and preferences for the characteristics of one type of job over another.²³⁶ Together, these lead to differences in the comparative advantages across jobs that a well-functioning labor market will allocate differentially across sectors.

Boeri, Del Boca, and Pissarides (2005) find a strong relationship between household formation and part-time work. In the United Kingdom, for example, single women without children are 5.5 percent more likely than single men without children to hold a part-time job, but the disparity rises to 23.5 percent for those married without children and to 50.1 percent for those married with small children. Documenting the patterns across OECD countries, the authors conclude that “in northern and central Europe, part-time work among women is explained largely by family ties (especially when there are very young children), and it is unlikely to be perceived as the consequence of a market constraint on the number of hours worked. On the contrary, in southern European countries (including France) the explanatory power of family ties in female part-time employment is lower, and single women are more likely to be involuntarily part-time than are single men. The results for the southern countries are much easier to reconcile with discrimination against women in regular, full-time jobs than with gender differences in preferences or comparative advantages” (p. 53).

As an alternative work arrangement, part-time work lifts a constraint between the extremes of unemployment and full-time employment, allowing for greater flexibility in the labor market. Beyond this mechanical benefit, part-time work may be seen as a means to facilitate the integration of women in the labor market, by allowing them to combine market work with family responsibilities, and by enabling the accumulation of human capital while meeting such family demands. Conversely, the social value of part-time work may come into question if the labor market segregates into full-time and part-time work along gender lines, perhaps due to barriers such as social norms or discrimination. That is, in some countries part-time jobs may marginalize women in the labor market. This may occur when part-time jobs are characterized by poor wages and benefits, low job tenure, and the absence of training, reducing women’s prospects of promotion and putting them at a higher risk of dropping out of the labor force.

²³⁴ See Boeri, Del Boca, and Pissarides (2005) and Dolado (2002).

²³⁵ European Labor Force Survey 2001.

²³⁶ Boeri, Del Boca, and Pissarides 2005.

Interestingly, there is some evidence of a wage penalty among voluntary part-time workers, as if part of the compensation in the voluntary case (northern Europe) is the added flexibility. Accordingly, workers are willing to be “remunerated” with flexibility and forgo some of the pecuniary compensation. After controlling for a number of earnings determinants and job characteristics, Pissarides et al. (2003) find evidence of an hourly earnings penalty for part-time jobs in northern Europe, where part-time work is considered voluntary. However, in southern Europe, where part-time work is perceived as involuntary, the wage gaps are reversed, and the authors report a wage premium in Austria, Germany, and southern European countries.²³⁷

Marginalization might be measured by a difficulty to move to full-time jobs or weak attachment to the labor market. O’Reilly and Bothfeld (2002) find that only a small proportion of women in Germany and the United Kingdom can use part-time work as a bridge back to full-time employment. Instead, a substantial percentage drops out of employment, especially mothers of more than one child. For the United States, Miller (1997) finds that part-time experience increases the probability of part-time employment and decreases the probability of full-time employment, even if part-time work was taken up temporarily due to the presence of children. On the other hand, Blank (1989) and Farber (1999) conclude that part-time and temporary work are often part of the transition out of unemployment, leading to regular full-time employment in the future.

While there are several measurable disadvantages and penalties associated with part-time work (as detailed above), it is unclear whether the overrepresentation of women in part-time employment results from societal constraints and welfare-reducing frictions in the labor market (such as discrimination or perceptions of lower productivity) or from optimizing behavior by households. For instance, the observed distribution of genders across employment modalities may obtain if households optimally split their time between market and home production and husband and wives are differentially productive in the two sectors, with women (on average) holding a comparative advantage in home production and child rearing.

Booth and van Ours (2008, 2009, 2010) study the relationship between hours of work and self-reported job and life satisfaction and happiness in three countries. In Australia (Booth and van Ours 2009), they find that women working part time are more satisfied with working hours than women working full time. Partnered women’s life satisfaction increases if their partners work full-time. Male partners’ life satisfaction is unaffected by their partners’ market hours but increases if they themselves are working full-time.²³⁷ For the United Kingdom, Booth and van Ours (2008) report that women prefer part-time jobs irrespective of whether their hours are many or few. In the Netherlands, where the share of women workers aged 25–54 years who are working part time is 54 percent, Booth and van Ours (2010) analyze the relationship between part-time work and life satisfaction and between job satisfaction and preferred working hours, using panel data on life and job satisfaction for a sample of partnered women and men. The authors exploit time-use data to consider the distribution within the household of market work and housework. Their main results indicate that partnered women in part-time work have high job satisfaction, have low desire to change their working hours, and live in partnerships with highly gendered household production. They conclude that the results suggest that part-time jobs are “what most Dutch women want.”

In OECD countries, women work less than full time by choice and with some satisfaction, rather than as a result of social forces or constraints in the job market.²³⁸ This contrasts with the only comparable evidence from Latin America, where the share of women working part-time increased

²³⁷ These findings are consistent with the gender identity hypothesis of Akerlof and Kranton (2000).

²³⁸ Booth and van Ours 2008, 2009, 2010.

30 percent between the mid-1990s and the early 2000s. Unlike the above results from OECD countries, López Bóo, Madrigal, and Pagés (2009) do not find a preference for part-time work among women: In Honduras both women and men tend to prefer full-time work, though the preference for working longer hours is more intense for men.²³⁹ In addition and somewhat surprisingly, partnered women with children are more likely to prefer full-time work than partnered women without children. The authors hypothesize that women may be labor supply-constrained, working part-time not by choice but rather because the demand for labor is lacking. And working full time is likely to be preferred because it generates more per capita household income. The contrasting results between developed countries and Honduras point to a need for a better understanding of demand-side constraints on labor and of worker flows across modalities of work.

While the discussion here has centered on the full-time or part-time margin of choice, many of the arguments regarding the tradeoffs apply similarly to the distinction between formal and informal work. While work in the formal sector often entails (explicit) benefits, such as social insurance and some degree of job security (depending on the regulatory regime and the rigidities built into the labor market), it can be inflexible and impose restrictions on time and child rearing.

6.4.2 Part-time work legislation and female labor force participation in Argentina

Argentina's legalization of part-time work in 1995 provides an opportunity to distinguish between different hypotheses concerning why women with children are overrepresented in the informal sector, relative to their counterparts without children.²⁴⁰ The first is that women with children may be rationed out (discriminated against) of formal employment. The second is that the need to balance family and work responsibilities may require increased flexibility with respect to hours of work.

Before 1995, formal employers were prohibited from offering part-time contracts, leaving informal work and, in particular, self-employment as the only option for women with children seeking flexible employment. A more flexible contract added another alternative. If formal employers systematically discriminated against women on the basis of gender, an increase in formal employment should not be expected simply because they could be hired for fewer hours.²⁴¹

In line with of the previous chapters, married women differ from single women beyond merely marital status. Single women with no children both participate more, and tend to use more full time contracts than their married counterparts, although there are no significant differences in degree of formality. But on having children, unmarried women converge more toward married women on both measures.

For both single and married women, formal employment is correlated with higher rates of full-time employment. This is particularly dramatic in the case of single women without children for whom 86 percent of formal positions are full-time compared with 67 percent in informal employment. Finally,

²³⁹ López Bóo, Madrigal, and Pagés 2009.

²⁴⁰ This section features the results of Bosch and Maloney (2011), a background paper for this study on the 1995 part-time labor reform in Argentina.

²⁴¹ Bosch and Maloney (2011) restrict their analysis to women between 20 and 40 years of age who are either household heads or spouses. Unfortunately they cannot perfectly identify part-time contracts in their data since the nature of the contract is not revealed. They rely instead on the total number of hours worked during a week, considering in particular that a woman is a part-time worker if she claims to work less than 30 hours during the interview week.

part-time work was becoming increasingly prevalent over 1993–2001 for all categories of women, though more conspicuously for women with children.

Focusing on married women (the bulk of the sample), several observations are noteworthy. First, a slight increase in participation is observed over this period—7 percent for those without children and 4 percent for those with children. Second, formality remained constant across the two periods for those without children. For married women with children, however, it increased initially by around 5 percent and then substantially by around 9 percent in formal part-time jobs.

Single women show similarly patterns—though less striking. Participation rose for those with and without children. Informality fell for both classes as well. And, again, the increase in formal employment was accompanied by a rise in part-time work for both.

To investigate the impact of Argentina’s part-time reform, Bosch and Maloney (2011) divide the sample by women’s marital status and the presence of children. In addition, they also distinguish between women with one or two children and women with more than two children, to explore possible nonlinearities in the effects of family responsibilities on the labor supply decisions.

Participation. Bosch and Maloney (2011) report no significant effect of the change in part-time legislation on overall participation in part-time work. These results hold for the whole sample as well as for subsamples segregated by fertility and marital status. Either workplace flexibility was not a factor in participation decisions or the informal sector provided the necessary flexibility for those willing to work.

Single women with and without children seem to be less elastic to the change in legislation, along the intensive and extensive margins: conditional on being active in the labor market, this group does not exhibit a preference for a more a formal flexible work arrangement. This pattern could reflect a more binding budget constraint relative to married women who have the option to pool resources with spouses, hence adjusting the intensity of their participation.

Substitution. However, important changes in the allocation between informal and formal employment emerge across the period. In particular, for married women with family responsibilities, the authors find a significant increase in formal employment (8.6 percentage points) at the expense of self-employment (−7.2 percentage points), compared with married women without children. Given the dominance of the married women with children category, this represents a decline in female informality of roughly 4–5 percentage points.

To shed light on whether the rise in take-up of part-time formal work was driven by the appeal of formality as a job characteristic, the authors consider substitutions across part-time work arrangements only: informal self-employment, informal salaried, and formal part-time. A significant 5.3-percentage-point increase in the probability of women with children being in part-time formal employment is recorded after the reform, relative to those without children. The result appears to be driven mostly by married women with 1–2 children, once again at the expense of a reduction in self-employed part-time contracts.²⁴²

²⁴² There is also a significant 3.4-percentage-point decrease in the probability of married women with children being in informal self-employment, relative to married women without children. This may be because the sector is an entry point into the labor force for young workers, perhaps before marrying and child bearing. Alternatively, to the extent that women are working as “salaried” informal workers in family microenterprises, other household considerations (such as child-care responsibilities) could be expected to hinder substitutions out of this category.

In sum, the authors find strong evidence that the law increased formal sector employment at the expense of informal self-employment and that this was driven by the uptake in part-time work in the formal sector.

These results are consistent with formality being preferred, but prior to the change in legislation, only informal work offered the flexibility necessary to accommodate family responsibilities. The rise in formality appears to be driven primarily by married women with 1–2 children, with a more muted and insignificant effect recorded for those with more children. The substitution patterns apparently driven by the uptake in formal part-time work suggests, first, that informality was a flexible option to (the more rigid) formal employment prior to the change in legislation—and, second, that well-designed legislation, which recognizes the realities of the demands on households' time, can have a significant impact on the level of informality.

This set of results is consistent with evidence from Fortin (2005), who considered the determinants of part-time occupation. The absence of children and being single are associated with large reductions in the probability of working part time, as noted in previous sections such that the correlates of single women's labor supply resemble those of men. Interestingly, females' stated preferences for a more traditional division of labor between sexes are also negatively related to the probability of being employed part time. Finally, the presence of children coupled with the belief (stated preference) that mothers provide better care for children is strongly and positively correlated with part-time work, suggesting that part-time work may afford women some flexibility in balancing maternal and professional roles.

An indirect measure of the role of part-time arrangements in balancing the competing demand on women's time is the fact that, unlike full time participation, women's part-time participation is significantly related to job characteristics. Unsurprisingly, "good wages" are predictive of part-time work (implying that the income can be dedicated to outsourcing home production). More surprising is the fact that "good hours" are even more predictive: flexible work hours increase the probability of working part time by 5 percentage points, after controlling for demographics, gender attitudes, and education. The division of labor within the household and the relative bargaining positions of spouses are influenced not only by relative comparative advantages, strength of assets brought into the marriage,²⁴³ and social norms—but also by institutions and, more generally, by the options available outside the household.

In Argentina, institutional reform highlights unmet demand for flexible work arrangements, which is otherwise met by the informal sector. In particular, the addition of a formal option with flexible hours seems to attract new female workers who may otherwise be deterred by the informal status. It thus appears that the lack of an option to choose the intensity of labor supply may force some women into specializing in home production, because of their comparative advantage.

This natural experiment highlights that reforms successfully encouraging female LFP recognize the differences between men and women in their preferences and in their comparative advantages in home or market production. This enables policy-makers to design effective gender policies, by recognizing and exploiting these differences to allow free and unconstrained choices.

²⁴³ Hallman et al. 2005.

Chapter 7. Concluding Remarks

LAC has experienced remarkable achievements in terms of gender parity in several key areas including health, fertility, maternal mortality and education. Over recent decades, girls have even been outperforming boys on a number of education indicators. A significant portion of these achievements is due to girls' increased attainment at the higher levels of education. In fact, they are today more likely than boys to be enrolled in secondary and tertiary school and also more likely to complete both. The female share of the total population has risen in tandem with both female and male life expectancy at birth, the gender gap of which has widened in favor of women. Fertility rates in Latin America have dropped dramatically over the past 50 years, converging to those of high-income OECD countries.

Over the past four decades, LAC has also witnessed unprecedented growth in female labor force participation, with nearly 70 million additional women entering the labor force since 1970. Female LFP has risen faster in LAC over the last three decades than in any other region, rising from roughly 36 percent in 1980 to more than 52 percent in 2009. In most LAC countries, the rate of female LFP has at least doubled since the 1960s, and has tripled in Brazil. Improvements in human capital investments, changes in the structure of the family and in the degree to which the market rewards them account for a large fraction of the observed trends. The expanded professional engagement of women has translated into higher political participation, with the share of parliamentary seats held by women in LAC exceeding that of high income OECD countries in 2010.

7.1. New challenges for women and policy makers

In light of the region's remarkable achievements over the past four decades, it may be tempting to conclude that the gains in access mechanically translate into gains in labor market outcomes and that welfare can unequivocally be inferred from these trends. The findings in this study caution against such simplistic views and urge a deeper understanding of women's decision making processes in order to improve the design and efficacy of policy.

The relationship between economic development and female economic participation is neither linear nor monotone. The interplay of several micro economic factors gives rise to one of the most robust empirical regularities in the literature linking female LFP and economic development. Also in LAC, female participation initially declines with development then rises again, and draws different sub-groups of women into the labor force in a heterogeneous fashion. This report provides insight on the complex interplay between economic development and female economic participation. Single women enter the labor force at earlier stages than their married counterparts, with their behavior mimicking that of men; married women and mothers then follow in degrees that vary with their characteristics, including their level of education, cohort, and family structure.

The relationship between female participation and economic development is made more complex by

the acknowledgement that individuals are part of larger economic units – families. Whatever the reasons for family formation – be it a Beckerian motive to take advantage of complementarities in consumption and economies of scale in the provision of household public goods or a desire to achieve a sense of belonging that enhances intrinsic values and meets the aspirations of social relatedness (Maslow, 1943) – intra-household dynamics play a central role in determining welfare, and in the efficiency and equity of outcomes. At the core of the recognition that household interactions play a mediating role in outcomes is the implicit assumption that men and women, while equal in rights, differ along several important dimensions beyond the obvious physical comparative advantages in fertility.

It is therefore inside the household that divergences of opinion, preferences, and comparative advantages are negotiated to reach decisions regarding the division of labor, child care responsibilities, home vs. market production, etc. In some cases, intra-household interactions can yield efficient specialization among spouses, such that both spouses do not have identical degrees of engagement in the labor force. In other instances, the interaction may lead to inefficient allocations of resources and/or destructive outcomes, as in the extreme case of domestic violence, making a case for policy interventions on equity and efficiency grounds.

The evidence and analysis in the report ties the historical process of female economic integration and widening choice sets to a fundamental change in paradigm in women's decision making.²⁴⁴ This paradigmatic transformation includes a shift in the horizon over which women's human capital investments yield returns and, consequently, in their attachment to the labor market. It also includes a contemporaneous shift in women's perceptions whereby they consider their work a fundamental part of their identity, which is related to the distinction between jobs and careers.

These complex transformations widen women's opportunities and aspirations and pose new tensions and challenges for women which, paradoxically, have been made possible by four decades of steady gains. Understanding the nature and sources of tension for women trying to balance work and family is thus crucial for policy.

However, women's ability to balance their new identities with traditional responsibilities is not without its challenges. Whether it is with regards to child care choices, part-time employment opportunities, or sectoral allocations, an unmet demand for flexibility consistently emerges among women who are married and/or have children.

Transition patterns between the formal and informal sectors were found to be consistent with them being voluntary and driven by family structure. Women's responses to Argentina's legalization of part-time work in 1995 are also consistent with this view. A large fraction of married women with children rapidly transitioned to formal employment from their previous positions in the informal sector, without any appreciable effect on aggregate female LFP. This behavior reveals a preference for formal – yet flexible – forms of employment among married mothers suggesting that, prior to 1995, the demand for flexible arrangements was met by the informal sector, in which women with children were overrepresented, but that formal sector options, in which social security protections are granted, were preferred.

A similar form of substitution is encountered in the response to the introduction of universal childcare. A robust finding across virtually all the studies considered (in LAC and OECD countries) is that the impact of universal child care provision on utilization is sizeable: eligibility for public child care provision invariably results in high take up rates. The significant demand for formal child care

²⁴⁴ Goldin 2006.

services appears to result largely from crowd out of existing arrangements whereby working mothers who relied on informal child care arrangements prior to their eligibility – for instance, through agreements with extended family members – opted into the publicly provided option.

Satisfying the previously unmet demand for formal child care appears to improve the quality of participation in the labor market for some women, with the increase in quality occurring along the intensive margin of participation (i.e. how many hours worked) or sorting into higher productivity jobs.

The welfare gains from lifting constraints on women and families such as those discussed here are potentially large despite the fact that, in both instances, the intervention drew no new women into the labor force. Instead, the behavioral responses come from more subtle forms of substitution exclusively among mothers who would have worked in the absence of the intervention (in the case of free child care provision, the response also involved increased hours worked). Formality is thus highly valued, while the provision of subsidized childcare has the potential to increase mother's quality of life by lifting concerns about childcare and the quality of their participation in the labor market.

Although not discussed formally in this report, maternal leave policies have in recent years received considerable attention as an instrument for easing constraints on households and enhancing the quality of working women's lives. Part of the interest in these policies is related not only to their high take up rates, which signal workers' high valuations for this type of benefit and their potential to mitigate the incidence "mother's guilt," but also because they have important benefits for children's cognitive and non-cognitive development in the medium and long runs.²⁴⁵ The latter observations are of particular interest in light of potential trade-offs surrounding female LFP discussed in the literature which stress that, in some cases, the additional income made available to women by being the labor force may not compensate for the reduction in time investments in their children. More broadly, it is worth noting that the welfare consequences of these policies may not be limited to the short run. Interventions that alleviate the burden on working mothers and facilitate balancing work and life can afford parents the possibility of higher quality parenting, and enable them to be present at critical periods of their children's development. With research showing that nurturing children early is beneficial to child development and yields long term rewards in the form of improved health, human capital, and productivity,²⁴⁶ policies that help reconcile work and parenthood can generate social returns in the long run.

The report has uncovered and highlighted strong parallels between the experiences of women in the region and those in the U.S. Specifically, the evolution of LFP of single and married women in LAC mimicked very closely that of American women, only at a 30 year lag. If the analogy to the U.S. experience is extended, the history of American women's experiences could provide a glimpse into the future for LAC, a future that may come sooner than 30 years given the region's current pace.

Despite the extraordinary progress of U.S. women over recent decades, measures of subjective well-being indicate that women's happiness has declined both in absolute terms and relative to men. In the 1970s, women reported higher subjective well-being than men; the relative declines in female happiness have eroded and reversed a gender gap in happiness which has been linked to the expanding roles and identities of women.²⁴⁷ Similar trends are found across different measures of

²⁴⁵ See for example Carneiro, Løken and Salvanes, 2011.

²⁴⁶ Carneiro, Cunha and Heckman, 2004.

²⁴⁷ Stevenson and Wolfers 2009.

subjective wellbeing, demographic groups, and industrialized countries. The literature has also drawn attention to another form of trade-off, this time operating across generations. Maternal employment may be associated to lower health and cognitive outcomes, suggesting the possibility that the additional income may not compensate for the reduction in time investments in children, particularly during the early and critical stages of human development. For instance, Bernal (2008) documents that having a full-time working mother who uses child care during one of the first five years after child birth is associated with a 1.8% reduction in child test scores. In turn, Morrill (2011) documents that the probability of an overnight hospitalization, an asthma episode, or an injury/poisoning rises by 200% with full time working mothers.

As a possible reflection of some of these tensions, after a century of remarkable gains in economic engagement, female LFP leveled off in the U.S. in the late 1990s despite continued advances in educational attainment. Given that the LFP of college-educated women had almost reached parity with men's in the mid-1990s, the slight retreat was particularly disappointing for the women's movement. The phenomenon was characterized in the popular press as “opting out”²⁴⁸ wherein changing attitudes may have included backlash from the workplace that made it difficult for women to reconcile their dual identities as homemaker and “career woman.” Among the professional and managerial ranks, where higher incomes afforded them a wide range of choices, women became more reluctant to juggle their roles as executives and mothers, and more willing to forego paychecks and prestige in favor of time with their families.²⁴⁹ It is conceivable that a similar phenomenon may occur in LAC in the coming decades.

This and other evidence reviewed in the report is illustrative of a new set of challenges for women made possible by the four decades of achievements, and identifies new needs for policy intervention to address the delicate and complicated issues of navigating women's expanded set of opportunities.

7.1.1 A new menu of gender policies and a new focus

Today, the complex environment requires women to balance different roles, identities, and aspirations. Jobs, careers, and family place competing demands on women's time and attention, more so than at any other time, and pose new challenges for them and for policy makers. Gender policy in LAC is at a crucial juncture which calls for an expansion of the policy perspective.

This is in large part the product of success, for there has been substantial progress—amply documented in this study—toward achieving gender parity in key dimensions relating to human dignity, particularly access to basic services (e.g., health, education) and fundamental human rights. These achievements are welcome, as they implicate universal principles that should apply to all humans, independently of sex, race, religion, etc.

Nevertheless, the policy goal of gender parity with respect to basic rights and services has not been fully or uniformly reached across the region. There remains much room for improvement, particularly where chronic poverty is intertwined with precarious access and where certain institutional arrangements and social norms breed systematic “barriers for women”. But the improvements in the circumstances of women in LAC over the past decades are undeniable and call for a reassessment and expansion of the policy focus.

The first generation of gender policies in LAC tended to set quantitative objectives for gender

²⁴⁸ Belkin, 2003, Wallis, 2004 and Story, 2005.

²⁴⁹ Wallis 2004.

parity—focusing not only on equal access (e.g., to health, education, judicial services) but also on equality in certain outcomes (e.g., equal pay for comparable experiences and skills, or equal participation in the labor force, in electoral ballots, or in congressional seats). This is appropriate to the extent that societies are trapped in inefficient and inequitable equilibria characterized by discrimination and abuse of women. In such a context, quantitative gender parity targets to monitor achievements can help societies break free from an unfair status quo.

But as the standing of women improves and their opportunities and choices widen—as is happening in LAC—new issues, tensions, and challenges arise. They point to the need for a second generation of gender policies, one that would still encompass certain (more focused) quantitative targets for gender parity but that would also go well beyond them.

The evidence and analysis presented in this study indicate that women in LAC confront competing demands for their time and energy as they, on the one hand, join the labor force and increasingly see employment as part of a career (rather than a simple source of income) and, on the other hand, seek self-realization through marriage, motherhood, and family. These complexities have to be brought to the center stage of policy design.

There is, of course, no one-size-fits-all policy agenda that is well suited to these changing gender realities. Reform agendas have to be adapted to the context of individual countries. But the evidence examined in this study suggests at least three key directions for the new generation of policies.

“The highest equality is equity” - Victor Hugo

First and foremost is the need to revise gender policy’s *goals and expectations*. This follows naturally from the recognition that the equalization across genders of access to basic services and fundamental human rights does not translate mechanically or monotonically into the equalization of outcomes, such as the extent and modality of female economic participation. Nor are outcomes a perfect reflection of wellbeing.

The ascribed role of preferences, household relationships, institutions, and social mores as mediating factors invites a change in policy perspective from gender parity (which is akin to gender blindness) to *gender consciousness*. In turn, gender consciousness entails an emphasis on equity over equality. While equality implies sameness and, by definition, ignores differences, equity recognizes differences and engages them to facilitate the realization of each person’s potential to the fullest extent possible—to which gender consciousness aspires.

The emphasis on equity sets the stage for policies that expand women’s freedom, namely the freedom to choose one’s identity and to exercise that choice without facing discrimination or disadvantage. These principles are at the heart of Sen’s notion of freedom as the ultimate end of development. The capability of a person to choose, do and be can be seen as an essential determinant of well-being:

“If we adopt the notion of development as process of expanding human freedoms, it is the enhancement of freedoms that allow people to lead lives that they have reason to live” - Amartya Sen

Second, acknowledging that men and women differ in substantive ways and that their differences are mediated through interactions within the household has important policy implications and yields an *expanded menu of policies* to address gender issues. These new policies have the potential not only to affect equity of allocations within the household, but also to increase effectiveness of policy instruments and ultimately elevate the discussion regarding their welfare implications. With the notable exception of conditional cash transfers which are designed on the presumption that money in the hands of women is spent differently, household interactions are seldom exploited in the

design of policy. The unexploited richness of (gender) policy instruments represents a missed opportunity that needs correction, by embedding in policy design certain insights on household dynamics.

As discussed in the report, in some cases, intra-household interactions can yield efficient allocations of resources, with both spouses gaining from cooperation. In such instances, policy interventions would be justified only on equity grounds. In noncooperative households, in turn, inefficient and/or destructive outcomes may arise, as in the extreme instance of domestic violence, justifying policy interventions on both equity and efficiency grounds. This discussion emphasizes the value of understanding the types of conditions that affect bargaining positions within the household and that have the potential to curb abusive and nonconsensual behaviors.

Whether directed at women by design or not, any government intervention that influences women's control over fertility, their ability to choose a spouse with certain characteristics, and their realized and potential labor market outcomes, can affect the bargaining positions of women within the household and thus the final allocation of resources. Bargaining positions of spouses and their subsequent interactions are not only affected by each spouse's direct control over resources (income, time or otherwise), but also by their prospects outside of the union, should they leave it. Credible exit options raise the incentives for nonconflictual, respectful behavior within existing unions. These policies can thus contribute to reducing the risk of abusive relationships as well as to widen the scope for self-realization of women within the household. Hence, the expanded menu of policies could extend to reforms that include the provision of social insurance, the legal definition of informal unions (e.g. unmarried cohabitation) and their corresponding parental obligations, the introduction of anti-discrimination laws, any regulation that directly or indirectly affects sectors or occupations dominated by one gender, the modernization of divorce laws, and the enhancement of property rights and even criminal laws.

“Balancing work and family is one of the country’s major challenges. The government wants to change labor laws that have companies help bear the cost of daycare, making women more expensive to hire.” - Carolina Schmidt, Minister of National Women’s Service, in a phone interview.

Third, this study documents women's need for greater freedom to choose their identities, which manifests itself as an *unmet demand for flexibility*. This puts a premium on policies that help women find an equilibrium among competing demands. Women's ability to balance their new identities with traditional responsibilities is full of challenges. Whether it is with regards to child care choices, part-time employment opportunities, an unmet demand for flexibility consistently emerges among women who are married and/or have children. Unfortunately, formal labor market institutions are still woefully insensitive to these realities. While some, albeit still limited, progress has been made in LAC in terms regulations concerning maternity leave and the provision of child care services, for instance, formal labor contracts remain unduly rigid compared to women's needs. While in the short run, these rigidities do not appear to prevent women from entering the labor force, all too often married women in LAC resort to informal employment and trade basic labor protections and career advancement for the job flexibility that facilitates balancing family responsibilities.

Legislation that acknowledges the pressures of motherhood and of the day-to-day demands on households' time, more generally, can generate important social returns by enabling women to fulfill their identities as mothers and workers, raising the quality of their economic participation, thereby increasing their well-being as well as that of the entire household.

It is worth noting that the welfare consequences of the afore-mentioned policies may not be limited to the short run. Interventions that alleviate the burden on working mothers and facilitate balancing

work and life can afford parents the possibility of higher quality parenting. Providing flexible alternatives that don't compromise working mothers' career objectives may attenuate the stress exerted by such trade-offs which have been implicated in the recent emergence of a gap in subjective well-being that favors men in certain industrialized countries. Furthermore, invoking such institutions to foster a healthy equilibrium between work and family can mitigate some of the intergenerational costs that might arise from maternal employment in the event that the children's health and development benefit from time spent with their mothers.

Hence, a key policy message from this study concerns the need to revisit labor market institutions and regulations from the gender conscious perspective that focuses on welfare-enhancing flexibility. Any policy aimed at addressing the new set of issues facing women has to wrestle with (and ideally take advantage of) the fact that women's outcomes in the labor market—including whether or not to work, how much to work if so, and how to combine work and family—are the result of unobservable household negotiations which depend to a large extent on individual preferences over work and family. Two women who are outside of the labor market may be so for very different reasons that a gender conscious policy should detect. One may have simply decided to invest more time and energy in her children while taking advantage of her spouse's income. The other may prefer to work in a job but the lack of flexible contracts in the formal labor market renders it unfeasible for her to fulfill her desired roles in both motherhood and the professional realm. Labor market outcomes alone are not always informative about welfare, because they distinguish only imperfectly between unhindered decisions and institutional barriers (such as discrimination, rigidity in the labor market, social norms, etc.). In this context, policy can play a role by guaranteeing an environment that is devoid of discrimination and provide a richer menu of options in the labor market that recognizes the trade-offs that women face (as their choices widen) in the pursuit of self-actualization.

7.1.2 *In conclusion*

In its approach and in the evidence provided, this Regional Study has endeavored to draw attention to the importance of intra-household decision-making in shaping gender outcomes. In addition to traditional inputs such as education and income, household choices are shaped by social norms, preferences, and expectations, as well as by the manner in which its members interact with one another. The remarkable gains achieved to date by women and girls in LAC on basic indicators such as education, health, and fertility suggest a role for a “second generation” gender agenda, which requires deeper insight into the ways in which household members interact, reach decisions, and allocate resources, as well as of the forces that influence them.

Refocusing attention on the household requires the use (and possibly the development) of analytical tools that can distinguish outcomes that arise from unconstrained choices from those that are restrained by barriers or discrimination toward certain members, be it from social forces or from within the household. The analysis in the report stresses the importance of following individuals over the lifecycle, in order to better understand how life events shape the various margins of participation (extensive and intensive) and how preferences and constraints evolve as individuals progress through the various stages of their lives. The lack of available panel data motivated a synthetic cohort approach which, while it can provide insight, does not allow to uncover differences in behavior within cohort. Nor does it lend itself to exploring the richness of intergenerational linkages in participation or shed light on the interplay between norms, experience, and preferences. Finally, by acknowledging that outcomes are incomplete and sometimes misleading indicators of welfare, a challenge is to identify or incorporate measure of welfare in analyses that focus on

multidimensional tradeoffs which do not necessarily arise from a simple earnings maximizing objective.

Making progress on this research agenda is made all the more pressing by the fact that the intrahousehold perspective can significantly enrich the set of instruments in policy makers' portfolios to affect the welfare of households, and women in particular. Furthermore, recognition of household interactions may help increase the efficiency and efficacy of policies, precisely by exploiting the manner in which household members interact, for instance, by enhancing women's outside options. Finally, this perspective provides a framework for understanding the different constraints and work-life tradeoffs that different household members face. Acknowledging these in policy design will require trading the principle of gender blindness for that of gender-awareness, whereby policy recognizes the distinct demands and constraints faced by women relative to men, for instance by adopting labor market policies that alleviate the increasing burdens of balancing motherhood and work.

Of course, given the heterogeneity in gains across countries in LAC, this new agenda should not overshadow or detract from continued efforts to improve human capital and fertility outcomes in those countries that lag the region. These may nonetheless also benefit from the household perspective to the extent that it illuminates new and effective policies that eliminate barriers and distortions. Similarly, despite the noteworthy achievements, the new agenda should not lose sight of the importance of policies intended to eradicate toxic environments such as discriminatory labor markets or households in which choices are dictated by acts or threats of physical or emotional violence.

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Appendix: Background papers

1. Gender Wage Gaps in LAC: Alejandro Hoyos and Hugo Nopo, 2010.
2. The Rise of Female Labor Force Participation Rate in LAC, 1960-2000: Laura Chioda and Gabriel Demombynes, 2010.
3. How Family Formation Has Shaped Labor Force Participation in LAC. Laura Chioda, 2011a.
4. Who Gains What From Education? Regression Discontinuity Evidence from Colombia: Laura Chioda, 2011b.
5. Women on the Move: Female Labor Market Dynamics in the Developing World: Mariano Bosch and William Maloney, 2011.
6. Female Headed Households and Poverty In LAC: What Are We Measuring?: Tami Aritomi, Analia Olgati, and Maria Beatriz Orlando, 2010.
7. Factors Influencing Occupational and Sector Choice by Male and Female Workers : Maria Beatriz Orlando and José Montes, 2010.
8. Impact of Conditional Cash Transfer Programs on Women's Labor Supply: Evidence from Peru's Juntos Program: Nistha Sinha and José Montes, 2010.
9. The Role of Conditional Cash Transfers in Reducing Spousal Abuse in Mexico: Short-Term vs. Long-Term Effects: Gustavo J. Bobonis and Roberto Castro, 2010.
10. Impact of Free Childcare on Female Labor Force Participation: Evidence from Low-Income Neighborhoods in Rio de Janeiro: Mirela Carvalho, Trine Lunde, Pedro Olinto and Ricardo Paes de Barros, 2010.
11. Efficient Responses to Targeted Cash Transfers: Orazio Attanasio and Valérie Lechêne, 2010.



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