

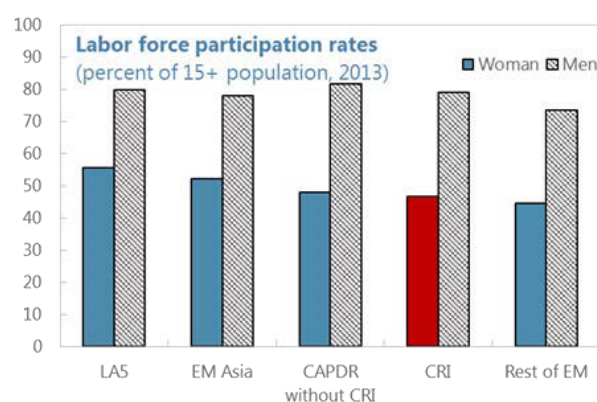
FEMALE LABOR FORCE PARTICIPATION IN COSTA RICA¹

Despite the high educational attainment of women in Costa Rica, its female labor force participation (LFP) rate lags behind those of LA5. Using both evidence from household surveys and cross-country data, this note examines the determinants of female labor force participation and the factors behind low female LFP rate in Costa Rica. Income and education levels, presence of children in the household, physical and informational access to jobs as well as labor market efficiency are important determinants of female LFP. Increasing investment in infrastructure and information technology as well as taking measures to support working mothers with children could help raise female LFP in Costa Rica, in particular.

A. Introduction

1. **Costa Rica ranks low on economic participation and opportunities for women, despite high educational attainment of women.** Costa Rica boasts a number one ranking in the WEF's

Gender Gap Index on the subcomponent of women's educational attainment reflecting a large gender education gap where women outperform men. Nonetheless, it ranks 105 out of 142 countries on the subcomponent of economic participation and opportunity for women in the same index. The poor ranking reflects low female labor force participation (LFP) and the gender wage gap. While male the LFP rate in Costa Rica is almost at the same level as that in other emerging markets, its female LFP rate is much lower than in other



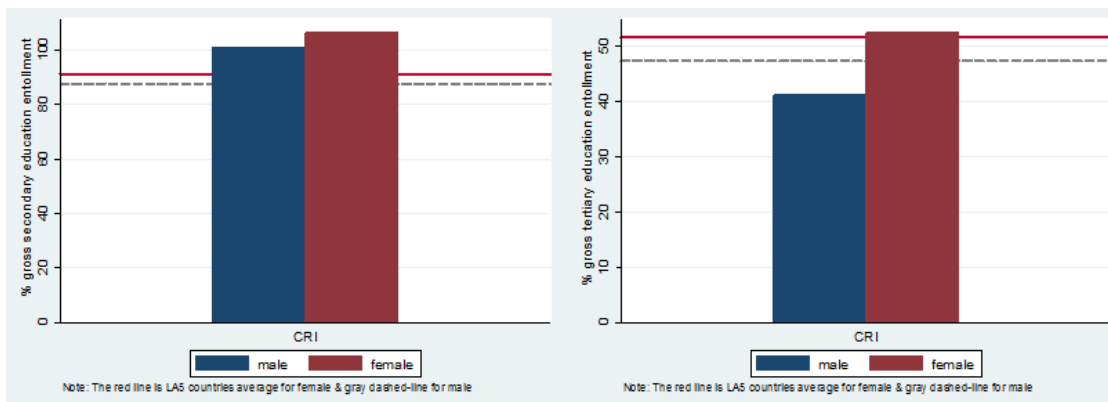
regions, in particular, it is 10 percentage points lower than the average of LA5. The differences are particularly pronounced among professional and technical workers. Stagnating female LFP rates in Costa Rica over the past decade are all the more surprising given a pronounced increase elsewhere in Latin America during this period.

2. **Higher female LFP could help spur growth in Costa Rica.** Given especially the high level of education of women in Costa Rica, increasing female LFP can help raise productivity and growth. Higher female LFP could also help mitigate the impact of a shrinking workforce in the face of the forthcoming demographic pressures. Indeed, Costa Rica has the highest life expectancy among LAC countries (79 years versus 75 years in LAC). As a result, its percentage of people aged 65 and above is expected to double from 6.5 percent in 2010 to 14.1 percent by 2030. To better understand

¹ Prepared by Anna Ivanova, Ryo Makioka, and Joyce Wong.

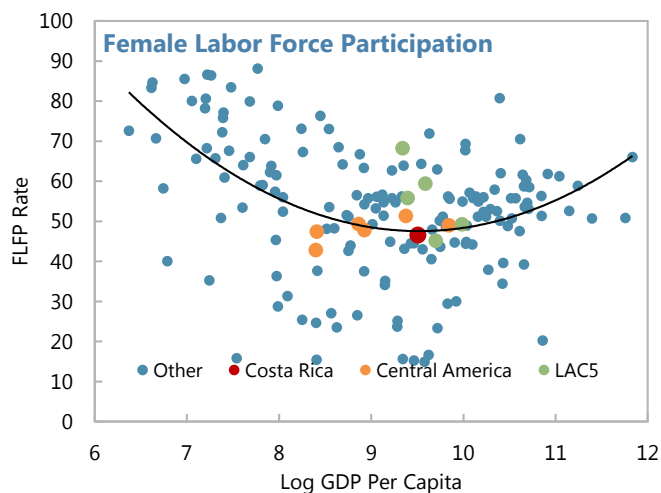
the drivers of female LFP participation in Costa Rica and the possible actions that could be taken to raise it, this note addresses the following questions: (i) what are the main determinants of female LFP rates; (ii) why are female LFP rates relatively low in Costa Rica, compared to LA5; and, finally, (iii) if and why Costa Rica is different from other upper middle income countries.

Internet Use, Labor Market Efficiency and Urbanization: CRI vs LA5



Sources: WDI; WEF, and Fund staff estimates.

3. **One potential explanation of the relatively low female LFP in Costa Rica is its middle income status.** The literature finds a U-shaped relationship between the level of economic development (e.g. GDP per capita) and female LFP rate (Goldin 1994). One reason for this relationship is that when a country is poor, women work out of necessity, mainly in subsistence agriculture or home-based production. With income growth, the activity shifts from agriculture to industry, with jobs which are away from the home, making it more difficult for women to juggle home production and children with a market job. As education levels rise, fertility rates fall, and social stigma weakens, women shift into the growing service sector which appeals more to women’s comparative advantages (Rendall 2010). At the level of a household, these changes can also be described with a neoclassical labor supply model: as the husband’s wage rises, there is a negative income effect on the supply of women’s labor. Once wages for women start to rise, however, the substitution effect increases incentives for women to increase their labor supply, until this effect dominates the negative income effect.



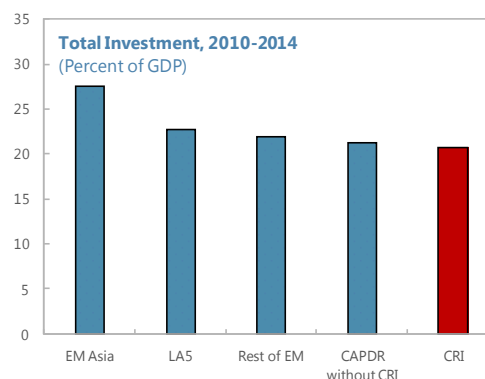
4. **But income level alone does not explain everything.** First, there is a large variation in female LFP rates even among upper middle income countries. For example, there are several countries with similar GDP per capita levels as Costa Rica with female LFP rates ranging from 20 to

80 percent. These variations suggest the importance of other elements. Second, examining other determinants of female LFP, Costa Rica actually enjoys several conditions (see below), including a low fertility rate, high educational attainment, and a service-dominated production structure, which are found to be associated with higher female LFP rates. (Bloom et al 2007; Klasen and Pieters 2015; Gaddis and Klasen 2014).

B. Some Stylized Facts

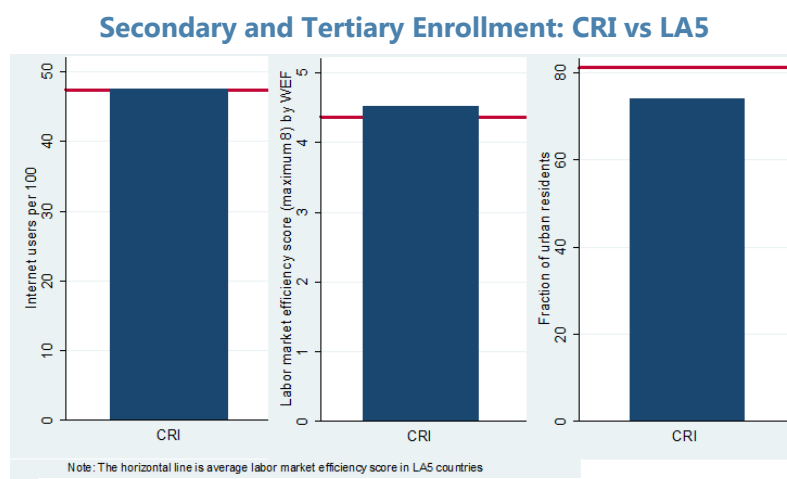
5. **Costa Rica has a relatively large services sector, but low overall investment, factors considered important in determining female LFP.**

In 2012, the services sector accounted for almost 70 percent of total GDP, with manufacturing and agriculture each accounting for about half of the remainder. This share of services is relatively high compared to other countries with similar level of income per capita, such as Malaysia and Thailand, where the size of the services sector is close to 50 percent. On the other hand, investment in Costa Rica has been relatively low at about 20 percent of GDP during 2010–2014, ranking behind other emerging markets.



Sources: WEO and fund staff calculations.

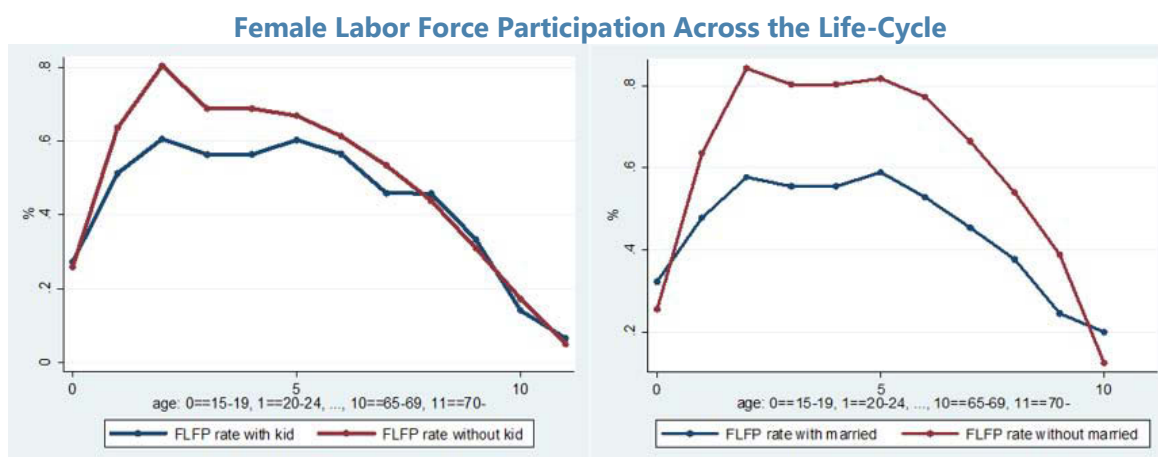
6. **The labor market in Costa Rica is relatively efficient, internet access is at par with LA5, but urbanization lags somewhat.** The number of internet users per 100 people in Costa Rica is at LA5 average. Labor market efficiency rated at 4.5 out of 7 is a little above LA5 average, but still lagging the world maximum. Interestingly, the fraction of urban residents in Costa Rica is lower than in LA5 (74 percent vs 81 percent), despite its relatively small size, and high level of GDP per capita and educational attainment.



Sources: WDI and Fund staff estimates.

7. **Lastly, as in many advanced countries, female LFP rates in Costa Rica differ significantly between women with and without children.** The difference of participation rates is particularly large for women aged between 20 and 40, which is also a prime age for accumulation of

experience. Also, there is a similar but larger difference between married and unmarried women where the differences reach nearly 20 percentage points during ages 20 to 40. Both of these trends have been extensively documented for the U.S. (e.g. Attanasio et al. (2008)).



Sources: Costa Rica Household Survey; and Fund staff estimates.

C. Evidence from Microdata

8. **We first estimate a model containing many of the drivers of female LFP identified in the literature, using a 2012 Costa Rican household survey.** The following regression is run using Costa Rica's household survey (the *Encuesta Nacional de Hogares*, ENAHO) of 2012:

$$\begin{aligned} labor_force_{ir} = & \alpha + \beta_1 prim_second_edu_i + \beta_2 second_tertiary_edu_i + \beta_3 more_than_tertiary_edu_i \\ & + \beta_4 urban_i + \beta_5 married_i + \beta_6 age_i + \beta_7 (age_i)^2 + \beta_8 cellphone_i + \beta_9 computer_i \\ & + \beta_{10} kid_0to6_i + \beta_{11} kid_6to12_i + \beta_{12} old_morethan_70_i + \beta_{13} \log(headincome)_i + \gamma_r \\ & + \varepsilon_{ir} \end{aligned}$$

where $prim_second_edu_i$, $second_tertiary_edu_i$, and $more_than_tertiary_edu_i$ are dummy variables for the woman i 's final educational attainment level, and $urban_i$, $married_i$, $cellphone_i$, and $computer_i$ are dummy variables for the location of the household in urban area, household being a married couple, and household having a cell-phone. kid_0to6_i , kid_6to12_i , and $old_morethan_70_i$ are equal to one if a household has a member in these categories, respectively. $\log(headincome)_i$ is the log of income of a household head. Regional fixed effects are also included.

9. **Regression results using such microdata confirm the importance of education, marital status, and urbanization in driving female LFP.** The regression results are reported in Table 1, separately, for all women versus only those married. The results show the usual "hump-shaped" relationship between female LFP rates across the life-cycle with the age terms being significant and with the expected signs. Second, a higher educational attainment is related to a higher participation rate. Third, ownership of cell-phones and computers, as well as living in an urban area are positively and significantly associated with higher female LFP rate—these results point towards the importance of information and physical ability to reach jobs. Fourth, being married has a negative and

significant association with female LFP. Fifth, the presence of young children and the elderly in the household are also related to lower participation, albeit insignificantly for the latter. Lastly, attesting to the wealth effect in household labor supply, a higher income of the household head is associated with the lower female LFP.

D. Cross-Country Evidence

10. **In order to understand the differences between the main drivers of female LFP in Costa Rica and those of other countries, cross-country data is examined next.** A panel is constructed for 184 countries from 1990-2013, mostly using World Development Indicators complemented by labor market efficiency data from the Global Competitiveness Report. The following regression is estimated following Bloom et al. (2007):

$$\begin{aligned} FLFP_{irt} = & \alpha + \alpha_1 \log(GDPCapita_t) + \alpha_2 [\log(GDPCapita_t)]^2 + \beta_1 fertility_{it} \\ & + \beta_2 internet_{it} + \beta_3 share\ female\ secondary\ edu_{it} \\ & + \beta_4 share\ female\ tertiary\ edu_{it} + \beta_5 share\ male\ tertiary\ edu_{it} \\ & + \beta_6 urban_{it} + \beta_7 labor\ market\ quality_{it} + \beta_8 investment_{it} + \delta_r + \gamma_t + \mu_{rt} \\ & + \varepsilon_{irt} \end{aligned}$$

where $\log(GDPCapita_t)$ and $\log(GDPCapita_t)^2$ control for the countries' GDP per capita levels, $FLFP_{irt}$ is the female LFP rate for country i in region r at year t , $fertility_{it}$ is the fertility rate, and $internet_{it}$ is the number of internet users per 100 people. $share\ female\ secondary\ edu_{it}$, $share\ female\ tertiary\ edu_{it}$, and $share\ male\ tertiary\ edu_{it}$ are the ratios of total female (male) enrollment for secondary and tertiary education levels to the total female (male) population. $urban_{it}$ is the percentage of urban residents out of the total, $labor\ market\ quality_{it}$ is an indicator for labor market efficiency referred to in paragraph 5, and $investment_{it}$ is the log of investment in telecommunications and transportation with private participation.² Dummies include the regional dummy δ_r , the year dummy γ_t , and the year-region dummy μ_{rt} . Error terms ε_{irt} are clustered at the country level.

11. **Cross-country regression results are consistent with many of the findings in the micro-data.** Results for these regressions are reported in table 2. The importance of investment in infrastructure, the presence of children proxied by higher fertility rates, higher education levels, and internet access are all supported by the cross-country regression results. These factors have also been found to be important in the literature – see, e.g. Jensen (2012), Klasen and Pieters (2015). Investments in transportation and telecommunications have positive and significant coefficients, as do coefficients on internet access. In the latter case, the effect is stronger when LFP of women under the age of 25 is considered, suggesting, perhaps, the importance of technology for the younger

² Investment in telecoms with private participation is the value of telecom projects that have reached financial closure and directly or indirectly serve the public, including operation and management contracts with major capital expenditure, greenfield projects, and divestitures. Investment in transport with private participation is the value of transportation projects that have reached financial closure and directly or indirectly serve the public, including operation and management contracts with major capital expenditure, greenfield projects, and divestitures.

cohorts. The share of female tertiary enrollment also has positive and significant coefficients, while that of male tertiary educational attainments is negative and statistically significant, in line with the results from microdata on the impact of husband's earning capacity on female LFP. Fertility rates which serve as a proxy for the effect of children on women's decision to work also have negative and marginally significant coefficients.

12. **In addition, cross-country regressions also help shed light on the importance of development levels, urbanization, and labor market efficiency for female LFP.** First, the polynomial of the log of GDP per capita is statistically significant and generates the well documented U-shaped relationship between female LFP and the level of economic development (see, e.g. Goldin (1994), Gaddis and Klasen (2014)). The polynomial fit is quite good and Costa Rica is located at the bottom of the U-shape. Second, measures of labor market efficiency are positively and significantly related to LFP rates. Lastly, and in contrast to the micro-data evidence for Costa Rica, the share of urban residents has negative and marginally significant coefficient. Intuitively, urbanization has two contradictory effects on female LFP. While increased access to services jobs helps female LFP, the need to commute may impair women's availability to work when compared to rural areas where women work much closer to home. These factors, combined with the importance of the services sector and higher education levels of women in Costa Rica (both of which tend to cluster jobs in urban centers), together with relatively low levels of urbanization in Costa Rica, may explain why urbanization has positive and significant effects on female LFP in Costa Rica specifically.

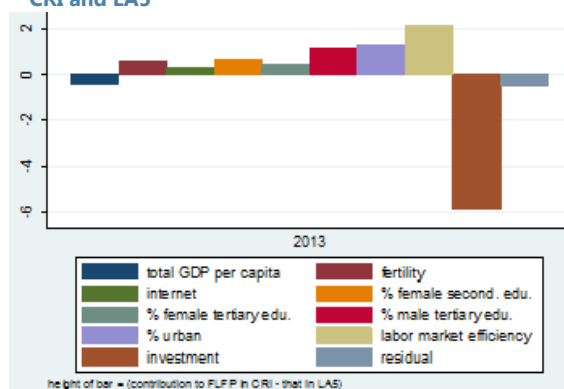
13. **Differences in investment explain a large portion of Costa Rica's lower female LFP rates, compared to LA5.** Investment in

telecommunications and transportation contributes significantly to explaining female LFP variation, both in levels and in differences, compared to LA5. This is the largest driver of Costa Rica's female LFP gap with LA5. Another factor that contributes slightly to Costa Rica's relatively low female LFP is total GDP per capita, with Costa Rica featuring at the lowest point of the estimated U-shaped relationship. Lastly, the contribution of the residuals to the difference

between Costa Rica and LA5 is negative and could reflect elements which are not captured by the model, including potentially social stigma about women working and cultural elements.

14. **Policies to close the female LFP gap in Costa Rica vis-à-vis LA5 could include higher investment in infrastructure and information technology as well as measures to support working mothers with children.** One obvious choice given Costa Rica's low levels of investment compared to peers and the importance of the factor in supporting female LFP would be to increase investment, not only on physical infrastructure but also on promoting the development of

Differences of Contributions to FLFP between CRI and LA5



Sources: Costa Rican Household Survey and Fund staff estimates.

information technology and telecommunications. One factor which constrains investment is implementation capacity. Policies to improve implementation could thus serve not only to increase female LFP rates but also to take advantage of the large pool of educated women in the country. Given the relatively low fertility rates further work could also be done in order to better understand whether the low levels of fertility are the result of the lack of a developed supporting child-care framework for families. For instance, at 1.8 children per woman, fertility rates are much lower than those of Panama (2.5 children per woman) and, in 2013, the fertility rate in Costa Rica reached the lowest in its history. Low fertility rates combined with low levels of female LFP could signal a weak system of childcare, either public, or private or through family members, though other explanations such as cultural norms are also possible.

Table 1. Regression Results Using Microdata

Dependent variable	All women			All married women		
	(1)	(2)	(3)	(4)	(5)	(6)
Independent variables:	Dummy on labor force participation					
Less than secondary	0.202*** (0.019)	0.059*** (0.018)	0.090*** (0.021)	-0.019 (0.030)	-0.027 (0.033)	-0.030 (0.038)
Less than university	0.283*** (0.019)	0.104*** (0.019)	0.140*** (0.022)	0.038 (0.031)	0.025 (0.034)	0.051 (0.040)
University and more	0.509*** (0.020)	0.278*** (0.021)	0.289*** (0.024)	0.271*** (0.034)	0.263*** (0.037)	0.302*** (0.043)
Age		0.036*** (0.001)	0.065*** (0.002)	0.016*** (0.002)	0.025*** (0.003)	0.024*** (0.004)
(Age)^2		-0.0004*** 0.00001	-0.001*** (0.00002)	-0.002*** (0.00002)	-0.004*** (0.00004)	-0.004*** 0.00005
Cellphone		0.035** (0.016)	0.050** (0.019)	0.003 (0.027)	0.017 (0.031)	0.036 (0.038)
Computer		0.014 (0.009)	0.006 (0.009)	0.061*** (0.014)	0.049*** (0.014)	0.074*** (0.016)
Urban		0.054*** (0.008)	0.058*** (0.008)	0.057*** (0.013)	0.060*** (0.013)	0.063*** (0.014)
Married		-0.120*** (0.008)	-0.157*** (0.009)			
With kids 0-6			-0.005 (0.009)		-0.097*** (0.014)	-0.104*** (0.015)
With kids 6-12			-0.055*** (0.009)		-0.058*** (0.013)	-0.061*** (0.014)
With old 70-			-0.027* (0.014)		-0.018 (0.026)	-0.051 (0.035)
Log head income						-0.044*** (0.008)
# obs.	15256	15251	14164	6454	6162	5344
Region FEs	Yes	Yes	Yes	Yes	Yes	Yes

Table 2. Cross Country Regression Results

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent variables	Independent variable: FLFP rate (FLFP rate under 25 years-old in (6))							
Log GDP per capita	-46.918*** (11.909)	-52.519*** (13.460)	-54.902*** (11.701)	-55.646*** (11.391)	-69.790*** (12.611)	-66.596*** (14.006)	-92.947*** (19.612)	-113.19*** (32.321)
(Log GDP per capita)^2	2.511*** (0.641)	2.757*** (0.719)	2.845*** (0.619)	2.944*** (0.605)	3.638*** (0.672)	3.525*** (0.758)	4.623*** (0.987)	5.963*** (1.857)
Fertility rate per 100		-1.881 (1.282)	-1.949 (1.352)	-2.267* (1.368)	-2.171 (1.506)	-0.831 (1.728)	-0.695 (1.840)	-2.051 (1.955)
Internet uses			0.077 (0.052)	0.096* (0.049)	0.110** (0.053)	0.317*** (0.077)	0.049 (0.066)	-0.071 (0.107)
Share of urban residents				-0.102* (0.060)	-0.116 (0.079)	-0.105 (0.090)	-0.135 (0.094)	-0.203 (0.132)
Share of female secondary education					0.023 (0.050)	0.003 (0.064)	0.086 (0.078)	0.039 (0.093)
Share of female tertiary education					0.182*** (0.061)	0.066 (0.101)	0.147** (0.066)	0.342** (0.146)
Share of male tertiary education					-0.228*** (0.071)	-0.127 (0.135)	-0.091 (0.06)	-0.416** (0.204)
Labor market efficiency							9.012*** (2.053)	9.424*** (2.499)
Invest to transportation and telecoms								1.461* (0.776)
Observation	4073	4069	3514	3514	1789	1789	592	303
R square	0.495	0.502	0.507	0.513	0.556	0.458	0.692	0.710

References

- Attanasio, Orazio, Hamish Low, and Virginia Sanchez-Marcos. 2008. "Explaining Changes in Female Labor Supply in a Life-Cycle Model." *American Economic Review*, 98(4): 1517-52.
- Alesina, Alberto, Paola Giuliano, and Nathan Nunn. (2013) "On the Origins of Gender Roles: Women and the Plough." *Quarterly Journal of Economics* 128(2): 469-529.
- Bloom, David E, David Canning, Gunther Fink, and Jocelyn E. Finlay. (2007) "Fertility, Female Labor Force Participation, and the Demographic Dividend." *NBER Working Paper* #13583.
- International Monetary Fund. (2015) "Costa Rica Selected Issues and Analytical Notes." *IMF Country Report* No. 15/30.
- Jensen, Robert. (2012) "Do Labor Market Opportunities Affect Young Women's Work and Family Decisions? Experimental Evidence from India." *Quarterly Journal of Economics*: 1-40.
- Klasen, Stephan and Janneke Pieters. (2015) "What Explains the Stagnation of Female Labor Force Participation in Urban India?" *The World Bank Economic Review* ():1-30.
- Gaddis, Isis and Stephan Klasen. (2014) "Economic Development, Structural Change, and Women's Labor Force Participation: A Reexamination of the Feminization U hypothesis." *Journal of Population Economics* 27: 639-681.
- Goldin, Claudia. (1994) "The U-shaped Female Labor Force Function in Economic Development and Economic History." *NBER Working Paper* #2707.
- Rendall, Michelle. (2010) "Brain versus Brawn: The Realization of Women's Comparative Advantage." *Mimeo*.
- Population Reference Bureau. (2014) "Life Expectancy Gains and Public Programs for the Elderly in Latin America and the Caribbean Issue 30." Report in Today's Research on Aging.
- World Economic Forum. (2014) "*The Global Competitiveness Report 2014-2015*." http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf.
- Tico Times (March 25, 2014), "Costa Rica reports the lowest fertility rate in its history." <http://www.ticotimes.net/2014/03/25/costa-rica-reports-the-lowest-fertility-rate-in-its-history>

Annex I. Costa Rica: Bank Heat Maps

Relative Soundness of Individual Bank Compared to Peers¹

		Asset Quality								
Bank		2007	2008	2009	2010	2011	2012	2013	2014	2015
1		-0.6	-0.4	-0.3	-0.4	-0.3	-0.2	0.2	2.2	2.5
2		-0.7	-0.6	-0.5	-0.5	-0.6	-0.6	-0.1	0.4	..
3		-0.6	-0.8	-0.7	-1.0	-0.9	-0.8	-0.4	-0.3	-0.4
4		0.2	-0.7	-0.7	-0.8	-0.7	-0.7	-0.6	-0.7	..
5		1.2	1.2	2.0	2.0	0.9	1.3	-0.2	..	..
6		-0.1	1.3	1.9	1.4	0.9	-0.5	-0.4	0.0	..
7		..	0.9	-0.5	1.7	1.7	-0.2	0.1	1.0	..
8		..	..	..	..	-1.1	-1.0	-1.0	-1.1	-1.8
9		0.3	0.2	0.0	..	0.2	-0.5	-0.6	-0.8	..
10		-0.5	-0.5	-0.4	-0.5	-0.5	-0.4	0.4	0.6	..
11		-0.5	-0.4	0.3	1.1	0.6	-0.4	0.0	-0.2	..
12		-1.0	-1.0	-1.1	..	-1.2	-1.1	-1.5	-1.7	-1.0
13		..	..	..	..	-0.7	-0.6	-0.5	-0.3	..
14		2.4	-0.3	-0.5	-0.1	0.1	-0.4	-0.1	-0.1	..
15		..	..	..	..	-0.6	-0.4	-0.1	..	..
Public banks		-0.6	-0.2	-0.5	0.0	0.0	-0.4	-0.1	0.8	1.0
Private banks		0.2	0.0	0.2	0.5	-0.2	-0.4	-0.4	-0.5	-1.4

		Earnings								
Bank		2007	2008	2009	2010	2011	2012	2013	2014	2015
1		0.6	-0.2	-0.5	-0.4	-0.3	0.3	-0.8	-0.4	-0.4
2		0.6	-0.1	-0.5	-0.4	0.0	0.1	-0.3	-0.8	-0.4
3		1.8	0.3	-0.1	0.5	2.6	1.9	0.9	0.8	0.9
4		1.1	0.9	0.4	-0.1	2.2	2.0	1.8	2.7	..
5		-2.1	-0.8	-1.1	-0.9	-0.8	-0.2	-0.5	..	..
6		-1.0	-0.5	-1.1	-0.8	-0.9	0.2	0.1	0.1	..
7		-0.2	0.0	-0.8	-0.4	0.2	-0.2	-1.0	-1.5	..
8		..	..	..	..	-1.7	0.2	0.2	-1.2	0.0
9		0.0	0.8	-0.3	-0.4	1.3	0.6	0.4	0.4	..
10		-0.5	-0.4	-0.4	-0.8	-0.4	-0.3	-1.1	-1.0	-1.0
11		-0.1	-0.1	-0.3	-0.5	-0.7	-0.3	-0.7	-0.3	..
12		-0.2	0.1	-0.2	-0.4	0.5	0.8	-0.3	1.4	0.2
13		..	4.0	-1.1	-1.2	-0.8	-0.5	-0.8	-1.3	..
14		-0.1	0.4	0.7	-0.1	-0.2	0.3	0.2	-1.2	..
15		..	..	..	..	-0.9	-0.6	-1.2	..	..
Public banks		0.7	0.0	-0.5	-0.2	0.6	0.5	-0.3	-0.5	0.0
Private banks		-0.3	0.5	-0.4	-0.6	-0.2	0.2	-0.2	0.0	-0.3

¹ Heat Maps are based on the methodology by Lian Ong, L., P. Jesakul, and S. Kwoh, (2013), "HEAT! A Bank Health Assessment Tool," IMF Working Paper WP/13/77. They show normalized z-scores for the displayed financial ratios compared to the whole domestic banking system. The system mean and standard deviations are calculated over three periods to incorporate both the time and cross-sectional dimensions.

		Liquidity								
Bank		2007	2008	2009	2010	2011	2012	2013	2014	2015
1		-1.4	-1.0	-1.4	-1.4	0.2	-1.6	-1.3	-1.7	-1.2
2		-1.5	-0.7	-1.1	-1.0	-0.9	-1.3	-1.2	-1.6	-1.8
3		-0.5	0.3	0.2	-0.3	-0.6	-0.1	-0.2	-0.2	0.9
4		0.8	-1.2	-0.8	-0.8	-1.0	-1.1	-1.0	-1.2	..
5		0.2	0.3	0.7	0.7	0.0	0.2	0.3	..	..
6		0.3	0.3	0.4	0.6	0.9	0.8	0.6	0.6	..
7		0.4	0.9	1.2	-0.5	-0.6	-0.6	0.1	0.2	..
8		..	..	..	..	1.2	1.3	-0.4	0.4	-0.6
9		0.4	0.8	0.3	0.6	0.4	0.3	0.3	0.3	..
10		-0.4	-0.9	1.6	0.4	0.2	0.1	0.0	0.2	0.4
11		-0.9	-0.9	0.4	-0.2	0.0	-0.1	0.0	0.4	..
12		0.6	0.3	-0.5	-1.0	-1.0	0.9	0.7	1.4	1.4
13		..	..	3.7	0.9	2.9	-0.9	-0.9	0.0	..
14		1.9	-0.1	-0.5	-0.1	-0.2	-0.2	-0.1	1.8	..
15		..	..	..	..	1.1	1.0	1.3	..	..
Public banks		-0.8	-0.1	-0.3	-0.8	-0.5	-0.9	-0.7	-0.8	-0.7
Private banks		0.4	-0.2	0.6	0.1	0.4	0.2	0.1	0.4	0.4

		Leverage								
Bank		2007	2008	2009	2010	2011	2012	2013	2014	2015
1		-0.6	-0.3	-0.3	-0.3	-0.3	-0.4	-0.7	-0.7	-0.6
2		0.0	-0.2	-0.3	-0.3	-0.4	-0.5	-0.6	-0.7	-0.6
3		1.7	0.1	0.2	0.3	0.9	1.9	2.3	2.3	2.0
4		-0.7	-0.3	-0.3	-0.3	-0.2	-0.1	0.0	0.2	..
5		-0.4	-0.3	-0.3	-0.2	-0.2	0.0	0.1	..	..
6		-0.2	-0.4	-0.3	-0.2	-0.3	0.1	0.1	-0.3	..
7		-0.1	-0.2	-0.5	-0.5	-0.7	-1.0	-0.1	-0.4	..
8		..	..	..	..	0.9	0.5	1.1	0.6	2.3
9		-0.6	-0.4	-0.4	-0.4	-0.5	-0.6	-0.6	-0.7	..
10		-0.7	-0.3	-0.4	-0.4	-0.8	-1.4	-1.1	-0.8	-0.8
11		-1.1	-0.5	-0.3	-0.5	-0.6	-0.9	-1.0	-1.3	..
12		0.5	-0.3	-0.2	-0.3	-0.1	0.0	0.5	0.7	0.2
13		..	4.2	2.1	0.6	0.6	1.2	0.9	0.0	..
14		2.2	1.9	0.5	-0.1	0.0	0.0	-0.6	0.1	..
15		..	..	..	..	-0.1	-0.6	-1.4	..	..
Public banks		0.24	-0.18	-0.22	-0.21	-0.11	-0.01	0.20	0.1	0.3
Private banks		-0.12	0.40	0.05	-0.21	-0.12	-0.15	-0.19	-0.2	0.6

		Capital Adequacy								
Bank		2007	2008	2009	2010	2011	2012	2013	2014	2015
1		-0.3	0.2	0.1	0.2	0.2	..	-0.2	..	..
2		0.5	0.6	0.4	0.5	0.3	0.1	0.0	..	..
3		1.1	0.8	1.6	2.5	2.2	1.5	..	..	..
4		..	-0.8	-0.6	-0.5	-0.5	-0.5	-0.6	..	..
5		..	..	..	..	..	..	..	..	..
6		..	..	..	..	..	..	..	..	..
7		..	..	..	..	..	..	..	..	..
8		..	..	..	..	1.5	0.3	0.6	0.0	..
9		..	..	..	..	..	..	..	..	..
10		-1.2	-1.0	-0.9	-1.4	-1.4	-1.6	..	..	..
11		..	..	..	..	..	..	..	..	..
12		..	-1.0	-0.6	-0.7	-0.6	-0.6	..	..	..
13		..	..	..	..	0.8	..	..	..	..
14		..	..	..	..	..	..	..	..	..
15		..	..	..	..	-0.5	..	..	..	..
Public banks		0.4	0.6	0.7	1.1	0.9	0.8	-0.1	..	..
Private banks		-1.2	-0.9	-0.7	-0.9	-0.1	-0.6	0.0	0.0	..

		Overall								
Bank		2007	2008	2009	2010	2011	2012	2013	2014	2015
1		-1.3	-0.9	-1.9	-1.5	0.0	..	-3.2	..	..
2		0.3	0.2	-1.0	-0.7	-0.4	-1.1	-2.0	..	..
3		4.7	2.3	2.6	3.9	6.1	6.1	..	..	..
4		..	-0.8	-0.6	-0.9	1.4	1.0	0.7	..	..
5		..	..	..	..	..	..	..	..	..
6		..	..	..	..	..	..	..	..	..
7		..	..	..	..	..	..	..	..	..
8		..	..	..	..	2.9	3.3	2.6	0.9	..
9		..	..	..	..	..	..	..	..	..
10		-2.4	-2.1	0.4	-1.7	-2.0	-2.8	..	..	..
11		..	..	..	..	..	..	..	..	..
12		..	0.2	-0.5	..	0.1	2.2	..	..	..
13		..	..	..	..	4.1	..	..	..	..
14		..	..	..	..	..	..	..	..	..
15		..	..	..	..	0.2	..	..	..	..
Public banks		1.2	0.5	-0.1	0.5	1.9	2.5	-2.6	..	..
Private banks		-2.4	-0.9	-0.2	-1.3	1.1	0.9	1.7	0.9	..

Source: BankScope; and IMF staff calculations.