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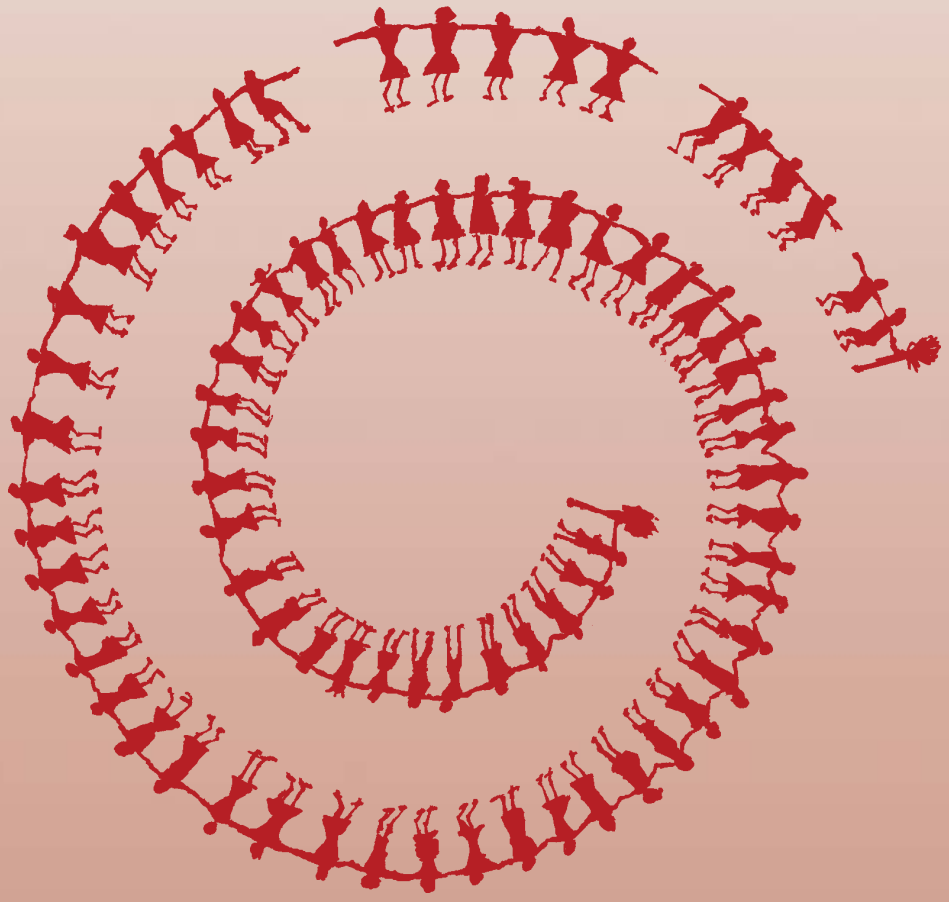
South Asia Human Development Sector

Low Female Labor-Force Participation in Sri Lanka: Contributory Factors, Challenges and Policy Implications

January 2013



Discussion Paper Series

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South Asia Region Human Development Sector

Low Female Labor-Force Participation in Sri Lanka: Contributory Factors, Challenges and Policy Implications

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Discussion Paper Series

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INTRODUCTION

Sri Lanka has been experiencing high levels of growth in recent years accompanied by higher labor force participation and lower unemployment rates. Historically, from 2003 until 2012, the Sri Lankan growth rate averaged 6.5 percent. Currently, the country is enjoying the demographic dividend of a large working age population. The demographic bonus with this large working age population and lower dependency ratio started in 1991 and is projected to last until end of 2017 (De Silva, 2012). The labor force of the country is expected to start shrinking after 2026. At the same time, Sri Lanka will have an ageing population that needs to be supported by this shrinking workforce. According to the annual 'Sri Lanka Labor Force Survey', 53.4 percent of the working age population, age 15 and over, was in the labor force and among them 95.8 percent was employed in the year 2011[1]. For men, these rates were 74.2 percent and 97.3 percent. Among working age women, only 35 percent were in the labor market and 93.2 percent of those in the labor force were employed. In 2002, female labor force participation rate was 33.6 percent (age 10 years and over); for the same age group, the rate was 32.8 percent in 2011 – exhibiting 1 percent decline in participation rate over this time span of 9 years. However, with the upcoming shrinkage of workforce and ageing of the population, the country needs to engage more of its working age population, particularly women in the labor force to achieve and sustain any sustainable growth strategy.

The relatively low female labor force participation rate in Sri Lanka can be viewed as a puzzle given that the country enjoys low fertility rates and high levels of female schooling. Lack of schooling amongst women does not explain this gap since there is no significant discrepancy in educational attainment especially between younger men and women (See Figure AA in appendix- School attendance by single years of age and sex). Engaging women actively in economic activities in a country where women traditionally have low participation rates can be difficult but not impossible. A number of developing countries have experienced rapid increase in female labor force participation in a short span of time. For example, in Columbia in 1982, 47 percent women were in the labor force; by 2006 this rate has increased to 65 percent (Amador et. al. 2011).

Empirical evidence suggests that a country's economic development and female labor force participation are neither linearly nor monotonically related; rather there exists a U-shaped relationship. With economic development, female labor force participation initially declines with the rise of per capita income and then eventually starts to increase with higher level of development [2]. However, evidence also suggests that public policies and their proper

[1] LFS data does not cover migrant workers; hence, understatement of labor force participation may occur.
[2] For explanation behind the U-shaped relationship between economic development and women's economic participation -- see Goldin 2005, 1995; Fernandez and Fogli 2006; Fernandez 2007, 2010.

implementation can play salient role in speeding up this change (World Bank, 2013). Now the question is how Sri Lanka can bring its female working age population in the labor market in a productive manner.

Even though Sri Lanka is a fore-runner in many human development dimensions and aspects of gender equality amongst the South Asian countries, it is surprisingly similar to other South Asian countries when it comes to women's participation in economic activities. As it has been already mentioned, female labor force participation has not changed much in recent decades and remained stagnant at a rate around 30 to 35 percent of working age women. This rate is comparatively much lower than what one would expect given the educational attainment of the female population in Sri Lanka. However, given that Sri Lanka is at a transitional stage of economic development with a shrinking agricultural and expanding service sector, female labor force participation is expected to rise assuming the country will follow the traditional U-shaped female employment growth path. But that will happen if the right policies and incentives are in place to narrow the gaps. Under the circumstances, not only to be on track but also to speed up the process, the country needs to take active role in identifying policies that would help achieving the end goal along with proper implementation of those policies.

In order to encourage increased women's participation in economic activities, the first condition is to understand what is keeping them out of the scene. This paper analyzes the underlying reasons behind low participation rates of women in economic activities. It also investigates the employment outcomes, occupational choice, rates of returns, and skills set of economically active women in comparison with men to identify and understand the gaps. The findings have been used to suggest potential policies and programs that can help remove some of those barriers and encourage and enable women to become more economically active in the labor market.

Box 1: Description of the Main Data Sets Used

The analysis in this paper relies primarily on data from three major household surveys: the Labor Force Survey, Household Income and Expenditure Survey, and STEPS Skills Measurement Survey.

Labor Force Survey (LFS) is undertaken by the Department of Census and Statistics (DCS) between 1992 and 2009. These data exclude the districts of Northern and Eastern Sri Lanka because of the adverse security situation during this time period. LFS sample started as a quarterly survey of 2,000 housing units per quarter in 1990. In 2009, the annual sample was expanded to cover 22,500 housing units. This data set is representative at district level.

The 2007 Sri Lanka Household Income and Expenditure Survey (HIES 2007) is the most recent representative household dataset that contains information on household consumption, income and transfers. The DCS conducts the HIES once in every five years. The survey is fielded from July 2006 to June 2007 throughout Sri Lanka, excluding the Northern Province and Trincomalee district in the Eastern province. The sample size is 18,544 households.

Sri Lanka STEP Household Skills Measurement Survey was carried out in Sri Lanka in 2012 as part of the World Bank multi-country analysis of the Skills Toward Employment and Productivity (STEP) household and employer surveys which is, ultimately, to be carried out in 8 developing countries. The survey provides detailed information about education, training, different types of skills as well as basic demographic and household information on family background, employment and wages. The survey is representative at urban and rural level and covers all nine provinces of Sri Lanka. The sample size is 3,000 households.

PROFILING WORKING-AGE WOMEN

In this section, we focus on two groups of working age female population – women in labor force and those out of labor force. We compare women in labor force with their male counterpart and also with women who are not in the labor force by disaggregating the population by its various work status related categories and demographic and socio-economic background towards understanding the comparative picture by gender. For women who are not in the labor force, we use women in labor force as the comparison group. The objective is to identify the characteristics of those women who are not in the labor force and investigate how they are different from the economically active income earning women, if they are different at all. For this section we use data from Household Income and Expenditure Survey (HIES) 2006-07. Here, employed refers to

those who possess income-earning employment, unemployed refers to those who are willing and looking for income-earning jobs; and housework means unpaid family or household work.

According to HIES 2006-07, 60 percent of all women aged 15 to 60 years old are not involved in the labor force that earns income either in cash or kind. The majority of women in this age group are engaged in housework (47 percent), the rest are either still students (11 percent) or retired or disabled or unable to work for some specific reason (3 percent). The remaining 40 percent of all women are active in the labor market – 32 percent currently employed and 8 percent looking for jobs (Table 1).

Demographic and Socio-Economic Characteristics

The employment rate of women increases with age and reaches its peak between 40 to 44 years. Labor force participation rates does not show a similar increasing trend with age; rather, it is the highest, 51 percent, among 20-24 age group and then declines slightly and hoovers around lower-to-mid-40 percent until age 55 and declines sharply afterward. Eighty percent of the youngest age cohort (15-19 years) is out of labor force and more than two-third of them is still students. The unemployment rate is much higher amongst the younger cohort; for instance, for age 20-24 year cohort, the unemployment rate is 24 percent.

Labor force participation rates in relation to education presents a U curve. Similarly, an inverted U-shaped relationship exists between education and either out of labor force rate or rate of being involved in housework. The particular relationship between education and labor force participation has been found in many other developing countries[3]. In the sample, women with no schooling or less than primary education have higher labor force participation rates, 47 percent and 42 percent respectively, than those who attended secondary school. For those who completed at least higher secondary school or A/levels, the labor force participation rate is 56 percent and it becomes close to 90 percent for those who have at least 15 years of schooling. The unemployment rate increases with education reflecting a possible supply side bottleneck and higher reservation wage (Figure AB in Appendix). Highly educated women participate in the labor force as they view it as career not just a source of income. For them not only the opportunity cost of non-participation is higher, they also have access to better quality, better paid jobs.

[3] For the existence of U-shaped relationship between female education and labor force participation in LAC countries see, Chioda 2011.

Table 1: Composition of working-age (15-60 years) women by demographic and socio-economic characteristics, 2007

	Employed	Unemployed	Labor Force (Emp+Unemp)	Student	House work	Unable/too old/other	Out of LF (Stud +HW+Other)
Marital Status							
Never married	25.88	19.82	45.71	39.03	12.35	2.91	54.29
Married	32.03	3.70	35.73	0.26	61.59	2.42	64.27
Widowed	44.42	2.83	47.24	0.08	40.55	12.12	52.76
Divorced	43.93	5.97	49.91	3.56	42.81	3.73	50.09
Separated	59.13	6.39	65.52	0.00	29.58	4.90	34.48
Schooling							
No schooling	43.81	3.40	47.21	0.09	38.21	14.48	52.79
0 < grd <=5	38.78	3.35	42.13	0.16	50.59	7.12	57.87
5 < grd <=10	25.65	7.57	33.22	11.65	52.87	2.26	66.78
10 < grd <=12	25.14	9.32	34.46	19.02	45.06	1.46	65.54
12 < grd <=14	42.57	13.11	55.67	9.84	32.98	1.50	44.33
15 +	78.62	10.55	89.16	1.60	7.18	2.05	10.84
Age							
15-19	7.34	12.15	19.49	68.43	10.83	1.24	80.51
20-24	26.99	23.74	50.73	11.35	36.38	1.54	49.27
25-29	31.66	13.01	44.67	1.61	52.79	0.93	55.33
30-34	33.28	5.87	39.15	0.36	59.47	1.01	60.85
35-39	38.04	3.30	41.34	0.00	57.43	1.23	58.66
40-44	43.87	2.40	46.27	0.00	52.53	1.20	53.73
45-49	41.80	2.66	44.45	0.00	52.46	3.09	55.55
50-54	38.29	2.49	40.79	0.00	53.25	5.96	59.21
55 - 60	29.02	1.93	30.95	0.00	53.98	15.07	69.05
Religion							
Buddhist	33.23	7.70	40.93	11.02	45.04	3.01	59.07
Hindu	40.59	8.91	49.50	7.93	37.25	5.33	50.50
Muslim	9.84	10.70	20.54	10.86	65.97	2.63	79.46
Christian	30.03	6.56	36.59	8.68	51.44	3.29	63.41
Other	42.75	8.68	51.43	0.00	34.77	13.80	48.57
Ethnicity							
Sinhala	32.97	7.55	40.52	10.83	45.66	2.99	59.48
Sri Lankan	31.38	8.48	39.86	9.16	46.43	4.56	60.14
Indian Tamil	49.35	10.00	59.35	6.96	27.50	6.19	40.65
Sri Lankan Moor	9.31	10.74	20.05	10.88	66.37	2.71	79.95
Malay	26.45	1.29	27.74	10.25	61.72	0.29	72.26
Burger	36.20	2.85	39.04	18.29	42.66	0.00	60.96
Other	0.00	0.00	0.00	0.00	100.00	0.00	100.00
Region							
Western	30.64	7.40	38.04	9.71	49.09	3.17	61.96
Central	35.61	6.62	42.23	10.44	43.73	3.60	57.77
Southern	31.81	9.29	41.10	11.80	45.17	1.93	58.90
Eastern	15.25	10.66	25.91	11.89	58.81	3.38	74.09
North-Western	30.23	7.55	37.78	9.62	50.00	2.60	62.22
North-Central	35.93	7.34	43.27	10.43	43.28	3.02	56.73
Uva	36.58	8.95	45.54	11.73	37.94	4.80	54.46
Sabaragamuwa	32.44	8.82	41.26	11.54	43.23	3.98	58.74
Total	31.60	7.97	39.57	10.56	46.67	3.20	60.43

Source: Calculation using HIES 2006/07

In most cases, their participation is likely to be out of preference rather than the outcome of sheer need. On the contrary, for lower educated women, who generally come from poorer economic backgrounds, labor force participation is most likely to be the outcome of the need to survive. For the middle group (secondary education), the need is less since they generally belong to medium income group; they also do not have access to better jobs because of their comparatively lower human capital. Thus for them the opportunity cost of staying home is much less than working outside.

Women without marital/familial support – separated, divorced or widowed have higher participation rates, more than 45 percent, compared to those who are currently married. Never married women who tend to be younger also have comparatively high participation rates (45 percent); however, they also experience the highest unemployment rate (20 percent). Currently married women do not only have lower employment rate, their unemployment rate is also relatively low; they are just not present in the labor force. More than 60 percent of them are engaged in housework. Social norms, adherence to traditional roles, and the responsibility to manage household related work as well as caregiving responsibilities keep them away from active economic participation.

When female employment rates are disaggregated by religious groups, Muslims stand out as a very distinct group. Muslim women, followed by Christians, have the lowest employment rates. At the same time, the unemployment rate is the highest among Muslim women, but lowest among Christians. Muslim women also have the highest rates of being engaged in housework (66 percent) or being out of labor force (79 percent). Both of these religious groups individually consist of around 8 percent of the national population. Once we control for socioeconomic, demographic and spatial effects the risk of being unemployed is not different for either Muslims or Christians or Buddhists. However, a Muslim woman is much more likely to be out of the labor force in comparison to a Buddhist woman.

Table AA in appendix shows the determinants of being unemployed and staying out of the labor force by prime aged women using multinomial Probit regression model. The main workforce of estates is Hindu Indian Tamils and that is reflected in the employment rate by ethnicity. Half of Indian Tamils working age women are employed, for Sri Lankan Moors (Muslims) the employment rate is the lowest, less than 10 percent and unemployment rate is the highest, 11 percent (Figure AC in Appendix).

Location

Once women are in the labor force both men and women follow similar trends even though there is substantial difference in numbers and proportions. For men, labor force participation rates are more than 80 percent irrespective of their location; whereas for women location plays considerable role. In estates, close to two-third of women are economically active as oppose to urban areas where only one-third are in the labor market. In every location other than urban,

unemployment rates are higher for women. And it peaks to its highest in estate location, at 10.5 percent, which also has the highest employment rate for women, 53 percent (Table 2). It should be mentioned here that the majority of the national population, 80 percent, lives in rural areas. Estates have only 5.5 percent of the national population and the rest, 14.5 percent, are from urban areas.

Table 2: Composition of male and female labor force by their location, 2006-07

	Employment Rate			Unemployment Rate			Labor Force Participation Rate		
	Female	Male	All (M+F)	Female	Male	All (M+F)	Female	Male	All (M+F)
Urban	26.78	72.09	47.97	7.40	8.28	7.81	34.18	80.36	55.78
Rural	31.13	76.69	52.86	7.92	7.63	7.78	39.05	84.32	60.64
Estate	52.88	77.39	64.38	10.50	9.23	9.90	63.38	86.62	74.28
All locations	31.60	76.04	52.72	7.97	7.81	7.90	39.57	83.85	60.61

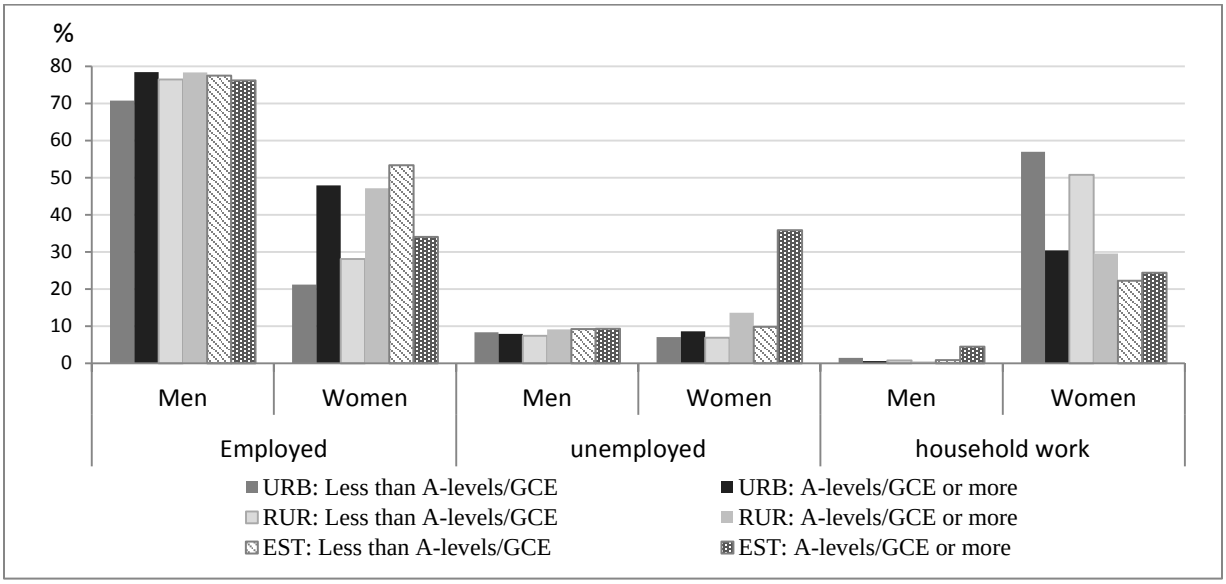
Source: Calculation using HIES 2006/07

Note: The numbers in this table are higher than the numbers mentioned earlier (based on LFS Annual Report) and that is due to difference in definition and the use of age cut-off. We used HIES 06-07 instead of LFS data to capture the rates for estates in addition to rural and urban locations and also for the additional household information that HIES offers.

Interaction between education and location matters for women but not much for men with respect to employment (Figure 1). In rural and urban locations, employment rates are higher among those who have at least GCE or A/levels of education. Not surprisingly, this is not the case in estates where the main supply of jobs is in the plantations which does not require much education. In estates, more than one-third of women with at least GCE or A/levels of education are unemployed suggesting a skewed job market for women in estates. For men in estates, unemployment rate does not differ by level of education reflecting a very segregated labor market where women are employed mostly as plantation workers[4]. The third set of bars in Figure 1 exhibits men and women's involvement in household work. Men are notably absent from household work. Women with less than A-levels or GCE level of education are substantially more engaged in household work both in rural and urban locations, but not in estates. Figure AD in appendix shows the distribution of women by their work status, location and grades of schooling.

[4] Sex-based occupational segregation in estate work has been discussed by Kotikula and Solotaroff 2006.

Figure 1: Distribution of working age men and women by location and completed years of schooling, 2007



Source: Calculation using HIES 2006/07

Interestingly, once we look at household composition we do find that relatively higher proportion of never married women is students in rural areas, rather than in estates or urban locations (Table 3). But compared to rural areas never married women, who are also likely to be younger, have a higher share of paid employment in urban areas. Amongst married women with or without any child in the household, rural women have relatively higher share that are involved in income-earning jobs. Irrespective of their location, married women with at least one child in the household have the highest share that is out of labor force and spends their time managing house work.

National averages can be misleading as they do not portray the complete picture and can conceal vast regional disparities. We do find moderately high provincial variation in women's work status with Eastern province[5] experiencing not only highest share of women being out of the labor force (74 percent), doing housework; but also experiencing the highest level of unemployment rate (11 percent) while its employment rate is the lowest (15 percent), less than half of all other provinces (See Table 1). This provincial[6] variation holds even after controlling for various demographic and socio-economic characteristics. Female employment rates are the lowest in Eastern province both in rural and urban areas and unemployment rate is the highest

[5] Eastern province in the sample includes data from two districts - Batticaloa and Ampara.
[6] There are 9 provinces. The survey covers 2/3 districts (in parenthesis) per province except for the Northern province which is not covered by HIES. The 8 provinces are: Central (Kandy, Matale, Nuwara Eliya), Eastern (Batticaloa, Ampara, Trincomalee), North Central (Anuradhapura, Polonnaruwa), North Western (Kurunegala, Puttalam), Sabaragamuwa (ratnapura, Kegalle), Southern (Galle, Matara, Hambantota), Uva (Badulla, Moneragala), and Western (Colombo, Gampaha, Kalutara).

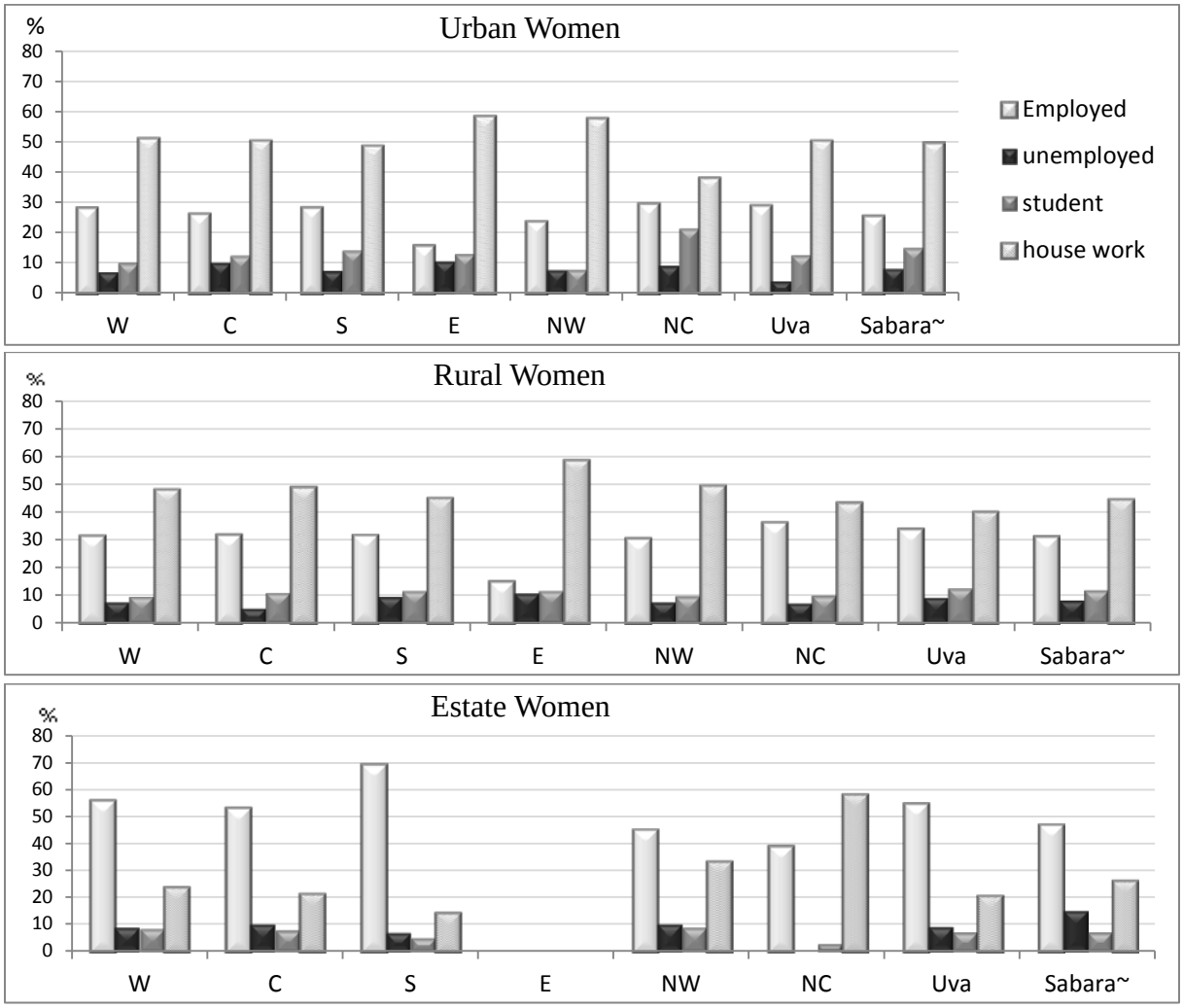
(Figure 2). One reason behind this could be that in Eastern province there are no estates which are generally associated with very high rates of female labor force participation. There are a large number of Muslims living in the districts of Eastern province who are significantly more likely to be out of labor force. Lack of security and job opportunities aggravated by the civil war might have played very significant roles in keeping women out of labor force in the Eastern province. A detailed table (Table AB) showing the share of women aged 15-60 years by work status in Eastern province is included in the appendix.

Table 3: Share (percentage) of women aged 15-60 years by their work status and location, 2007

	Employed			Unemployed			Student			House work		
	Urb	Rur	Est	Urb	Rur	Est	Urb	Rur	Est	Urb	Rur	Est
Never married - no child 0-4 in hh	28.9	24.9	25.3	15.0	20.2	27.0	40.0	40.8	30.2	13.6	11.3	12.6
Never married- has at least 1 child 0-4 in hh	30.3	26.4	33.9	25.3	18.5	31.7	20.2	36.7	15.6	19.2	15.6	17.4
Married - no child under 5 in hh	27.3	36.5	66.1	3.5	3.2	3.0	0.2	0.2	0.0	66.9	57.4	23.9
Married - no child under 10 in hh	27.9	37.3	64.4	3.5	3.4	3.7	0.2	0.3	0.0	66.0	55.8	24.5
Married -has at least 1 child under 5 in hh	18.4	23.3	58.0	4.2	4.5	5.9	0.9	0.3	0.0	74.8	70.5	30.6
Married -has at least 1 child under 10 in hh	20.9	26.9	61.1	4.0	3.8	4.7	0.6	0.2	0.0	73.0	67.5	28.6
Has 65 + elderly in the hh	34.2	33.3	49.6	8.9	8.3	14.2	7.6	9.1	5.5	46.1	44.9	23.6
Has 75 + elderly in the hh	40.8	35.0	46.3	7.4	7.2	17.5	8.6	11.2	4.8	40.0	43.3	23.4
Has at least another working age woman in hh	26.4	28.6	45.0	10.0	11.0	15.3	16.5	17.8	11.0	43.1	39.0	20.7
Total number of children (age 0 to 15) in hh*	1.0	1.0	1.5	1.1	0.8	1.4	1.1	1.1	1.4	1.4	1.3	1.4
Quintile 1	25.3	29.6	55.7	12.6	8.5	10.1	7.5	10.4	6.3	50.6	47.5	20.5
Quintile 2	18.4	28.0	53.1	11.1	8.3	12.2	9.6	11.1	8.8	56.6	49.9	20.6
Quintile 3	19.2	28.0	49.6	7.3	8.5	9.6	9.4	10.9	8.5	61.2	49.4	23.9
Quintile 4	25.6	32.2	52.6	8.1	7.5	5.7	12.5	10.5	5.7	51.2	47.3	29.7
Quintile 5	35.3	37.8	36.9	4.2	6.8	14.0	12.7	10.4	3.4	44.6	42.6	36.3
Total	26.8	31.1	52.9	7.4	7.9	10.5	11.2	10.7	7.4	51.4	47.4	22.3

Source: Calculation using HIES 2006/07

Figure 2: Work status of women aged 15-60 years by region, HIES 2007



Source: Calculation using HIES 2006/07

Women Out of the Labor Force: Who Are They?

Married women are the ones who are most likely to be out of the labor force in Sri Lanka. In rural areas, out of labor force rate is 56 percent among married women who do not have children aged less than 10 years; in urban locations this rate is higher, 66 percent. The probability of staying out of labor force is much higher for those married women who have at least one child aged less than 10 years. In rural locations 68 percent and in urban areas 73 percent of married women with children are out of the labor force. Holding everything else equal, the risk of being out of labor force increases 34 percent once a woman gets married (Table 4).

Table 4: Determinants of staying out of labor force by prime aged (18-45 years) women, 2009: Marginal effects (at means of variables) from a Probit regression

Variables	dF/dx	Std. Err.	Mean
Age	-0.0351***	0.0023	37.805
Age-sq	0.0004***	0.0000	1567.98
Level of Schooling (base: 0-5 grd)			
Grade 6-10	0.1029***	0.0105	0.4703
O/L or grade 11-12	0.0622***	0.0127	0.1717
A/L and above	-0.1458***	0.0130	0.1720
Marital status (base: Never married)			
Married	0.3369***	0.0104	0.7571
Widow	0.1855***	0.0173	0.0596
Divorced/Separated	0.0720	0.0295	0.0175
Religion (base: Buddhist)			
Hindu	0.0688***	0.0162	0.0926
Muslim	0.2419***	0.0126	0.0976
Christian	0.0792***	0.0148	0.0678
HH characteristics			
hh size	0.0143***	0.0023	4.4567
Presence of dom. servant	-0.2809***	0.0324	0.0093
Location (base: Rural)			
Urban	0.0559***	0.0117	0.1347
Estate	-0.2713***	0.0175	0.0530
Province (base: Western)			
Central	-0.0470***	0.0129	0.1261
Southern	-0.0529***	0.0120	0.1514
Eastern	0.0212	0.0158	0.0949
North-Western	-0.0657***	0.0128	0.1232
North-Central	-0.1655***	0.0149	0.0711
Uva	-0.2016***	0.0151	0.0662
Sabaragamuwa	-0.1127***	0.0135	0.1026
Number of observations =21003		Pseudo R2 = 0.1101	

*Note: ***<.001, **<.01*
Source: Estimation using LFS 2009

Consistent with our previous findings, women with secondary schooling are more likely to be out of labor force than those who have either a primary or no education. Women with tertiary degrees have the highest probability of being in the labor force. This relationship holds even after controlling for other relevant factors. Those who have either no or primary education are also the ones that comes from the poorest households and their labor force participation potentially reflects their necessity to earn a living; which is not likely the case with those who have higher education and are in the labor market. Increase in household size also statistically significantly increases the likelihood of staying out of labor force for women**.** One interesting but not

unexpected finding is that women who have domestic servant(s) present in their household are less likely to be out of labor force. Urban women are more likely to be out of labor force than their rural counterparts even after controlling for other effects. Muslim women are one-fourth times more likely than Buddhists to be out of labor force. But again, this does not explain the overall low level of labor force participation by Sri Lankan women, since Muslims are only 8 percent of the population.

In summary, we can say that unemployment rates are the highest amongst younger cohorts and in estates even though they have the highest rates of participation. In general, the female unemployment rates increase with level of education in Sri Lanka. Labor force participation rates are also high amongst women without marital or familial support. Married women especially with children and women with some secondary education and those residing in larger households or urban locations are the ones who are more likely to stay out of labor force**.**

ECONOMICALLY ACTIVE WOMEN

Women in the labor force are experiencing slow but substantial change in their occupational choices and status as globalization and new technologies have brought remarkable changes in the job market in Sri Lanka. The previous section provides a brief profiling and description of able-bodied working-age women in Sri Lanka. In this section, we focus more on economically active women and their labor market outcomes, job status, productivity and rates of returns to schooling, and skills compared to men to asses if difference along those lines can explain their lower labor force participation.

Employment Outcomes and Occupational Choice

Not only is the pool of employed women relatively small – close to half the size of employed men – the composition of the pool is very different along a number of dimensions such as employment, occupation, and job status. Half of employed women work as wage workers, 42 percent are involved in their own economic activities either as self-employed or employer of wage workers. About 8 percent of employed women work as unpaid worker in a family business or farm (Table 5). Working as a wage worker is also the main occupation for majority of men. However, for men the proportion employed in this category is much higher, 63 percent. Only 4 percent men are involved in unpaid family business as oppose to 8 percent of female participation.

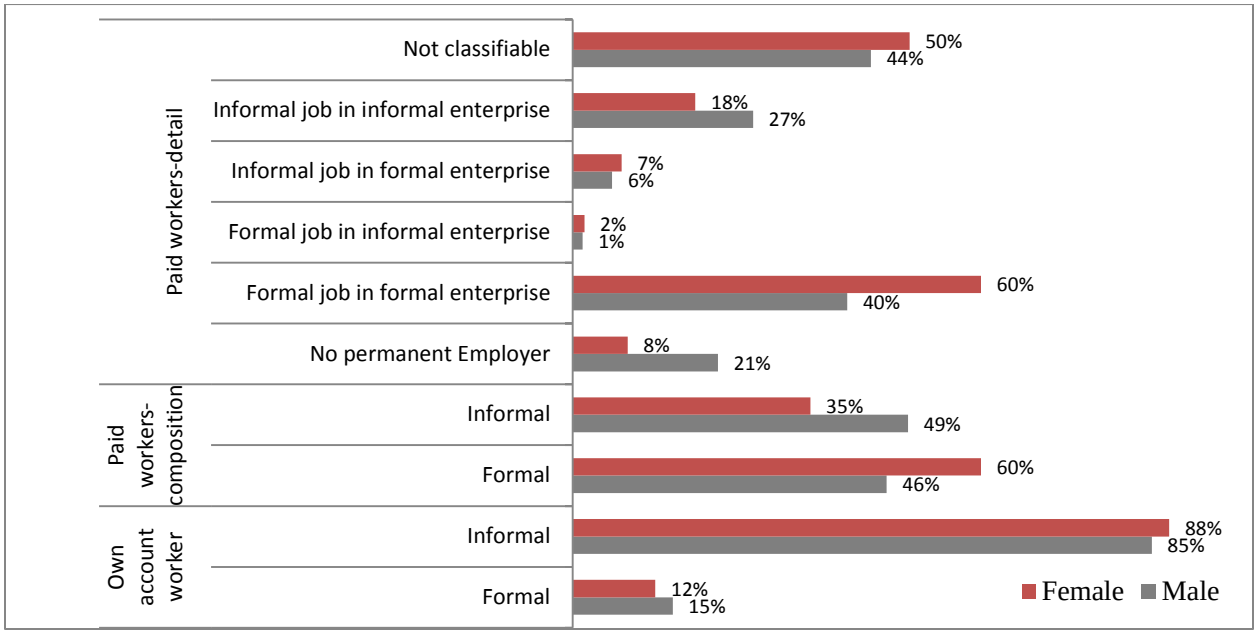
Table 5: Type of employment (Main occupation), 2012

	Female (%)	Male (%)	Total (%)
Wage worker/employee	348 (49.64)	603 (62.88)	951 (57.29)
Own economic activity	297 (42.37)	321 (33.47)	618 (37.23)
Unpaid worker in family business/farm	56 (7.99)	35 (3.65)	91 (5.48)
Total	701 (100)	959 (100)	1660 (100)

Source: Calculation using Steps Skills Measurement Survey 2012

The informal sector[7] dominates labor markets in Sri Lanka with 63 percent of women and 70 percent of men employed in informal jobs in 2009. Figure 3 shows the distribution of employed men and women according to type of enterprise and job based on availability of benefits. Sixty percent of women who work as paid employees are employed in formal jobs. The rest are either in informal enterprises with benefits or in formal or informal enterprises without any benefits. Women earn less in both formal and informal work in comparison to men. Real mean monthly earnings for men and women in formal sector are – 8,502.87 LKR and 6,705.17 LKR respectively and in informal sector are 4,691.59 LKR and 2,611.71 LKR respectively (Sinha 2012). For women, average informal sector earnings are about 40 percent of formal earnings. Therefore, formal sector jobs have higher returns and they are more desirable for women. Even though among women the proportion employed in the formal sector and in public jobs are higher, Sinha, (2012) found that after controlling for employees' human capital, household and socio-economic characteristics, men are significantly more likely than women to be employed in the public sector.

Figure 3: Distribution of males and females in formal and informal jobs, 2009



Source: Calculation using Labor force Survey 2009

In Sri Lanka, the service sector is the major as well as the fastest growing source of employment for both women and men both in rural and urban locations. In urban locations, more than two-third of workers are employed in this sector. This sector has been experiencing 2.4 percentage of increase in number of employed workers annually (Table 6). Thirty-eight percent of working

[7] Paid jobs in informal sector do not offer paid leave or any form of retirement benefit. Informal employers/ enterprises are those who are not registered, do not maintain formal accounts and have less than 5 employees.

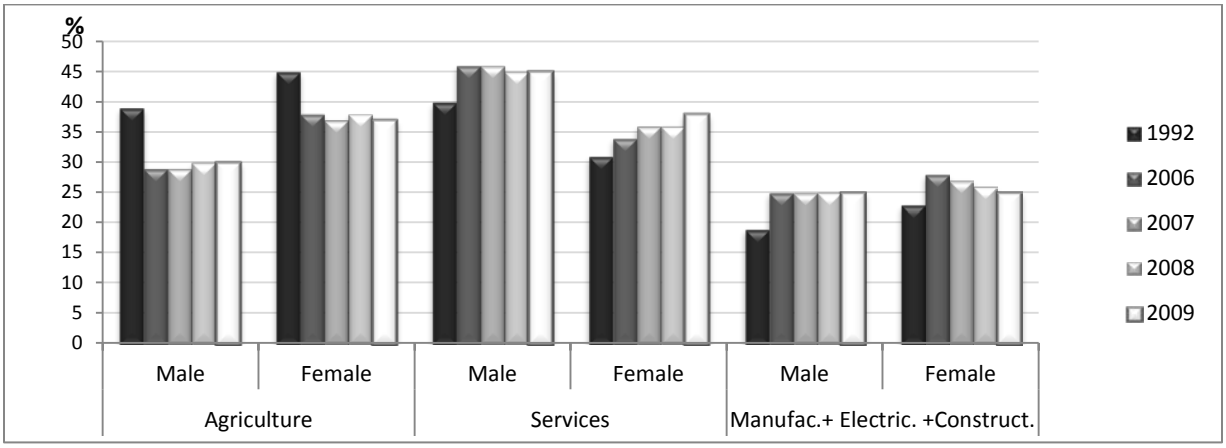
women were employed in the service sector in 2009. The greatest expansion of female employment is also happening here. In 1992, 31 percent of employed females were working in this sector. On the other hand, in terms of employment, agricultural sector is shrinking over time with an annual rate of 0.3 percent even though real GDP growth rate is still positive, 1.5 percent. Even in rural locations, agriculture is not the major job providing sector anymore; and in urban locations, only 2 percent workers are employed in this sector. In 1992, the agricultural sector was the dominant one regarding female employment with 45 percent of working women employed in this sector. By 2009, this proportion came down to 37 percent (Figure 4). The Industrial sector, where the number of workers employed increases annually at 2.2 percentage rate, accounts for only a quarter of employment individually for both men and women.

Table 6: Distribution of employment (percentage) by location and sectors, 2008

	Agriculture	Industry	Services	All
Rural	34	26	39	90
Urban	2	31	68	10
Total	31	27	42	
Annual % increase in no. of employed workers	0.3	2.2	2.4	1.1

Source: World Bank 2012
Note: Estates, which have very high labor force participation, are included in rural areas

Figure 4: Sectoral share of employment of males and females aged 15- 65 years, 1992-2009



Source: Sinha, 2012.

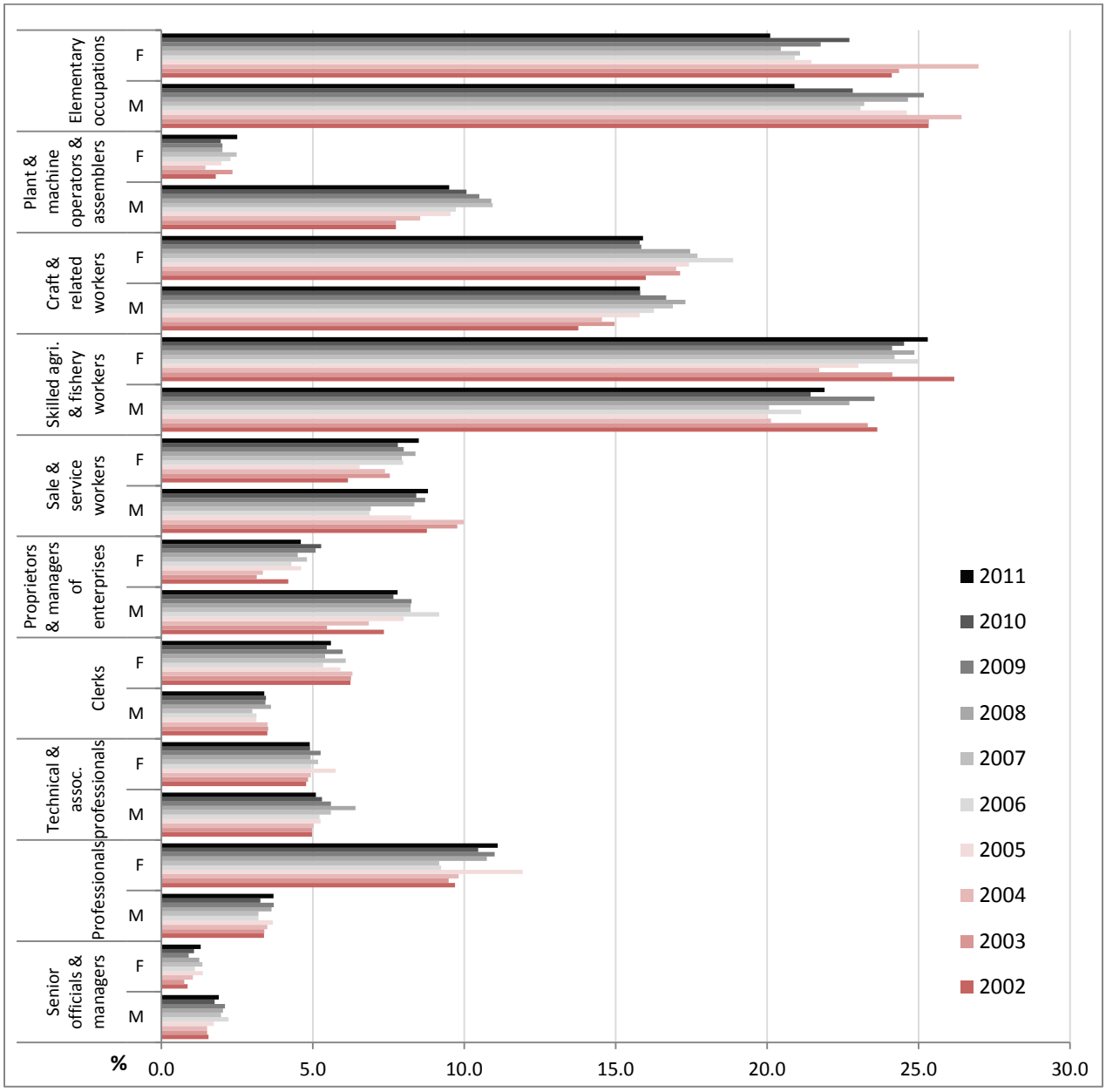
Disaggregation of male and female employment by sectors and districts captures the labor market heterogeneity that exists between Sri Lankan districts. Districts of Western province (Colombo, Gampaha, Kalutara), which have experienced higher economic growth than any other

provinces have a major share of employment in services sector. More than two-third of female workers in Colombo are employed in the service sector. On the other hand, agriculture is the major supplier of jobs in districts where GDP per capita is relatively lower; examples of such districts include Badulla, Moneragala, Ratnapura, Matale. In Eastern province, about a quarter of women are in the labor force and among those who are employed, half of them are in the service sector. Table AC in the appendix shows the percentages of employment in major economic sectors by districts and gender.

Gender differences are not only visible across sectors, but they are also quite apparent within industry and occupations (Figure 5). The majority of working women, which accounts for almost half of the women in the labor force, are employed either as skilled agricultural and fishery workers (25 percent) or are involved in elementary occupations (23 percent) such as day laborers, subsistence workers, street vendors and the like. These are also the major occupations for men. Differences between male and female employment are small in occupations such as craft and related work, sale and service work, technical and associate professionals.

However, there are some occupations where gender segregation is striking. One such occupational category is working as a 'professional' which is by share dominated by women; 11.1 percent of working women work are professionals, whereas only 3.7 percent men's work fall in that category. In contrast to that, another such segregated category that is dominated by men is working as a 'plant and machine operator and assembler". One-tenth of working men work as machine operators or assemblers, whereas only one-twentieth of female workers fall in that category. A relatively higher share of men are proprietors and managers of enterprises (7.8 vs. 4.6 percent) or senior officials and managers (1.9 vs. 1.3 percent) and women are more in clerical positions (3.4 percent men vs. 5.6 percent women). The differences in actual numbers are much higher than the percentage share of each pool since the size of male workforce is almost double than that of female's (Table AD in appendix provides the numbers that has been used to create Figure 5) The share of women in high-end occupations or jobs with high status such as senior officials and managers, professionals, technical and associate professionals, proprietors and mangers of enterprises has increased over time during the period 2002 to 2011 or at least stayed stable.

Figure 5: Share of male and female employment by occupation groups, 2002-2010



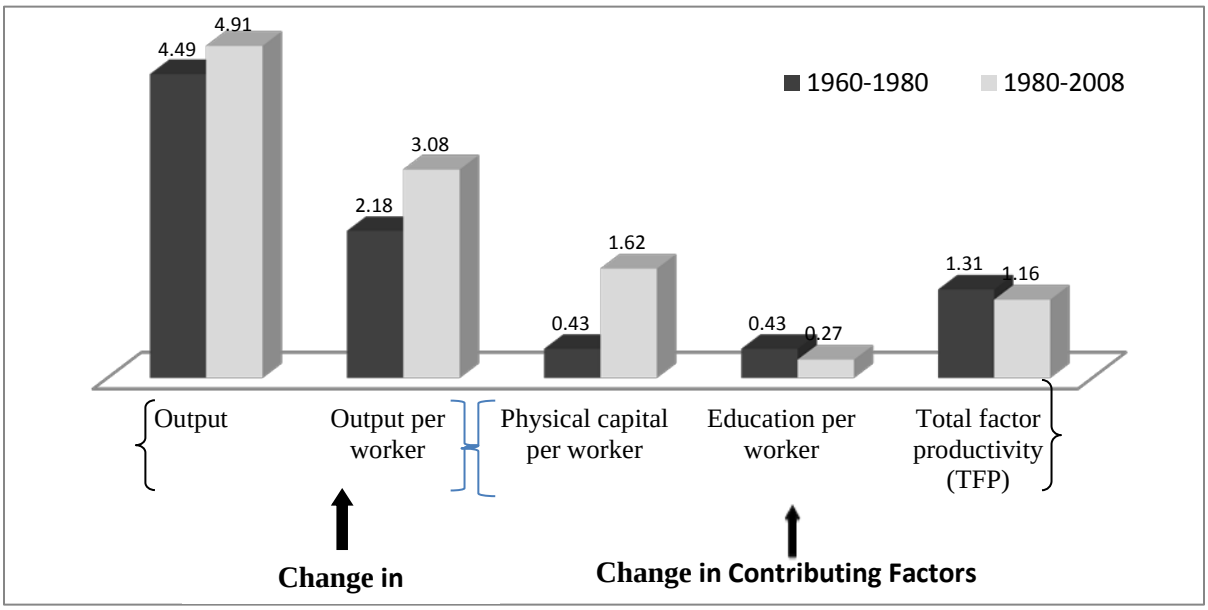
Source: Calculation using Information from Sri Lanka Labor Force Survey, Annual Report -2010
Note: Share of either employed male or female corresponds to their own pool not the pool of both sexes.

PRODUCTIVITY, RATES OF RETURNS TO SCHOOLING

Sri Lanka has experienced an average of 3.08 percent annual aggregate growth in labor productivity during 1980-2008 (World Bank 2012). Growth in aggregate labor productivity or aggregate output per worker can emerge from three different sources – growth in physical capital

per worker (capital deepening), growth in human capital per worker (education), and growth in total factor productivity (TFP), which is the change in efficiency determined by how efficiently and intensely the inputs are utilized in production. If all inputs are accounted for, then total factor productivity can be taken as a measure of an economy's long-term technological change. A decomposition of Sri Lanka's aggregate growth in labor productivity (Figure 6) identifies capital deepening as the main source (52 percent) of labor productivity growth during 1980-2008 with TFP accounting for 39 percent of it, in contrast to the period of 1960-80, when TFP was the main source of Sri Lanka's aggregate labor productivity (62 percent) growth (World Bank 2012). Even though it is not the main source of growth in recent years, the growth of TFP remained high.

Figure 6: Sources of average annual growth in output per worker in Sri Lanka, 1960-1980

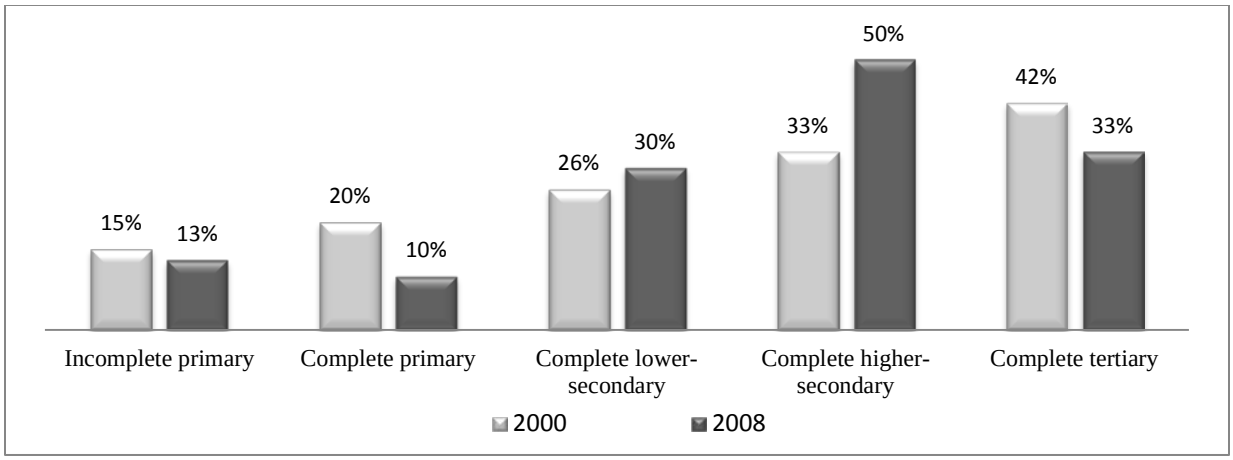


Source: Bosworth 2010.

Note: Average annual growth in output per worker in the sum of physical capital, human capital, and TFP contributions to growth productivity. Due to interaction terms, totals may not add up to total growth in output per worker. The growth accounts use employment data from national labor survey 2010.

In Sri Lanka, in recent decades with the expansion of service sector as well as industry, the demand for skilled workers has increased and this is reflected in the increase in wage premiums associated with the more skilled occupations that require a higher level of education. For instance, the wage premium for completing higher secondary is 50 percent more than completing lower-secondary (Figure 7). And this is happening in the context where level of education of the work force has been rising over time. In Sri Lanka, the share of the labor force with lower-secondary education increased by 10 percentage points between 2000 and 2008; although, the increase in the pool of workers with higher-secondary and tertiary education was much smaller (World Bank 2012). Hence, the steep rise in wage premium for completing higher secondary is a reflection of not only high demand for that category but also supply-side shortage.

Figure 7: Wage premiums by level of education in Sri Lanka, 2000-2008

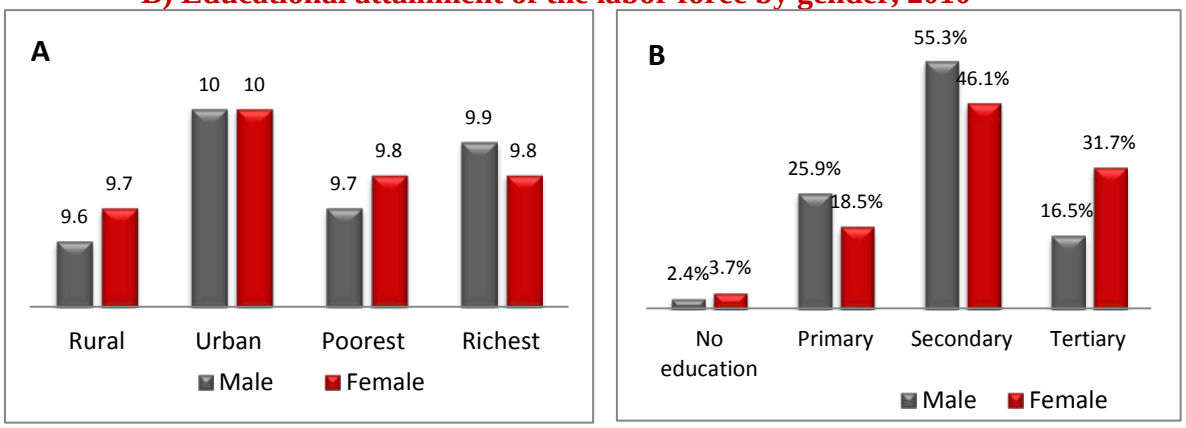


Source: World Bank, 2012; based on data from national labor force and household surveys

Note: The first pair of bars reflects the wage premium for having some primary education relative to no education; the last set of bars reflects the wage premium for completing tertiary relative to completing upper-secondary education. The wage premiums represent the differences in the coefficients of a regression of log hourly wage on basic controls done by the authors of the World Bank report.

We do not find much educational gap regarding average years of schooling with respect to location and wealth status between male and female labor force participants especially among the younger cohorts (Figure 8A). However, among the female labor force participants, close to one-third have tertiary degree in contrast to male workers among whom less than one-fifth have attained tertiary degree. Except for tertiary degree, a higher proportion of male workers have attained either primary or secondary education than female workers (Figure 8B). And this supports the previous discussion that women with some primary or lower or higher secondary education are more likely to stay out of the labor force.

Figure 8: A) Mean years of schooling: 15-34 years of males and females, 2007
B) Educational attainment of the labor force by gender, 2010



Source: World Bank, 2012

Table 7: Trends in real mean monthly earnings, 2006-09

	Mean Earnings LKR		growth rate 2006-2009		Unadjusted Gender Earnings Gap (% difference between Male and Female Earnings)
Overall	Women	Men			
2006	8,607.61	9,293.39			7%
2007	9,233.18	9,548.86			3%
2008	7,982.69	8,431.19			5%
2009	8,048.43	8,794.49	-6%	-5%	8%
Public sector					
2006	9,672.66	9,785.55			1%
2007	10,163.18	10,149.85			0%
2008	9,440.47	9,166.88			-3%
2009	9,197.26	9,335.19	-5%	-5%	1%
Semi-government					
2006	5,925.77	8,310.78			29%
2007	6,837.22	8,252.93			17%
2008	4,998.25	7,095.74			30%
2009	5,384.34	7,746.04	-9%	-7%	30%
Private sector					
2006	4,018.62	6,269.09			36%
2007	3,941.97	6,057.38			35%
2008	3,860.45	5,761.75			33%
2009	3,944.31	6,115.63	-2%	-2%	36%

Source: Sinha, 2012.

The earning analysis conducted by Sinha (2012) shows that even though nominal earnings increased over time, real monthly earnings declined by about 5 percent between 2006 and 2009 for all paid workers[8]. Investigating wage data using several rounds of labor force survey, she also found gender parity in earnings in the public sector, but high earning gaps in private sector or semi-government organizations (Table 7). For women, wage premium is much higher in public sector than men since only in public sector women with similar characteristics can earn the same as men. For both men and women across sectors, wage premium is the highest in public and lowest in private sector. In the private sector, the unadjusted gender earning gap can be as high as 36 percent fabricating a negative incentive for women to participate in the labor force. The adjusted gender gap after controlling for education, experience and a number of employee characteristics is much larger. The selection corrected earnings regression done by Sinha (2012) shows that men have higher returns to education and experience in the labor market. The returns to education are 3 percent for women and 8 percent for men. The returns to potential labor

[8] Similar result was found by World Bank 2010.

market experience are concave, reaching a maximum at 36 years of experience for women and 28 years of experience for men.

JOB RELATED SKILLS OF WOMEN AND MEN

Box 2: Relevant Skills for Jobs

Skills are not one-dimensional. Different combination of skills is required for different types of jobs. For example, manual skills are needed for physical tasks, cognitive skills are more important for jobs that need mental tasks, non-cognitive and interpersonal skills play salient role in jobs that requires interaction with others. To link jobs and skills, three broad categories – cognitive, non-cognitive and technical skills - are identified in a conceptual framework "Skills Toward Employment and Productivity (STEP)" developed by the World Bank as the necessary skills set for a worker.

Cognitive skills are defined by American Psychological Association as "ability to understand complex ideas, to adapt effectively to the environment, to learn from experience, to engage in various forms of reasoning, to overcome obstacles by taking thought". Cognitive skills were measured using three separate dummy variables involving reading, writing and numeracy. Reading dummy equals to one if a person read at work or in everyday life; writing dummy takes the value one if she filled the bills or forms or wrote at work or in everyday life; and finally numeracy dummy equals one if she performed different calculations at work or outside of work. These three domains of cognitive skills actually measure the intensity of the usage of each domain rather than the skill itself. In addition to that, the crudeness of the measures which are self-reported and based on simple dummy variables asks for careful interpretation.

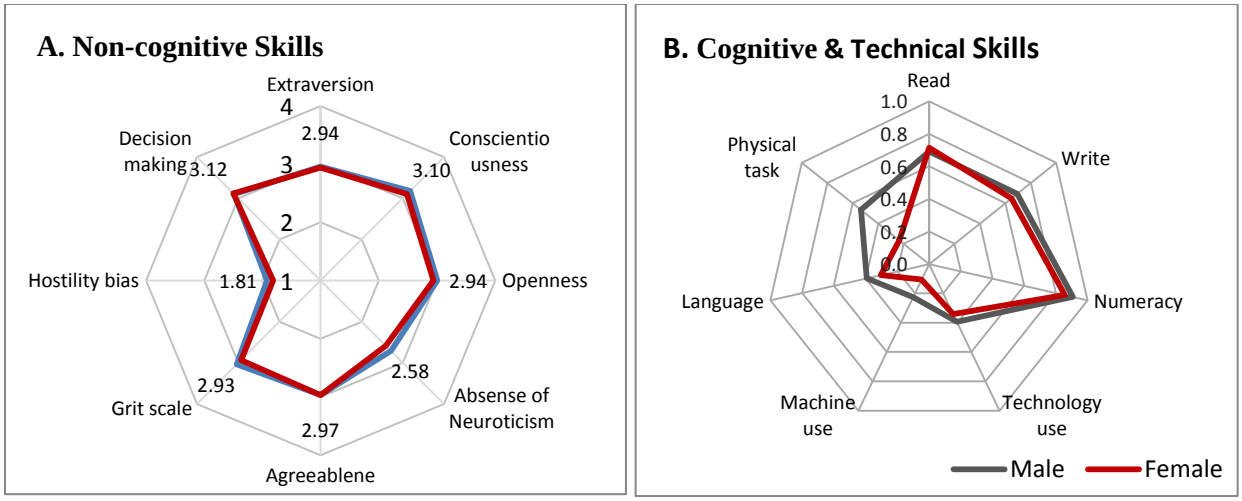
Non-cognitive skills which are also known as soft-skills, personality traits or socio-emotional skills are interpreted as skills that are not directly related to intelligence rather might involve multiple dimensions that can affect the productivity of a worker. Non-cognitive skills measured by STEP survey include the measures of Big Five personality traits (extraversion, conscientiousness, openness, lack of neuroticism and agreeableness), grit scale, hostility bias, decision making and dummy for interpersonal skills.

Technical skills are job-specific specialized skills necessary to perform certain tasks. Technical skills were assessed by a number of job-specific skills: technology use, machine use, language skills and physical tasks. All these measures are crude as these are self-reported, but still are good measures for comparisons and bringing out overall trends. The measure of technology use is an average of usage of communication devices such as phone, mobile phone and such, bar code reader and computer at work or outside of work. Machine use is an average of operating or driving vehicles, repairing or maintenance of electronic equipment, operating heavy machinery or industrial equipment as part of the job or in everyday life. Language skill is measured with a dummy variable that takes the value one if the person speaks an additional language that is required in her job. Finally a physical task is also measured by a dummy variable that equals to one if the person has to do heavy lifting at work. This measure is available for working people only. (Savchenko, 2012).

Skills as well as education and experience are important determinants of labor market outcomes and its importance is acknowledged in both empirical and theoretical research from various fields. One of the arguments that researchers and policy makers make about low female labor force participation in developing countries is their lack of skills - either in obtaining a job or being able to perform - is keeping them in the bottom tier of their occupation or at worst keeping them away from labor market altogether. In this section, we investigate a few skills related issues that are relevant for not only women but for labor market in general to see if disparity in skills set between men and women exists and can be the reason behind gender gap in labor market outcomes in Sri Lanka. We focus on a few related issues: if there exist any gap between men and women with respect to their skills set, how they see themselves in the labor market, what are the main methods they use to obtain a job, what are the main hindrances that contribute in quitting the job if they have done that, and finally what are the main skill development supports they have used.

Cognitive skills: Cognitive skills are positively and directly associated with levels of education and indirectly correlated with wealth status. Higher proportion of both men and women in urban locations use reading, writing and numeracy in their daily lives and this is because most of the jobs in urban locations are in either service or industrial sector and requires some cognitive skills. The differences between men and women regarding cognitive skills are not substantial (see Figure 9B). The small difference that exists show that women use reading skills more frequently in their daily lives whereas men use more writing and numeracy skills (see Table AG in Appendix for detailed breakdown). Among women, employed ones use numeracy and writing more frequently (95 and 71 percent respectively) and they are also the ones that use reading the least (69 percent). Between employed men and women, women use each skill more frequently than men.

Figure 9: Means of skills by males and females aged 15-64 years, 2012



Source: Calculation using Step Skills Measurement Survey 2012

Non-cognitive Skills: Comparing Sri Lankan men and women at means of non-cognitive skills show that even though the magnitude of differences are small, men have better skills compared to women in every dimension except decision making and agreeableness: women are slightly more skilled regarding decision making and there is no difference between men and women in agreeableness. Figure 9 shows the overall comparison of different measures on non-cognitive skills except interpersonal skill between men and women of 15-64 years old irrespective of their labor market participation.

By definition non-cognitive skills such as soft skills or personality traits are not directly related to intelligence, however exposure to different life chances or events can influence some dimensions of such skills set. Table AE and AF in appendix shows the means of various measures of non-cognitive skills by demographic and socio-economic background for men and women. Men marginally surpass women in the majority of skills tested except decision making and hostility bias (for which lower value represent better skill) for each and every category that we explored.

Grit Scale: We do see a positive correlation between education and grit scale that measures the firmness of a person and her ability to face challenges with courage, and also between grit scale and wealth status of a person for both men and women. Employed men have the highest grit scale (measured in a scale of 1 to 4, where 4 represents almost always and 1 almost never), which is 3.07; on the other hand, unemployed women has the lowest grit scale, 2.86. For women grit scale is the highest for employed women (3.01) and lowest for the unemployed ones; for out of labor force women grit scale is 2.89. The average grit scale is higher for both men and women in urban areas.

Hostility bias: Hostility bias represents a person's sensitiveness to unfriendly behavior of other people. Higher the value of hostility bias, more the person is likely to get affected by other's negative behavior. On average, men have higher hostility bias meaning - compared to women, men get affected by others' unfriendly behavior more frequently. If we consider age, both younger men and women have lower hostility bias than older ones. Among women, unemployed ones show relatively higher hostility bias (1.83) and employed women has the lowest mean (1.80). But among men, it is the employed group that has expressed the highest level of hostility bias (1.94) and men not in the labor force possess the lowest mean (1.81). Men in rural areas have higher hostility bias (1.93 vs. 1.90 in urban locations) unlike urban women who has larger mean of the bias (1.85 vs. 1.79 in rural locations).

Decision making: There is a positive correlation between decision making power and education, wealth status. Women overall are slightly better endowed with decision making skill. There is not much difference in such skill between men and women regarding labor force status except that the measure of decision making power for unemployed men is much lower. Location does not make much of a difference for men; however for women, urban women are more skilled in this regard than rural women.

Interpersonal skills: Interpersonal skills in this case are self-reported and thus are very subjective. This skill set is measured for employed population only and is a weighted average of three dummy variables – interaction with clients, presentation to co-workers and managing the work of co-workers. The value of the measure ranges from 0 to 1. Interpersonal skills are positively correlated with level of education and wealth status. Urban men and women have higher interpersonal skills than their rural counterparts which is not unexpected since urban employees are more likely have the need and opportunities to deal with various clients.

The Big Five: The big five personality trait includes the measure of five personality traits: extraversion, conscientiousness, openness, absence of neuroticism and agreeableness. Most of the measures monotonically increase with level of education. The rural urban differences are mixed. Men are better skilled than women which could be a reflection of better exposure of men to various social and employment situations, trainings and such.

Technical skills: The major difference between men and women regarding skill formation and supply emerged due to the substantial differences that exist between them in technical skills (see Figure 9B). Other than physical tasks, for both men and women those who are located in urban areas possess or use more skills. In each and every aspect of technical skills, men surpass women. Other than physical tasks, all three measures of technical skills are positively and monotonically correlated with levels of education and wealth status. The highest difference between men and women are reflected in physical tasks (54 vs. 23 percent) and then machine use (23 vs. 11 percent). The slimmest difference is in use of technology, which is 39 percent for men and 34 percent for women. Thirty percent of women know an additional language that could be used in a job, for men this rate is 39 percent. Between women in or out of labor force the difference in language skill or use of machinery are marginal. Interestingly, those who are employed uses technology the least (28 percent). Technology use is more common among the unemployed women (46 percent) and then among women out of labor force (38 percent).

Perceptions about and steps taken to increase own skills/ability: Men not only possess or use their skills more frequently than women they are also more confident about their abilities. A number of questions regarding perception and abilities were asked in a nationally represented randomly selected sample of 15 to 64 years old men and women in STEP Skills Survey conducted in 2012 which confirms that statement. Table 8 presents the share of men and women who expressed positive perception about their own ability regarding job search.

Except for preparing resume, for all other questions regarding - their ability to apply for jobs, self-presentation and performance, qualifications, necessary experience, references - higher proportion of men showed positive perception. However, the main difference between men and women is that compared to women a substantially higher proportion of men have work experience. Only half of women reported having necessary work experience to get a job while this proportion is three-fourth for men. Moreover, a higher share of men has access to means to start their own business than women (46 vs. 35 percent). These two powerful factors are

potentially contributing to the positive perception that higher proportion of men have expressed. When men and women were asked if they can find a job with their education and experiences 35 percent women and 40 percent men responded positively (Table 8 in annex). However, when younger cohorts, age between 20 to 40 years, were asked if lack of certain skills such as computer skill or reading and writing skills in official languages have kept them from getting a job, a promotion, a pay raise or from even advancing in their own businesses, we don't see much difference in their responses (Table AI in Appendix).

Table 8: Positive perceptions about own ability regarding job search

	Female	Male
Has means to find out about job vacancies through newspaper, internet etc.	73.05	77.67
Has ability to prepare resume	79.05	78.62
Has ability to fill out job applications	82.82	83.19
Has Good references	76.1	78.79
Has ability to perform adequately in an interview	75.18	78.45
Has adequate education and qualifications	61.81	64.83
Has necessary work experience	52.7	74.31
Knows a way to certify /demonstration education or qualification	57.72	60.78
Has means to start own business	34.59	45.69

Source: Calculation using Step Skills Measurement Survey 2012

Table 9: Main method used to find current job, 2012

	Female (%)	Male (%)
Through Jobsnet	1.57	1.56
Through Private Employment Agency	0.43	0.73
Through University/School Career Office	5.56	1.66
Through Social Network (Friends/Relative)	35.61	42.98
Through Media/Internet (Other Than Jobsnet)	6.13	6.45
Employer Contacted You	4.42	8.01
Contacted Employer Directly	5.84	9.16
Started Own Business	36.04	25.08
Job Obtained After Training/Apprentices	2.56	2.81
Inheriting A Business	0.43	1.25
By The Government	1.42	0.31

Source: Calculation using Step Skills Measurement Survey 2012

The decomposition of main method used to find a job by gender shows whether access to information or translation of skills into obtaining a job are different for men and women (Table 9). Despite the fact that women have less access to resources to start their own business, a higher share of women (36 percent) starts their own business to earn income. The potential reason behind this could be that the flexibility of self-employment resonates more with women's life-style where they are not only responsible for housework but also the sole care providers of

household members especially children and elderly. However, it can also be a reflection of labor market biases and discrimination against women. For men, major source of finding a job is social network comprising friends and relatives which is the second most used sources of finding the current job for women. Interestingly, relatively a higher share of women found their current job through University or school career office or the government (2 percent of men vs. 7 percent of women). Women are half as likely as men either to contact an employer directly or being contacted by an employer. Eight percent of currently employed men interviewed in Step Skills Measurement Survey, 2012, report that they were contacted by their current employers; on the other hand only 4 percent of women were contacted by their employer. We do not find much difference between men and women in the use of different mediums such Jobsnet or media and internet or in obtaining job after training or apprenticeship.

Investigating the main reason behind quitting his/her most recent job gives us a window to see what affects their employment decisions the most (Table J in appendix). About three-fourth women reported family, health or personal reason as the main reason for quitting the most recent job. For 44 percent of men, that was the case. For men moving to another area is not a reason to quit a job. For men employment is the main reason for migration not the other way round. On the other hand, women tend to follow their family wherever they move and 7 percent of women reported moving to another area as the reason for quitting their jobs. A higher share of men (11 percent) reported that they gave up their most recent job to continue education, which reflects that men do tend to work to gain experience even before completing their education. This is a rare case for women; only 1 percent identified continuing education as the reason, potentially because they do not work before completing their education to gain work experience. This most likely contributes to their comparative lack of experience.

Skills development: We have seen that skills are positively correlated with education. However, general education provides and nurtures a certain type of skills not all. In addition to general education, there are three different routes that can be taken for skill development: vocational education, training, and apprenticeship. Vocational training in Sri Lanka, which is known as technical and vocational education and training (TVET), is offered by both public and private training institutions and NGOs. About two-third of vocational education recipient received their education from public institutions. Anyone with a GCE O-level or A-level education can apply for TVET. The programs under TVET offered by public organizations are free for those who use this as transitional step from school to work; for currently employed, the program is offered on a fee-basis (Tan 2012). Other than vocational education one can also obtain skills through apprenticeship in early stage of career or register for training courses at later stage. Apprenticeship can be either formal or informal. The national Apprentice and Industrial Training Authority (NAITA) established in 1990 provides formal apprenticeship and enterprise based training. Craft, situational and village-level apprenticeship are the three major enterprise based apprenticeship programs (Suraweera, 2010). The average duration of an apprenticeship reported by Step household survey respondents was around 8 months with most of the apprenticeships

lasting for 6 months (Savchenko, 2012). Only 37 percent of those who were apprentices have formal certificate, the rest were informal apprentices.

Table 10: Share of the sample by socio-economic and demographic background of males and females who received some skill development support, 2012

	Male			Female		
	Vocational Education	Training*	Apprentice -ship	Vocational Education	Training *	Apprentice -ship
Age group						
15-20	0.09	0.08	0.06	0.09	0.09	0.05
21-30	0.27	0.07	0.22	0.19	0.09	0.14
31-40	0.17	0.08	0.19	0.21	0.06	0.16
41+	0.19	0.04	0.20	0.13	0.04	0.13
Level of Education						
Primary & below	0.02	0.01	0.16	0.02	0.03	0.08
Secondary &/or O levels	0.14	0.03	0.18	0.09	0.03	0.12
Upper secondary &/or A levels	0.33	0.09	0.20	0.28	0.09	0.16
Bachelor & higher	0.35	0.28	0.19	0.43	0.2	0.12
Asset quintile						
Poorest	0.07	0.02	0.16	0.06	0.04	0.11
2	0.10	0.05	0.14	0.12	0.04	0.14
3	0.17	0.05	0.22	0.15	0.05	0.13
4	0.24	0.06	0.20	0.22	0.06	0.13
Richest	0.36	0.11	0.20	0.26	0.10	0.14
Labor force status						
Employed	0.20	0.06	0.21	0.23	0.1	0.18
Unemployed	0.43	0.10	0.17	0.19	0.06	0.13
Not in LF	0.11	0.05	0.05	0.12	0.03	0.10
Location						
Rural	0.16	0.04	0.16	0.14	0.05	0.12
Urban	0.24	0.08	0.22	0.19	0.07	0.14
Total	0.19	0.06	0.18	0.16	0.06	0.13

Source: Calculation using Step Skills Measurement Survey 2012
*All training other than training associated with vocational education

Table 10 shows the proportion of men and women who received some skill development support by their socio-economic and demographic background. On average, 17 and 15 percent of the sample (STEP Skill Measurement Survey) participated in the vocational education and apprenticeship system respectively. We do find that a relatively larger share of men has attained vocational education and apprenticeship than women, 19 vs. 16 percent and 18 vs. 13 percent respectively. However, there is no gender difference in obtaining private training which is not

related to vocational training. The incidence of participating in training other than TVET is relatively lower – 6 percent. The incidence of participating in skill development either through vocational education or training or apprenticeship is much higher among men and women with better education and among those who come from economically better-off background or urban locations. Even though in general more men attained vocational training, women with bachelors or higher degree have the highest participation rate with 43 percent of them enrolled in vocational education. For men with bachelors or higher degree this participation rate is 34 percent. Compared to women, unemployment rate is higher among men with vocational training, 19 vs 43 percent.

INTERNATIONAL MIGRATION AND SRI LANKAN WOMEN

International migration is a significant contributor of employment for Sri Lankan women. About one-fifth of labor-force worked abroad in 2007 and a little more than a million of them were females who comprised about 38 percent of total female labor force (DC&S 2008; Ukwatta, 2010). Each year approximately five percent of women active in the labor force go abroad to work as international migrant labor[9]. With encouraging government policies and increasing demand for migrant labor, Sri Lankan labor migration has started to flourish in the mid-1980s; in 1986, there were less than 20,000 labor migrants from the country. In 2010, 266,445 departures were made; of which 49.14 percent were females (SLBFE 2010). Currently there are approximately 1.9 million Sri Lankan migrant workers worldwide. In the early stages, it was the male workers who dominated international migration; however with increase in female migration that pattern has changed since 1988 to 2007 (See Figure AF in appendix for departures for foreign employment by sex and year). In 2010, female migrants consisted of 49.14 percent of the total pull of foreign migrants (Table AK in appendix). This is one area of employment where there is not much gender gap regarding participation.

Female migrants are not only a significant group of female labor force; their contribution to foreign earnings also plays a significant role in the country's economy. Remittance is the second largest source of foreign earnings of the country. The other two sources are garments, and plantation crops. Even though remittance is the second largest source, the growth of remittances has been faster than the earnings from the other two sources (Ukwatta, 2010). In 2008, foreign remittances to Sri Lanka was SLR 316,118 million (US $2.8 billion[10]) of which 59.8 percent were from the migrants in the Middle East where the majority of female migrants are employed primarily as domestic help such as housemaids (SLBFE 2009, p.105). This indicates not only the importance of labor migration but also women's contribution to the Sri Lankan economy.

[9] In 2009, 4.59% migrated. The denominator includes total number of females aged 20 years and above active in the labor-force plus total number of 20+ years females migrated in the year 2009.
[10] 1 US dollar= SL Rs. 113.53 according to the exchange rate of February 18, 2009.

Even though there is not a significant gender gap regarding participation, there are significant gender differences in the types of work. About 86 percent female migrant workers are employed as housemaids who earn the lowest compared to migrant men and women employed in other sectors. The majority of male migrants are employed as professionals or middle level, clerical and related skilled workers. From the number of complaints from migrants received by the Sri Lankan Bureau of Foreign Employment it is apparent that work environment is not always ideal and safe especially for female migrants. The number of complaints received during the year 2010 was increased by 2,644 complaints and it was 5.5 percent of total recruitment. More than 80 percent of the complaints were made by female migrants; out of those complaints, about 48 percent came from those who went to Saudi Arabia and worked as housemaids.

The Sri Lankan government is very keen on supporting labor migration. The Foreign Employment Unit was established in the Department of Labour in 1976, and later in 1985 Sri Lankan Bureau of Foreign Employment (SLBFE) was established with the goal of finding employment opportunities oversees, organizing and monitoring migration, and maintaining migration records to support and protect migrants.

KEY BARRIERS FOR INCREASED FEMALE LABOR FORCE PARTICIPATION AND POTENTIAL POLICY INTERVENTIONS

The constraints that women face to actively participate in income earning activities are multifaceted and come from all different spheres such as private, public, individual, household, community as well as state level. In most of the cases, the barriers are inter-dependent. To encourage and increase female participation, it is essential to shed light on the barriers that they face in order to tackle those. The common supply side barriers that women generally face are related to time, skill, mobility, capital, and information constraints. On the demand side, discrimination may play a critical role. Existing norms and culture regarding women's status and role in the society shape both of these demand and supply side constraints. Below we discuss these constraints along with policy options in more detail.

Time constraints (role of care provider – children, elderly; housework/household management): Not only in Sri Lanka but also in other developing and most developed countries, women's involvement and choices made about economic opportunities are shaped and driven by the existing deep-rooted norm of women being responsible for care-giving and housework. A good amount of life-time of a woman is spent in bearing and rearing children. With the decline in fertility over time, chunks of this child bearing time has been released from women's lives. Our analysis using data from Household Income and Expenditure Survey (HIES) 2006/07 presented in an earlier section shows that more than 70 percent of Sri Lankan married women with at least 1 child under 5 are not in the labor market and spend their time in housework. For urban mothers

with at least one under 5 year old child, this rate is about 75 percent, and for rural mothers it is 71 percent. Among married women, who do not have any under 5 child, 67 and 57 percent respectively in urban and rural areas are not in the labor force and involved in fulltime housework. On the other hand, since women are generally the caregivers in a family, the ageing of population in Sri Lanka may potentially add more care-giving responsibility on women. This distribution of responsibility and time constraint play as a stubborn barrier for women to actively participate in labor force.

Policies aiming to release women's time can play substantial role in encouraging them to take active role in labor force by freeing up their time to do so. Subsidies to or public provision of child care are used in developed as well as in some middle-income countries such as Mexico, Columbia, Argentina, Brazil, states of India and the like to compensate women for the costs they incur within their home from participating in economic activities. A study[11] investigating the impact of subsidized childcare and free kindergarten introduced in Quebec, Canada in 1997 found that child-care policy, together with the transformation of public kindergarten from part-time to full-time, had a large and statistically significant impact on the labor supply of Quebec mothers with preschool children. For instance, the authors found that, in 2002, the policy increased the participation rate of mothers with at least one child aged 1-5 years by 8 percentage points and that hours and weeks worked per year increased by 231 and 5.17 respectively. For the same child-care policy, a similar result was found by Baker, Gruber, and Milligan (2005) using slightly different methodology. Similar conclusions emerge from other natural experiments regarding free kindergarten and its impact on mothers' employment. For instance, analyzing single mothers with a youngest child of 5 years old in the United States, Gelback (2002) also found positive impact of public kindergarten on mothers' employment and other labor supply measures. However, unless the policy is carefully designed there is a possibility of backfire. Unconditional cash-for-care where parents are provided with cash to buy child-care by themselves may decrease mothers' participation in economic activity[12]. A study based on a survey of 200 households with at least one pre-school child in urban Sri Lanka suggests that women's non-market work is not dependent on husband's income rather on share of housework and childcare of other adults in the household. Mothers are more likely to participate in the labor force when they can share their childcare and housework responsibility with others. The decision to buy formal child care is affected by the age of children, cost of day-care centers, household income, types of occupation, level of education and quality of child care. Quality and affordability of child-care services positively influences female labor force participation (Premaratne 2011). Hence, subsidized childcare with good quality and free kindergarten are very much likely to increase female labor force participation.

In addition to child-care, housework is another element that constrains women's participation by adding pressure on time. Unpaid housework requires time and energy. Full-time involvement in

[11] Lefebvre, Pierre and Philip Merrigan 2008.
[12] For example, see Schone, Pal. 2004.

paid work not only has much higher opportunity cost in terms of work pressure and health, it can also reduce female welfare. Since the basic premise of encouraging women to actively participate in paid work is to improve the welfare of women, their families, and at the macro level to enhance the size of workforce of the country by transforming them into more productive citizens, it is important to keep in mind that participation in paid work needs to be associated with improvement in the welfare of those women's lives instead of compromising the welfare part. And without freeing up time from housework, access to paid work by women will only translate into increased workload for them; and therefore, it is unsustainable to expect higher participation rate in paid work by those who are responsible for all housework.

There is no short-run fix for freeing up women's time from housework. Targeted investment and interventions in social and physical infrastructure, providing basic services in a timely manner, improving the quality and availability of infrastructure services such as electricity, water supply and sanitation can reduce the time spend to perform housework and thus release women's time. For example, electrification in rural South Africa has increased women's labor force participation by about 9 percent (World Bank 2013). Investment service related facilities can increase the incidence and quality of women's labor force participation in two ways – firstly, services like child-care and infrastructure services such as water, electricity can free up women's time from domestic and care work. Secondly, these services will also make it easier for women to accumulate productive assets and human capital that is essential for the labor market. Again, the norms of distribution of housework by gender make women responsible to do most of the household related work. About 47 percent of all working age women (age 15 to 60 years) in Sri Lanka are involved full-time in housework. Those who are active in paid work are not free from housework responsibilities unless they can afford to outsource some of that housework. In our analysis, we found (in section II) that the presence of a domestic servant reduces the probability of staying out of labor force - suggesting if women can share housework responsibility they are more likely to share income earning responsibility as well. Otherwise, working women are the ones who share the burden of work disproportionally and that does not provide any incentive to become active in income-earning activities. Lack of time use data restricts us to shed more light on this topic. But we know norms are not caste on stone, with the right set of incentives norms do change. With increase in women's opportunity cost to conduct and manage all the housework, men are likely to participate and share the burden of housework more. Promoting awareness about gender equality in housework along with other dimensions of life through education, media, awareness campaign and right kind of policy can bring change in norms related to not only time use in housework but also other gendered activities.

Lack of job related skills (Training on soft skill, internship, subsidized vocational training): Lack of appropriate skills especially among women is thought to be one of the key determinants not only for unemployment but also for staying away from market activities. In the previous section we have seen that there exist gender gaps in certain types of job-related skills. However, these skill-related gaps contribute but do not explain completely either women's low labor force

participation or existing earnings gap between men and women. Targeted training program can be a potential solution to reduce the gender gap in skills. Different sub-groups of women may need different types of training; for instance, the need for those transitioning from education to work-life in rural areas is different from those who are self-employed and want to expand and improve their business as well as productivity in an urban location.

Lack of access to opportunities and information: Women's lack of access to opportunities and information related to jobs is a result of their concentrated presence in private sphere and distance from public life. Since birth, men and women grow up in different ways with different responsibilities, expectations and access to resources – which results in women having lack of access to productive resources - be it opportunities or information about opportunities. One way to address this lack of access to resources problem can be tackled by microfinance schemes along with business development services by providing women access to small-scale credit and start their own business. Micro-credit programs generally offer small loans to women in poor households who are credit-constrained and less able to undertake economic activities. For those who are interested to start or expand their own businesses but lack initial capital to purchase needed asset or running capital for the business may find micro-credit a way to become entrepreneurs. Using randomized trials to evaluate the impact of introducing micro-credit targeting women in a new market, Banerjee et. al. (2010) found that the number of new businesses has increased by one-third in 15 to 18 months for those households that received credit from MFI; and for households already engaged in entrepreneurship – household businesses have expanded.

Business training programs along with cash support for self employed women are popular policy interventions to provide access to information and techniques to start new businesses or enhance efficiency of already existing business enterprises owned by women. A randomized experiment conducted in Sri Lanka sheds some light on the effectiveness of such training combined with financial assistance (De Mel, McKanzie and Woodruff 2012). The study included two groups of women – one included self-employed women operating their own businesses, and the other included out of labor force women who were interested to start their own businesses. Each sample was divided into three groups- control group, a group that received short term (7 to 9 days) business training, and another group that received training along with cash grant. The study found that among women who were out of labor force, even though training and cash support sped up the creation of new and more successful businesses, in the long run they did not produce more businesses. Among those who were already small entrepreneurs training only improved their business techniques but not profits or sales. In contrast, the combination of training and cash grant has led to significantly large improvement in business performances. This finding suggests that targeted training combined with cash support can play salient role in improving performance among those who are already in the labor force. However, it may not be the efficient way to allure women into the labor force.

Supply-side bias: Low economic participation of women and the striking fact that women earn significantly less than men are not completely explained by the existing gap between men and women regarding education or experience or skills or even sector of work. On average, for the same job men earns more than equally qualified women. Women are half as likely as men to be contacted by a potential employer for a job. The earning gap is the lowest and rate of returns are the highest for women in public sector jobs, and for the right reason among educated women public jobs are the most desirable. In the private sector, the earning gap is more than 35 percent. The unexplained gap can be attributed to gender discrimination of the labor market. It is likely that due to lower rate of returns in the private sector where women primarily with secondary or lower level of education can get jobs, labor force participation rates are the lowest among those women. To attract women in the labor force, it is important to remove regulations that imply biased or even discriminatory practices depriving women from having equal opportunities and returns in the labor market. Correcting biases in public regulations, policies and legal system such as inheritance, land rights and distribution, job regulations and the like can remove some of the discriminatory factors that reinforce the existing biases.

PROMISING POLICY OPTIONS

Target Group	Goal	Promising interventions
General population, particularly women	Increase participation and improve labor market outcomes by changing gender-biased norms, practices, systems and access to services	• Improve the quality and services of basic physical infrastructure such as sanitation, electrification, transportation etc. to free-up more time for productive use. • Promote awareness about gender equality in different spheres of life through education, media, and awareness campaign. • Reform legal and customary rights to promote gender equality especially regarding access to resources such as land and asset.
Married women	Increase labor force participation	• Set up subsidized community-run childcare options • Provide subsidized full-time kindergarten for children aged 4-5 years old • Provide location specific employment agencies to support women without work experience with information and skills training catered towards their need
Young females transitioning from education	Reduce unemployment	• Strengthen the capacity of the training centers and equip those to connect trained individuals to jobs

to employment		• Provide internship for students completing A levels or equivalent level of education • Investing in advanced skills through higher education • Provide special training on confidence building and interpersonal skills.
Self-employed women	Improve performance and earnings	• Provide business training tailored to their geographic location and potential opportunities combined with increased access to credit and markets
Women employed in semi-government and private sectors	Reduce earning gaps between equally qualified men and women	• Provide incentives (such as tax subsidy) to private firms/organizations to hire women for long term. • Improve employment conditions by introducing and reforming flexible working hour arrangements, equitable salary structure and leave conditions
Female international migrant workers	Improve the security situation of migrants abroad	• Provide physical and legal security to foreign migrants. The government has taken a number of effective initiatives to protect female migrants. However, the number of complaints indicates that there is still room for improvement. Currently, safety of migrants depends on their foreign employers, which is problematic.

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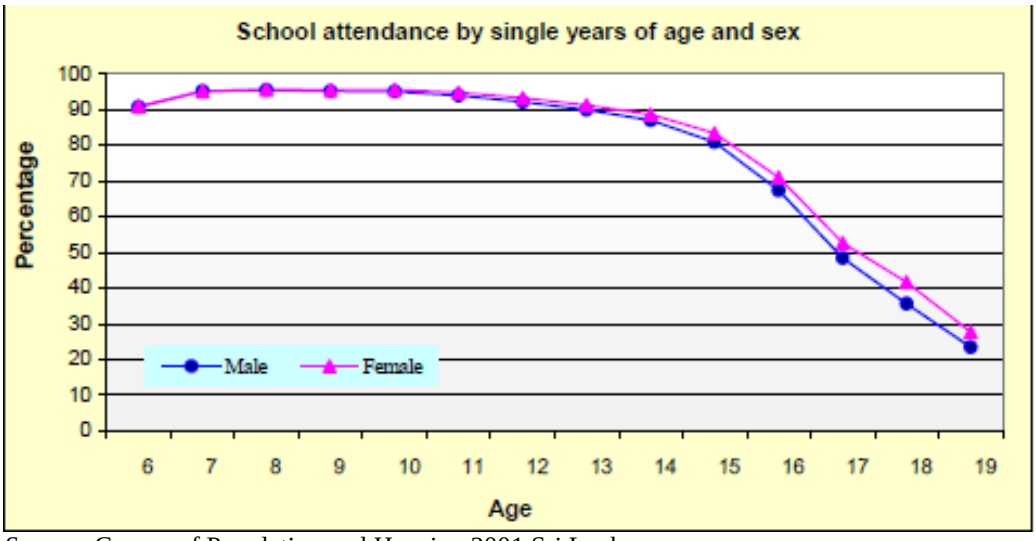
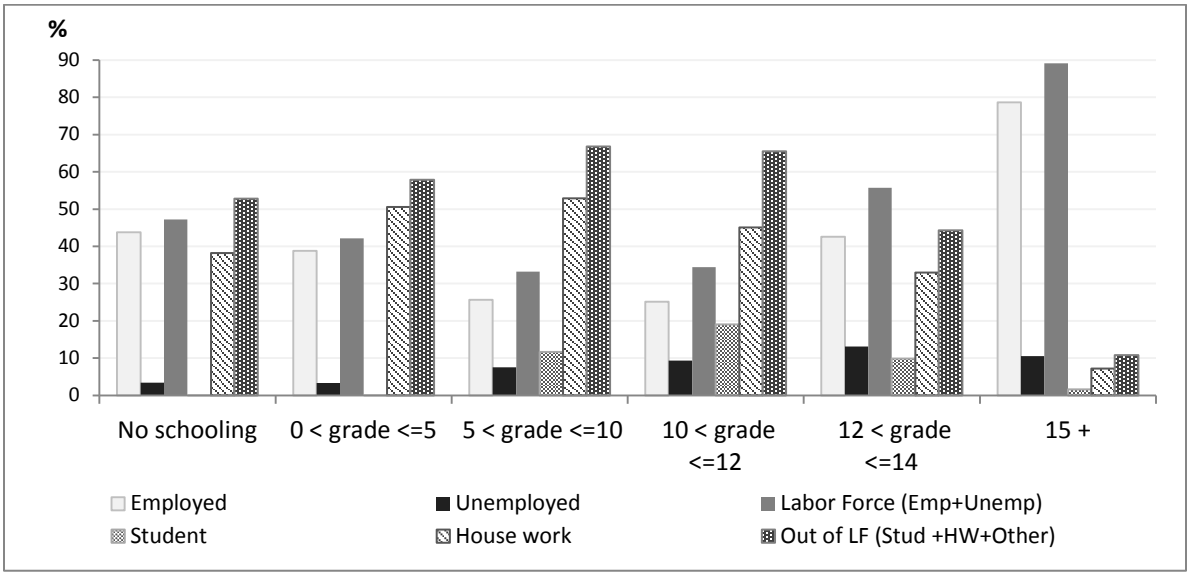
APPENDIX

Figure AA: School attendance by single years of age and sex



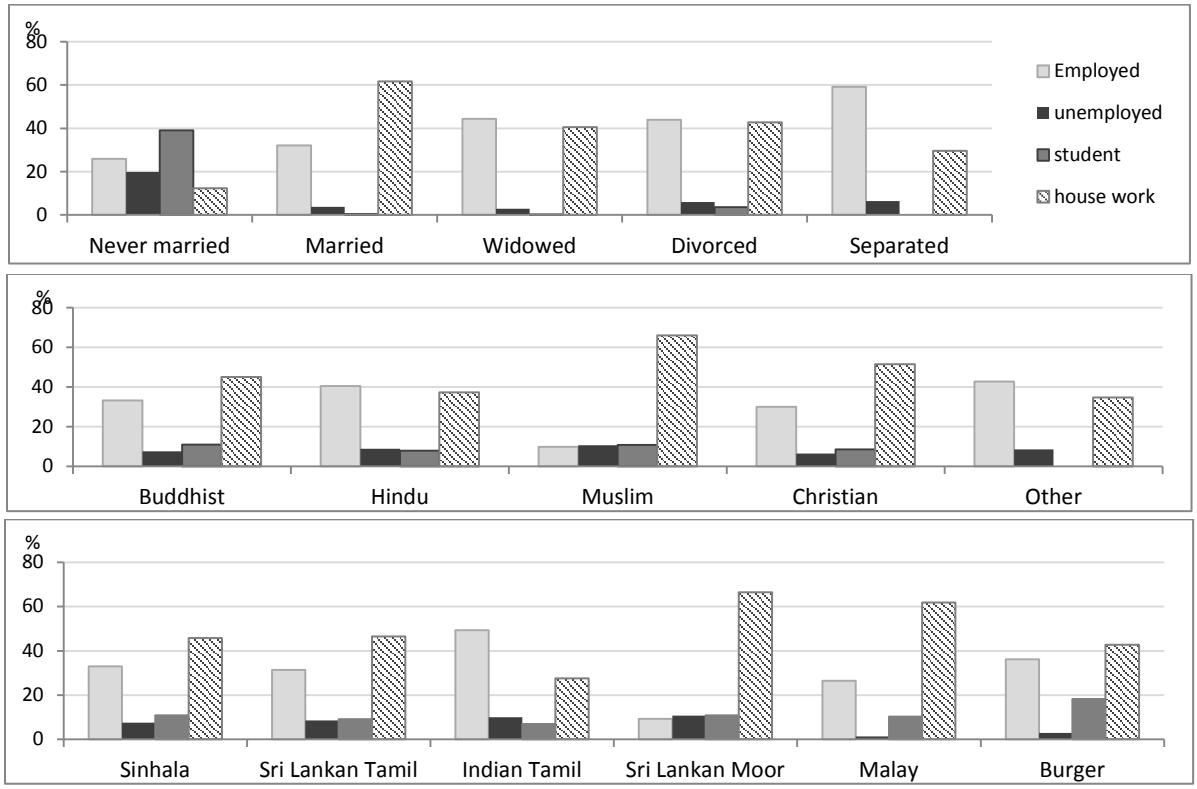
Source: Census of Population and Housing 2001 Sri Lanka

Figure A B: Work status by years of schooling of women aged 15-60 years, 2007



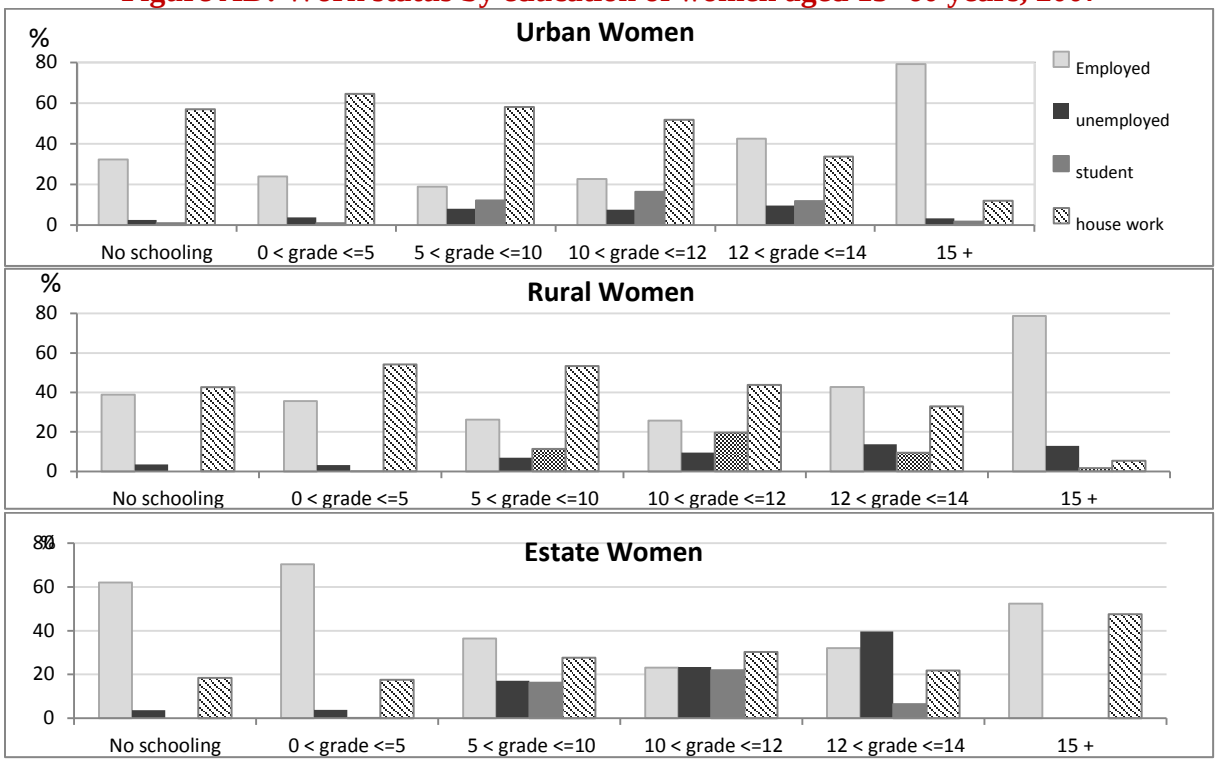
Source: Calculation using HIES 2006/07

Figure AC: Work status by marital status, religion and ethnicity, women aged 15- 60 years, 2007



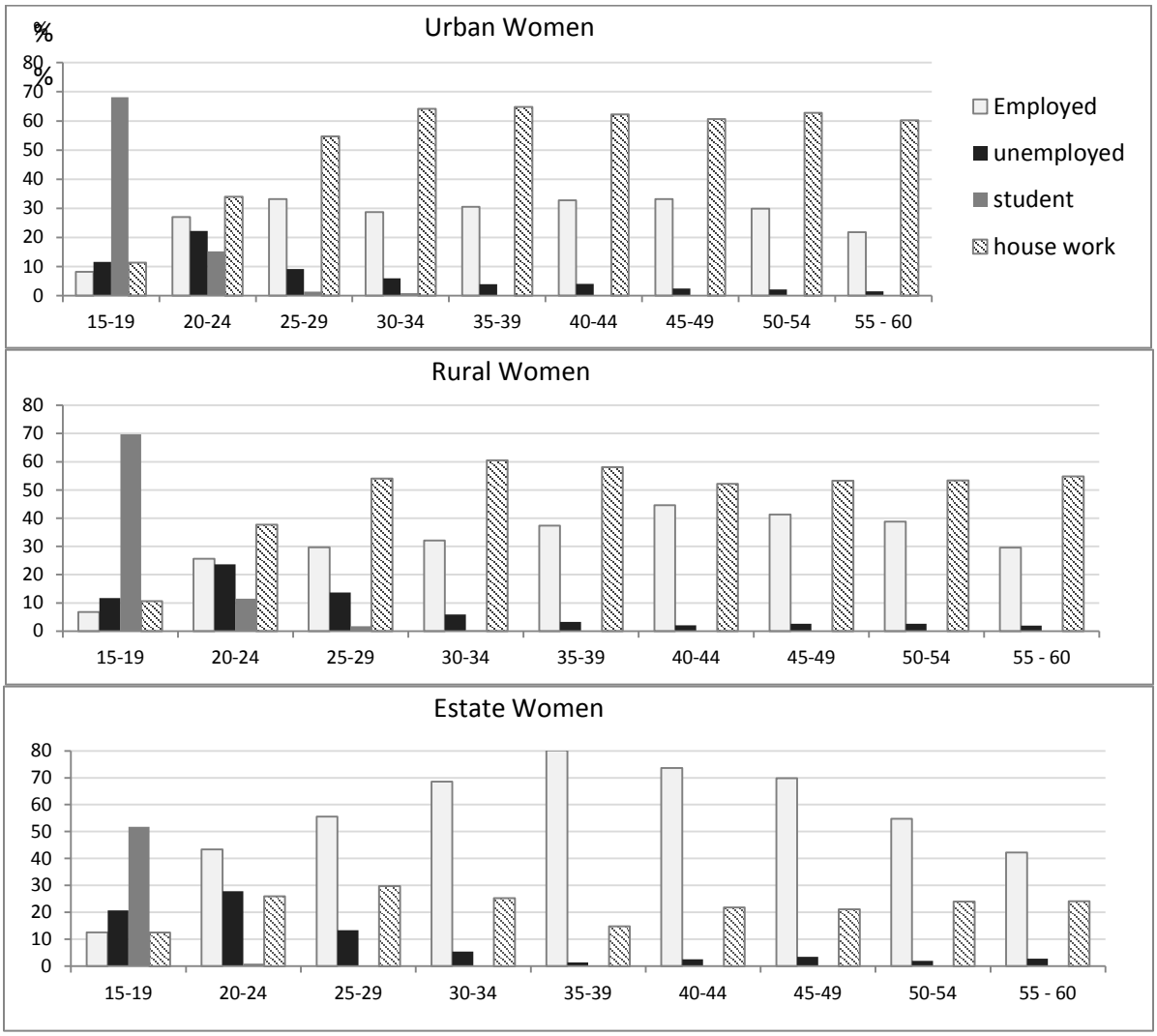
Source: Calculation using HIES 2006/07

Figure AD: Work status by education of women aged 15- 60 years, 2007



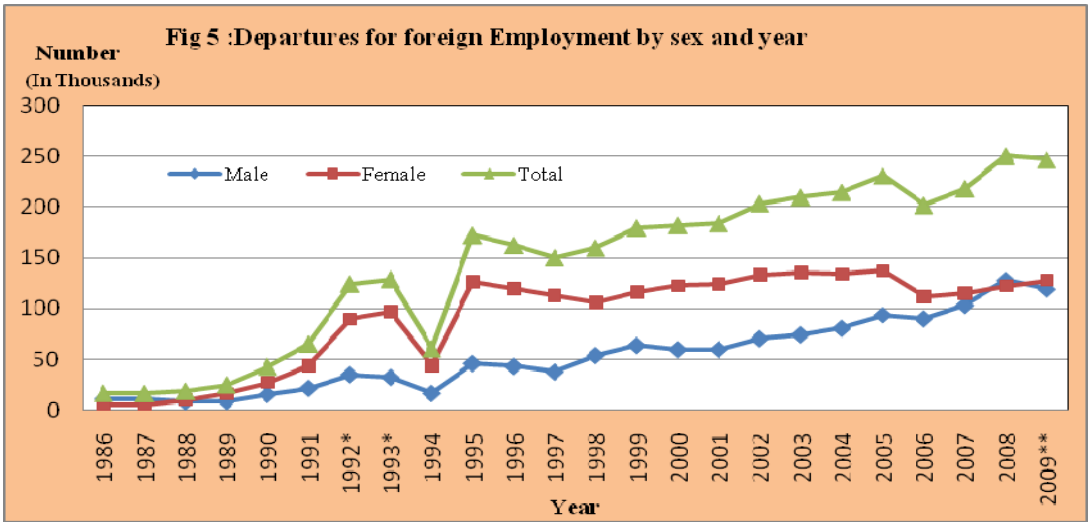
Source: Calculation using HIES 2006/07

Figure AE: Work status of women aged 15-60 years by age and rural-urban-estate divide, 2007



Source: Calculation using HIES 2006/07

Figure AF: Departures for foreign employment by sex and year



Note: * - Airport survey SLBFE, ** - Provisional
Source: Annual Statistical Report 2009 – Sri Lankan Bureau of Foreign Employment

Table AA: Determinants of being unemployed or staying out of labor force by prime aged (18-45 years) women 2009: Results from multinomial Probit regression with being employed as base outcome, 2009

	Unemployed		Out of labor force	
	Coef.	(Std. Err.)	Coef.	(Std. Err.)
Age	-0.044	(1.4)	-0.07	(3.58)**
Age-square	0.00	(0.67)	0.00	(1.62)
Level of Schooling (base: 0-5 grade)				
Grade 6-10	0.393	(3.37)**	0.39	(7.58)**
O/L or grade 11-12	0.715	(5.79)**	0.308	(5.13)**
A/L and above	0.785	(6.52)**	-0.37	(6.16)**
Marital status (base: Never married)				
Married	-0.477	(7.62)**	1.162	(24.55)**
Widow	-0.334	(1.69)	0.167	(1.37)
Divorced/Separated	-0.053	(0.29)	0.022	(0.16)
Religion (base: Buddhist)				
Hindu	-0.303	(2.44)*	0.197	(2.78)**
Muslim	0.144	(1.29)	0.923	(14.07)**
Christian	0.021	(0.19)	0.198	(2.97)**
HH characteristics				
HH size	0.00	(0.01)	0.044	(4.40)**
Presence of dom. servant	-0.617	(1.9)	-1.06	(5.59)**
Location (base: Rural)				
Urban	-0.031	(0.36)	0.146	(2.81)**
Estate	-0.85	(4.90)**	-1.076	(12.07)**
Province (base: Western)				
Central	0.674	(7.03)**	-0.074	(1.31)
Southern	0.826	(9.59)**	0.011	(0.21)
Eastern	1.078	(9.62)**	0.226	(3.30)**
North-Western	0.470	(4.93)**	-0.167	(3.00)**
North-Central	0.217	(1.88)	-0.546	(8.16)**
Uva	0.400	(3.44)**	-0.647	(9.23)**
Sabaragamuwa	0.388	(3.77)**	-0.261	(4.34)**
Constant	-0.415	(0.87)	0.685	(2.25)*
Number of obs =14,416	Wald chi2 (44), Prob > chi2=0			

Note: * $p<0.05$; ** $p<0.01$
Source: Estimation using LFS 2009

Table AB: Percentages of women aged 15-60 years by work status in Eastern province which includes Batticaloa and Ampara districts, 2007

	Employed	Unempl.	In LF (Emp+ Unemp)	Student	House work	Unable/ Too old / Other
Never married - no child 0-4 in the hh	11.81	24.47	36.29	39.75	19.82	4.14
Never married- has at least 1 child 0-4 in the hh	10.15	25.48	35.63	49.41	14.367	0.59
Married - no child 0-4 years in the hh	15.01	4.20	19.21	0.16	78.48	2.15
Married -has at least 1 child under 5 in the hh	11.17	6.50	17.68	0.19	79.62	2.51
Married -has at least 1 child under 10 in the hh	11.99	5.64	17.63	0.15	80.35	1.88
Has 65 + elderly in the hh	16.53	11.13	27.66	11.57	53.04	7.73
Has 75 + elderly in the hh	12.70	16.51	29.21	8.83	61.96	0.00
Has at least another working age woman in the hh	15	14.29	29.29	19.57	47.01	4.14
Number of members in the hh*	4.31	5.01	4.66	5.28	4.65	4.27
Total number of children (age 0 to 15) in the hh*	1.20	1.09	1.14	1.56	1.52	0.86
Number of bed rooms/member*	0.49	0.39	0.44	0.39	0.40	0.58
Distance from house to the closest bus halt (Km)*	0.48	0.50	0.49	0.53	0.66	0.42
Time required to go from house to the closest bus halt (minutes)*	11.32	11.89	11.61	10.99	13.22	10.47
Asset index: Quintile 1	10.24	8.87	19.11	11.48	61.27	8.15
Quintile 2	13.17	13.71	26.88	10.75	61.22	1.16
Quintile 3	13.70	8.54	22.24	10.48	64.14	3.14
Quintile 4	16.36	12.31	28.63	16.57	52.06	2.69
Quintile 5	24.28	8.94	33.22	8.55	54.72	3.50
Total	15.25	10.67	25.91	11.89	58.81	3.39

Source: Calculation using HIES 2006/07

Table AC: Employment (percentages) in major economic sectors by districts and gender, 2010

Province	District	Agriculture			Industry			Services		
		All	Male	Female	All	Male	Female	All	Male	Female
Western	Colombo	3.6	3.6	3.6	28.6	26.9	32.2	67.8	69.5	64.2
	Gampaha	6.6	7.2	5.1	37.8	35	44.3	55.6	57.8	50.6
	Kalutara	17.5	14	24.5	32.2	31.1	34.4	50.3	54.8	41.1
Central	Kandy	23.1	17.6	35.4	22.2	24	18.2	54.7	58.4	46.4
	Matale	46.5	43.6	52.2	19.6	21.1	16.6	33.9	35.2	31.2
	Nuwara Eliya	68.2	61.3	78.2	8.4	9.5	-	23.4	29.3	15
Southern	Galle	33.3	30.9	38.1	27.4	26.1	30	39.3	43	31.9
	Matara	36.9	35.1	40.4	24.8	23.8	26.9	38.3	41.1	32.8
	Hambantota	43.6	46.4	37.6	23.3	21.6	26.8	33.2	32	35.6
Eastern	Batticaloa	27.5	32.5	11.1	22.1	19.8	29.9	50.3	47.7	59
	Ampara	39.2	41.1	32.4	20	19.9	20.3	40.8	38.9	47.3
	Trincomalee	37.5	37.2	38.5	12.5	12.1	*	50	50.7	48.1
North Western	Kurunegala	38.5	38.4	38.6	23.2	22.5	24.4	38.3	39	37
	Puttalam	33.3	33.2	33.4	31.3	30.8	32.4	35.4	36	34.2
North Central	Anuradhapura	64.2	58.5	72.3	9.8	11	8	26	30.4	19.8
	Polonnaruwa	47.4	51.2	36.7	17.4	15.1	23.8	35.2	33.7	39.4
Uva	Badulla	61.6	56.2	39.7	11	13.6	7.1	27.4	30.2	23.2
	Moneragala	55	50.7	62.2	11.6	12.8	*	33.4	36.5	28.2
Sabaragamuwa	Ratnapura	47	39.7	60.1	23.6	28	15.7	29.4	32.3	24.3
	Kegalle	32.6	31.6	34.2	27.9	22.1	37.9	39.5	46.3	27.9
	Total	32.7	30.2	37.8	24.2	2.9	24.8	43.1	45.9	37.4

Source: Sri Lanka Labor Force Survey, Annual Report -2010

Table AD: Share (percentages) of employed males and females by occupation groups, 2002-11

	2002 *		2003 **		2004 ***		2005 ****		2006 *		2007 *		2008 **		2009 **		2010 **		2011 ****	
	M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Senior officials & managers	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1
Professionals	3	10	3	9	3	10	4	12	3	9	3	9	4	11	4	11	3	10	4	11
Technical & assoc. professionals	5	5	5	5	5	5	5	6	5	5	6	5	6	5	6	5	5	5	5	5
Clerks	3	6	4	6	4	6	3	6	3	5	3	6	4	5	3	6	3	5	3	6
Proprietors & managers of enterprises	7	4	5	3	7	3	8	5	9	4	8	5	8	5	8	5	8	5	8	5
Sale & service workers	9	6	10	8	10	7	8	7	7	8	7	8	8	8	9	8	8	8	9	9
Skilled agri. & fishery workers	24	26	23	24	20	22	20	23	21	25	20	24	23	25	24	24	21	25	22	25
Craft & related workers	14	16	15	17	15	17	16	17	16	19	17	18	17	17	17	16	16	16	16	16
Plant & machine operators & assemblers	8	2	8	2	9	1	10	2	10	2	11	2	11	2	11	2	10	2	10	3
Elementary occupations	25	24	25	24	26	27	25	21	23	21	23	21	25	20	25	22	23	23	21	20

Source: Labor Force Survey 2010

Note: * - Excluding Northern and Eastern provinces

** - Including Eastern province but excluding Northern Province

*** - Excluding Mulathivu, Kilinochchi districts

**** - All the districts are included

Table AE: Means of non-cognitive skills (big five) by socio-economic and demographic background for men and women aged 15-64 years, 2012

	Extraversion		Conscientiousness		Openness		Absence of Neuroticism		Agreeableness	
	M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Age group										
15-20	2.96	3.03	3.04	2.96	3.13	3.14	2.67	2.61	2.95	2.95
21-30	2.97	2.92	3.22	3.08	3.10	3.05	2.66	2.55	2.94	2.99
31-40	2.95	2.96	3.20	3.16	3.02	2.98	2.70	2.55	2.99	2.97
41+	2.95	2.91	3.18	3.11	2.92	2.81	2.75	2.61	2.97	2.96
Level of Education										
Primary & below	2.83	2.80	3.21	3.05	2.67	2.48	2.72	2.50	2.97	2.98
Low secondary &/or O levels	2.97	2.95	3.15	3.11	2.97	2.92	2.74	2.57	2.94	2.93
Upper secondary &/or A levels	2.99	2.96	3.22	3.09	3.17	3.09	2.67	2.62	3.00	3.01
Bachelor & higher	2.91	3.03	3.18	3.18	3.25	3.22	2.67	2.71	3.11	3.10
Asset quintile										
Poorest	2.87	2.87	3.18	3.05	2.81	2.70	2.65	2.55	2.92	2.88
2	2.96	2.96	3.22	3.13	2.93	2.89	2.69	2.58	2.96	2.96
3	2.95	2.95	3.20	3.10	2.95	2.95	2.75	2.58	2.98	3.00
4	3.02	2.94	3.13	3.12	3.12	3.00	2.72	2.59	2.93	2.94
Richest	3.00	2.99	3.17	3.08	3.21	3.14	2.75	2.62	3.04	3.06
Labor force status										
Employed	2.96	2.95	3.21	3.17	2.99	2.95	2.72	2.60	2.96	2.99
Unemployed	3.01	2.92	3.16	3.23	3.07	3.00	2.63	2.58	2.90	3.11
No in LF	2.93	2.94	3.03	3.05	3.08	2.93	2.69	2.57	3.03	2.95
Location										
Rural	2.97	2.96	3.18	3.10	2.96	2.91	2.70	2.59	2.97	2.93
Urban	2.94	2.91	3.18	3.10	3.07	2.99	2.72	2.57	2.97	3.03
Total	2.96	2.94	3.18	3.10	3.00	2.94	2.71	2.58	2.97	2.97

Source: Calculation using Step Skills Measurement Survey 2012

Table AF: Means of non-cognitive skills by socio-economic and demographic background for men and women aged 15-64 years, 2012

	Grit scale		Hostility bias		Decision making		Interpersonal skill*	
	Male	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
Age group								
15-20	2.82	2.89	1.79	1.78	3.05	3.14	0.45	0.33
21-30	3.04	2.90	1.91	1.85	3.10	3.15	0.58	0.52
31-40	3.09	3.00	2.03	1.84	3.12	3.17	0.61	0.49
41+	3.06	2.92	1.90	1.80	3.11	3.06	0.57	0.47
Level of Education								
Primary & below	3.07	2.84	1.92	1.93	2.97	2.92	0.41	0.32
Some low secondary and/or O levels	3.00	2.92	1.90	1.81	3.08	3.09	0.53	0.39
Upper secondary and/or A levels	3.06	2.95	1.92	1.78	3.17	3.21	0.70	0.58
Bachelor and higher	3.20	3.13	2.09	1.87	3.21	3.24	0.85	0.83
Asset quintile								
Poorest	2.98	2.83	2.01	1.86	3.01	3.00	0.42	0.33
2	3.05	2.90	1.95	1.86	3.09	3.07	0.54	0.37
3	3.05	2.96	1.95	1.79	3.10	3.15	0.56	0.45
4	3.01	2.98	1.83	1.77	3.06	3.15	0.64	0.57
Richest	3.10	2.99	1.84	1.80	3.24	3.21	0.77	0.72
Labor force status								
Employed	3.07	3.01	1.94	1.80	3.10	3.11	0.58	0.49
Unemployed	2.90	2.86	1.88	1.83	3.06	3.10	-	-
No in LF	2.88	2.89	1.81	1.82	3.12	3.12	-	-
Location								
Rural	3.03	2.92	1.93	1.79	3.10	3.09	0.53	0.45
Urban	3.04	2.95	1.90	1.85	3.10	3.15	0.66	0.54
Total	3.04	2.93	1.92	1.81	3.10	3.12	0.58	0.48

Source: Calculation using Step Skills Measurement Survey 2012

* For the measure of Interpersonal skills the sample includes only employed male or female

Table AG: Sample distribution of cognitive and non-cognitive skills by socio-economic and demographic background of males and females, 2012

	Male							Female						
	Cognitive			Technical				Cognitive			Technical			
	Read	Write	Numeracy	Tech use	Machine use	Language	Physical task*	Read	Write	Numeracy	Tech use	Machine use	Language	Physical task*
Age group														
15-20	0.86	0.82	0.92	0.65	0.08	0.46	0.69	0.88	0.83	0.90	0.53	0.06	0.46	0.18
21-30	0.76	0.72	0.90	0.51	0.30	0.46	0.56	0.76	0.70	0.84	0.47	0.11	0.31	0.14
31-40	0.68	0.70	0.91	0.39	0.26	0.38	0.55	0.68	0.68	0.87	0.34	0.12	0.32	0.22
41+	0.62	0.65	0.90	0.28	0.21	0.35	0.50	0.67	0.56	0.84	0.23	0.11	0.24	0.28
Level of Education														
Primary & below	0.30	0.29	0.83	0.14	0.10	0.21	0.77	0.35	0.20	0.75	0.14	0.03	0.21	0.41
Low secondary &/or O levels	0.65	0.67	0.91	0.33	0.23	0.31	0.61	0.69	0.63	0.85	0.28	0.09	0.23	0.28
Upper secondary &/or A levels	0.89	0.88	0.93	0.58	0.26	0.57	0.35	0.85	0.79	0.90	0.47	0.14	0.42	0.15
Bachelor & higher	0.94	0.94	0.94	0.65	0.29	0.80	0.13	0.97	0.95	0.93	0.60	0.16	0.65	0.04
Asset quintile														
Poorest	0.54	0.52	0.88	0.22	0.15	0.21	0.73	0.54	0.44	0.82	0.19	0.04	0.16	0.37
2	0.61	0.54	0.90	0.28	0.18	0.23	0.67	0.66	0.64	0.85	0.28	0.08	0.19	0.26
3	0.69	0.69	0.89	0.36	0.26	0.31	0.49	0.69	0.61	0.86	0.32	0.10	0.24	0.17
4	0.75	0.83	0.93	0.48	0.26	0.47	0.48	0.80	0.72	0.85	0.37	0.13	0.36	0.21
Richest	0.87	0.89	0.93	0.64	0.28	0.73	0.26	0.87	0.81	0.90	0.57	0.19	0.58	0.14
Labor force status														
Employed	0.68	0.69	0.92	0.36	0.25	0.37	0.54	0.69	0.71	0.95	0.28	0.11	0.32	0.24
Unemployed	0.77	0.77	0.87	0.53	0.26	0.47	-	0.78	0.62	0.84	0.46	0.09	0.32	-
No in LF	0.77	0.70	0.83	0.57	0.10	0.50	-	0.72	0.61	0.79	0.38	0.10	0.29	-
Location														
Rural	0.64	0.63	0.90	0.32	0.22	0.29	0.60	0.67	0.60	0.85	0.30	0.09	0.23	0.27
Urban	0.77	0.79	0.91	0.50	0.23	0.56	0.42	0.79	0.72	0.87	0.41	0.13	0.42	0.17
Total	0.69	0.69	0.91	0.39	0.23	0.39	0.54	0.71	0.65	0.86	0.34	0.11	0.30	0.23

Source: Step Skills Measurement Survey 2012

* For the measure of physical task the sample includes only employed male or female

Table AH: Are there any kind of work that you can do with your education or experience?

	Female (%)	Male (%)	Total (%)
Yes	301 (35.29)	57 (39.86)	358 (35.94)
No	481 (56.39)	75 (52.45)	556 (55.82)
Don't know	71 (8.32)	11 (7.69)	82 (8.23)
Total	853 (100)	143 (100)	996 (100)

Note: Difference between male and female regarding yes/no is statistically significant at t<.0
Source: Calculation using Step Skills Measurement Survey 2012

Table AI: Lack of certain skills that have kept one from getting a job, a promotion, a pay raise or from advancing in own business

	Female, age 15-64 years (age 20-40 yrs)			Male, age 15-64 years (age 20-40 yrs)		
	% Yes	% No	% Don't know	% Yes	% No	% Don't know
Lack of reading and writing skills in official languages- Sinhala, Tamil, English	10 (7.95)	85.81 (89.04)	4.19 (3.01)	11.94 (13.07)	84.72 (84.36)	3.34 (2.57)
Lack of computer skill	7.91 (9.53)	81.34 (82.63)	10.75 (7.83)	11.29 (13.57)	80.43 (82.34)	8.28 (4.09)

Source: Calculation using Step Skills Measurement Survey 2012

Table AJ: Main reason behind quitting the most recent job

	Female (%)	Male (%)	Total
Got fired	0.72	3.51	1.2
Enterprise got closed	2.54	1.75	2.4
Wanted to start own business/economic activity	2.54	7.02	3.3
Low wage/ bad working condition	3.62	8.77	4.5
Moved to another area	6.88	0	5.71
Contract ended	3.99	3.51	3.9
For family, health or personal reasons	73.55	43.86	68.47
Employer reduced working hours	0	1.75	0.3
To continue education	1.09	10.53	2.7
Retired	4.35	19.3	6.91
Other	0.72	0	0.6

Source: Calculation using Step Skills Measurement Survey 2012

Table AK: Comparison of male and female migrant workers 1996 - 2010

Year	Male		Female						Grand Total
			Housemaid		Other		Total		
	No.	%	No.	%	No.	%	No.	%	
1996	43,112	26.52	110,479	67.96	8,985	5.53	119,464	73.48	162,576
1997	37,552	24.99	99,429	66.16	13,302	8.85	112,731	75.01	150,283
1998	53,867	33.71	85,349	53.4	20,600	12.89	105,949	66.29	159,816
1999	63,720	35.45	88,063	49	27,952	15.55	116,015	64.55	179,735
2000	59,793	32.82	99,413	54.57	22,982	12.61	122,395	67.18	182,188
2001	59,807	32.5	102,850	55.89	21,350	11.6	124,200	67.5	184,007
2002	70,522	34.61	108,535	53.26	24,716	12.13	133,251	65.39	203,773
2003	74,508	35.51	102,011	48.61	33,327	15.88	135,338	64.49	209,846
2004	80,699	37.59	110,512	51.47	23,498	10.94	134,010	62.41	214,709
2005	93,896	40.6	125,493	54.26	11,901	5.15	137,394	59.4	231,290
2006	90,170	44.65	99,711	49.37	12,067	5.98	111,778	55.35	201,948
2007	103,476	47.37	102,355	46.85	12,628	5.78	114,983	52.63	218,459
2008	128,232	51.19	107,923	43.08	14,344	5.73	122,267	48.81	250,499
2009	119,381	48.31	113,678	46	14,067	5.69	127,745	51.69	247,126
2010	135,502	50.86	113,087	42.44	17,856	6.7	130,943	49.14	266,445

Source: Annual Statistical Report of Foreign Employment 2010