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1992-2015**

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ABSTRACT

Globalisation and the Gender Earnings Gap: Evidence from Sri Lanka and Cambodia 1992-2015

This paper focuses on how the forces of globalisation, specifically the Multi-Fibre Arrangement (MFA), have affected women's wages in the apparel sector in developing countries. Using household and labour force surveys from Cambodia and Sri Lanka, we find large positive wage premiums and a closing of the male-female wage gap during the MFA period, but smaller premiums and a widening wage gap after the end of the MFA. Our results suggest that apparel exports continued to benefit women in developing countries post-MFA.

JEL Classification: F16, F63, F66, J21, J24, J30, J31, J81, L67

Keywords: apparel, Multi-Fibre Arrangement, textile, wages, women, working conditions

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1. Introduction

The idea that incorporating women into the formal workforce contributes to economic development is now well established in academic literature (Anderson & Eswaran, 2009; Duflo, 2012; Galor & Weil, 1996). Although having made gains over the last 20 years, women's labour force participation still falls short of men's (ILO, 2018). One strategy to bring women into the formal labour force is trade liberalization and export promotion. One of the most important industries for women making the transition from either agriculture or informality into the formal labour force is apparel. Over the last 40 years, apparel production has been shifting to developing countries, creating opportunities for women to enter the labour force and increase their earnings over domestic alternatives (Lopez-Acevedo & Robertson, 2012, 2016; Robertson, Brown, Pierre, & Sanchez-Puer, 2009).¹

Working in export-oriented industries, however, also makes women more susceptible to changes in the global apparel market, like falling prices. Apparel prices have been falling for at least 30 years. Figure 1 shows that for U.S. consumers, the apparel price index (relative to the overall consumer price index) has been steadily falling since 1990. It is well known that prices are falling because supply has been increasing (as opposed to a falling demand). The drop in prices was especially stark after the end of the Multi-Fibre Arrangement (MFA) in 2005 as production shifted to low-wage countries (Harrigan & Barrows, 2009). These price changes have been linked to wages and working conditions in Cambodia (ILO, 2016a), as well as the structure of the apparel sector in Sri Lanka (Kelegama, 2005a, 2005b, 2006, 2009).

[Figure 1 near here]

Falling prices corresponded with growing demand in developed countries. Figure 1 shows how the U.S. imports of apparel have grown since the late 1980s, as they have in other major importing regions (the European Union and Japan). Although briefly interrupted by the great trade collapse of 2007, the United States has continued to increase its imports of apparel. These variations in apparel imports over time provide an excellent opportunity for examining how globalisation affects gender equality.

Studies of globalisation and gender earnings gaps generally fall into three groups. The first are ‘macro’ studies in the sense that they consider cross-country regressions of changes in inequality and globalisation (Kucera & Milberg, 2000). Macro studies do not always focus on the mechanisms of the inequality-globalisation link, and they often present mixed results depending on the country studied (Anderson, 2005; Oostendorp, 2009). For example, South Africa’s apparel sector was overall negatively affected by the increased international competition, but there were some winners. Some workers were able to stay in the apparel industry even when most workers became unemployed (Bezuidenhout, Khunou, Mosoetsa, Sutherland, & Thoburn, 2007).² Similarly, workers in Bangladesh’s export processing zones (EPZ) enjoy higher levels of welfare compared to non-EPZ workers, although the latter have higher wages than alternative occupations (Kabeer & Mahmud, 2004).

The second group of globalisation-earnings-gender studies suggests that discrimination is the key mechanism that explains the gender wage gap. The literature first built upon Becker’s (1971) discrimination model, which predicts that trade liberalization will increase competition and reduce the employer’s ability to discriminate, leading to a smaller gender wage gap. Empirical

results have been mixed. Artecona and Cunningham (2002) and Black and Brainerd (2004) find results consistent with Becker's model. Other research finds evidence that increasing trade openness is associated with higher gender wage gaps (Berik, van der Meulen Rodgers, & Zveglic, 2004; Menon & Rodgers, 2009).

The third group of globalisation-earnings-gender studies applies models based on trade theory that treat men and women as different factors, perhaps differentiated by skill (see, for example, Galor & Weil, 1996)³ or other dimensions. These studies often include output price changes, either directly or indirectly (through tariffs), and differentiate industries by female intensity. These papers often focus on imports and falling tariffs rather than exports. Studies that focus on tariff reductions find that tariff reductions favour women in both employment and consumption (see, for example, Aguayo-Tellez, Airola, Juhn, & Villegas-Sánchez, 2010; Juhn, Ujhelyi, & Villegas-Sanchez, 2013, 2014).

Papers that focus on exports find mixed results. Klein, Moser, and Urban, (2010) find that growing exports reduce gender wage inequality. Saurè and Zoabi (2014), however, find that an increase in the output price of the female-intensive sector raises both male and female wages (so that the relative wage does not change in the short run), but, as males reallocate towards the female-intensive sector, the gender gap widens on favour of men. Kis-Katos, Pieters, and Sparrow (2017) found that Indonesia's initial structure of protection was considerably more female-biased than skill-biased and therefore reductions in input tariffs especially benefited sectors with a larger initial concentration of female workers.

Our study combines elements from all three approaches but is closest to the third category. Blau and Kahn (2017) analyse the gap between male and female labour +market outcomes, and our

study follows their empirical approach but extends it by adding globalisation to the list of factors that can affect labour market outcomes. Like Blau and Kahn (2017), we use micro-level data to decompose labour market outcomes. We extend the analysis to generate estimates of variables that represent general-equilibrium adjustment to free trade. We nest the three approaches in a common framework to illustrate how trade can affect both industry-specific discrimination, industry-specific wage effects, and finally the estimated male-female wage gap throughout the entire economy (not specific to industries). We then compare the changes in these estimates over time with globalisation measures to illustrate how globalisation may affect women's wages.

We focus specifically on Sri Lanka and Cambodia for three key reasons. First, they are both 'small' countries that are not expected to affect global prices. They take the demand of their main markets, the United States and the European Union, as exogenous, which aids with identification. Second, Cambodia entered the global apparel market more recently and experienced much more fluctuation in trade flows relative to Sri Lanka. Thus, in a way, Sri Lanka acts as a comparison case for the changes observed in Cambodia (López Moureló & Samaan, 2018). Figure 2 shows that Cambodian apparel exports to the United States and the European Union (EU-28) rose much more quickly than Sri Lanka's apparel exports. The countries also had very different experiences with output prices, as measured by unit values. Figure 3 shows that all prices are lower in 2016 than in 2000, but there is a difference between the degree of price changes across source and destination countries. Third, both are comparable in terms of the female labour force participation in the economy generally and in apparel. As in many low-wage developing countries, apparel is the key manufacturing industry in Sri Lanka and Cambodia.

[Figure 2 near here]

[Figure 3 near here]

Several papers analyse the gender wage gap Sri Lanka (Ajwad & Kurukulasuriya, 2002; Arunatilake & Jayawardena, 2010; Gunewardena, 2002, 2010; Gunewardena, Abeyrathna, Ellagala, Rajakaruna, & Rajendran, 2008; World Bank, 2002, 2013, 2016) and Cambodia (Gorman, Dorina, & Kheng, 1999; Lopez Mourelo & Samaan, 2018). Our paper extends these earlier papers in several ways. First, we decompose wages using both the Oaxaca-Blinder and Mincerian wage equations. Second, we compare wage inequality with global trade and prices with a particular focus on the apparel industry. Third, we compare Sri Lanka and Cambodia directly.

Our empirical approach merges empirical methods from labour economics with canonical trade theory. We show how wages can be decomposed into various elements and then explain how trade theory predicts which elements would be affected by globalisation and how they would be affected as the economy moves from an industry-specific shock to general equilibrium effects. Specifically, we suggest that a change in the global apparel market (like falling global prices) first affects the domestic apparel industry (in terms of lowering the element of wages specific to apparel) and also has a general equilibrium effect of affecting the wage gap between men and women in all industries. This is because apparel is a female-intensive industry, and trade theory (specifically, the Stolper-Samuelson theorem) predicts that a drop in the price of female-intensive goods (that is, apparel) will lower the relative wages of women everywhere—not just in apparel—because of the general-equilibrium adjustment.

We present three main results. First, the Oaxaca-Blinder approach shows that the ‘unobservable’ component of the male-female wage gap explains most of the gap over time. The ‘explainable’ portion, which includes changes that might occur from women getting more education or experience, is relatively small and constant. This means that the returns to different characteristics would be changing over time.

Second, we decompose wages into the ‘usual’ observable elements and show that the returns to those elements change over time. This approach, which is similar to the approach used by Acosta and Gasparini (2007) and Do, Levchenko, and Raddatz (2011), allows us to document the changes in the apparel-specific wage premium and the economy-wide gap between male and female wages. We show that these two elements move in ways predicted by neoclassical trade theory. Specifically, changes in the international demand for apparel first affect all apparel workers (not just females), and then, since apparel is female-intensive, the change is transmitted throughout the economy to affect the male-female wage differential in all industries (not just apparel).

Taking advantage of the comparison between Sri Lanka and Cambodia, we then show that the changes in trade flows and the composition of trade move in ways that are consistent with the predictions that trade is driving the changes in returns to different elements of wages in both countries. Consistent with the overall falling global price of apparel, Sri Lanka exhibits a clear negative trend in the apparel industry wage premium and rising male-female wage gaps.

Cambodia, however, exhibits three distinct episodes during the 1997–2017 period. In the first period, roughly between 1995 and 2005 (when the MFA ends), Cambodia begins exporting apparel (largely to the United States). As the demand for Cambodian apparel rises, the apparel

premium rises and the male-female wage gap shrinks considerably. In the second period, roughly 2005 to 2010, U.S. demand drops, along with the Cambodian apparel wage premium, and the wage gap rises. In the third period, Cambodia shifts exports to the European Union and the apparel premium reverses its downward trend. The wage gap in Cambodia is smaller in the last two years for which we have data than the previous two years.

Moving forward, the next section explains the theoretical framework and empirical approach. Section three describes the data. Section four presents the empirical results and section 5 compares the results to changes in trade patterns. The final section concludes.

2. Theoretic Framework and Empirical Approach

As described in the first section, the academic literature contains numerous ways in which globalisation might affect women's wages. Here we present a simple analytical framework that nests the different explanations for the links between globalisation and earnings that motivate our empirical approach.

The field of labour economics has long recognised that wages, represented by w_{it} for a given individual i at time t , are influenced by several factors. For example, wages are affected by a range of demographic and other characteristics, which we represent with X_{it} . The elements of X_{it} include both observable elements, such as gender, age, education, family characteristics, location, occupation, industry, firm-specific characteristics, and unobservable elements, like initiative, luck, and perhaps charisma.

Wages can be decomposed into various characteristics using individual-level household or

labour-force data. Labour economists have used the Mincerian wage equation to estimate the contribution of different elements on earnings. A typical Mincerian wage equation takes a form such as

$$w_{it} = \beta_0 + \beta_{1t}gender_{it} + \beta_{2t}age_{it} + \beta_{3t}age_{it}^2 + \beta_{4t}education_{it} + \beta_{5t}family_{it} + \beta_{6t}location_{it} + \beta_{7t}occupation_{it} + \beta_{8t}industry_{it} + e_{it} \quad (1)$$

In this equation, the estimated beta coefficients represent the ‘returns’ to each element in the sense that the beta coefficients represent the contribution to earnings of each of the represented elements. For example, β_{4t} represents the ‘returns to education’ and represents the change in wages that would result from, say, one additional year of education. The final term e_{it} captures the unobservable characteristics of earnings as mentioned above. In Mincerian wage equations, observable factors usually explain about a third of the total variation in earnings.

It is important to point out that there is a difference between industry-specific aspects of earnings and those that are economy-wide. For example, the β_{1t} coefficient represents the male-female wage gap throughout the entire economy, which is different from a male-female wage gap within a given industry. The contributions of industry-specific factors to wages are captured in the β_{8t} coefficients. In particular, the β_{8t} coefficients represent the difference in earnings for all workers—male and female—within a given industry relative to other industries.

If one accepts that wages can be decomposed into various components, then our next step is to describe how the different beta coefficients are determined in the economy. Note that the beta terms are indexed by t because changes in the economy can change the estimated coefficients. To

explain these changes, we draw upon theory from the field of international economics to describe how globalisation might contribute to the different beta terms over time.

For example, there is a tremendous literature surrounding the determination of β_{1t} term generally and how globalisation might change this term in particular. As described in the introduction, there are roughly two competing views. The first postulates that gender differences in earnings exist because firms have a taste for discrimination and that they effectively use rents to pay males more money because firms prefer to hire males. Globalisation, especially in the form of import competition, would increase competition and reduce rents, which reduces the pool of money available to favour males and therefore the male-female gap should close. In other words, discrimination theory suggests that rising import competition causes the wage gap between males and females to shrink *within the industry experiencing import competition*. Note that the predicted effects of globalisation have to be industry specific, because if there was another industry that did not prefer men over women (that is, did not discriminate), that industry would offer women higher (relative) wages. Moreover, if perfectly mobile, women would not work in the industry that offers lower wages. Thus, for the discrimination theory to hold, the wage gap must vary by industry and women must not be perfectly mobile.

The Heckscher-Ohlin (HO) model, perhaps the most well-known model in international economics, offers different predictions. The most basic HO model is based on a two-good, two-factor model in which the goods differ in their factor intensity (the ratio at which they employ the two factors) and countries differ in their factor endowments (the ratio of the supply of one factor to the supply of the other). The model predicts that a country that is abundant in a given factor will tend to produce and export the good that intensively uses that factor in production.

Furthermore, the HO model describes the relationship of the earnings of each factor through the Stolper-Samuelson theorem. The Stolper-Samuelson theorem predicts that an increase in the relative output price of one good will cause wages of the factor used intensively that good to increase, and the wages of the other factor will fall. The basic logic behind this theorem is that the increase in the relative price of one good will increase the demand for the factor intensively used in the production of that good.

It is important to point out that the Stolper-Samuelson theorem is based on the assumption that the two factors are perfectly mobile between industries. The main implication of this assumption is that each factor will be paid the same in each industry. That is, the first factor will be paid the same in both industries, and the second factor would be paid the same in both industries. Clearly, however, the first and second factors will not be paid the same. The difference in their earnings, however, does not depend on the industry in which they work. Both factors work in both industries and can freely move to the industry that might be offering higher wages. Since workers can costlessly move between industries to get the highest wages, both industries have to pay the same rate to a given factor.

In the case of gender wage differentials, one can apply the HO model using males and females as different factors. A few other papers in the literature, such as Juhn, Ujhelyi, and Villegas-Sanchez (2014) and Do, Levchenko, and Raddatz (2011), apply the same logic with the two factors being defined by gender. In an economy with two industries—one that tends to hire females (the ‘female intensive’ industry) and one that tends to hire males (the ‘male intensive’ industry)—changes in the relative output prices would determine β_{1t} . This theory is illustrated in Figure 4a. Since the Stolper-Samuelson theorem assumes perfect competition and full

employment, marginal costs equal output prices. The two curves in Figure 4a represent the combinations of male and female wages (represented as w^m and w^f , respectively) that are consistent with marginal cost (being a combination of the costs of males and females) being equal to the output price. Since the theorem also assumes that workers are perfectly mobile between industries, the two industries must pay the same for males and females. Thus, the equilibrium β_{1t} (which is essentially the ratio of w^m/w^f) is determined by the intersection of these two curves.

[Figure 4a near here]

Relying on the Stolper-Samuelson theorem, the international trade theory approach suggests that changes in output prices over time would change the β_{1t} over time. For example, in Figure 4a, an increase in the output price of the female-intensive industry would increase the wages paid to women (in absolute and real terms) and reduce the wages paid to males (in absolute and real terms). If globalisation is characterised by imports of female-intensive goods because the foreign price of female-intensive goods was lower, then the opposite would occur. The falling demand for female-intensive goods would increase the wage gap in all industries.⁴

When compared to the discrimination theory, the predictions for globalisation's effects on the gender wage gap are different because the Stolper-Samuelson predictions suggest that the male-female wage gap is not industry specific. As described above, the discrimination theory suggests that falling prices (from imports) would reduce the ability of firms to discriminate and therefore the male-female wage gap would shrink within that industry. Whether the gap would fall in other

industries, or how the gap would fall in other industries, is not usually considered.

The Stolper-Samuelson theorem, on the other hand, does not generate industry-specific results for the wage gap because, due to perfect mobility between the sectors, there are no industry-specific wages. Wages for males are the same in both industries and wages for females, while different than wages for males, are the same in both industries.

It is well known, and increasingly appreciated, that workers are not perfectly mobile in the short run. Workers are only perfectly mobile in the 'long run'. There are very few estimates of what constitutes the 'long run', but Robertson (2004) finds that the Stolper-Samuelson results begin to emerge in a time horizon of three to five years, and not earlier. Prior to three years, factors are less mobile. The 'specific factors' version of the HO model, often called the Ricardo-Viner model, suggests that when factors are specific, the wages received are closely tied to their industry and not immediately subject to the general-equilibrium effects captured by the Stolper-Samuelson theorem.

Industry-specific effects, as described in the Ricardo-Viner model, are also elements of the Mincerian wage equation shown above. Specifically, the industry-specific effects are represented by the β_{gt} term. Figure 4b illustrates how industry-specific wages might be affected by an increase in demand for, say, apparel. In an economy with two industries, apparel and non-apparel, the two demand curves (derived from the marginal revenue product in each industry) would intersect. The horizontal axis represents all workers in the economy, and the point on the horizontal axis that falls directly below the intersection of the two demand curves represents the employment in each industry. If workers are perfectly mobile between industries, then the wage would be the same in both industries and would be represented by the points on the vertical axes

that are directly horizontal from the intersection of the two demand curves (WA0 and WN0).

An increase in demand for apparel would cause the labour demand curve for apparel to shift up. Before workers move between industries, wages in the apparel industry increase to WA1, while wages in the other industry remain constant. Gradually, however, workers migrate from the non-apparel industries to apparel, causing a movement along each demand curve to the new equilibrium wage. Thus, in the short run, the wages in apparel will increase relative to others, but in the long run wages will again equalise across industries.

Note that, as in the discrimination model, the industry-specific effects represented by the β_{gt} term are also functions of output prices. That is, when factors are specific, then an increase in the output price of a given industry will increase the industry-specific component of earnings (that is, the β_{gt} term). Note that the price effects on the β_{gt} term should be most evident in the short run, before factors have a chance to move. As factors move, the general equilibrium effects of the Stolper-Samuelson theorem emerge. Thus, over time, an increase in the demand for apparel exports would cause the industry-specific coefficient to increase and would cause the wage gap to get smaller (with the reverse happening for a fall in apparel prices).

The third point from the Mincerian wage equation is that there are many other factors that affect earnings. Our empirical approach, therefore, is to use household data to control for these observable characteristics, examine how the coefficients change over time, and compare changes in the estimated coefficients with changes in output prices of female-intensive industries, such as apparel. Note that we also focus on industry-specific gender differentials to estimate the predictions of the discrimination model. As is the convention in labour economics, unobservable factors are captured in the residuals.

3. Data and Empirical Results

3.1 Data Description

We combine household and labour force surveys from each country. The Cambodian data come from the cross-sectional Cambodia Socio-Economic Survey (CSES), is conducted by the National Institute of Statistics. We use data from the 1996, 1999, 2004, 2007, 2008, 2009, 2010, 2011, 2012, 2013, and 2014 surveys, which contain roughly 12,000 households each. These are cross-sectional household surveys that contain detailed household and individual information, including wage, education, age, marital status, gender, location, industry, occupation, some working conditions, and the hours worked. We include both full-time and part-time workers.

For Sri Lankan data, we use the 1992, 1994–1996, 1998–2004, 2007, 2008, and 2011–2015 waves of the cross-sectional Sri Lanka Labour Force Surveys (LFS) and 2006 wave of the Sri Lanka Household Income and Expenditure Survey (HIES), which are carried out by the Sri Lankan Department of Census and Statistics. These surveys cover approximately 30,000–60,000 individuals each. They contain information about work-related activities (for example, employment status, occupation, industry, and wages); household characteristics (for example, size and location); and individual demographic characteristics (such as age, gender, and education, among others). As with the Cambodian data, both full-time and part-time workers are included.

Labour force data from Table 1 illustrates the value of comparing Cambodia and Sri Lanka. The male labour force participation rates are quite similar and stable (around 70 per cent), but the female labour force participation rates are much more volatile in Cambodia. In particular, Cambodian female labour-force participation rates rise significantly over the sample period. The

share of the total labour force employed in the textiles and apparel industry was relatively small and remained stable in Sri Lanka but rose along with female labour force participation in Cambodia.

[Table 1 near here]

In both countries the apparel sector is female dominated. The female share of employment in apparel was 74 per cent in Sri Lanka (2015) and 78 per cent in Cambodia (2014). In both countries, this share was much higher than the proportion of females in the total employment: 49 per cent in Cambodia and 35 per cent in Sri Lanka. In both countries, the share of women in apparel was relatively constant over time. By nearly any definition, the apparel sector is female intensive.

Third, the labour force working in apparel was more educated than the country average. In Cambodia in 2014, an average person had 6.5 years of education, while an apparel sector employee had 7.0 years of education. In Sri Lanka in 2015, where the population is more educated on average than in Cambodia, the average person had 8.8 years of education compared to 9.9 years for an apparel sector worker.

Fourth, men working in the apparel sector are more educated than women. In Cambodia in 2014, women had on average 6.7 years of education while men had 8.3 years. This gap was smaller for Sri Lanka in 2015, with 9.8 years of schooling for female workers and 9.9 years for male workers. But these differences are representative of the gender education gap in general in these

countries, rather than a gap that is specific to the apparel industry.

On average, wages were higher in textiles and garments than in agriculture in both countries (see table 2) but lower than the economy-wide average. Table 2 also shows that men earn more than women everywhere, but this gap may not be constant over time. As described earlier, this earnings gap may be the result of many factors. Therefore, as a first step, we decompose the earnings differences into observable and unobservable components.

[Table 2 near here]

3.2 Decomposing the Gender Wage Differential

The Oaxaca-Blinder decomposition is a very well-known technique that is often applied in studies of gender wage differentials. Men and women may have different wages for many reasons. Some are easily observable (such as differences in education, age, and occupation) and others, such as discrimination, are considered to be usually unobservable to the researcher. The decomposition technique separates the observed wage differences into the observable and unobservable components.

The decomposition involves estimating separate wage equations for men and women that include age, education, and other observable variables on the right-hand side. The estimated coefficients are therefore allowed to differ by gender. The approach then applies the estimated coefficients from, say, the male equation to the female data to estimate a possible counterfactual wage value

for women. The difference between the two earnings can therefore be expressed as the part due to the differences in the observable and the unobservable characteristics.

The Oaxaca-Blinder decompositions shown in tables 3 and 4 include, age, age squared, and education as observable characteristics. The decompositions show that in Cambodia the gender differential was around 11.8 per cent in 1996, and it grew to 32.1 per cent until 2011. This result is consistent with Lopez Mourelo and Samaan (2018), who find an increase in gender differentials during this period. Since then, however, it has been decreasing to approximately 19 per cent. In Sri Lanka, in turn, the wage gap has increased from 5 to 23 per cent since 1992.

[Tables 3 and 4 near here]

The differentials do not seem to be explained by women getting more education or experience. In fact, unexplained characteristics accounted for a large portion of the differential. Figures 5a and 5b show the total gap and unexplained portions in Sri Lanka and Cambodia (respectively). Note that most of the wage gap in both countries is unexplained in both countries. Second, note the Sri Lankan decomposition is rising more consistently than the rising estimated gap in Cambodia.

[Figures 5a and 5b around here]

The main message of Figures 5a and 5b is that they suggest that we can look at changes in the betas of the Mincerian wage equation over time, because those changes clarify the ‘unexplained’ part of the Oaxaca-Blinder decomposition. The large role of the unexplained component suggests that globalisation generally, and apparel prices in particular, could be playing a significant role through the general equilibrium effects that apparel price changes have in the economy.

3.3 Specification and Estimation Issues

The Mincerian equation takes a hedonic approach to decompose earnings into components attributed to separate characteristics (equation 2). We use pooled cross-sectional data to regress the logarithm of the wages⁵ for worker k on a set of worker characteristics, including gender (gen_k); age (age_k ; age_k^2); years of education (edu_k); industry dummies⁶ (ind_k) that include all industries except textiles and garments; a textile and garment industry dummy (TG_k); occupation dummies⁷ ($occup_k$); a year dummy ($year$) equal to the value of one for the year 2005 and beyond; an interaction term between TG_k and the $year$ dummy; and a remaining match-specific component that is captured in the residual term ε_k .

$$\log(wage_k) = \beta_0 + \beta_1 gen_k + \beta_2 age_k + \beta_3 age_k^2 + \beta_4 edu_k + \sum_j \gamma_j ind_{kt} + \beta_5 TG_{kt} + \sum_i \lambda_i occup_k + \alpha * year + \psi * year * TG_k + \varepsilon_k \quad (2)$$

As is well-known, this approach presents a host of estimation issues. We correct for the possibility of selection bias that comes from the censoring of (mainly female) wages by using the two-step Heckman approach and incorporating available variables known to affect labour force participation in Cambodia and Sri Lanka (see, for example, ILO, 2016b). Workers with a

positive wage value are considered to be participating in the labour force.⁸ In addition to the variables in the wage equation, the variables used in the selection correction equation are marital status, household head educational attainment, household size, and the number of children in two different age groups (0–5 years and 5–18 years).⁹

Of course, the Heckman approach involves several additional estimation issues, such as the endogeneity of occupation selection (Bonin, Dohmen, Falk, Huffman & Sunde, 2007; Polachek & Solomon, 1981). The solution would be to include instruments for endogenous occupation selection, but the search for adequate instruments was not successful. The problem of endogenous selection in our case, however, may not be as severe as in developed countries. In the developed countries, endogenous occupation selection can lead to positive wage differentials if high-ability workers sort into high-productivity occupations. In the developing country context, the labour markets are probably more accurately characterised by a state of excess supply that allows firms to select from the upper end of the worker distribution. If so, then expanding apparel exports, which raises the demand for workers, would induce firms to work down the distribution when hiring (because they already selected from the top of the distribution). In this case, endogenous selection could cause the wage difference in apparel to fall relative to the rest of the economy, because lower-productivity workers are entering the high-wage sector. Furthermore, the structure of the apparel industry is relatively flat in the sense that the main occupation is sewing, which may not offer the same opportunities for sorting (and thus endogenous occupation selection bias) that might be found in other regions.

Another estimation issue involves estimating the industry-specific returns from the dummy variables that represent industries. It is well-known that the estimation of the T&G (apparel)

coefficient is sensitive to the omitted industry category. To address this, we apply the ‘grand mean’ approach described by Haisken-DeNew and Schmidt (1997). The estimated coefficients on the industry dummy variables are interpreted as ‘inter-industry wage differentials’ following Krueger and Summers (1987) and represent the difference earned in each industry relative to the overall mean wage in the economy (rather than the omitted industry).

The neoclassical trade theory described above suggests that a change in the demand for exports would affect the industry-specific component of wages (that is, the T&G dummy); and, as long as industry j is female-intensive (we assumed that T&G is female-intensive), β_1 represents the economy-wide gender wage gap.

3.4 Main Results

Table 5 presents the results of wage regressions for Cambodia and Sri Lanka in which we test whether the textile and garment (apparel) premium changes over time. Table 6 presents the results of wage regressions in which we test whether the gender wage differential changes over time. The regression analysis was carried out using the methodology described above. For our analysis, we used 11 rounds of the Cambodian Socio-Economic Surveys that covered the 1996–2014 period, and the 1992, 1994–1996, 1998–2004, 2007, 2008, and 2011–2015 Sri Lankan Labour Force Surveys.¹⁰

[Table 5 near here]

The estimation approach generates two additional estimation issues. The first is the use of sample weights. We estimated the selection-corrected wage equations with and without sample

weights and the results were very similar, both qualitatively and quantitatively. The results presented here are without sample weights (results with weights are included in the estimation appendix). The second issue is the interpretation of the coefficients. In Heckman selection models the interpretation of coefficients may not be straightforward (especially in the presence of interaction terms). To explore the interpretation issue, we computed the implied marginal effects (that derive from both stages of the Heckman) using Stata's MFX commands. These estimates are nearly identical quantitatively and identical qualitatively from those estimated directly (without calculating the marginal effects) and are available upon request.

Before discussing the main results, it is also important to point out that the estimated hazard ratio is generally positive and statistically significant, which indicates that selection is important. We experimented with different sets of selection variables, but the results remained nearly identical.

In both countries, working in apparel pays a premium compared to the economy average.¹¹

Column 1 of table 5 shows that the pre-2005 wage premium was 31.7 per cent in Cambodia and column 3 of table 5 shows that this premium was 6.0 per cent in Sri Lanka. This result contrasts with table 2, which might be interpreted as demonstrating that the apparel sector is a low-wage 'sweatshop' sector. In comparison to international and unadjusted domestic wages, wages are indeed low in the apparel sector. But table 5 shows that relative to alternatives for similar individuals (generally younger, unmarried, less-educated females), the apparel jobs (T&G dummy) pay higher than average.¹²

Figure 3 demonstrates that the unit values of apparel exports fell in both countries. The theory predicts that the fall in apparel prices should translate into a drop in the apparel premium. Table 5 shows that in both countries we observe a short-run drop in the apparel premium after 2005.

This finding is consistent with López Mourelo and Samaan (2018) and World Bank (2016). The interaction with post-MFA and the T&G sector (apparel) is negative and significant in both countries. In Cambodia, the apparel wage premium declined post-MFA by 20.4 per cent compared to other industries, but still remained 11.3 per cent higher than the economy average. In Sri Lanka the apparel premium fell by 11.8 per cent after 2005.

An alternative specification separates the pre-2005 period using 1999 as a dividing year in order to take advantage of the difference between Cambodia and Sri Lanka. Cambodia entered the international market around 1999. Cambodia experienced a large increase in the unit value of apparel exports between 1998 and 2000. The wage premium increased 40.5 percentage points in the 1999–2004 period when the apparel price was increasing. In the pre-2005 period, the premium fell but remained 16.2 percentage points higher than in the pre-1999 period. This pattern also matches the changes in unit values shown in figure 3.

In Sri Lanka, where the price movements were more moderate, we see smaller changes in the apparel wage premium. Figure 3 shows that the unit values in the 1999–2004 period were lower than in the 1998–1999 period, and that they continued to fall after 2005. The estimated apparel wage premiums in table 5 (column 4) follow the same pattern: they were lower in the 1999–2004 period than prior to 1999, and they continued to drop in the post-2005 period.

Table 6 contains the results from the test that the male-female wage differential changes over time. Columns 1 and 3 show that the male-female wage gap throughout the economy in both countries increased after the end of the MFA, which is consistent with the theoretic prediction that a drop in the price of the female-intensive good should reduce the wages of women throughout the economy. The change in the wage gap is very similar in the two countries.

[Table 6 near here]

When we divide the pre-2005 period into two segments, again using 1999 as a break point, we see that the male-female wage gap closed considerably in Cambodia when the price of apparel increased between 1999 and 2004 (column 2, table 6). In Sri Lanka, the gender wage gap increased during the 1999–2004 period, and continued increasing after the end of the MFA when the unit value of apparel dropped, as suggested by theory and documented in World Bank (2016).

Since we are using cross-sectional data pooled over time, we conduct robustness exercises to check whether there were changes in returns to other factors over time (such as age and education) that could potentially affect our results. Tables 7 and 8 present the results of log hourly wage regressions individually for each year of available data for Cambodia and Sri Lanka respectively using a simple Mincer model with Heckman correction as described above.

[Table 7 near here]

[Table 9 near here]

The coefficient of the apparel dummy, which represents wages of all (male and female) apparel workers relative to workers in other industries, and the coefficient on the female dummy

variable, which captures male-female wage differentials in all industries (throughout the entire economy), vary over time in both countries. Figure 6a graphs these two for Sri Lanka, which serves as our comparison country. Since apparel prices globally have been declining generally (Figure 1), and have been falling in Sri Lanka in particular (Figure 3), it is not surprising that in Sri Lanka the apparel wage premium (solid line) falls consistently over time and the male wage premium (dashed line) increases over time (trend lines estimated with an OLS trend term are added for emphasis).

Figure 6b graphs the same two variables for Cambodia. When Cambodia first enters the global market, it experiences a sharp increase in the apparel prices, and both the apparel premium and the wage gap between men and women (the dashed line) falls dramatically until about 2006. When the apparel premium starts to fall in 2006, the wage gap between men and women throughout the economy starts to rise.

[Figure 6a and 6b near here]

Note that the apparel premium starts to rise again in 2011, and the wage gap between men and women falls in the last two years for which we have data. Figure 7 provides one possible reason for this reversal. Starting around 2011, Cambodia starts switching export destination from the United States to the European Union. As suggested in Figure 3, EU prices for Cambodia had fallen much less than U.S. prices. The switch to the European Union resulted in an increase in output prices for Cambodia. Although we only have 10 time-series observations for the male-

female wage gap, a simple OLS regression of the male-female wage gap on the 1-year lagged (log) exports to the United States explains 76 per cent of the variation in the male-female wage gap in Cambodia (with an estimated coefficient (standard error) of -0.125 (0.0248)). Exporting apparel to the United States was correlated with a reduction in the male-female wage gap throughout the economy (not just in the apparel industry), which is consistent with the Stolper-Samuelson prediction, and falling exports to the United States was correlated with a rising wage gap throughout the economy.

[Figure 7 near here]

As Blau and Kahn (2017) point out, there are of course many other possible contributing factors to changes in the male-female wage gap. In the next several sections, we evaluate several of the leading possibilities.

3.5 Labour Force Participation

Sauré and Zoabi (2014) find that women adjust along the extensive margin in response to labour demand shocks. To evaluate this possibility, we consider trends in women's labour force participation. Tables 9 and 10 report marginal effects (evaluated at the means of the regressors) of the independent variables on labour force participation in Cambodia and Sri Lanka. The likelihood of labour force participation for women is lower than that of men in both countries. The female-male labour force participation differentials are higher in Sri Lanka than in Cambodia. For example, while women were 15 per cent less likely than men to participate in the

labour force in Cambodia in 2014, in Sri Lanka this differential was 50 per cent in 2015. In 1996, women were 38 per cent less likely to participate in the labour force than men. The gap has sharply narrowed in the post-MFA period. In Sri Lanka, the labour force participation of women was about 45 per cent lower than of men over the 1992–2002 period, but the difference increased to 50.7 per cent in 2011 and has remained around those levels since then. Age and education were associated with a higher probability of labour force participation in both countries. On the other hand, married individuals were less likely to be economically active compared to the never married group.

[Tables 9 and 10 near here]

Overall, the results show that women's labour force participation is relatively constant over time. This suggests that our results are not driven by adjustments along the extensive margin or are not affected by unaccounted selection bias.

3.6 Working Conditions and Hours

In addition to employment, working conditions directly impact a worker's well-being through the number of overtime hours worked overtime, a hazardous work environment, social benefits, or workplace discrimination. But working conditions also have an indirect impact on employment and wage opportunities through the demand side: buyers might pay lower prices or refuse to buy at all if they know that producers exploit child labour or mistreat employees.

The Cambodian and Sri Lankan governments had different strategies to improve working conditions in the apparel sector. Sri Lanka, as a part of its Five-Year Strategy,¹³ designed international and local campaigns to improve the image of the apparel sector and working conditions. The 2006 international image-building campaign was called Garments without Guilt, and the 2008 local campaign was called Abhimani ('pride'). Despite these efforts, working conditions are still far from ideal. As mentioned earlier, labour costs in Sri Lanka are lower than in China and India. Besides low wages, other issues have been problematic in parts of the apparel sector, particularly in smaller firms. These issues include the lack of appointment letters, long working hours, high work intensity, and, in particular, denial of the right of association and collective bargaining (as many firms are reluctant to recognise trade unions) (Staritz & Frederick, 2011b).

Cambodia has a good record of labour compliance because of the Better Factories Cambodia program that began in 1999. Through this program, compliance with international labour standards was directly linked to the apparel export quotas that Cambodia received from the United States. In the 2004 Foreign Investment Advisory Service survey of the 15 largest U.S. and EU buyers of Cambodian apparel, Cambodia was rated the highest on 'level of labour standards' and 'protecting the rights of workers to organise unions' among Asian apparel-exporting countries, including Bangladesh, China, Thailand, and Vietnam (Staritz & Frederick, 2011a). The MFA phase-out coincided with the expiration of the U.S. quotas in 2004, which eliminated the incentive motive of Better Factories Cambodia (Staritz & Frederick, 2011a). Nevertheless, the Cambodian government encouraged the apparel sector to continue with the program to maintain its reputation for compliance with good labour standards in order to remain attractive to the foreign investors.

Table 11 shows that from 1996 to 2014 substantial numbers of employees in Cambodia worked more than 40 hours a week. The percentage of women working more than 40 hours a week increased post-MFA from 62.6 per cent in 2004 to 65.3 per cent in 2014. The proportion fell to 55.2 per cent in 2009. The analysis shows that women who worked overtime on average worked 54 hours a week. There was no significant difference between men and women. Furthermore, Table 11 shows that 96.5 per cent of textile and apparel workers worked more than 40 hours a week in 2014. This number was significantly higher than the economy average of 69.4 per cent. We also find that there was a very small percentage of workers below 14 years old—on average less than one per cent from 1996 to 2014. The percentage of workers in apparel younger than 14 years old was slightly higher than the economy for selected years, but lower than the agriculture average.

[Table 11 near here]

Table 12 shows that in 2008, on average, 76 per cent of people in Sri Lanka worked more than 40 hours a week—much like Cambodia at 78 per cent. In Cambodia this share decreased from 2008 to 2014, while in Sri Lanka it remained constant. There was a big difference between the share of men and women working overtime in Sri Lanka—85 and 61 per cent in 2015, respectively. Similar to Cambodia, people who worked overtime worked on average about 52 hours a week. Also, similar to Cambodia, more people worked overtime in the apparel industry than in the economy overall—83 and 76 per cent in 2015, respectively. The percentage of workers less than 14 years old in Sri Lanka is lower than in Cambodia—0.06 and 0.19 per cent in

2012, respectively. There were no workers under 14 years old in the textile and apparel industry in 2012. Moreover, the percentage of girls and boys under 14 years working in Sri Lanka in 2012 was approximately the same—0.06 and 0.07 per cent, respectively.

Employment fluctuates with changes in labour demand, suggesting imperfect mobility between industries. Working conditions fluctuate less over time, suggesting that our model—which focuses on wage changes in the context of imperfect labour mobility—is not at odds with the labour market characteristics of Cambodia and Sri Lanka.

5. Conclusions

Our results contribute in several ways to the debate surrounding the value of apparel exports and employment for women in developing countries. First, we demonstrate that apparel workers earn significant wage premiums relative to their other options in the economy. Especially in Cambodia, these premiums increased significantly when Cambodia started exporting apparel. Second, we show that women's wages relative to men (the gender wage gap) follow changes in apparel prices in ways consistent with theory. Third, we show that changes in apparel prices are not followed by significant changes in our measures of hours or adjustments along the extensive margin for women.

Our results also contribute to the broader debates surrounding trade and wages and the effects of globalisation on women. We demonstrate that a Heckscher-Ohlin approach which differentiates males and females as separate factors may be a fruitful alternative to discrimination models or those that analyse the effects of globalisation on women in terms of skill. Under the assumption that women comprise a more apparel-specific labour input than men and that the apparel sector is

a female-labor-intensive sector, the simple theoretical model predicts that a negative price shock will translate into a relative decline in apparel wages compared to other industries in the short run, and a relative decrease in female wages compared to male wages across all industries in the long run.

The increased competition in apparel exports after the MFA phase-out drove down the unit values of apparel both in Cambodia and Sri Lanka. The empirical results of the post-MFA changes support the theoretical predictions. Workers, the majority of whom are female, in the apparel industry were receiving a premium comparable to that of an average worker. This premium decreased in both countries right after the MFA phase-out, but it slightly recovered in the following years. Male-female wage differentials were declining under the MFA in both countries. The gap widened right after the MFA phase-out but later decreased. Finally, in terms of a very narrow measurement of working conditions, we found that substantial numbers of people were working more than 40 hours a week in apparel in both countries—95 per cent in Cambodia in 2011 and 75 per cent in Sri Lanka in 2012. On average, people working overtime were working about 53 hours a week. On the other hand, only 0.9 per cent of apparel workers in Cambodia were younger than 14 years and there were no apparel workers under 14 years in Sri Lanka.

The finding of significant apparel wage premiums that are linked to apparel prices suggests economic opportunities for women in the formal labour market. Further research is necessary to identify the potential development effects of such employment and to thoroughly compare the benefits documented in this paper with the costs that may come with apparel jobs.

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Notes

- ¹ The shift towards developing countries that increased the demand for women in developing countries also reduced the demand for women in developed countries. Kucera and Milberg (2000) find that North-South trade of manufacturing has in many developed countries reduced female employment relatively more than male employment.
- ² Levels of household income per capita revealed sharp gender differences. With the per capita income of some female households falling below the ultra-poor poverty line of R194 per month per adult per month.
- ³ Most studies find little support for the assumption that females could be treated as unskilled workers (Domínguez-Villalobos & Brown-Grossman, 2010).
- ⁴ Note that other industry-specific factors, such as input costs and technological change, may also affect wages. Falling input costs or an increase in (some forms of) technological change can have the same effects in the sense that they can increase demand for exports. In turn, these changes would still result in Stolper-Samuelson effects.
- ⁵ The logarithm of wages is measured as the logarithm of real hourly individual labour income in 2005 prices.
- ⁶ Industry dummies include 15 categories: Agriculture and Forestry; Mining; Food, Beverage, and Tobacco; Textile and Apparel; Wood; Other Manufacturing; Utilities; Construction; Sales; Transport; Financial, Insurance, and Real Estate; Public Administration; Social Services; and Other Services. An omitted category is Agriculture and Forestry.

⁷ Occupation dummies are according to 1-digit ISCO-08; the omitted category is Managers.

⁸ Like many developing countries, neither Cambodia nor Sri Lanka had unemployment insurance programs during the sample period. As a result, people who are able and willing to work generally earn some non-zero amount in either the formal or informal labour markets and unemployment rates are low. For a popular-press discussion, see [https://www.cambodiadaily.com/editors-choice/cambodias-low-jobless-rate-hides-harsh-reality-106803/..](https://www.cambodiadaily.com/editors-choice/cambodias-low-jobless-rate-hides-harsh-reality-106803/)

⁹ The possibility that the women choosing the T&G sector are different cannot be ruled out in principle and deserves some empirical consideration. One way to approach this would be to identify variables that would condition the selection into T&G that do not affect wages. Having siblings may be a good measure. We tried identifying the selection equation on siblings as a separate exercise. Unfortunately, this variable is not available in the data for either country.

¹⁰ Several papers split the sample (Blau et al., 2016) between male and females. This is the Oaxaca-Blinder (OB) decomposition that separates the wage gap into observed and unobserved components. We are not concerned with the unobserved portions. Combining the sample allows us to compare male and female wages directly before, during, and after the end of the MFA.

¹¹ Another important non-monetary dimension of a job that needs consideration is formality, such as benefits and type of contract. Not everybody working in a formal firm is a formal worker, and these other non-monetary dimensions are important to assess who is really better off. Unfortunately, our household surveys do not allow us to have more specific information on benefits and type of contract beyond the measurements of working conditions described in the previous section.

¹² The results present T&G relative to the 'rest' using grand means. This makes the omitted category irrelevant, as it recalculates all of the industry dummy variables as the difference between each industry's mean wage and the overall average wage in the economy.

¹³ Here we refer to the 5-year strategy developed in 2002 (see Ruwanpura, 2016).

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Table 1: Labour Force Characteristics for Cambodia and Sri Lanka (1996–2014)

| | Panel A: Cambodia | | | | | | | | | | |
|--|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 1996 | 1999 | 2004 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| <i>Employment and Education</i> | | | | | | | | | | | |
| Labour force participation rate, all | 38.0 (48.5) | 37.6 (48.4) | 43.6 (49.6) | 49.0 (50.0) | 52.9 (49.9) | 56.3 (49.6) | 59.8 (49.0) | 63.9 (48.0) | 65.5 (47.5) | 67.7 (46.8) | 68.1 (46.6) |
| Labour force participation rate, males | 51.0 (50.0) | 49.3 (50.0) | 52.4 (49.9) | 58.7 (49.2) | 61.6 (48.6) | 59.3 (49.1) | 62.2 (48.5) | 65.4 (47.6) | 69.4 (46.1) | 72.6 (44.6) | 72.7 (44.5) |
| Labour force participation rate, females | 26.5 (44.1) | 26.9 (44.3) | 35.6 (47.9) | 40.1 (49.0) | 45.1 (49.8) | 53.6 (49.9) | 57.6 (49.4) | 62.5 (48.4) | 62.0 (48.5) | 63.3 (48.2) | 64.0 (48.0) |
| Females in employment (per cent) | 36.2 (48.1) | 37.3 (48.4) | 42.8 (49.5) | 41.3 (49.2) | 42.1 (49.4) | 49.4 (50.0) | 50.6 (50.0) | 51.6 (50.0) | 49.4 (50.0) | 48.9 (50.0) | 49.0 (50.0) |
| Hours worked, all | 42.6 (15.3) | 47.3 (13.8) | 44.5 (18.0) | 47.3 (17.2) | 47.8 (15.1) | 40.5 (18.2) | 42.7 (16.8) | 42.2 (16.3) | 43.1 (16.4) | 44.4 (15.8) | 44.4 (16.2) |
| Hours worked, males | 43.3 (14.9) | 47.3 (13.4) | 46.0 (17.2) | 49.0 (16.1) | 49.1 (14.4) | 41.8 (17.3) | 44.4 (15.3) | 43.9 (14.8) | 44.9 (15.2) | 45.4 (14.7) | 45.6 (15.1) |
| Hours worked, females | 41.4 (15.9) | 47.3 (14.4) | 42.5 (18.8) | 44.9 (18.4) | 46.0 (15.9) | 39.2 (18.9) | 41.1 (18.0) | 40.5 (17.3) | 41.2 (17.4) | 43.3 (16.8) | 43.0 (17.1) |
| Years of education | 3.9 (3.6) | 5.3 (4.2) | 4.8 (4.0) | 6.0 (4.6) | 6.2 (4.7) | 5.0 (4.1) | 6.0 (4.6) | 6.4 (4.6) | 6.4 (4.5) | 6.7 (4.6) | 6.5 (4.9) |
| Years of education for females in T&G | 4.8 (3.2) | 5.6 (3.2) | 5.5 (2.8) | 6.0 (3.0) | 6.0 (2.7) | 6.0 (2.9) | 6.3 (3.2) | 6.9 (3.0) | 6.7 (3.0) | 6.7 (3.0) | 6.7 (3.3) |
| Years of education for males in T&G | 5.0 (3.3) | 7.8 (3.3) | 7.3 (3.4) | 8.5 (3.8) | 7.2 (2.6) | 7.4 (3.3) | 7.5 (3.8) | 8.5 (3.7) | 8.3 (3.1) | 8.4 (3.4) | 8.3 (3.5) |
| Years of education in T&G | 4.8 (3.2) | 6.0 (3.3) | 5.8 (3.0) | 6.4 (3.3) | 6.2 (2.7) | 6.3 (3.0) | 6.5 (3.3) | 7.2 (3.2) | 7.0 (3.0) | 7.0 (3.1) | 7.0 (3.4) |
| <i>Employment Share of the Industry</i> | | | | | | | | | | | |
| Agriculture (per cent) | 60.3 (48.9) | 45.6 (49.8) | 45.6 (49.8) | 38.4 (48.6) | 36.3 (48.1) | 52.1 (50.0) | 40.4 (49.1) | 42.5 (49.4) | 41.4 (49.3) | 39.8 (48.9) | 40.4 (49.1) |
| T&G (per cent) | 2.2 (14.7) | 6.5 (24.6) | 6.9 (25.4) | 6.9 (25.4) | 7.9 (27.0) | 7.2 (25.8) | 8.4 (27.8) | 9.9 (29.9) | 9.0 (28.7) | 9.2 (28.9) | 12.3 (32.8) |

| | | | | | | | | | | | |
|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Share of females in T&G (per cent) | 79.2 | 82.8 | 81.3 | 82.9 | 80.9 | 83.2 | 84.7 | 83.4 | 82.0 | 80.8 | 77.5 |
| | (40.7) | (37.8) | (39.0) | (37.7) | (39.4) | (37.4) | (36.1) | (37.2) | (38.4) | (39.4) | (41.8) |

Source: Calculations based on the Cambodia Socio-Economic Survey (CSES).

Note: T&G = textiles and garments. Standard deviations are in parentheses.

Table 1 (continued)

| | Panel B: Sri Lanka | | | | | | | | | | | | | | | | | | |
|---|--------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--|
| | 1992 | 1994 | 1995 | 1996 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2007 | 2008 | 2011 | 2012 | 2013 | 2014 | 2015 | |
| <i>Employment and Education</i> | | | | | | | | | | | | | | | | | | | |
| Labour force participation rate, all | 47.6 (49.9) | 48.4 (50.0) | 48.2 (50.0) | 50.6 (50.0) | 53.6 (49.9) | 52.4 (49.9) | 52.6 (49.9) | 50.7 (50.0) | 51.9 (50.0) | 50.7 (50.0) | 49.6 (50.0) | 52.0 (50.0) | 51.6 (50.0) | 49.2 (50.0) | 48.6 (50.0) | 56.1 (49.6) | 49.4 (50.0) | 50.3 (50.0) | |
| Labour force participation rate, male | 65.2 (47.6) | 66.6 (47.2) | 66.6 (47.1) | 67.6 (46.8) | 69.5 (46.1) | 69.3 (46.1) | 69.4 (46.1) | 68.3 (46.5) | 70.0 (45.8) | 69.3 (46.1) | 68.2 (46.6) | 70.2 (45.7) | 70.1 (45.8) | 68.5 (46.4) | 68.8 (46.3) | 78.6 (41.0) | 68.5 (46.4) | 69.0 (46.3) | |
| Labour force participation rate, female | 30.3 (46.0) | 30.5 (46.1) | 30.5 (46.1) | 34.1 (47.4) | 38.2 (48.6) | 35.9 (48.0) | 36.1 (48.0) | 33.6 (47.2) | 34.6 (47.6) | 32.8 (47.0) | 32.0 (46.7) | 35.3 (47.8) | 34.8 (47.6) | 31.8 (46.6) | 30.4 (46.0) | 36.7 (48.2) | 32.3 (46.8) | 33.8 (47.3) | |
| Females in employment (per cent) | 28.5 (45.1) | 28.7 (45.3) | 29.3 (45.5) | 31.6 (46.5) | 34.1 (47.4) | 33.0 (47.0) | 33.3 (47.1) | 32.2 (46.7) | 32.4 (46.8) | 31.2 (46.3) | 31.5 (46.4) | 34.3 (47.5) | 34.4 (47.5) | 32.8 (46.9) | 32.1 (46.7) | 34.2 (47.4) | 33.8 (47.3) | 34.7 (47.6) | |
| Hours worked, all | 45.8 (15.5) | 45.9 (15.5) | 45.4 (15.2) | 30.5 (26.1) | 44.0 (15.9) | 44.4 (15.6) | 44.6 (15.5) | 45.5 (15.2) | 45.4 (15.9) | 46.0 (16.0) | 46.1 (15.5) | 46.3 (15.7) | 46.2 (15.8) | 46.1 (14.8) | 46.2 (14.0) | 46.0 (14.8) | 46.5 (14.3) | 46.0 (15.0) | |
| Hours worked, male | 47.5 (15.2) | 47.5 (15.3) | 47.1 (15.0) | 31.5 (26.5) | 46.6 (15.5) | 46.9 (15.3) | 46.9 (15.3) | 47.7 (14.9) | 47.9 (15.5) | 48.4 (15.7) | 48.6 (15.2) | 49.1 (15.2) | 49.2 (15.3) | 48.7 (14.2) | 48.7 (13.5) | 48.7 (14.3) | 49.0 (13.8) | 49.0 (14.4) | |
| Hours worked, female | 41.7 (15.5) | 41.7 (15.0) | 41.3 (15.1) | 28.1 (25.0) | 39.0 (15.4) | 39.4 (14.9) | 39.9 (14.9) | 40.8 (14.9) | 40.1 (15.3) | 40.7 (15.3) | 40.8 (14.8) | 41.0 (15.4) | 40.4 (15.2) | 40.7 (14.4) | 40.8 (13.6) | 40.7 (14.4) | 41.4 (14.0) | 40.4 (14.5) | |
| Years of education | 7.9 (3.7) | 8.1 (3.6) | 8.3 (3.6) | 7.3 (3.8) | 7.6 (3.6) | 7.7 (3.6) | 7.8 (3.6) | 8.1 (3.5) | 8.0 (3.6) | 7.9 (3.6) | 8.1 (3.6) | 8.2 (3.5) | 8.3 (3.5) | 8.4 (3.4) | 8.6 (3.4) | 8.7 (3.4) | 8.8 (3.3) | 8.8 (3.3) | |
| Years of education for females in T&G | 8.9 (2.6) | 9.2 (2.3) | 9.3 (2.3) | 9.2 (2.5) | 9.2 (2.3) | 9.1 (2.5) | 9.2 (2.5) | 9.5 (2.2) | 9.6 (2.1) | 9.6 (2.1) | 9.6 (2.3) | 9.6 (2.1) | 9.7 (2.0) | 9.8 (1.8) | 9.7 (2.0) | 9.8 (1.9) | 9.7 (2.0) | 9.8 (1.8) | |
| Years of education for men in T&G | 9.1 (2.7) | 9.1 (2.7) | 9.2 (2.7) | 9.1 (2.9) | 8.7 (2.8) | 9.0 (2.7) | 9.1 (2.8) | 9.7 (2.4) | 9.8 (2.1) | 9.6 (2.4) | 9.8 (2.2) | 10.0 (2.0) | 9.9 (2.0) | 9.9 (2.1) | 9.8 (2.1) | 10.0 (1.9) | 10.0 (1.9) | 9.9 (2.0) | |
| Average years of education in T&G | 9.0 (2.6) | 9.2 (2.4) | 9.3 (2.4) | 9.2 (2.6) | 9.0 (2.5) | 9.1 (2.5) | 9.2 (2.5) | 9.5 (2.3) | 9.7 (2.1) | 9.6 (2.2) | 9.7 (2.2) | 9.7 (2.1) | 9.8 (2.0) | 9.8 (1.9) | 9.7 (2.0) | 9.9 (1.9) | 9.8 (2.0) | 9.9 (1.9) | |
| <i>Employment Share of the Industry</i> | | | | | | | | | | | | | | | | | | | |
| Agriculture (per cent) | 29.6 (45.7) | 27.1 (44.5) | 25.7 (43.7) | 41.5 (49.3) | 40.7 (49.1) | 39.2 (48.8) | 38.4 (48.6) | 33.3 (47.1) | 33.0 (47.0) | 34.3 (47.5) | 31.5 (46.4) | 31.4 (46.4) | 32.0 (46.7) | 32.6 (46.9) | 30.0 (45.8) | 30.1 (45.9) | 29.0 (45.4) | 29.4 (45.6) | |
| T&G (per cent) | 5.1 (22.0) | 6.1 (23.9) | 6.3 (24.4) | 5.9 (23.6) | 6.4 (24.5) | 6.3 (24.4) | 6.9 (25.3) | 6.8 (25.2) | 5.8 (23.4) | 5.6 (23.0) | 5.5 (22.9) | 6.1 (23.9) | 6.1 (23.9) | 4.9 (21.7) | 5.5 (22.7) | 5.7 (23.1) | 6.3 (24.3) | 5.6 (23.1) | |
| Share of female in T&G (per cent) | 71.0 (45.4) | 70.1 (45.8) | 70.2 (45.8) | 71.7 (45.0) | 72.5 (44.7) | 71.8 (45.0) | 74.0 (43.9) | 69.8 (45.9) | 72.3 (44.7) | 71.2 (45.3) | 71.7 (45.0) | 73.6 (44.1) | 73.7 (44.0) | 72.3 (44.8) | 71.1 (45.4) | 71.6 (45.1) | 70.7 (45.5) | 74.1 (43.8) | |

Source: Calculations based on 1992, 1994-1996, 1998-2004, 2007-2008 and 2011-2015 Labor Force Surveys.

Note: T&G = textiles and garments. Standard deviations are in parentheses.

Table 2: Monthly Real Wage Levels in U.S. Dollars for Cambodia and Sri Lanka, 2005 prices (1996–2014 for Cambodia; 1992–2015 for Sri Lanka)

| | Panel A: Cambodia | | | | | | | | | | |
|--------------------------------------|-------------------|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|
| | 1996 | 1999 | 2004 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| <i>Mean wage in T&G, all</i> | 50.2 (54.6) | 59.3 (50.6) | 61.0 (32.5) | 60.0 (25.4) | 53.4 (32.6) | 51.6 (31.8) | 58.8 (47.0) | 55.8 (27.7) | 60.1 (31.9) | 67.2 (30.0) | 80.8 (57.3) |
| Male | 61.0 (51.4) | 80.2 (95.9) | 69.0 (47.8) | 68.4 (30.4) | 50.2 (18.2) | 58.1 (35.1) | 70.4 (72.1) | 58.8 (30.0) | 67.4 (36.7) | 72.8 (49.9) | 84.3 (65.7) |
| Female | 47.5 (55.2) | 55.0 (33.0) | 59.1 (27.2) | 58.4 (24.1) | 54.2 (35.1) | 50.3 (31.0) | 56.7 (40.5) | 55.2 (27.2) | 58.4 (30.4) | 65.9 (22.9) | 79.9 (54.6) |
| <i>Mean wage in agriculture, all</i> | 48.9 (148.9) | 43.7 (90.7) | 24.2 (32.5) | 33.3 (21.9) | 34.9 (31.7) | 30.6 (32.9) | 31.0 (30.5) | 38.0 (29.0) | 42.5 (33.1) | 48.0 (57.5) | 55.9 (48.9) |
| Male | 55.5 (145.7) | 46.9 (92.1) | 29.0 (42.2) | 38.6 (24.4) | 37.9 (29.3) | 34.3 (35.1) | 35.0 (34.5) | 46.3 (34.1) | 48.7 (40.0) | 54.6 (73.9) | 62.7 (53.7) |
| Female | 36.8 (154.0) | 36.5 (87.3) | 19.5 (16.9) | 27.5 (16.8) | 31.8 (33.9) | 26.6 (29.9) | 26.9 (25.2) | 29.8 (19.8) | 35.6 (20.9) | 39.8 (22.7) | 47.5 (40.9) |
| <i>Mean wage, all</i> | 69.2 (277.9) | 67.1 (413.2) | 50.9 (73.4) | 68.7 (74.7) | 63.5 (64.6) | 52.4 (54.5) | 65.8 (67.3) | 69.3 (60.6) | 72.1 (60.6) | 79.1 (68.6) | 91.8 (115.5) |
| Male | 76.3 (321.0) | 64.1 (214.8) | 53.8 (83.6) | 73.3 (75.5) | 69.3 (72.3) | 58.3 (60.7) | 73.4 (73.6) | 79.7 (69.1) | 81.4 (66.1) | 87.1 (74.4) | 100.7 (140.7) |
| Female | 58.0 (191.1) | 72.2 (616.0) | 46.7 (55.3) | 62.1 (73.1) | 55.4 (50.6) | 44.6 (43.6) | 55.3 (56.0) | 56.4 (44.7) | 59.3 (49.3) | 68.1 (58.1) | 80.1 (68.0) |

Table 2 (continued)

| | Panel B: Sri Lanka | | | | | | | | | | | | | | | | | |
|----------------------------------|--------------------|----------------|----------------|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|------------------|
| | 1992 | 1994 | 1995 | 1996 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2007 | 2008 | 2011 | 2012 | 2013 | 2014 | 2015 |
| <i>Mean wage in T&G, all</i> | 51.7 (29.5) | 57.2 (22.4) | 58.8 (29.3) | 55.6 (57.4) | 54.4 (40.2) | 55.8 (46.7) | 60.6 (55.5) | 59.0 (38.2) | 59.8 (50.9) | 60.8 (56.7) | 60.2 (48.8) | 66.8 (51.1) | 63.9 (49.0) | 67.4 (44.2) | 72.7 (41.1) | 74.0 (105.8) | 77.8 (77.5) | 76.8 (61.5) |
| Male | 64.5 (40.0) | 66.3 (30.5) | 66.8 (37.3) | 76.2 (102.8) | 70.5 (54.1) | 70.8 (79.9) | 82.3 (86.3) | 74.5 (50.9) | 77.7 (66.1) | 79.5 (91.7) | 76.5 (70.5) | 86.4 (68.8) | 87.5 (77.9) | 87.6 (64.2) | 89.3 (47.2) | 103.2 (103.5) | 112.8 (107.3) | 108.2 (66.7) |
| Female | 47.4 (23.3) | 54.2 (18.1) | 55.8 (25.0) | 48.0 (19.7) | 48.3 (31.3) | 49.9 (20.6) | 53.0 (36.7) | 52.1 (28.3) | 53.2 (42.1) | 53.3 (30.7) | 53.7 (34.7) | 58.9 (39.2) | 54.5 (25.3) | 58.8 (27.9) | 65.2 (35.6) | 62.1 (104.5) | 62.8 (53.9) | 65.6 (55.4) |
| Mean wage in agriculture, all | 34.1 (22.7) | 38.3 (22.2) | 39.2 (24.3) | 35.2 (34.6) | 36.2 (21.5) | 40.2 (28.2) | 38.9 (26.2) | 36.4 (20.6) | 35.8 (34.3) | 38.0 (22.3) | 37.9 (24.4) | 38.5 (24.3) | 39.5 (26.8) | 47.2 (30.0) | 52.0 (31.7) | 54.4 (76.2) | 60.4 (61.6) | 61.7 (53.9) |
| Male | 37.7 (25.1) | 42.8 (25.0) | 44.7 (27.3) | 38.8 (37.4) | 40.1 (23.7) | 45.2 (30.9) | 43.4 (30.4) | 41.2 (22.5) | 40.6 (35.6) | 42.7 (24.7) | 43.3 (25.9) | 44.5 (28.5) | 45.8 (31.2) | 52.7 (31.7) | 57.8 (32.0) | 60.5 (84.9) | 66.6 (64.2) | 70.2 (57.2) |
| Female | 27.7 (15.7) | 31.7 (15.1) | 30.2 (14.3) | 30.5 (29.9) | 31.3 (17.2) | 33.1 (22.2) | 32.8 (17.3) | 30.5 (16.2) | 29.9 (31.5) | 32.2 (17.2) | 30.8 (20.1) | 31.6 (15.7) | 31.2 (16.4) | 39.5 (25.6) | 42.1 (28.6) | 38.1 (41.2) | 43.2 (50.1) | 41.6 (38.1) |
| Mean wage, all | 55.5 (37.6) | 62.2 (38.1) | 63.7 (38.4) | 59.0 (54.1) | 63.6 (55.9) | 66.7 (57.6) | 68.2 (61.5) | 67.6 (50.6) | 66.0 (58.5) | 67.2 (58.3) | 67.2 (54.0) | 78.5 (65.1) | 74.1 (58.9) | 79.8 (57.1) | 84.3 (52.9) | 86.2 (108.9) | 91.7 (103.4) | 102.0 (117.2) |
| Male | 57.9 (38.3) | 64.2 (38.3) | 65.5 (38.0) | 63.2 (57.3) | 68.1 (57.5) | 70.9 (60.6) | 72.9 (65.7) | 71.6 (51.9) | 68.8 (57.9) | 71.0 (61.4) | 71.0 (55.7) | 83.1 (67.1) | 78.5 (60.4) | 84.0 (57.8) | 88.3 (52.1) | 93.6 (113.9) | 99.4 (112.8) | 110.7 (121.5) |
| Female | 50.0 (35.6) | 57.7 (37.1) | 60.0 (39.0) | 50.8 (46.0) | 55.1 (51.6) | 58.3 (49.7) | 58.8 (51.2) | 59.4 (46.5) | 60.0 (59.5) | 59.1 (50.1) | 59.3 (49.3) | 69.5 (60.1) | 65.4 (54.5) | 70.8 (54.4) | 75.8 (53.6) | 68.8 (94.1) | 73.5 (74.0) | 82.7 (104.4) |

Source: Calculations based on Cambodia Socio-Economic Surveys, the Sri Lankan 2006 Household Income and Expenditure Survey, and the 1992–2002, 2008, 2011, and 2012 Labour Force Surveys.

Note: T&G = textiles and garments. The local currency was transformed into the U.S. dollars using the Consumer Price Index (CPI) and the exchange rate from the World Development Indicators Database. Standard deviations are in parentheses.

Table 3. Oaxaca-Blinder Decomposition for Cambodia (1996–2014)

| Variables | 1996 (1) | 1999 (2) | 2004 (3) | 2007 (4) | 2008 (5) | 2009 (6) | 2010 (7) | 2011 (8) | 2012 (9) | 2013 (10) | 2014 (11) |
|-------------|---------------------|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| male | 6.358*** (0.015) | 6.507*** (0.015) | 6.529*** (0.015) | 6.872*** (0.021) | 6.840*** (0.020) | 6.792*** (0.012) | 7.034*** (0.018) | 7.130*** (0.017) | 7.130*** (0.015) | 7.198*** (0.014) | 7.343*** (0.008) |
| female | 6.241*** (0.019) | 6.522*** (0.019) | 6.415*** (0.018) | 6.747*** (0.025) | 6.723*** (0.021) | 6.567*** (0.013) | 6.767*** (0.020) | 6.809*** (0.017) | 6.846*** (0.016) | 6.988*** (0.015) | 7.153*** (0.008) |
| difference | 0.118*** (0.024) | -0.015 (0.024) | 0.114*** (0.023) | 0.125*** (0.033) | 0.118*** (0.029) | 0.225*** (0.018) | 0.267*** (0.027) | 0.321*** (0.024) | 0.284*** (0.022) | 0.210*** (0.021) | 0.190*** (0.011) |
| explained | 0.059*** (0.006) | 0.063*** (0.006) | 0.134*** (0.009) | 0.101*** (0.014) | 0.118*** (0.014) | 0.113*** (0.008) | 0.128*** (0.013) | 0.123*** (0.012) | 0.103*** (0.011) | 0.101*** (0.011) | 0.078*** (0.005) |
| unexplained | 0.059** (0.024) | -0.078*** (0.024) | -0.020 (0.022) | 0.024 (0.031) | 0.000 (0.027) | 0.112*** (0.017) | 0.140*** (0.025) | 0.198*** (0.021) | 0.181*** (0.020) | 0.110*** (0.019) | 0.112*** (0.010) |

Source: Calculations based on Cambodia Socio-Economic Surveys.

Note: Standard errors are in parentheses. Statistically significant coefficients at the 10, 5, and 1 per cent level are indicated by one, two, and three asterisks respectively.

Table 4: Oaxaca-Blinder Decomposition for Sri Lanka (1992–2015)

| Variables | 1992 (1) | 1994 (2) | 1995 (3) | 1996 (4) | 1998 (5) | 1999 (6) | 2000 (7) | 2001 (8) | 2002 (9) | 2003 (10) | 2004 (11) | 2007 (12) | 2008 (13) | 2011 (14) | 2012 (15) | 2013 (16) | 2014 (17) | 2015 (18) |
|-------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| male | 3.292*** (0.006) | 3.414*** (0.009) | 3.429*** (0.010) | 4.527*** (0.017) | 3.411*** (0.007) | 3.463*** (0.007) | 3.485*** (0.007) | 3.479*** (0.008) | 3.412*** (0.007) | 3.436*** (0.007) | 3.454*** (0.005) | 3.556*** (0.007) | 3.515*** (0.006) | 3.608*** (0.007) | 3.689*** (0.006) | 3.663*** (0.005) | 3.718*** (0.005) | 3.821*** (0.005) |
| female | 3.182*** (0.012) | 3.338*** (0.017) | 3.383*** (0.017) | 4.386*** (0.024) | 3.245*** (0.012) | 3.318*** (0.011) | 3.340*** (0.011) | 3.336*** (0.013) | 3.318*** (0.012) | 3.324*** (0.011) | 3.325*** (0.009) | 3.393*** (0.012) | 3.378*** (0.011) | 3.479*** (0.013) | 3.575*** (0.011) | 3.436*** (0.009) | 3.504*** (0.009) | 3.590*** (0.009) |
| difference | 0.110*** (0.013) | 0.075*** (0.019) | 0.046** (0.020) | 0.142*** (0.030) | 0.166*** (0.014) | 0.145*** (0.013) | 0.144*** (0.013) | 0.143*** (0.015) | 0.094*** (0.014) | 0.112*** (0.013) | 0.129*** (0.011) | 0.162*** (0.014) | 0.137*** (0.013) | 0.129*** (0.015) | 0.114*** (0.013) | 0.227*** (0.011) | 0.213*** (0.010) | 0.231*** (0.011) |
| explained | 0.035*** (0.008) | 0.011 (0.011) | 0.006 (0.011) | 0.059*** (0.008) | 0.020*** (0.007) | 0.011 (0.007) | 0.008 (0.007) | -0.005 (0.008) | -0.021*** (0.008) | -0.009 (0.007) | -0.002 (0.006) | -0.017** (0.008) | -0.035*** (0.007) | -0.038*** (0.007) | -0.053*** (0.007) | -0.051*** (0.004) | -0.056*** (0.004) | -0.062*** (0.004) |
| unexplained | 0.074*** (0.010) | 0.065*** (0.015) | 0.040** (0.016) | 0.083*** (0.029) | 0.146*** (0.011) | 0.134*** (0.011) | 0.136*** (0.010) | 0.148*** (0.013) | 0.116*** (0.012) | 0.121*** (0.011) | 0.132*** (0.009) | 0.180*** (0.011) | 0.173*** (0.010) | 0.167*** (0.012) | 0.167*** (0.011) | 0.278*** (0.010) | 0.269*** (0.009) | 0.292*** (0.010) |

Source: Calculations based on the Sri Lankan 1992, 1994-1996, 1998-2004, 2007-2008 and 2011-2015 Labor Force Surveys.

Note: Standard errors are in parentheses. Statistically significant coefficients at the 10, 5, and 1 per cent level are indicated by one, two, and three asterisks respectively.

Table 5: Changes in Apparel Premium over Time (1996–2014 for Cambodia; 1992–2015 for Sri Lanka)

| | Cambodia | | Sri Lanka | |
|------------------------------|----------------------|----------------------|----------------------|----------------------|
| | (1) | (2) | (3) | (4) |
| Female dummy | -0.183*** (0.011) | -0.181*** (0.011) | -0.360*** (0.014) | -0.330*** (0.014) |
| Age | 0.056*** (0.004) | 0.055*** (0.004) | 0.078*** (0.003) | 0.071*** (0.003) |
| Education | 0.047*** (0.001) | 0.047*** (0.001) | 0.041*** (0.001) | 0.041*** (0.001) |
| T&G dummy | 0.317*** (0.019) | 0.005 (0.046) | 0.060*** (0.012) | 0.120*** (0.017) |
| 1999–2004 dummy | | 0.102*** (0.012) | | -0.200*** (0.007) |
| 2005 and above dummy | 0.411*** (0.009) | 0.482*** (0.012) | 0.159*** (0.005) | 0.034*** (0.007) |
| T&G * (1999–2004 dummy) | | 0.405*** (0.057) | | -0.099*** (0.023) |
| T&G * (2005 and above dummy) | -0.204*** (0.022) | 0.162*** (0.054) | -0.118*** (0.017) | -0.178*** (0.022) |
| Hazard ratio | 0.145*** (0.026) | 0.132*** (0.026) | 0.207*** (0.024) | 0.153*** (0.024) |
| Constant | 5.467*** (0.084) | 5.372*** (0.085) | 1.808*** (0.079) | 2.086*** (0.079) |
| Observations | 68,023 | 68,023 | 271,863 | 271,863 |

Source: Calculations based on the Cambodian Socio-Economic Surveys 1996, 1999, 2004, 2007 - 2014, and the Sri Lankan 1992–2002, 2008, 2011 - 2015 Labour Force Surveys.

Note: Standard errors are in parentheses. Standard errors are clustered at the industry level. Statistically significant coefficients at the 10, 5, and 1 per cent level are indicated by one, two, and three asterisks respectively. The grand mean effects of the industries are calculated; post-MFA is a dummy equal to 1 for years 2005 and later; additional controls include age squared, industry, and occupation dummies. Occupation dummies are according to 1-digit ISCO-08; the omitted category is managers. Industry dummies include 15 categories: Agriculture and Forestry; Mining; Food, Beverage, and Tobacco; Textile and Apparel; Wood; Other Manufacturing; Utilities; Construction; Sales; Transport; Financial, Insurance, and Real Estate; Public Administration; Social Services; and Other Services. Log wages are measured as logarithm of real hourly individual labour income in 2005 prices. The omitted time category in cols (1) and (3) is 2004 and earlier; the omitted time category in cols (2) and (4) is 1998 and earlier.

Table 6: Changes in Gender Differential over Time (1996-2014 for Cambodia; 1992-2015 for Sri Lanka)

| | Cambodia | | Sri Lanka | |
|---------------------------------|----------------------|----------------------|----------------------|----------------------|
| | (1) | (2) | (3) | (4) |
| Female dummy | -0.168*** (0.014) | -0.233*** (0.021) | -0.282*** (0.015) | -0.218*** (0.018) |
| Age | 0.055*** (0.004) | 0.054*** (0.004) | 0.077*** (0.003) | 0.070*** (0.003) |
| Education | 0.047*** (0.001) | 0.047*** (0.001) | 0.041*** (0.001) | 0.041*** (0.001) |
| T&G dummy | 0.224*** (0.024) | -0.055 (0.048) | 0.038** (0.016) | 0.083*** (0.021) |
| 1999–2004 dummy | | 0.068*** (0.014) | | -0.185*** (0.008) |
| 2005 and above dummy | 0.425*** (0.010) | 0.472*** (0.014) | 0.200*** (0.006) | 0.084*** (0.007) |
| T&G * (1999–2004 dummy) | | 0.355*** (0.058) | | -0.074*** (0.024) |
| T&G * (2005 and above dummy) | -0.181*** (0.024) | 0.151*** (0.055) | -0.055*** (0.017) | -0.099*** (0.023) |
| Female * (1999–2004 dummy) | | 0.099*** (0.024) | | -0.054*** (0.014) |
| Female * (2005 and above dummy) | -0.045*** (0.015) | 0.025 (0.022) | -0.146*** (0.010) | -0.181*** (0.013) |
| Female * T&G | 0.131*** (0.022) | 0.126*** (0.022) | -0.013 (0.019) | -0.012 (0.019) |
| Hazard ratio | 0.135*** (0.027) | 0.119*** (0.027) | 0.196*** (0.024) | 0.141*** (0.024) |
| Constant | 5.475*** (0.085) | 5.418*** (0.085) | 1.808*** (0.079) | 2.079*** (0.079) |
| Observations | 68,023 | 68,023 | 271,863 | 271,863 |

Source: Calculations based on the Cambodian Socio-Economic Surveys 1996, 1999, 2004, 2007 - 2014, and the Sri Lankan 1992–2002, 2008, 2011 - 2015 Labour Force Surveys.

Note: Standard errors are in parentheses. Standard errors are clustered at the industry level. Statistically significant coefficients at the 10, 5, and 1 per cent level are indicated by one, two, and three asterisks respectively.

The grand mean effects of the industries are calculated; post-MFA is a dummy equal to 1 for years 2005 and later; additional controls include age squared, industry, and occupation dummies. Occupation dummies are according to 1-digit ISCO-08; the omitted category is managers. Industry dummies include 15 categories: Agriculture and Forestry; Mining; Food, Beverage, and Tobacco; Textile and Apparel; Wood; Other Manufacturing; Utilities; Construction; Sales; Transport; Financial, Insurance, and Real Estate; Public Administration; Social Services; and Other Services. Log wages are measured as logarithm of real hourly individual labour income in 2005 prices. The omitted time category in cols (1) and (3) is 2004 and earlier; the omitted time category in cols (2) and (4) is 1998 and earlier.

Table 7: Year-by-Year Wage Mincerian Regressions, Cambodia (1996–2014)

| Variables | 1996 (1) | 1999 (2) | 2004 (3) | 2007 (4) | 2008 (5) | 2009 (6) | 2010 (7) | 2011 (8) | 2012 (9) | 2013 (10) | 2014 (11) |
|--------------|----------------------|----------------------|----------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Female dummy | -0.284*** (0.038) | -0.355*** (0.042) | -0.241*** (0.041) | -0.118** (0.060) | -0.145*** (0.052) | -0.167*** (0.022) | -0.120*** (0.032) | -0.200*** (0.027) | -0.205*** (0.030) | -0.150*** (0.028) | -0.163*** (0.017) |
| Age | 0.060*** (0.009) | 0.093*** (0.012) | 0.067*** (0.011) | 0.040*** (0.015) | 0.067*** (0.013) | 0.058*** (0.009) | -0.001 (0.014) | 0.059*** (0.013) | 0.057*** (0.013) | 0.060*** (0.011) | 0.062*** (0.007) |
| Age squared | -0.001*** (0.000) | -0.001*** (0.000) | -0.001*** (0.000) | -0.000** (0.000) | -0.001*** (0.000) | -0.001*** (0.000) | 0.000 (0.000) | -0.001*** (0.000) | -0.001*** (0.000) | -0.001*** (0.000) | -0.001*** (0.000) |
| Education | 0.033*** (0.004) | 0.036*** (0.003) | 0.049*** (0.003) | 0.049*** (0.004) | 0.051*** (0.004) | 0.043*** (0.002) | 0.043*** (0.003) | 0.039*** (0.003) | 0.043*** (0.003) | 0.045*** (0.002) | 0.033*** (0.001) |
| T&G dummy | -0.082 (0.089) | 0.209*** (0.077) | 0.286*** (0.045) | 0.246*** (0.062) | 0.069 (0.060) | 0.103*** (0.035) | 0.027 (0.052) | -0.053 (0.046) | -0.008 (0.037) | -0.026 (0.034) | 0.057*** (0.016) |
| Hazard ratio | 0.088* (0.052) | 0.347*** (0.071) | 0.298*** (0.083) | 0.080 (0.129) | 0.302** (0.129) | 0.078 (0.059) | -0.239*** (0.091) | 0.128 (0.094) | 0.122 (0.097) | 0.192** (0.085) | 0.254*** (0.059) |
| Constant | 5.416*** (0.225) | 4.477*** (0.286) | 5.104*** (0.253) | 6.121*** (0.359) | 5.290*** (0.323) | 5.971*** (0.192) | 7.233*** (0.300) | 5.947*** (0.275) | 5.935*** (0.270) | 5.793*** (0.222) | 6.174*** (0.143) |
| Observations | 8,319 | 8,559 | 8,129 | 2,536 | 2,778 | 9,081 | 3,262 | 3,488 | 3,839 | 4,148 | 13,860 |

Source: Calculations based on the Cambodian Socio-Economic Surveys 1996, 1999, 2004, 2007 - 2014.

Note: Standard errors are in parentheses. Standard errors are clustered at the industry level. Statistically significant coefficients at the 10, 5, and 1 per cent level are indicated by one, two, and three asterisks respectively. The grand mean effects of the industries are calculated; additional controls include, industry, and occupation dummies. Occupation dummies are according to 1-digit ISCO-08; the omitted category is managers. Industry dummies include 15 categories: Agriculture and Forestry; Mining; Food, Beverage, and Tobacco; Textile and Apparel; Wood; Other Manufacturing; Utilities; Construction; Sales; Transport; Financial, Insurance, and Real Estate; Public Administration; Social Services; and Other Services. Log wages are measured as the logarithm of real hourly individual labour income. Log wages are measured as the logarithm of real monthly individual labour income in 2005 prices.

Table 8. Year-by-Year Wage Mincerian Regressions, Sri Lanka (1992–2015)

| Variables | 1992 (1) | 1994 (2) | 1995 (3) | 1996 (4) | 1998 (5) | 1999 (6) | 2000 (7) | 2001 (8) | 2002 (9) | 2003 (10) | 2004 (11) | 2007 (12) | 2008 (13) | 2011 (14) | 2012 (15) | 2013 (16) | 2014 (17) | 2015 (18) |
|--------------|----------------------|----------------------|----------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Female dummy | -0.281*** (0.029) | -0.290*** (0.042) | -0.171*** (0.038) | -0.145 (0.093) | -0.214*** (0.029) | -0.326*** (0.032) | -0.298*** (0.026) | -0.200*** (0.031) | -0.317*** (0.031) | -0.333*** (0.032) | -0.361*** (0.024) | -0.449*** (0.025) | -0.476*** (0.026) | -0.468*** (0.031) | -0.374*** (0.026) | -0.643*** (0.038) | -0.510*** (0.030) | -0.510*** (0.030) |
| Age | 0.074*** (0.008) | 0.069*** (0.011) | 0.045*** (0.010) | 0.012 (0.027) | 0.046*** (0.008) | 0.075*** (0.008) | 0.070*** (0.007) | 0.042*** (0.008) | 0.072*** (0.008) | 0.076*** (0.008) | 0.079*** (0.006) | 0.089*** (0.006) | 0.095*** (0.006) | 0.089*** (0.007) | 0.073*** (0.005) | 0.091*** (0.006) | 0.070*** (0.005) | 0.068*** (0.005) |
| Age squared | -0.001*** (0.000) | -0.001*** (0.000) | -0.000*** (0.000) | -0.000 (0.000) | -0.001*** (0.000) | -0.001*** (0.000) | -0.001*** (0.000) | -0.000*** (0.000) | -0.001*** (0.000) |
| Education | 0.051*** (0.002) | 0.044*** (0.002) | 0.048*** (0.002) | 0.036*** (0.005) | 0.038*** (0.002) | 0.037*** (0.002) | 0.036*** (0.002) | 0.037*** (0.002) | 0.036*** (0.002) | 0.033*** (0.002) | 0.033*** (0.001) | 0.039*** (0.002) | 0.040*** (0.002) | 0.042*** (0.002) | 0.042*** (0.002) | 0.046*** (0.002) | 0.048*** (0.002) | 0.042*** (0.002) |
| T&G dummy | 0.116*** (0.020) | 0.066** (0.028) | 0.059** (0.027) | 0.080 (0.059) | 0.006 (0.019) | 0.031* (0.019) | 0.030* (0.017) | -0.013 (0.020) | 0.072*** (0.020) | 0.034* (0.018) | 0.009 (0.015) | 0.000 (0.017) | 0.012 (0.017) | 0.012 (0.022) | 0.020 (0.019) | -0.008 (0.018) | -0.029* (0.017) | -0.056*** (0.017) |
| Hazard ratio | 0.145*** (0.052) | 0.176** (0.076) | -0.014 (0.073) | -0.037 (0.193) | 0.037 (0.060) | 0.270*** (0.063) | 0.228*** (0.051) | 0.041 (0.058) | 0.241*** (0.059) | 0.283*** (0.058) | 0.298*** (0.043) | 0.377*** (0.046) | 0.421*** (0.047) | 0.411*** (0.052) | 0.245*** (0.043) | 0.351*** (0.045) | 0.208*** (0.036) | 0.175*** (0.035) |
| Constant | 1.834*** (0.178) | 2.077*** (0.262) | 2.608*** (0.249) | 4.858*** (0.634) | 2.827*** (0.193) | 2.157*** (0.206) | 2.395*** (0.170) | 2.879*** (0.196) | 2.121*** (0.195) | 2.047*** (0.194) | 2.023*** (0.141) | 1.995*** (0.150) | 1.679*** (0.150) | 1.867*** (0.175) | 2.199*** (0.145) | 1.628*** (0.133) | 2.141*** (0.122) | 2.407*** (0.117) |
| Observations | 16,399 | 6,590 | 6,654 | 14,140 | 12,074 | 11,878 | 12,201 | 9,104 | 12,224 | 13,511 | 19,658 | 14,471 | 15,474 | 11,225 | 12,500 | 25,784 | 26,791 | 27,438 |

Source: Calculations based on the Sri Lankan 1992–2002, 2008, 2011 - 2015 Labour Force Surveys

Note: Standard errors are in parentheses. Standard errors are clustered at the industry level. Statistically significant coefficients at the 10, 5, and 1 per cent level are indicated by one, two, and three asterisks respectively. The grand mean effects of the industries are calculated; additional controls include, industry, and occupation dummies. Occupation dummies are according to 1-digit ISCO-08; the omitted category is managers. Industry dummies include 15 categories: Agriculture and Forestry; Mining; Food, Beverage, and Tobacco; Textile and Apparel; Wood; Other Manufacturing; Utilities; Construction; Sales; Transport; Financial, Insurance, and Real Estate; Public Administration; Social Services; and Other Services. Log wages are measured as the logarithm of real hourly individual labour income. Log wages are measured as the logarithm of real monthly individual labour income in 2005 prices.

Table 9: Marginal Effects for Labour Force Participation, Cambodia (1996–2014)

| Variables | 1996 (1) | 1999 (2) | 2004 (3) | 2007 (4) | 2008 (5) | 2009 (6) | 2010 (7) | 2011 (8) | 2012 (9) | 2013 (10) | 2014 (11) |
|-----------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| <i>Individual characteristics</i> | | | | | | | | | | | |
| Female dummy | -0.379*** (0.006) | -0.323*** (0.007) | -0.281*** (0.005) | -0.283*** (0.010) | -0.251*** (0.010) | -0.127*** (0.006) | -0.120*** (0.010) | -0.085*** (0.009) | -0.133*** (0.009) | -0.153*** (0.008) | -0.149*** (0.005) |
| Age (years) | 0.070*** (0.001) | 0.078*** (0.002) | 0.060*** (0.001) | 0.061*** (0.003) | 0.055*** (0.003) | 0.071*** (0.001) | 0.080*** (0.002) | 0.080*** (0.002) | 0.077*** (0.002) | 0.074*** (0.002) | 0.072*** (0.001) |
| Age squared | -0.001*** (0.000) |
| Education (years) | 0.017*** (0.001) | 0.017*** (0.001) | 0.010*** (0.001) | 0.012*** (0.002) | 0.009*** (0.002) | 0.003*** (0.001) | -0.002 (0.001) | 0.000 (0.001) | 0.001 (0.001) | -0.000 (0.001) | -0.003*** (0.001) |
| Married dummy | 0.123*** (0.011) | 0.037*** (0.012) | 0.080*** (0.009) | 0.060*** (0.017) | 0.046*** (0.017) | 0.152*** (0.009) | 0.141*** (0.016) | 0.065*** (0.015) | 0.070*** (0.014) | 0.054*** (0.014) | 0.007 (0.008) |
| Divorced dummy | 0.363*** (0.028) | 0.171*** (0.046) | 0.214*** (0.019) | 0.166*** (0.032) | 0.158*** (0.033) | 0.076*** (0.019) | 0.031 (0.031) | -0.009 (0.035) | 0.070** (0.028) | 0.057* (0.031) | 0.026 (0.019) |
| Widowed dummy | 0.399*** (0.017) | 0.232*** (0.022) | 0.223*** (0.012) | 0.169*** (0.023) | 0.172*** (0.022) | 0.040*** (0.014) | 0.027 (0.025) | -0.011 (0.026) | 0.009 (0.023) | 0.003 (0.023) | -0.006 (0.013) |
| <i>Household characteristics</i> | | | | | | | | | | | |
| HH head education | 0.003** (0.001) | -0.001 (0.001) | -0.001 (0.001) | -0.005*** (0.001) | 0.001 (0.001) | -0.005*** (0.001) | -0.007*** (0.001) | -0.011*** (0.001) | -0.011*** (0.001) | -0.012*** (0.001) | -0.006*** (0.001) |
| HH size | -0.044*** (0.003) | -0.031*** (0.003) | -0.027*** (0.002) | -0.021*** (0.003) | -0.027*** (0.003) | -0.040*** (0.002) | -0.033*** (0.003) | -0.030*** (0.003) | -0.014*** (0.003) | -0.010*** (0.003) | -0.005*** (0.002) |
| Number of kids 0-5 | 0.034*** (0.005) | 0.035*** (0.011) | 0.032*** (0.004) | 0.036*** (0.008) | 0.027*** (0.008) | 0.039*** (0.005) | 0.027*** (0.008) | 0.030*** (0.008) | 0.026*** (0.008) | -0.011 (0.008) | -0.013*** (0.004) |
| Number of kids 6-18 | 0.018*** (0.003) | 0.013*** (0.003) | 0.010*** (0.003) | 0.007 (0.005) | 0.016*** (0.005) | 0.034*** (0.003) | 0.027*** (0.005) | 0.024*** (0.004) | 0.000 (0.004) | -0.006 (0.004) | -0.015*** (0.002) |
| Observations | 31,787 | 23,472 | 44,662 | 11,023 | 10,915 | 39,117 | 11,588 | 11,476 | 12,416 | 12,344 | 38,268 |

Source: Calculations based on the Cambodian Socio-Economic Surveys 1996, 1999, 2004, 2007 - 2014.

Note: Marginal effects of the labour force participation are evaluated at the mean of the independent variables. Standard errors are in parentheses. Never married is an omitted category for marital status. Standard errors are reported below the estimated coefficients. Statistically significant coefficients at the 10, 5, and 1 per cent level are indicated by one, two, and three asterisks respectively.

Table 10: Marginal Effects for Labour Force Participation, Sri Lanka (1992–2015)

| Variables | 1992 (1) | 1994 (2) | 1995 (3) | 1996 (4) | 1998 (5) | 1999 (6) | 2000 (7) | 2001 (8) | 2002 (9) | 2003 (10) | 2004 (11) | 2007 (12) | 2008 (13) | 2011 (14) | 2012 (15) | 2013 (16) | 2014 (17) | 2015 (18) | |
|-----------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------|
| <i>Individual characteristics</i> | | | | | | | | | | | | | | | | | | | |
| Female dummy | -0.455*** (0.004) | -0.471*** (0.006) | -0.469*** (0.006) | -0.447*** (0.005) | -0.422*** (0.005) | -0.445*** (0.005) | -0.451*** (0.005) | -0.470*** (0.006) | -0.476*** (0.005) | -0.488*** (0.005) | -0.482*** (0.004) | -0.474*** (0.005) | -0.483*** (0.004) | -0.507*** (0.005) | -0.528*** (0.005) | -0.492*** (0.004) | -0.509*** (0.004) | -0.499*** (0.004) | |
| Age (years) | 0.108*** (0.001) | 0.109*** (0.002) | 0.111*** (0.002) | 0.110*** (0.001) | 0.105*** (0.001) | 0.104*** (0.001) | 0.107*** (0.001) | 0.106*** (0.001) | 0.107*** (0.001) | 0.105*** (0.001) | 0.106*** (0.001) | 0.101*** (0.001) | 0.102*** (0.001) | 0.101*** (0.001) | 0.101*** (0.001) | 0.085*** (0.001) | 0.102*** (0.001) | 0.102*** (0.001) | |
| Age squared | -0.001*** (0.000) | |
| Education (years) | 0.007*** (0.001) | 0.005*** (0.001) | 0.005*** (0.001) | 0.003*** (0.001) | 0.006*** (0.001) | 0.007*** (0.001) | 0.008*** (0.001) | 0.011*** (0.001) | 0.010*** (0.001) | 0.011*** (0.001) | 0.011*** (0.001) | 0.012*** (0.001) | 0.013*** (0.001) | 0.018*** (0.001) | 0.019*** (0.001) | 0.015*** (0.001) | 0.022*** (0.001) | 0.021*** (0.001) | |
| Married dummy | -0.168*** (0.007) | -0.142*** (0.012) | -0.154*** (0.012) | -0.123*** (0.009) | -0.123*** (0.009) | -0.109*** (0.009) | -0.097*** (0.009) | -0.087*** (0.011) | -0.086*** (0.009) | -0.068*** (0.009) | -0.097*** (0.008) | -0.034*** (0.009) | -0.031*** (0.009) | 0.006 (0.010) | -0.004 (0.010) | -0.022*** (0.008) | 0.001 (0.009) | -0.017** (0.008) | |
| Divorced dummy | -0.029 (0.022) | -0.001 (0.045) | -0.030 (0.040) | -0.067** (0.028) | -0.071** (0.028) | -0.099*** (0.029) | -0.098*** (0.029) | -0.025 (0.032) | 0.003 (0.027) | 0.008 (0.026) | 0.001 (0.023) | 0.099*** (0.025) | -0.004 (0.024) | 0.136*** (0.027) | 0.098*** (0.024) | 0.062*** (0.020) | 0.108*** (0.021) | 0.061*** (0.021) | |
| Widowed dummy | -0.143*** (0.012) | -0.097*** (0.021) | -0.135*** (0.020) | -0.112*** (0.015) | -0.116*** (0.016) | -0.109*** (0.016) | -0.098*** (0.016) | -0.048*** (0.019) | -0.069*** (0.016) | -0.041*** (0.015) | -0.084*** (0.012) | -0.031** (0.015) | -0.013 (0.015) | 0.059*** (0.016) | 0.050*** (0.016) | 0.002 (0.013) | 0.041*** (0.014) | 0.032** (0.014) | |
| <i>Household characteristics</i> | | | | | | | | | | | | | | | | | | | |
| HH head education | -0.009*** (0.001) | -0.008*** (0.001) | -0.006*** (0.001) | -0.010*** (0.001) | -0.013*** (0.001) | -0.011*** (0.001) | -0.013*** (0.001) | -0.011*** (0.001) | -0.011*** (0.001) | -0.010*** (0.001) | -0.013*** (0.001) | -0.015*** (0.001) | -0.014*** (0.001) | -0.016*** (0.001) | -0.017*** (0.001) | -0.014*** (0.001) | -0.017*** (0.001) | -0.017*** (0.001) | |
| HH size | -0.001 (0.001) | -0.003 (0.002) | 0.003 (0.002) | 0.001 (0.002) | -0.005*** (0.002) | -0.001 (0.002) | 0.002 (0.002) | 0.004** (0.002) | 0.003 (0.002) | 0.008*** (0.002) | 0.003 (0.002) | 0.009*** (0.002) | 0.006*** (0.002) | 0.002 (0.002) | 0.002 (0.002) | 0.002 (0.002) | 0.002 (0.002) | 0.003* (0.002) | 0.011*** (0.002) |
| Number of kids 0-5 | -0.003 (0.004) | -0.006 (0.006) | -0.017*** (0.006) | -0.023*** (0.005) | -0.016*** (0.005) | -0.024*** (0.005) | -0.028*** (0.005) | -0.037*** (0.006) | -0.043*** (0.006) | -0.039*** (0.005) | -0.023*** (0.004) | -0.059*** (0.005) | -0.046*** (0.005) | -0.040*** (0.006) | -0.035*** (0.006) | | -0.036*** (0.005) | -0.047*** (0.005) | |
| Number of kids 6-18 | -0.034*** (0.002) | -0.031*** (0.003) | -0.034*** (0.003) | -0.032*** (0.002) | -0.020*** (0.003) | -0.027*** (0.003) | -0.033*** (0.003) | -0.037*** (0.003) | -0.041*** (0.003) | -0.048*** (0.003) | -0.042*** (0.002) | -0.051*** (0.003) | -0.047*** (0.003) | -0.049*** (0.003) | -0.053*** (0.003) | -0.058*** (0.005) | -0.056*** (0.003) | -0.067*** (0.003) | |
| Observations | 73,503 | 28,012 | 27,419 | 54,155 | 48,054 | 47,657 | 47,163 | 35,906 | 46,582 | 53,142 | 74,466 | 53,943 | 57,673 | 44,329 | 48,503 | 54,455 | 63,110 | 63,855 | |

Source: Calculations based on the Sri Lankan 1992–2002, 2008, 2011 - 2015 Labour Force Surveys

Note: Standard errors are in parentheses. Standard errors are clustered at the industry level. Statistically significant coefficients at the 10, 5, and 1 per cent level are indicated by one, two, and three asterisks respectively. The grand mean effects of the industries are calculated; additional controls include, industry, and occupation dummies. Occupation dummies are according to 1-digit ISCO-08; the omitted category is managers. Industry dummies include 15 categories: Agriculture and Forestry; Mining; Food, Beverage, and Tobacco; Textile and Apparel; Wood; Other Manufacturing; Utilities; Construction; Sales; Transport; Financial, Insurance, and Real Estate; Public Administration; Social Services; and Other Services. Log wages are measured as the logarithm of real hourly individual labour income. Log wages are measured as the logarithm of real monthly individual labour income in 2005 prices.

Table 11: Hours Worked in Cambodia (1996–2014)

| | Per cent of workers working more than 40 hours a week | | | | | | | | | | |
|-------------|---|------|------|------|------|------|------|------|------|------|------|
| | 1996 | 1999 | 2004 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Male | 68.4 | 80.4 | 72.2 | 79.1 | 81.6 | 62.2 | 70.4 | 69.2 | 71.8 | 73.8 | 73.4 |
| Female | 61.2 | 77.2 | 62.6 | 67.8 | 72.0 | 55.2 | 59.2 | 58.9 | 61.5 | 66.7 | 65.3 |
| Agriculture | 59.2 | 70.8 | 60.6 | 57.3 | 63.4 | 42.5 | 42.2 | 38.7 | 40.7 | 44.2 | 42.9 |
| T&G | 68.9 | 93.2 | 93.4 | 92.6 | 94.1 | 89.8 | 92.4 | 93.7 | 95.3 | 96.6 | 96.5 |
| All sectors | 65.8 | 79.2 | 68.1 | 74.4 | 77.6 | 58.8 | 64.7 | 63.9 | 66.7 | 70.3 | 69.4 |

| | Per cent of children less than 14 years old in the employed population | | | | | | | | | | |
|-------------|--|------|------|------|------|------|------|------|------|------|------|
| | 1996 | 1999 | 2004 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Male | 0.44 | 0.33 | 2.01 | 1.01 | 0.70 | 1.31 | 0.38 | 0.23 | 0.11 | 0.22 | 0.16 |
| Female | 0.85 | 0.27 | 2.55 | 1.64 | 1.00 | 1.21 | 0.42 | 0.41 | 0.27 | 0.27 | 0.17 |
| Agriculture | 0.59 | 0.52 | 2.78 | 2.24 | 1.67 | 1.90 | 0.49 | 0.44 | 0.30 | 0.42 | 0.28 |
| T&G | 1.89 | 0.18 | 0.30 | 0.71 | 0.42 | 0.75 | 0.63 | 0.76 | 0.25 | 0.12 | 0.20 |
| All sectors | 0.59 | 0.31 | 2.24 | 1.27 | 0.83 | 1.26 | 0.40 | 0.33 | 0.19 | 0.24 | 0.17 |

Source: Calculations based on the Cambodian Socio-Economic Surveys 1996, 1999, 2004, 2007 - 2014

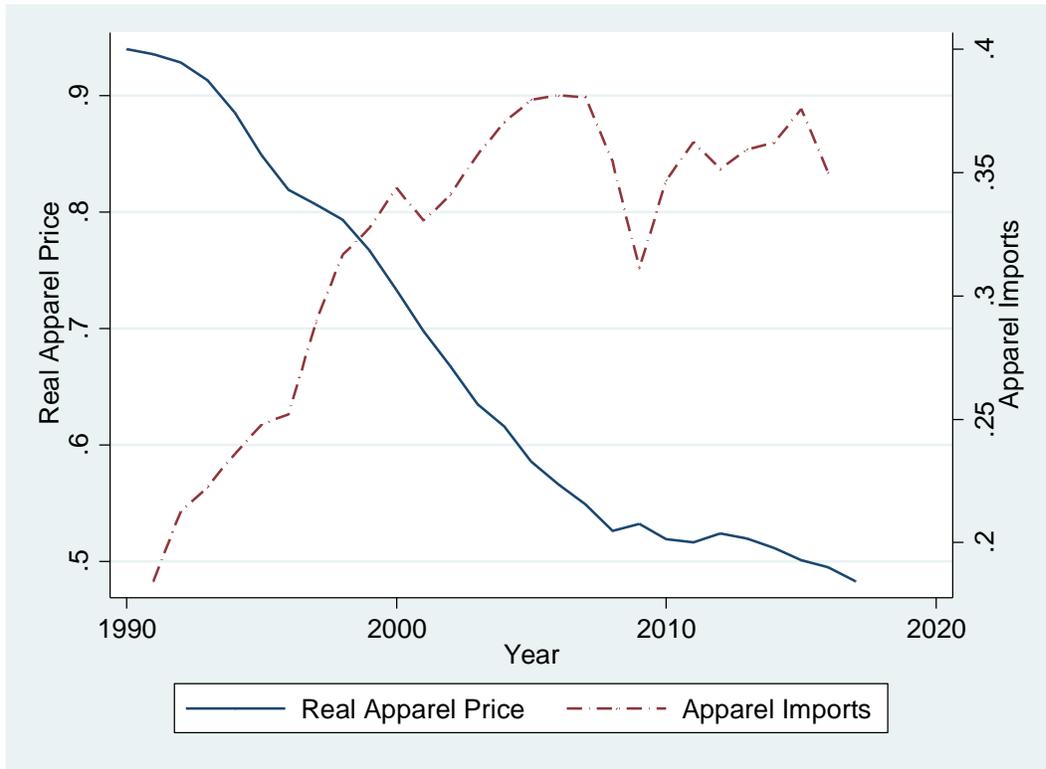
Note: T&G = textiles and garments.

Table 12: Hours Worked in Sri Lanka (1992–2015)

| | Per cent of workers working more than 40 hours a week | | | | | | | | | | | | | | | | | |
|-------------|--|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|
| | 1992 | 1994 | 1995 | 1996 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2007 | 2008 | 2011 | 2012 | 2013 | 2014 | 2015 |
| Male | 81.2 | 82.0 | 81.0 | 48.9 | 78.6 | 79.4 | 78.7 | 81.5 | 80.2 | 80.2 | 81.4 | 82.62 | 83.23 | 83.61 | 84.89 | 83.74 | 85.05 | 84.48 |
| Female | 66.3 | 66.7 | 64.9 | 41.1 | 59.0 | 61.8 | 61.9 | 64.0 | 60.4 | 62.7 | 63.9 | 62.4 | 61.31 | 61.95 | 63.87 | 62.71 | 64.24 | 61.24 |
| Agriculture | 67.4 | 64.0 | 61.0 | 44.9 | 58.5 | 59.5 | 57.9 | 59.2 | 56.2 | 60.1 | 61.6 | 61.75 | 61.28 | 63.04 | 64.01 | 62.85 | 63.89 | 60.28 |
| T&G | 80.4 | 87.0 | 86.7 | 48.4 | 87.2 | 88.7 | 89.3 | 90.2 | 89.5 | 88.8 | 87.7 | 85.18 | 84.71 | 87.00 | 87.21 | 85.11 | 86.91 | 82.73 |
| All sectors | 76.9 | 77.6 | 76.3 | 46.4 | 71.9 | 73.6 | 73.1 | 75.9 | 73.8 | 74.8 | 75.9 | 75.68 | 75.69 | 76.51 | 78.14 | 76.55 | 78.01 | 76.42 |
| | Per cent of children less than 14 years old in the employed population | | | | | | | | | | | | | | | | | |
| | 1992 | 1994 | 1995 | 1996 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2007 | 2008 | 2011 | 2012 | 2013 | 2014 | 2015 |
| Male | 0.26 | 0.24 | 0.12 | 0.22 | 0.48 | 0.49 | 0.24 | 0.19 | 0.16 | 0.15 | 0.20 | 0.11 | 0.16 | 0.09 | 0.06 | - | - | - |
| Female | 0.49 | 0.30 | 0.24 | 0.26 | 0.65 | 0.64 | 0.42 | 0.32 | 0.28 | 0.21 | 0.33 | 0.11 | 0.10 | 0.04 | 0.07 | - | - | - |
| Agriculture | 0.23 | 0.19 | 0.10 | 0.30 | 1.03 | 1.09 | 0.57 | 0.49 | 0.43 | 0.23 | 0.47 | 0.23 | 0.33 | 0.21 | 0.07 | - | - | - |
| T&G | 0.07 | 0.29 | 0.00 | 0.00 | 0.13 | 0.14 | 0.00 | 0.09 | 0.23 | 0.22 | 0.21 | 0.00 | 0.00 | 0.00 | 0.00 | - | - | - |
| All sectors | 0.33 | 0.26 | 0.16 | 0.23 | 0.54 | 0.54 | 0.30 | 0.23 | 0.20 | 0.17 | 0.24 | 0.11 | 0.14 | 0.08 | 0.06 | - | - | - |

Source: Calculations based on the Sri Lankan 1992–2002, 2008, 2011–2015 Labour Force Surveys. Years 2013–2015 capture working age population from 15 years and above.
 Note: T&G = textiles and garments.

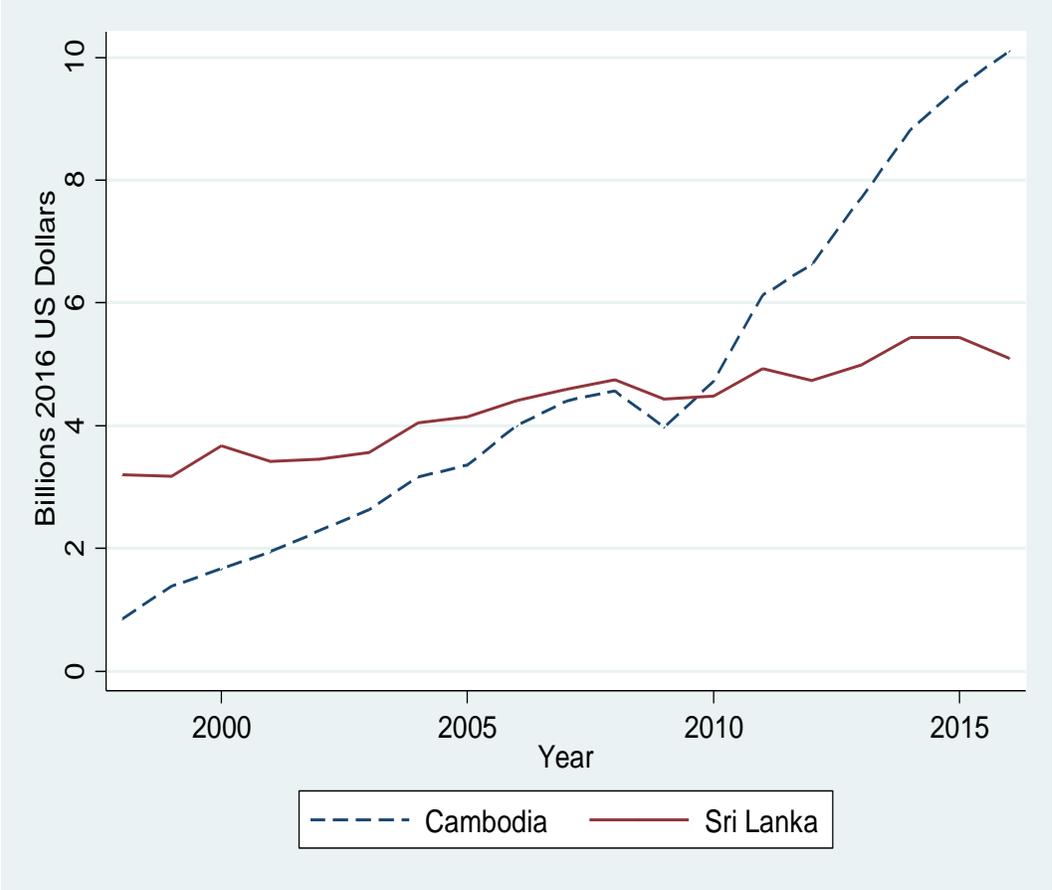
Figure 1: U.S. Apparel Imports and Real Apparel Prices (1991–2017)



Source: U.S. import data come from COMTRADE.

Note: Data represent billions of U.S. constant dollar (1982-1984 dollars) imports of Harmonized System categories 61 and 62. Real prices are the U.S. consumer price index for apparel divided by the consumer price index for all goods (all urban consumers). The real price index base period (in which the series is equal to one) is 1982-1984.

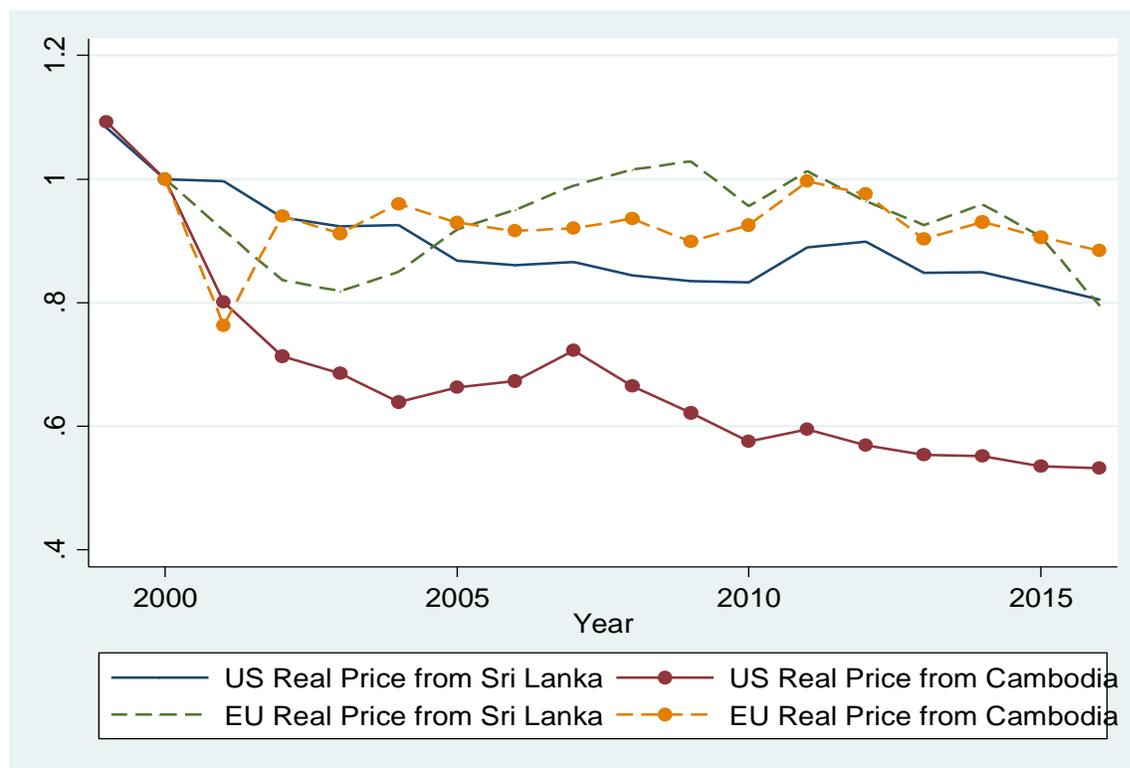
Figure 2: Apparel Exports by Country and Year (1998–2016)



Source: United Nations Commodity Trade Statistics Database (UN Comtrade).

Note: Figures are in billions of real (2016) U.S. dollars using the U.S. Consumer Price Index for all urban consumers to deflate the nominal import data. Exports are represented by imports reported by partner countries. Apparel Classification: HS 1992: Woven: HS62; Knit HS61.

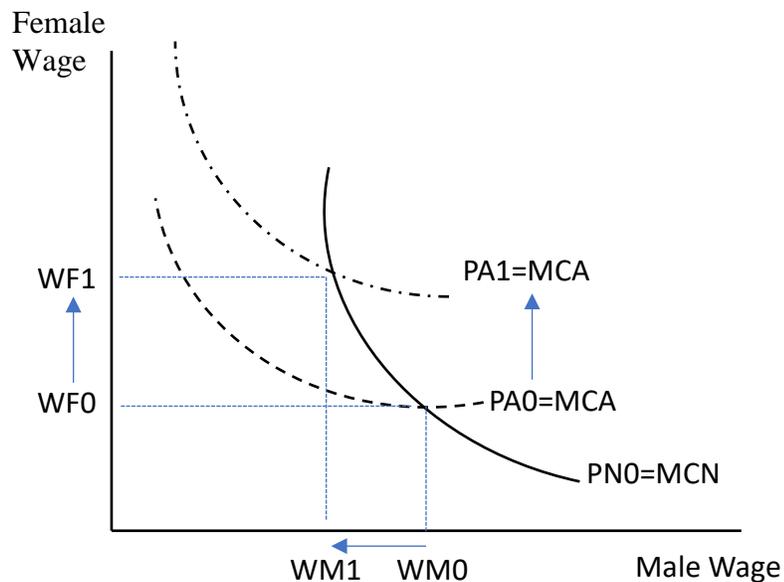
Figure 3: Unit values for U.S. and EU imports of HS 61 and 62 from Cambodia and Sri Lanka (1999–2016)



Sources: Data from Eurostat and the U.S. International Trade Administration’s Office of Textiles and Apparel (OTEXA).

Note: The EU unit values are calculated by first taking the value of imports (in nominal euros) divided by the quantity (in KG). The euro-values are then turned to real U.S. dollars using the euro-dollar exchange rate and the U.S. CPI. The U.S. unit values are calculated by turning all of the 10-digit HS category units to SME values, summing over all HS categories within each year, and then dividing total nominal dollar value of imports by total SME import quantities. The resulting unit values are then turned to real values using the U.S. CPI. All four series were then normalised by the 2000 values to illustrate the relative changes in output prices since 2000 in each country for each importer.

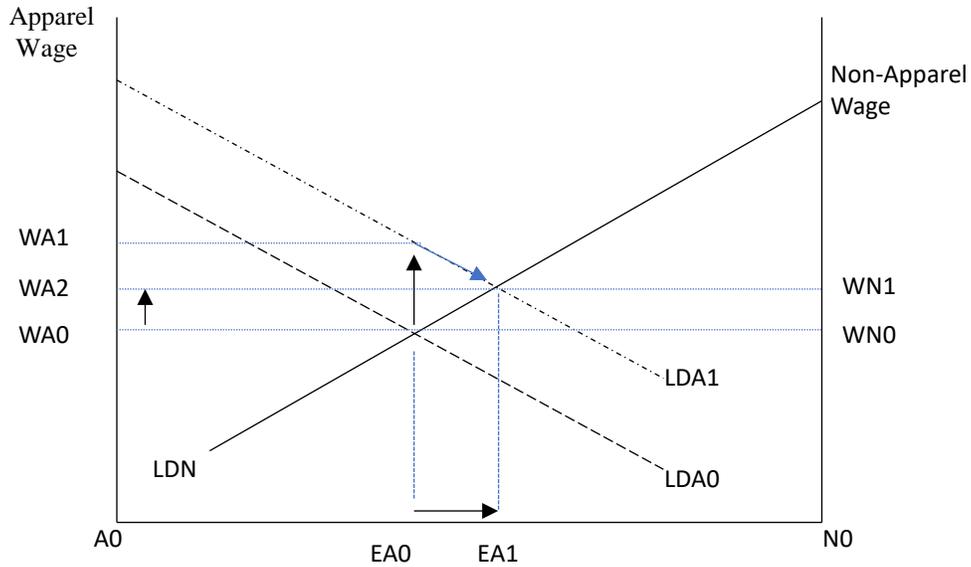
Figure 4a: General Equilibrium Adjustment from Increase in Apparel Demand (Male-Female Wage Differential in All Industries)



Source: Prepared by the authors.

Note: This figure represents the Stolper-Samuelson theorem. An increase in the price of apparel increases the wages of women in all industries and reduces the wages of men in all industries. Thus, an increase in the apparel output price would change the beta1 coefficient in equation 1.

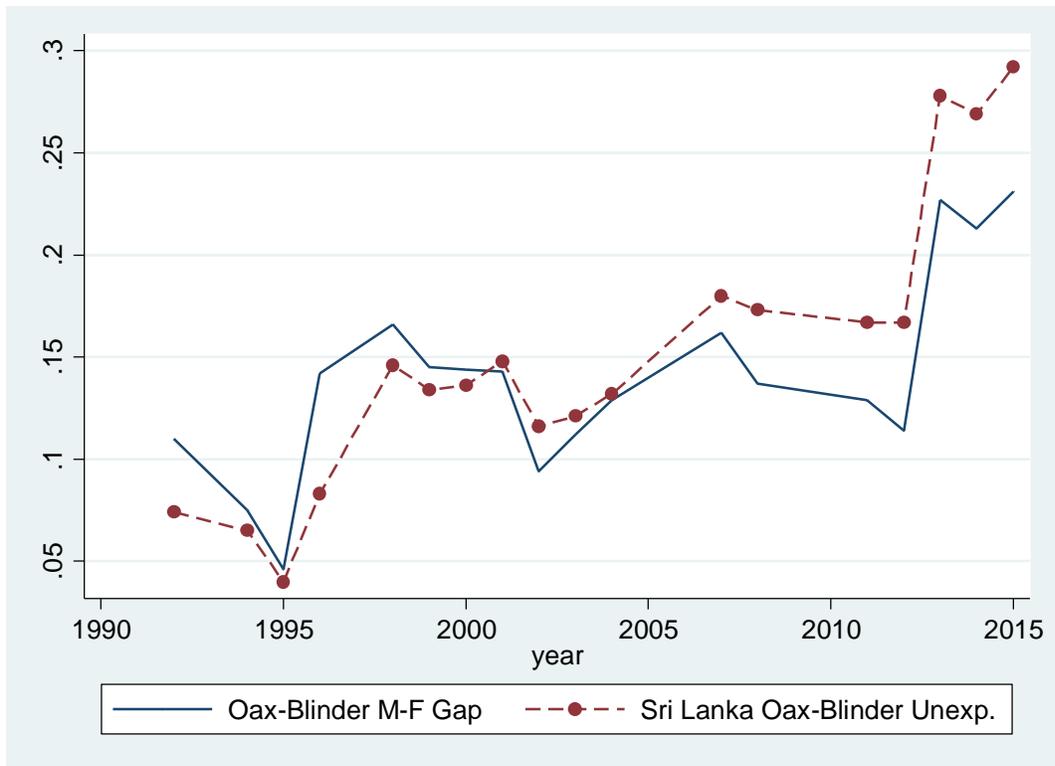
Figure 4b: An increase in the demand for apparel (Industry Premium Adjustment)



Source: Prepared by the authors.

Note: This figure represents the typical Ricardo-Viner model. LDA and LDN represent the labour demand curve for each industry. The distance A0 to N0 represents the (fully employed) labour force. The move from EA0 to EA1 represents an expansion of employment in the apparel industry. In the short run, an increase in the demand for apparel affects the wage of apparel workers (beta8 in equation 1) relative to wages in other industries.

Figure 5a: Oaxaca-Blinder Decomposition for Sri Lanka (1992–2015)

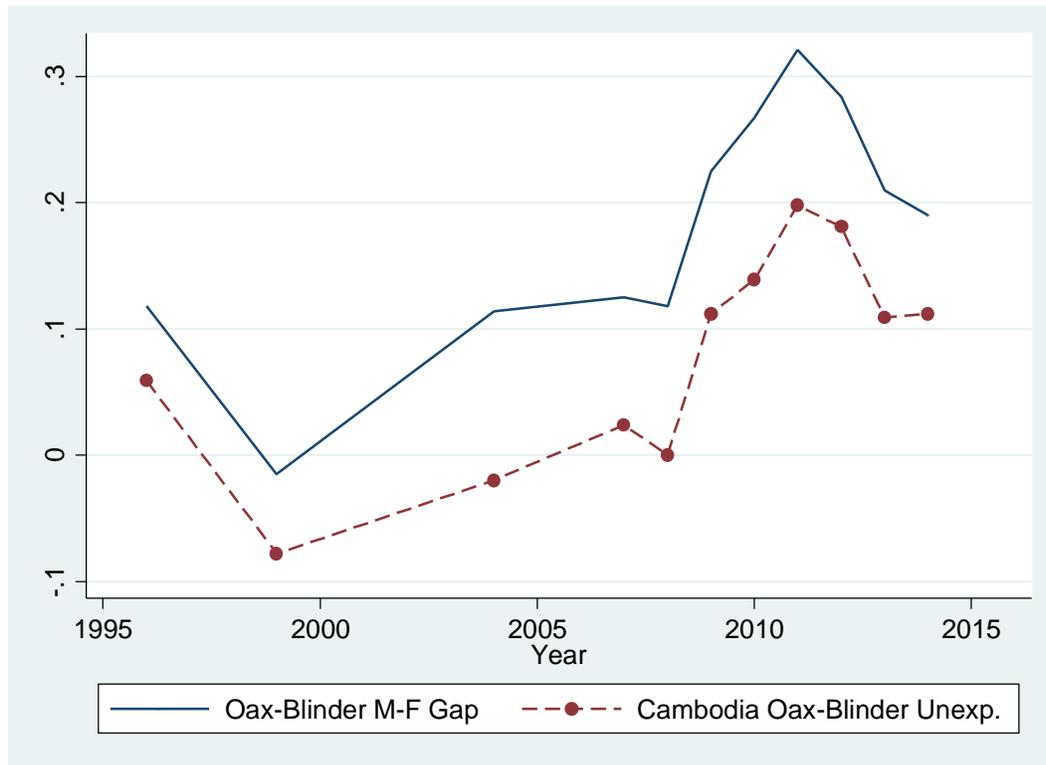


Source: Own estimates based on the Sri Lanka Labour Force Surveys.

Note: The solid line represents the total male-female wage difference. The dashed line represents the unexplained portion (due to changing returns to wage elements).

Figure 5b Oaxaca-Blinder Decomposition for Cambodia (1996–2014)

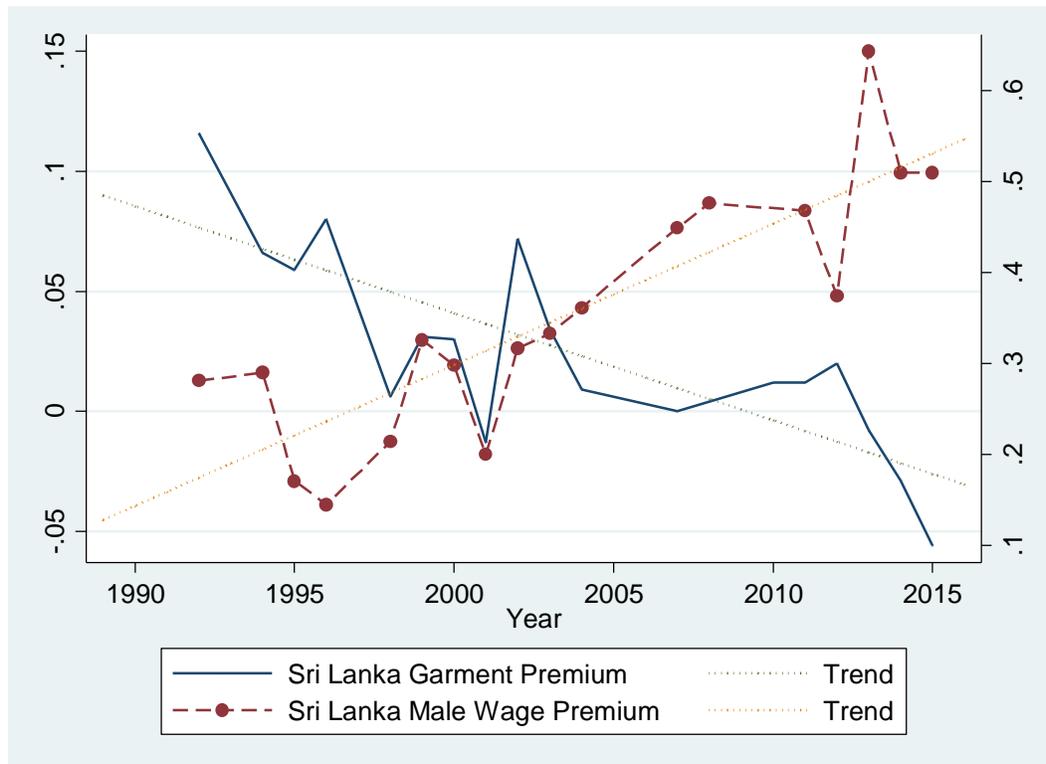
(Total male-female wage difference and the unexplained portion due to changing returns to wage elements)



Source: Own estimates based on the Cambodia Socio-Economic Surveys (CSES).

Note: The solid line represents the total male-female wage difference. The dashed line represents the unexplained portion (due to changing returns to wage elements).

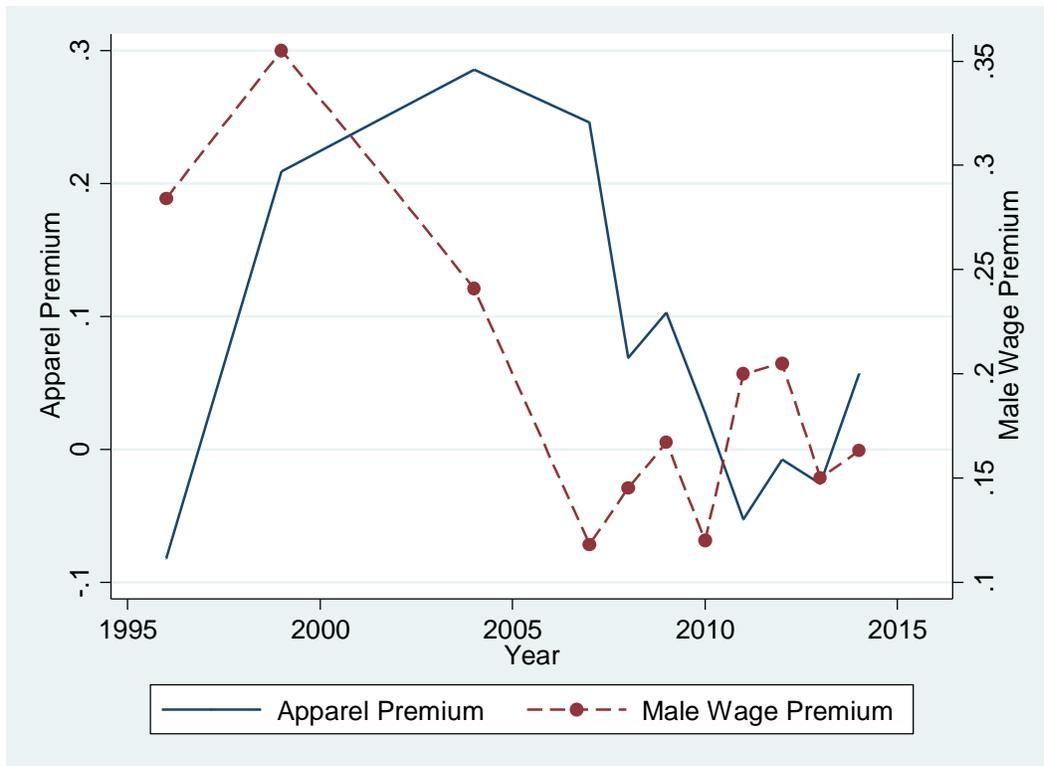
Figure 6a: Apparel Premium and Economy-wide male-female wage differential in Sri Lanka (1992–2015)



Source: Own estimates based on the Sri Lanka Labour Force Surveys.

Note: Falling apparel prices globally (as shown in Figure 1) are consistent with falling apparel wage premiums and rising male-female wage gaps. Linear time trend estimates are shown as dotted lines.

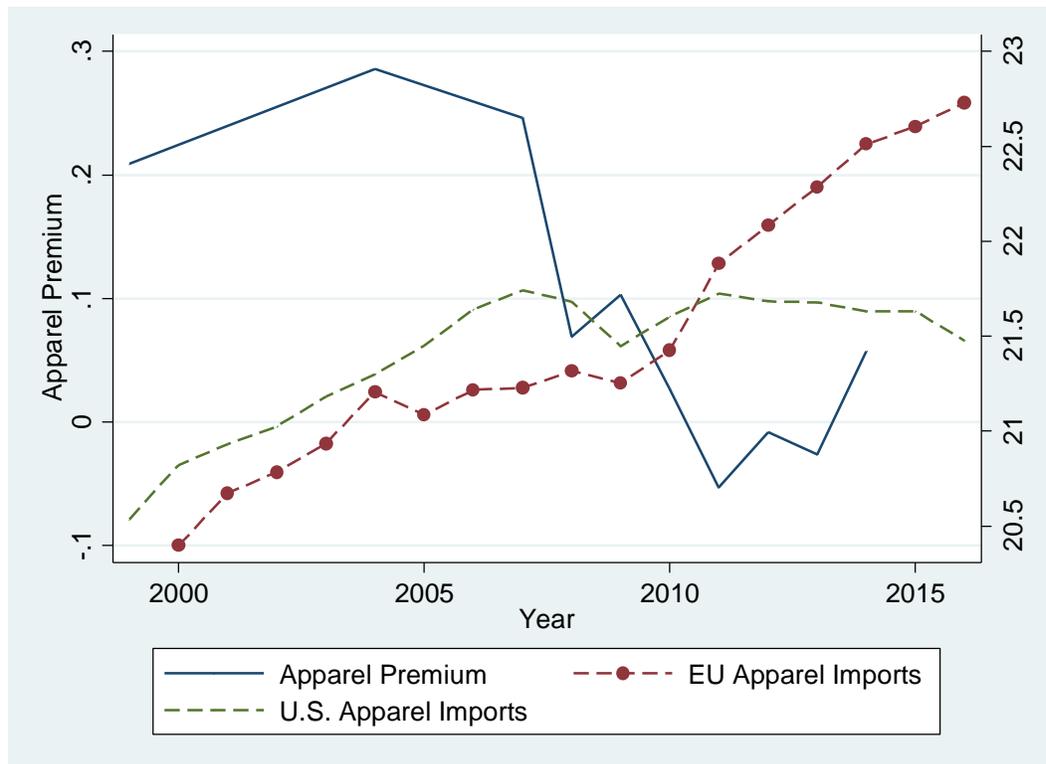
Figure 6b: Cambodia's Apparel Premium and the Estimated Wage Gap (1996–2014)



Source: Own estimates based on the Cambodia Socio-Economic Surveys (CSES).

Note: The apparel premium and the economy-wide male-female wage differential move oppositely. Note that the wage gap falls once the apparel premium rises, and vice-versa.

Figure 7: Cambodian exports to the European Union and US and the Apparel Wage Premium (1999–2016)



Sources: United Nations Commodity Trade Statistics Database (UN Comtrade) and own estimates based on the Cambodia Socio-Economic Surveys (CSES).

Note: The apparel premium starts to rise when EU exports take off. Regressing the estimated the male-female wage gap in Cambodia on lagged U.S. imports from Cambodia generates an adjusted R-squared value of 73.1 per cent.