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WILL WOMEN IN LOW-INCOME COUNTRIES GET LOST IN TRANSFORMATION?

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23 February 2016

Acknowledgements

This paper has been prepared by Louise Fox (University of California, Berkeley).

The paper has benefited from insights gained at a seminar at ODI on gender and economic transformation (22 June 2015, London) with Ranil Dissanayake, Stuart Tibbs, Sumana Hussain, Dirk Willem te Velde, Leah Worrall, Caroline Harper and Paola Perezniето. The paper also reflects comments from Paola Perezniето, Elena Bardasi and Sumana Hussain.

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ODI's Supporting Economic Transformation (SET) programme is supported by DFID. The views presented in this publication are those of the author(s) and do not necessarily represent the views of **DFID** or **ODI**.



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ABBREVIATIONS

DFID	Department for International Development
FDI	Foreign Direct Investment
FLFP	Female labour force participation
FLFPR	Female labour force participation rate
LFPR	Labour force participation rate
NREGS	National Rural Employment Guarantee Scheme
ODI	Overseas Development Institute
RCT	Randomized control trial
SSA	Sub-Saharan Africa

EXECUTIVE SUMMARY

Economic transformation is defined as the movement of resources (factors of production) to high-productivity activities, both within and between sectors. It encompasses both the process of structural change (movement of resources between sectors) and within sector labour productivity improvements. Economic transformation is essential for improving the quality of growth.

Major economic change naturally brings winners and losers. Initial conditions leading to heterogeneous outcomes and unexpected consequences are common. It is well known that women and men behave differently in a variety of economic situations for a number of reasons including both differences in the biology of the life cycle, and social, behavioural, and cultural expectations and norms associated with being a man or a woman (gender identity). Household outcomes depend on bargaining power within the household. Husbands and wives do not necessarily pool resources, nor do they always maximise production. This means that policies that change the opportunities of women may affect bargaining power and through this channel, household outcomes. Thus not only do factors specific to individual women and to the communities and societies they live in affect their behaviour and response to opportunities, the relationships within their household matter as well. Women and men are heterogeneous, and how economic transformation affects women in the above roles is mediated by other socioeconomic differences and inequalities, such as spatial differences in livelihoods and opportunities, income differences among households, ethnic differences, and other socioeconomic cleavages

Focusing on low income countries, where the problem of economic transformation is most acute, this paper analyses whether a particular economic change associated with transformation is likely to bring more opportunities for women, given the baseline (or the counterfactual of no transformation), recognizing that a number of factors govern whether they will be able to exercise these options. In other words, does a change have the potential to increase women's income, power and agency, and effectiveness in their multiple roles? Under what circumstances? We consider how females might be affected by these changes in their roles as labourers, producers, consumers, mothers, children, and citizens.

The paper argues that overall, the prospects for beneficial effects are good. However, as in other aspects of economic development, the extent of benefits for women depends on whether complementary policies are put in place to increase equality of opportunity. In some cases, barriers to opportunity are longstanding and hard to erase – for example, occupational segregation – and effective policies are difficult to identify. Improving the legal environment for women in to be active in the labour force may be necessary. In other cases, complementary policies are already part of the development agenda of most countries – e.g. improving educational opportunities for females or expanding the supply of affordable water and sanitation services – but they need to be implemented. Experimentation may be needed to develop appropriate approaches. Monitoring gender effects needs to be strengthened.

1. INTRODUCTION

Analysis of the impact of economic development on gender inequality has a history almost as long as the study of development itself. As a result of a general concern about the status and opportunities of women in developing countries, the relationships between the process of development and gender inequality have been analysed from the legal, social, economic, political, and moral dimensions, using the approaches and toolkits of various disciplines. With the broad acceptance of Amartya Sen's definition of development as expanding freedoms for all people (Sen, 1999), the issue of how to ensure that economic development expands choices and opportunities for women, especially poorer and vulnerable women, is now part of mainstream economic development theory and policy analysis.¹ This field has spawned an extensive literature.

Meanwhile, the field of economic transformation within economic development policy has also burgeoned as analysis has sought to understand why some countries have been able to grow fast and rapidly improve the welfare of their citizens while others have not. A focus on successful East Asian economies in the 1990s led to a revival of the idea of *economic transformation* as being essential to economic development. This idea, which has roots in early work of Arthur Lewis as well as Walt Rostow and Hollis Chenery, holds that the heart of development is the sustainable movement of the *share* of labour and value added from agriculture, the dominant but low-productivity sector, to industry, generally the highest-productivity sector, increasing value added and national income at a faster rate. Not discussed by the pioneers, but now accepted, is that the share of labour and value added in services would rise as well, even though, on average, service sectors have lower productivity than industry, and productivity does not grow as fast there (Rodrik, 2013).

As with other areas of applied economic policy analysis, in addition to understanding the drivers and pathways, it is helpful to ask how might the benefits of this process be distributed? What factors matter in determining whether economic transformation does expand choices and opportunities, and in particular, do choices and opportunities expand for poorer and more vulnerable sections of the population? Within the economic literature, there has been significant scholarship on growth and inequality, including on growth and gender inequality. This literature has mostly argued that as with other inequalities, gender inequality tended to reduce growth (Blackden et al., 2006; World Bank, 2011). There has also been some work on the effects of economic growth on gender inequality (Duflo, 2011; World Bank, 2011). This literature has argued that growth alone will have only a minor effect on gender inequality; other complementary measures are needed, especially in specific areas where non-economic factors such as laws, norms, traditions or culture may reduce opportunities.² Finally, there is a literature on whether increased openness to trade – usually an intermediate outcome in the structural transformation process – benefits women economically in developing countries (Do et al., 2011; Artecona and Cunningham, 2002). However, there is no specific literature on how the economic transformation

¹ While the topic of gender equality includes differences in opportunities and outcomes experienced by both men and women, for the most part in low-income countries women tend to rank lower in the distribution than men on almost any relevant outcome variable. Starting early in the life cycle, females in low-income countries tend to have fewer opportunities and worse outcomes (World Bank, 2015a). However, there are situations where males are disadvantaged. For example, in some nomadic households, young males are pulled out of school earlier than females in order to help during herding season. Nevertheless, in the paper, we focus on the role and status of females.

² Women's role in taking care of children is one example of norms and traditions that might limit women's economic opportunities. These norms may become more rigid if laws codify or enforce them, such as gender-based job restrictions or restrictions on holding and administering property.

process might affect economic opportunities, choices and welfare of women in low-income countries. The point of this paper is to develop an analytical framework for this task and use the framework to organise the available evidence for low-income countries.

The approach is to link the initial conditions of women and gender equity in a country and the expected macroeconomic and sectoral changes expected during the initial phases of economic transformation.³ Taking the different roles of women in the economy, various channels can be identified by which economic transformation might be expected to affect women positively or negatively. As women are a heterogeneous group, the paper tries to identify areas where effects could be heterogeneous among women – for example, women living in rural vs urban areas; women with more skills or less; younger women vs older ones, women with and without childcare responsibilities, etc. The paper argues that overall, the prospects for beneficial effects are good. However, as in other aspects of economic development, in many cases the extent of benefits for women depends on whether complementary policies are put in place to increase equality of opportunity. In some cases, barriers to opportunity are longstanding and hard to erase – for example, occupational segregation – and effective policies are hard to identify. In other cases, complementary policies are already part of the development agenda of most countries – e.g. improving educational opportunities for females or expanding the supply of affordable water and sanitation services.

The paper is structured as follows. In the next section, the analytical framework is developed linking the changes in the economy expected from economic transformation, and the classification of the channels by which these changes might affect women's lives. Females commonly have multiple roles; economic changes can affect them in these roles differently. We identify four roles: (i) females engaged in market work (labour force participants); (ii) women as leaders in the care economy (household work); (iii) female children/adolescents; and (iv) women as individuals, consumers and citizens (e.g. power and agency outcomes; gender-based violence and civic participation). The rest of the paper takes each role in turn, and considers how the economic changes which constitute structural transformation might affect women in these roles. The concluding section discusses what might be the policy implications.

³ One could also analyse the effect that gender inequality has on the structural transformation process. This is a much less tractable problem, as the nature of the transformation process, and the policies put in place to accelerate it, have hardly been the same across countries. Although potentially interesting, there is much less literature on this question. One source is World Bank (2011), which did give some consideration to how gender inequality retards economic growth and development. It did not, however, address the specific problem of economic transformation.

2. ECONOMIC TRANSFORMATION – WHAT IS IT AND WHY MIGHT IT AFFECT WOMEN?

Economic transformation is defined as the movement of resources (factors of production) to high-productivity activities, both within and between sectors.⁴ It encompasses both the process of structural change (movement of resources between sectors) and within-sector labour productivity improvements. The latter can be caused by more capital per unit of labour (investment), better technology, better management causing factors to be used more efficiently, or all of the above. While the process could be self-generating, in most low-income countries the process is associated with increased economic linkages with the outside world. This is because new technology is usually imported (even if adapted locally), and it often comes in the form of foreign direct investment (FDI). The FDI takes place as a producer in another location is looking to add to its capacity for sales either locally or abroad or both. Thus increased trade (and a more diverse basket of imports and exports) is often key to the process.

Economic transformation is essential for improving the quality of growth so that it is broad-based, resilient against shocks, and brings about opportunities for further growth. Growth based on the extensive margin – simply more production with the same technology and inputs – usually does not last, as it will not increase labour earnings per worker. Poverty in low-income countries happens primarily when people are able to ‘work their way out of poverty’ through higher earnings (Filmer and Fox, 2014). Earnings can increase because family farmers get irrigation, allowing them to use their land more extensively and work more hours per year (within-sector productivity). Or they can increase because one earner in a household with a small amount of land is able to leave the agricultural sector for a wage job in a nearby urban area while the other earner can grow almost the same amount of food for the household by using the same land and only her labour but a bit more fertiliser, which is now affordable (labour shifting sectors and a within-sector productivity gain). Or earnings can increase when a new enterprise opens up, hiring previously unemployed youth as well as the managers from a less efficient business (within-sector productivity change). Higher labour productivity should mean overall higher earnings in the economy, whatever the source of the productivity gain.

Economic transformation means more production in enterprises, and less production in households. Thus the process means that more labour will be demanded by the growing enterprise sector. This labour will be supplied by (i) those already in the labour force, engaged in home production (farmers who leave their land or cease other forms of self-employment); (ii) those about to leave school and enter the labour force and those in the labour force but unemployed; and (iii) those not in the labour force who might be induced to enter the labour force because of new opportunities to earn wages. As the agricultural and rural sectors tend to be the lower-productivity sectors, economic transformation and urbanisation usually occur together, implying spatial as well as well as sectoral labour mobility.

Policies to achieve economic transformation tend to focus on the manufacturing sector because of the opportunities for rapid productivity gains in this sector as well the spillover effects to the

⁴ See McMillan, Page and te Velde (2015) for a discussion of this definition and its importance to growth and development.

rest of the economy which come from learning-by-doing associated with making a manufacturing enterprise globally competitive. However, it should be noted that all tradable sectors have the potential for building local skills by becoming competitive, including service sectors. Finally, as Timmer (2009) and others have pointed out, transformation is not only about the non-farm sectors; raising productivity within the agricultural sector is critical for the transformation of the industrial and service sectors.

Major economic change naturally brings winners and losers. Initial conditions leading to heterogeneous outcomes and unexpected consequences are common. Many of the main outcomes associated with economic transformation may affect the distribution of welfare and opportunities across society positively for both men and women. For example, if economic transformation results in poverty reduction, both poor men and poor women should benefit. The same is true of other outcomes usually associated with a more productive economy – better governance or macroeconomic outcomes such as more sustainable growth. However, it is well known that women and men behave differently in a variety of economic situations for a number of reasons including differences in the biology of the life cycle as well as in the social, behavioural and cultural expectations and norms associated with being a man or a woman (gender identity). These differences (biological and socio-cultural) affect how men and women behave towards one another and in society, they affect the power balance between men and women (individually and as groups), and they affect men's and women's ability to find and make use of economic opportunities to improve their own welfare and the welfare of those they care about. It is the latter issue (changes in economic opportunities) that economists tend to address in considering the relationships between the economic changes labelled economic transformation and the welfare of women.

When household income rises, the welfare outcome may be different for males and females, depending on what is the source of the income gain. It is well established that household outcomes depend on individual economic shares and how these contribute to bargaining power within the household (Doss, 2013). Husbands and wives do not necessarily pool resources, nor do they always maximise production.⁵ This means that policies that change the opportunities of women may affect bargaining power and, through this channel, household outcomes. Thus an individual woman's behaviour and response to opportunities is affected not only by factors specific to her and the community and society she lives in but also by the relationships within her household.

Women and men are heterogeneous, and how economic transformation affects women in the above roles is mediated by other socioeconomic differences and inequalities, such as spatial differences in livelihoods and opportunities, income differences among households, ethnic differences and other socioeconomic cleavages. It is well known, for example, that in many countries female-headed households span the whole income distribution (Milazzo and Van De Walle, 2015). In this paper, we try to identify where, *ex ante*, we would expect the result to be quite heterogeneous across women with different initial conditions. In doing so, we focus the analysis primarily on females in low- and middle-income households, as these tend to be the more vulnerable ones with fewer opportunities to adapt to change (although these households could also be the ones that gain most from economic transformation).

⁵ See Castilla, (2015) for a recent example from India.

The focus is on low-income countries in this paper, where the need for economic transformation is most acute because current opportunities are so limited. The outcome measures we use are related to this question of opportunity – for households, and for the females in these households. Thus, we do not ask the question of whether gender inequality in all its various dimensions will increase or decrease. Instead, going back to the idea of development as freedom, we ask *whether a particular economic change associated with economic transformation is likely to bring more opportunities for women*, given the baseline (or the counterfactual of no transformation), recognising that a number of factors govern whether women will be able to exercise these options. In other words, does economic transformation have the *potential* to increase women’s income, their power and agency, their effectiveness in their multiple roles? Under what circumstances?

In the subsequent sections, we break down the types of change that are likely to occur into:

- changes in the demand for labour outside the household (general or gender specific)
- income effects – mostly increased earnings – in the household (which affects household consumption, investment, and the production function of the household economy); and
- changes in the price of inputs to household production and consumption.

We consider how females might be affected by these changes in their roles as labourers, producers, consumers, mothers, children and citizens. We review the evidence on whether in a low-income environment these changes have brought about more opportunities and higher welfare for women. So, for example, even where the majority of newly created wage jobs go to men, if some of them go to women and those women are better off than they were before, we judge this to be an increase in women’s opportunities. And even if the women earn less than the men, if they earn more than women with similar skills who do not get wage jobs, we still consider them better off.

This approach does not mean we are endorsing discrimination. Rather we are recognising that low-income countries not only are women poor, they have fewer public and private resources and capacities which can be used to bring about economic and social transformation and address problems of gender equity. Thus, gender equity, just like economic transformation, is a long-term process. Policy needs to be directed at improving opportunities for all within the transformation process, given the current institutions and capabilities available for the task. In the final section of the paper, we offer some comments on what this might involve. Without increased resources, public institutions that perform essential functions such as the protection of human rights are unlikely to be improved, while increased opportunities may increase demand for more equitable institutions. This is what happened in developed countries, and it has resulted in reduced gender discrimination and inequality (Doepke et al., 2012).

3. WOMEN IN MARKET WORK

The economic role most widely analysed by economists is women's participation in the labour force, in so-called *market work*. Market work includes any activity that generates actual or imputed income, monetary or in kind, formal or informal. Income is defined according to the guidelines of the System of National Accounts and includes subsistence production for the household but not caring for members of the household (e.g. most household chores).⁶ Market work does not include activities that are performed against the will of the worker (slavery or other forms of forced labour).

A job also confers more than an income. It develops a person's sense of identity, status, self-confidence, connections to others in the community, and overall satisfaction with life (World Bank, 2012). The distribution of jobs within society and the perceptions about who has access to opportunities, and why, often shapes young people's expectations and aspirations for the future, their sense of having a stake in society, and their perceptions of fairness. These considerations are especially important for young females transitioning to work, who tend to lack the opportunities, confidence and resources available to males. We pick up this point in section 6.

Strong gender divisions have been observed, across countries and time, in the amount of time men and devote to market work and in the nature of that work. In general, females participate less than males at any age past about age 20 because females need to leave the labour force to bear children and take care of them (World Bank, 2015).⁷ Females' traditional responsibilities in the care economy mean that they tend to have fewer hours available for market work. They often need to work part-time in order to juggle the responsibilities of market work and household work.

Males and females tend to work in different jobs – this is known as occupational segregation. There are several reasons for this. First, jobs requiring intense physical labour tend to be filled by men. Second, as noted above, females' need for flexible hours means they are more likely to end up in the informal economy, where either they are self-employed or they do piecework at home. Third, jobs requiring a high level of education, especially technical education, tend to be filled by men because women may not have had the chance to learn the relevant skills in school. Finally, there are strong norms and traditions around certain jobs and certain sectors, which, once established, can be very slow to change. For example, women's smaller hands are often seen as a benefit for work in electronics or textile factories but not in small appliance repair or in auto assembly, where men dominate the workforce.⁸ Once established occupational segregation is quite persistent (World Bank, 2011).

Using data from the United Nations Industrial Development Organization (UNIDO) database, Do et al. (2011) classified tradable manufacturing sectors by the share of women working in the sector (their sample was half developing countries and half Organisation for Economic Co-operation and Development (OECD) countries). In their data, women occupied 27% of all manufacturing jobs. But in the garment sector, women held 71% of total employment, and in other textile-related

⁶ See <http://unstats.un.org/unsd/nationalaccount/sna.asp>

⁷ In some countries, females enter the labour force earlier than males because they drop out of school earlier, so between the ages of 15 and 19 their LFPR may be slightly higher; see World Bank, (2015a).

⁸ See Oostendorp (2009) for a discussion of the role of occupational segregation vs within occupation wage gaps in explaining overall male–female wage gaps.

sectors (spinning, weaving, knitting, footwear) women were also over-represented, as they were in electronics manufacturing. But in sectors such as vehicle assembly, iron, steel and other metal casting and processing, and machinery of various types, females were under-represented. For example, in the motor vehicle sector, females occupied 9% of the jobs. Likewise, Klasen and Pieters (2015) tabulated the distribution of females across sectors in India – controlling for education – and found a surprising consistency between 1987 and 2011. Almost 50% of educated females worked in the education or health sectors, while few females of any education level worked in construction, utilities, transport, communication or financial services. In the case of women with low education, the share working in agriculture dropped in favour of working in textile factories and domestic services. Over the same period, the female labour force participation rate (FLFPR) at prime working age (25-54) was unchanged in urban areas but dropped from 57% to 44% in rural areas, as the share working in agriculture fell.⁹

Informal sector activities tend to be segregated as well (Filmer and Fox, 2014), and female dominated sectors such as sewing and beauty salons show lower average earnings. Studies have shown that women are unaware of these differences (Hicks et al., 2015; Alibhai, et al., 2015). This segregation is enforced by systems of traditional apprenticeship, where master craftsman are reluctant to accept female apprentices and in any case, the environment is usually not welcoming. When women do crossover to male dominated sectors, it is because of the support of an important male in their lives – father, husband, brother, etc. (Alibhai, et al., 2015)

Not only do occupations tend to be segregated, firms often have a majority of male or female workers, and even within firms, genders are segregated in their jobs (a form of within-firm occupational segregation). Amuedo-Dorantes and De la Rica (2005) found that in Spain, this within-firm segregation was an important factor in accounting for gender wage gaps. They also found that the segregation by sector of activity, occupation, and firm increased between 1995 and 2002 in Spain, even as women increased their overall share of employment. This shows the persistence of these gender norms in the workplace.

3.1 Expansion of employment and productivity in non-agricultural sectors

This segregation of jobs means that economic transformation, by expanding opportunities in non-agricultural sectors, could benefit men and women differently, depending on which sectors employment expands in (Table 1). Early development of manufacturing in Asia expanded the garment sector, a female dominated one; food processing, a sector that is not particularly female dominated but includes females in some jobs; and metal work and small machinery, which historically has employed few women (Do et al., 2011). Increased income associated with economic transformation also increases demand for labour in construction, another sector where females tend to be excluded (except in rural, seasonal public works schemes). Thus, expansion of employment and value added in more productive sectors does not automatically increase the demand for female labour; the extent of opportunities for women will be context specific. For example, Asian countries have expanded manufacturing in the textile sector, providing opportunities for female wage employment, while in sub-Saharan Africa (SSA) the food and agricultural processing and building materials sectors have dominated manufacturing expansion, providing fewer female wage employment opportunities. Expansion of employment in publicly supplied services such as education and health does tend to increase opportunities for females.

⁹ Klasen and Pieters (2015), Table 1, part-time and full-time workers. Some have attributed this drop in FLFP to occupational segregation and female gender norms regarding mobility, resulting in a lack of opportunities for women in rural India.

Table 1: Market work

Outcomes: conditions of employment and hourly earnings

<i>Economic transformation outcome</i>	<i>Possible effects on females</i>	<i>Expected direction of net impact on females' opportunities</i>
Structural change (shifts of output and employment)		
Expansion of employment in tradable products and services	<ul style="list-style-type: none"> • Increase in tradable light manufacturing employment may favour females • Increase in food processing employment does not favour females • Increase in tradable services generally does not favour females because of skill gap, but will favour educated females 	<ul style="list-style-type: none"> • Positive in earnings, hours worked, possibly in job security Possible spillover effects on female labour force participation (FLFP) throughout the economy where FLFP is low
Expansion of employment in non-tradables	<ul style="list-style-type: none"> • Construction sector has low female participation • Publicly supplied services tend to employ females; privately supplied services in enterprises tend not to employ females, but females are active in informal services 	Unclear. Could be positive if females earn higher incomes in informal services; occupational segregation could reduce gains
Within-sector productivity gains		
Increase in non-agricultural sector productivity	<ul style="list-style-type: none"> • If skill-driven it will widen male–female earnings gap • If competition-driven it could lower male–female wage gap at lower skill levels 	Unclear. Depends on the skill bias of the technological change
Increase in agricultural sector productivity	<ul style="list-style-type: none"> • Males tend to be more active in export/commercial agriculture so more likely to benefit • Productivity enhancing interventions such as extension services, inputs provision, irrigation investments and contract growing schemes, tend to exclude females • If males leave agriculture entirely, females might benefit through access to better land, technology, if complementary policies in place 	Negative or neutral. Probably widens gender earnings gap unless complementary policies are undertaken to include females
Economy-wide effects		
Increase in wage labour demand and in wage earnings	<ul style="list-style-type: none"> • Increase in FLFPR owing to increased demand for female labour and/or higher wages • Increased female participation wage labour jobs • Household income effect could reduce FLFP 	<p>Positive</p> <ul style="list-style-type: none"> • In regions with low baseline FLFP (e.g. South Asia), should be positive • In regions with low female participation in wage labour, should be positive • Higher income brings more choice, more ability to cope with risk
Increase in urban labour demand	<ul style="list-style-type: none"> • Increase in rural-urban migration of families or of individuals 	Unclear. Depends on who migrates – the males? the females? as families?

Evidence suggest that where women can access these jobs, wage employment in modern enterprises tends to provide higher and more secure earning opportunities. In the case of Bangladesh, Cambodia and some African countries (Lesotho, Madagascar), the development of the garment manufacturing sector brought women into wage employment in droves, with strong income benefits for their families. In Bangladesh, Heath and Mobarak (2014) not only found that FLFP increased because of the large number of women working in the garment industry; they found spillover benefits to whole villages located near garment manufacturing, as females in these villages were more likely to look for and find employment outside the home. This suggest that economic transformation helped to change gender norms around economic activity.

If employment expansion favours higher-skilled jobs, females may lose out. Artecona and Cunningham (2002) analyse job creation and the male–female wage gap in Mexico after the North American Free Trade Agreement (NAFTA). They found that the newly created jobs tended to be more skill intensive, and women could not compete for these jobs. Because the skill premium also went up, the average male–female wage gap widened. In general, female participation tends to be highest in the low-skill sectors (which are mostly informal in low-income countries) and lowest in the high-skill sectors.

Economic transformation may also increase productivity in service sectors where women work, bringing higher earnings. The effects on women’s welfare and on gender inequality depend on which forces increase the productivity. If for example, service sector productivity increases through more supermarkets and fewer informal markets, women – who in some countries are the majority of the retail traders of small perishable items – might lose out. But if productivity increases happen through expansion of more productive firms and contraction of less productive ones within the same sector, women could gain through higher wages. Artecona and Cunningham (2002) found this effect in the manufacturing sector in Mexico, where controlling for skills (education and experience) the wage gap between men and women declined owing to increased competition.

3.2 Productivity increase in the agricultural sector

In agriculture (compared to services and industry), there is a higher probability that processes that increase productivity may leave female farmers behind. There are several reasons for this. First, extensive research has shown that females are at a disadvantage in agricultural production relative to men. Women are less likely to have access or clear ownership/use rights to land (World Bank, 2011). As a result, their plots tend to be smaller and of lower quality. When new technology comes into the agricultural sector, men tend to monopolise it (Doss, 2013). Extensive analysis in SSA has shown that women have lower yields per acre and lower earnings per hour worked, both because they use fewer inputs and because those inputs do not tend to bring the same returns as they do for men (World Bank, 2014b). They are less likely to have access to farm machinery or livestock for land preparation and harvesting. In some countries, crops are designated as those grown by men or those grown by women. Those grown by men tend to be the higher value ones. Females are also less likely to get credit, and less likely to receive productive inputs and extension services from either government or private providers. As a result, females tend to earn less from agriculture (World Bank, 2011, 2012, 2014b).

Commercialization through development of high value agricultural exports may not help women. Contract buyers, who often bring the modern inputs and credit, prefer to sign up male farmers over female farmers (World Bank, 2011). For example, in the French bean export sector in Senegal, only 1 in out of 59 contracted bean farmers is a women. Women can’t compete for the contracts there because (i) they rarely control the land, and (ii) they lack access to the irrigation

infrastructure (Maertens and Swinnen, 2013). The development of large commercial farms offering wage employment may offer more benefits to women. In general, agricultural wage labour is a difficult job offering low pay. However, research by Maertens and Swinnen (2013) showed that women's earnings in Senegal have increased through the expansion of large commercial horticulture farms. This contrasts with the tendency of commercialisation through contract farming to bypass women.

Livestock development, an important path to raising productivity and earnings on the farm, is often closed off to women. A project to develop the dairy sector in Mozambique provided a dairy cow to the household. Although it was supposed to be owned jointly (and women did most of the work needed to maintain the cow), both men and women reported that the disposition of the assets (cow and calves) as well as the income from production was primarily controlled by male heads of household (Johnson et al. 2015). Indeed, the tradition in Mozambique that livestock belongs to the male where there is a male head limited the participation of females in the project. But in Bangladesh, where rearing dairy cows is a traditional and respectable occupation for women, a dairy development project was successful in raising women's earnings and building assets (Johnson, 2015).

Thus, while improvements in agricultural productivity support growth and transformation in a variety of important ways, the traditional practices and institutions in the sector may prevent female farmers from increasing their own earnings during this process. Indeed, it is possible that the male–female earnings and productivity gaps in this sector could widen, depending on the nature of the production change that delivers the productivity increase.

3.3 Increased household incomes and demand for labour in all sectors

Aside from the productivity-enhancing effects, economic transformation is desirable because it brings broad-based growth in value added (even in sectors where productivity is stagnant), and normally results in higher household incomes across the board. By creating more modern enterprises in all sectors, it creates more wage jobs. Owing to their generally higher earnings and security, wage jobs are preferred by many labour force participants. Will these broad, economy-wide trends increase opportunities for women to participate in market work and to secure wage jobs? A priori, the answer is unclear. For households, there is both an income effect and a price effect. The price effect occurs because there are more opportunities for men and women to engage in market work, and the returns to market work (earnings) should be higher for both. As noted above, this may encourage women to work more. Evidence seems to indicate that in Bangladesh, where the FLFPR has been traditionally low, especially for work outside the home, economic transformation did increase FLFP.

However, it is possible that increased household earnings from male work may induce women to work less, especially if their opportunities are limited. While income-earning opportunities outside the home bring increased income to females – which may increase bargaining power in the household as well as enhanced social networks and information – if these opportunities are in dangerous or unpleasant jobs, women may shun them. As noted above, Klasen and Pieters (2015) as well as Jacoby and Dasgupta (2015) found that in rural areas of India, where poorer women tend to work as low paid wage labour, FLFP fell as households got richer.¹⁰ Kotsadam and Tolonen (2013) found the same result when mines opened up in rural Africa: with an

¹⁰ As noted, norms and customs may influence whether women take up opportunities to work outside the home. In rural India, it is possible that cultural norms inhibited women from seeking other income-earning options.

increased male income from mine work, some women left their work in agriculture and left the labour force entirely. However, other women started an informal service business or went to work as wage labour in other businesses serving the mines. Thus both the income effect and the price effect were in play. Interestingly, in the mine example, the effect on women's participation in non-agricultural work was long lasting as it persisted even after a mine closure, suggesting the importance of a demonstration effect in changing long-standing gender norms and patterns of work behaviour.

Most new jobs created through an economic transformation process are expected to be in urban areas, owing to tendencies to cluster and economies of agglomeration in export manufacturing and services. This often leads to an increase in rural-urban migration, as new job opportunities pull the labour force and sometimes their households to the city. This migration might be gender biased, or it may be undertaken by whole households. For example, in Lesotho, the expansion of the garment industry pulled women (and often their children) from rural areas to the capital city to work. Husbands, brothers and the rest of the extended family stayed back in rural villages. In China, economic transformation initially pulled males from rural areas and the interior of China to large urban areas to work. Their wives and children remained behind in rural areas, in part because of China's strict controls on residency known as the *hukou* system. Eventually, younger women began to migrate as well, in response to ever increasing opportunities for wage income. For the older women who stayed behind, both the nature and amount of agricultural work changed permanently (Mu and van de Walle 2011). When the migration is disproportionately male, women's earnings in rural areas may suffer owing to a lack of labour for agriculture, or male earnings may support investments in labour-saving technology. If whole families migrate (even if in stages) the chances of new and better opportunities for market work for women may be higher.

Finally, the creation of new productive enterprises is a key process for economic transformation. Historically, few women have seized these opportunities and created their own firms (World Bank, 2011). One reason has been lack of funds, including access to credit, where women tend to face a number of obstacles. Legal obstacles are also common. These include the inability of a married woman to sign a contract, open a bank account, pledge her own property as collateral, or engage in a number of other transactions without the consent and signature of her husband (World Bank, 2014b). Limited networks may inhibit women from acquiring the information they need to identify opportunities and access markets. For all these reasons, it is likely to be some time before women in low-income countries benefit as entrepreneurs or even managers of new, modern firms. Economic empowerment programmes targeted at barriers to female entrepreneurs may be effective; see King et al. (2012) for a discussion with respect to small and medium enterprises.

In sum, depending on the starting point of the economy and the women within it, as well as the path that the economic transformation takes, women could benefit as much as or more than men, or less. Younger and more educated women and men are more likely to benefit – and this may itself lead to reductions in the education and skills gap between men and women (see below, especially section 5). As long as the income in a woman's household increases, her absolute welfare should improve even if her own earnings do not increase. Qualitative research has shown this to be the case (Johnson et al. 2015). But to what extent depends on the intrahousehold decision-making. If women value time – for household work or leisure – more than earnings, economic transformation may bring increased welfare in the form of *less market work*. However, to the extent that participation in market work and the earnings it brings affects women's power and agency within the household and the community, being unable to benefit personally may be a negative factor (discussed more extensively below). Strategies for economic transformation need to be cognizant of the existing gender differences in employment and earnings patterns, and monitor and evaluate results in a gender specific way. Where gender specific changes are

observed (e.g. women work outside the home more or less), the reasons why this is taking place need to be analysed – is the pull of new opportunities causing women to do more market work or have men lost out on the new jobs being created? Are opportunities for market work for women outside the home limited, and therefore as household incomes increase women are declining jobs with low pay and poor working conditions because their husbands are making more money so they can afford to work less in these difficult jobs? Would women work more hours if opportunities were more widely available, or is the burden of household chores too high? We now turn to discussion of this latter point in the context of transformation in the next section.

4. WOMEN AND THE CARE ECONOMY

Cultural norms (and the preferences they generate) dictate that in low-income countries women have a major economic role (at least by time use) working in the care economy, meaning housework and care activities such as cooking, cleaning and childrearing. Activities under this heading include:

- Collecting water and fuel (wood or dung) for the household (including travel and waiting time) – considered an economic activity in national accounts, but as unpaid labour widely viewed as a household chore, primarily performed by women and their children living at home;
- Food preparation, including shopping for purchased food or collecting food from the family stock; chopping wood and tending the fire; cleaning, processing, and cooking the food; and serving the food and clean-up afterwards;
- Cleaning the house and surroundings; minor repairs of household items or housing;
- Physical care of dependent household members, including children and sick or disabled members;
- Supervising children, including training, teaching, or helping with homework; and
- Accessing services, such as education and health care facilities or going to post offices or other government offices, either alone or with household members needing services, including travel and wait times.

Participation in these activities starts early. Data from Tanzania show that both male and female children age 5-9 spend 1 hour a day or more (girls spend on average 1 hour 20 minutes) on these tasks, 7 days a week. Females age 10-14 spend on average 2 hours 25 minutes a day on these activities.¹¹

When this work is combined with market work, time use studies (studies that track a person's daily activities) show that women have less leisure time than men – all over the world, in both rich and in poor countries (Berniell and Sánchez-Páramo, 2011, cited in World Bank, 2011). This is especially the case when children are young. In Tanzania, women aged 15-34 spend on average 5 hours a day in these household chores; the amount declines a bit as they enter their forties, because the childcare work load diminishes and the oldest children start picking up the burden. In Benin, women spend 23 hours a month just fetching water; in Madagascar the estimate is 14 hours a month. (Blackden et al. 2006). In rural Kenya, women devote 4 hours a week to collecting water and another 2.7 hours a week to collecting wood, and then they perform the other activities necessary to keep the household going (Agénor, et. al., 2012). A significant portion of the time spent is in travel time, including transporting heavy burdens of food, water, or wood back to the household.

When care economy activities are time consuming, women who want to participate in the labour force may not be able to because they cannot find jobs or activities flexible enough that they can also undertake the care activities. This does not only happen when there are young children at home; rigid schedules of market work may preclude for example supervising older children after school, or taking them to the clinic when they get sick. In addition, if public services are inefficient and/or time rationed – if for example there are long lines at the health clinic, or a bus ride is

¹¹ Author's calculations from the Tanzania 2014 Labor Force Survey.

necessary to pay school fees or utilities – women may be precluded from entering the labour force or may have to accept less remunerative home-based work.

Even when women do start their own business, the burden of caring for family members can intrude on profitability and success. In rural Mozambique, over half of female heads of households reported that they closed their self-employment business owing to illness or death of a family member, but less than 20% of male headed household reported the same problem (Fox and Sohnesen 2013). Male heads reported business-related reasons they closed their business related reasons – profitability, competition, access to markets.

Time use studies do show that economic development tends to be associated with increased efficiency in the care economy. As countries become richer, infrastructure investments such as piped water, improved roads, and expansion of the electrical grid reduce the time burden of these activities. Higher incomes allow the purchase and use of time-saving appliances and the purchase of processed food; households become smaller; and households may have a choice of services and can choose those that do not have such long lines or inflexible hours. Studies conducted in 2011 showed that in Pakistan, housework and childcare done by both males and females took up about 9.5 hours out of a 24-hour day, while in Sweden the same work only took up 6.5 hours. Most of the difference was in time spent by women doing housework. Men in Pakistan and Sweden both reported spending about 2.3-2.5 hours per day on household tasks, but women in Pakistan spent 5.5 hours compared with women in Sweden who spent 3.2 hours (World Bank, 2011). This difference is one reason why females participate more in market work in Sweden than in Pakistan; another reason is of course employer accommodations for working parents, producing less rigid market work schedules.

Economic transformation can affect how much time female adults and adolescents spend on household nonmarket activities, both by increasing opportunities for market work – thus raising the opportunity cost of non-market work – and by encouraging efficiency within the care economy. Owing to the income effect, we expect that economic transformation will reduce the time burden of the care economy by making time-saving goods and services affordable, benefiting women by increasing opportunities for outside work leisure (Table 2). Changing the way housework and child care is done will mean a change in traditions and customs; it is not just a simple matter of more capital in the household. The higher the demand for female labour – and the higher female earnings relative to work in alternative sectors such as agriculture, for example, where care and market work are more complementary – the more pressures there will be for efficiencies in this sector. Likewise, increased market work opportunities for women are expected to lead to lower fertility as the cost of early and frequent pregnancy goes up. Fewer children means less time devoted to childcare and for a shorter period of the life cycle devoted to child care. In Bangladesh, the explosion in demand for female labour in the garment sector led to an increase in the age of marriage and first childbirth, which also led to health gains for women (Heath and Mobarak, 2014).

Mothers and other older female relatives have always helped younger adult women cope with the demands of the care economy while undertaking market work (Glick, 2002), especially during periods of economic transformation. For example, in China, as women moved to urban areas to join their husbands in factory work, they often left their children in the rural areas with the children's grandparents. These arrangements could last until the children were fully grown. In Bangladesh, some women working in the garment factory leave their children behind in the village with relatives, sending money home, while others migrate with their husbands to the city to work,

leaving the intergenerational support system behind.¹² In situations where the increased demand for labour in urban areas is met by males migrating and leaving their wives and families behind in rural areas to farm, women can be disadvantaged by not having the male labour needed for farm work and for household chores.

Table 2: Care economy and children

<i>Economic transformation outcome</i>	<i>Possible effects on females</i>	<i>Expected direction of net impact on females' opportunities</i>
Care economy outcomes: time use (housework and leisure)		
Availability, affordability of labour-saving products and appliances	More efficient care economy, more time for leisure or market work	Positive
Lower fertility owing to higher LFPR, higher earnings	Positive health effects, reduced burden of childcare	Positive
More female market work without reduced care economy work	Increased 'time poverty'	Negative , but depends on response of household; income controlled by women may lead to the purchase of more care services
Higher level of public resources brings better and more accessible public services	More efficient care economy	Positive
If men migrate, lack of male labour	More time needed for housework	Negative
Children/adolescent outcomes: human capital development		
Increased household incomes	More nutrition, more health and education, more connectivity and stimulation, less trauma, etc.	Positive , but extent depends on intrahousehold allocation of resources, bargaining power
Increased female cash earnings	Increased spending on children (of both genders)	Positive
Increased returns to female market work	<ul style="list-style-type: none"> • Higher parent's demand for female education • Lower demand for early marriage, later childbirth lower TFR (produces better health for females) 	Positive
More market work by females leaves less time for care economy work	<ul style="list-style-type: none"> • Reduced health outcomes (fewer medical visits for preventative and curative care owing to time poverty) • More care responsibilities shifted to female children/adolescents, reducing time for skill development 	Negative (strength unclear)

¹² While there is no hard data on what arrangements women working in the garment industry have made for childcare, news articles have provided descriptive evidence on their lives. See for example <http://pulitzercenter.org/reporting/asia-bangladesh-dhaka-garment-factories-women-independence>

In some cases, employers who want female workers make the accommodations necessary for women to manage market work and household chores. This includes building nurseries, schools, or other types of facilities for dependent children at or near the workplace. Pre-employment training programs can include child care arrangements as well (World Bank, 2014a). In other cases women themselves organize these arrangements. In Senegal, women working on a horticulture plantation and packaging operation organized their own child care program, with each woman taking a turn at watching the children of the group (Maertens and Swinnen 2008). Similarly, an Oxfam rural enterprise project discovered that they needed to solve the childcare problem in order to include women in the project (Baden 2013).

5. INTERGENERATIONAL EFFECTS

Changes in women's time use and the earnings of the household both can affect the welfare of children, and there may be gender differences as well. By bringing about a permanent change in both income and opportunities for women, economic transformation should improve development of human capital in the next generation (Table 2). Poverty has negative effects on children's human capital development, so increased income should improve both male and female children's welfare in households where income gains occur. But which children benefit depends on how decisions are made within the household, including traditions and parents' knowledge. Duflo (2011) notes several cases where negative income shocks are more detrimental to girls than boys. But what about the positive income shocks economic transformation can bring? The answer is unclear. In situations where females do not have much input into household decisions because they lack bargaining power, improvements may not take place or may not be the same for boys and girls. For example, increased incomes in India have not led to expected gains in nutrition for females or children (Deaton and Drèze, 2009).

Studies have shown that increases in income controlled by women (earned themselves, by their husbands, or unearned) lead to increased household spending on children (World Bank, 2011). Indeed, this gender effect is now a widely accepted truism (World Bank, 2014a). Yet context clearly matters. In India, Afridi et al. (2011) find that participation of mothers in the National Rural Employment Guarantee Scheme (NREGS), a public works program, is associated with better educational outcomes for their children, while fathers' participation in NREGS has a negative effect on children's education. Maertens and Verhofstadt (2013) found a positive result in Senegal for women earning wages in the horticulture industry. However, in Burkina Faso and Morocco, researchers evaluating an unconditional cash transfer programme did not find a strong gender effect in propensity to spend on children. Where the transfer was conditional on health or education outputs for children, there was no strong gender effect either – both fathers and mothers receiving the transfer were more likely to send their children (male and female) to school or to the health clinic. Duflo (2011) reports that in South Africa, when a man in the household is receiving a pension, adolescents are more likely to be in school compared with households where there is no pensioner or where there is a female receiving the pension. But when women receive other types of transfer income, giving money to women helps girls attend school.

As noted above, increased FLFP is associated with lower fertility, as is urbanisation. Lower fertility leads to both better health for mothers and better outcomes for children (Buvinic et al., 2009). Research suggest that in some situations, the relationship between FLFP and fertility goes both ways, meaning that it is lower fertility that leads to FLFP. This issue has been studied intensively in Bangladesh, a country where the demand for female labour went way up when the garment industry bloomed; there, increased FLFP has been shown to result in later marriage and childbirth (Heath and Mobarak, 2014).

Increased opportunities for females has also been shown to increase parents' willingness to send girls to school. In Bangladesh, the arrival of the garment industry resulted in an increase in parents willingness to send both boys and girls to school (an income effect), but it also reduced the gender gap in educational attainment (increased returns to female education). Likewise in India, parent's exposure to call centre employment opportunities for girls increased educational attainment and delayed marriage and childbirth (Jensen, 2010). It also decreased female malnutrition rates.

It is possible that increased hours of market work by mothers, in the face of inflexible schedules for wage work in enterprises and the high demand of the care economy in low-income countries, could result in less parenting time for children, with negative effects on human capital development. Or it could produce a knock-on effect on the time use of adolescent females in the family, as they would be required to do more household chores and childcare. In Colombia, in years of a good harvest, increased seasonal employment and hours worked by mothers produced lower child immunisation rates because mothers no longer had time to bring their children to clinics (Miller and Piedad Urdinola, 2010). One reason for the drop is that this activity took a whole day, as mothers and their children using public clinics had to wait a long time to be seen. Glick (2002) finds that when women are engaged in very low paid activities, children's nutrition declines because the income effect is not strong enough to allow the household to purchase more nutritious food. This effect is strongest for children below the age of one, where breastfeeding is important but may not happen.

The evidence is unclear on whether there are negative effects of an increased household workload on children, especially young females, when mothers work. In summarising a number of studies in low- and-middle income countries, Glick (2002) notes the following:

- When mothers work, the household chores and childcare responsibilities of the adolescents in the family tend to go up, especially if there are no other adults to help.
- In the poorest households, where women earn very low wages, adolescent girls (but not boys) are less likely to go to school when mothers work, indicating that income effect is not strong enough, but this result does not hold up when women make more money and households are not as poor.
- There is some evidence that adolescents have weaker parenting skills than adults.
- However, no negative effects of adolescent childcare on children's health or nutrition have been found.

As noted above, households have many ways of coping with the burdens of the care economy, and more income certainly helps. Glick (2002) cites a study of middle-class mothers in Nigeria who went to work during the oil boom; the effect on girls' education was positive, and households used the increased income to purchase more processed foods and personal services (such as house cleaning and childcare). Other factors are clearly at play. In Mexico, research showed that when women had more control over resources (any resources), their daughters worked fewer hours in household tasks (World Bank, 2011). Once again, the issue of intrahousehold decision-making, which is definitely heterogeneous both between and within countries, emerges.

6. INDIVIDUAL AND SOCIAL OUTCOMES FOR WOMEN

Economic changes can lead to political, social and legal changes in the status of women. Being empowered – that is being ‘able to make effective choices, and transform those choices into outcomes’ (World Bank, 2012, p. 150) – is a desirable outcome itself for both men and women. It is essential to Sen’s (1999) formalisation of economic development. Doepke et al. (2012) note that in today’s developed countries, women had few rights before economic development took off. But when they gained rights, the nature of the political bargain changed. Female collective action produced more public provision of schools and health care, as well as more employment protection legislation (Doepke et al., 2012; World Bank, 2011).

Some scholars attribute the association between economic development and women’s rights and empowerment to technological change, which has increased demand for female labour and also increased men’s support for women’s rights as ‘the cost of patriarchy rose’ (Doepke et al., 2012). To the extent that this hypothesis is true, we should expect that economic transformation will contribute to these aspects of development in low-income countries (Table 3). Increased women’s income (earnings or transfers) has been shown to increase household purchases of private goods preferred by women, independent of any price effect. By increasing demand for female labour and female earnings, economic transformation could change societies’ view of women’s opportunities, increasing women’s self-confidence and aspirations. As noted above, increased female earnings could also change the power balance in the household, giving women more control over resources and voice in decisions. For example, studies have shown that increased bargaining power has improved women’s health outcomes (Doss, 2013). Finally, studies have correlated having a job with civic engagement, and losing a job with depression and withdrawal from society, friends, networks and even family (World Bank, 2012).

In terms of women as consumers, economic transformation could also help women through a price effect – the relative price of ‘women’s goods’ such as processed food (which saves time) or manufactured products preferred by women (such as clothes or cosmetics) could go down. Once again, the size of this consumption effect would depend on the extent of autonomy women have in household expenditure decisions.

Table 3: Individuals (as consumers, citizens, adults)

Outcomes: Power, agency, mental health, purchasing power, participation in civic affairs

<i>Economic transformation outcome</i>	<i>Possible effects on females</i>	<i>Expected direction of net impact on females' opportunities</i>
Manufactured goods become cheaper as do not need to be imported	Price of 'female' personal and household goods goes down	Positive
Increased demand for female labour	More choices of activities	Positive. Larger networks, better access to information and possibly better bargaining power for females
Increased female cash earnings	<ul style="list-style-type: none"> • May increase self-confidence, power and agency within household and community; may increase bargaining power • May increase health outcomes • May increase civic participation 	Positive
Increased FLFP	<ul style="list-style-type: none"> • Females' rights valued more • More autonomy • May increase gender-based violence 	Mostly positive, but if women are not safe inside or outside the home, highly negative. Requires complimentary policies.

Studies in low-income countries have not established these relationships between increased income, bargaining power, and legal and social status.¹³ In Bangladesh, Anderson and Eswaran (2009) measure 'women's autonomy' by how many expenditure decisions are made jointly. Using cross-sectional data, they find that when women are employed outside the household (e.g. wage employment) they have more autonomy than when their market work is undertaken within the confines of the family farm or household non-farm business.¹⁴ But Blattman et al. (2013), using an RCT (Randomised Control Trial) method, find that women who received training and cash to start a trading business – most did start the business – did not report more empowerment, as measured by involvement in household economic decision-making, independence, and attitudes in the village regarding women's status and rights. A dairy project in Bangladesh which targeted women increased women's jointly owned assets, but did not result an increase in their participation in decisions related to the cow or other dairy-related expenses. They reported that financial decisions remain the women's domain. (Johnson et al, 2015). Duflo (2011) points out that even in China, a country with a lot of economic transformation and high FLFP, and a low male–female earnings gap, the sex ratio at birth has steadily worsened since the 1970s. There are 'missing girls' because of both infanticide and sex-selective abortion. (Marcus and Harper 2014) cautiously conclude based on a review of the evidence that economic change bring wider opportunities for women is associated with norm changes regarding men's and women's economic activities and an acceptance of a greater equality in household decision-making but that much of the evidence comes South Asia (where the norms have historically been particularly

¹³ See Perezniето and Taylor (2014) for a review of when evaluations did and did not establish these relationships.

¹⁴ In this study, the authors try to control for the selectivity issue related to whether women work outside the house by using instruments for work activity and earned income such as covariate and idiosyncratic shocks. This is not a wholly satisfactory approach, however; the RCT results are more reliable.

strict) and is based on associations or quasi-experimental research; the processes are not well understood.

Rising incomes have not been shown to remove legal barriers to women's entrepreneurship and employment (World Bank, 2015b). While legal barriers have been found to be lower in developed countries, among developing and emerging market economies the extent of legal gender discrimination is not correlated with income. For example, a study by the World Bank showed that Malaysia has 50% more legal barriers than Morocco, while Tanzania has only one third of the barriers of Malaysia. In this case, economic transformation in Malaysia has not translated into reform of the state institutions towards improving the relationship between women and the law.

If women are to play a more important role in economic, political and social life, an important precondition is being safe from harm as they move about. Such safety needs to be guaranteed and enforced by the state. In its survey of legal restrictions on women's employment and economic empowerment, World Bank (2015b) reports that 46 out of 173 countries surveyed have no laws addressing domestic or gender-based violence (although in some of these countries, gender-based violence is prosecuted under gender criminal laws against assault, etc.). Many countries that have laws addressing domestic or gender-based violence fail to enforce them. As a result, women are often subjected to harassment in their places of employment and education as well as in public places such as markets, public transportation, etc.

The place where women most commonly experience violence is the home, from a relative or intimate partner (World Bank, 2015b). There is some evidence that for less educated, low status women, greater economic opportunities may increase their bargaining power enough to trigger a violent reaction from their husbands but not enough to allow them to find ways to resist or stop it. Heath (2012) reports that in peri-urban Dhaka she found a positive correlation between work and domestic violence, but this correlation is only present among women who have less education or who were younger at first marriage. In Africa, this correlation was not found among young females (married or single) who attended training courses and started working or changed jobs (World Bank, 2015a). These African women were a self-selected group, who generally fit the 'higher status' characterisation of Heath, however. Nonetheless, the dangers to women who are more visible at work and home cannot be understated, and they work as a strong brake on the benefits of economic transformation for women.

Duflo (2011) also concludes that rising incomes alone will not necessarily increase women's participation and agency in political life, using the example of public expenditure decisions. Her studies measured women's vs men's preferences on local economic infrastructure investments. She found for example that in West Bengal women wanted investments in drinking water while men wanted investments in irrigation. In areas where local authority positions were reserved for women, women were more likely to get the investments they preferred. She concludes that political power will not shift automatically with development; it needs affirmative action.

7. CONCLUSIONS AND POLICY OPTIONS

Development scholarship clearly indicates that economic changes have heterogeneous effects, including by gender. Heterogeneous effects are often unexpected and only discovered *ex post*. To the extent that more experiences and more scholarship expose these winners and losers and why they happen, policy design should be able to anticipate them and put in place compensatory policies. At the same time, experiences also reveal the importance of closely monitoring outcomes by gender in order to detect unanticipated negative effects early. This is especially true in the case of poor and vulnerable households, which have fewer ways to cope with unanticipated change.

This paper has proposed a number of areas where economic transformation may bring benefits to women, and areas where caution is warranted. The extent depends on the context – both the initial conditions for women and the nature of the transformation. Not all transformations will be the same. Already the transformation pattern in SSA seems to be different from those in East Asia, Latin America and developed countries. There is less industrialisation and less agricultural development but more service sector development. This suggests that early opportunities for women will be different. Perhaps less manufacturing, especially textile manufacturing, will bring fewer wage opportunities for women; this remains to be seen. At the same time, FLFP rates are already higher in SSA than in South Asia, where the gender aspects of industrialisation and transformation have received more attention.

Whatever the direction, the heterogeneity of outcomes has shown there is ample room for public policy to improve outcomes for women, supporting them in accessing the new opportunities that transformation brings. Policies and programs can be adopted to increase the potential for women to benefit from *new opportunities in the market economy*. While it does not make sense for governments to target industries for development based on whether they tend to employ males or females, being aware of these traditions might help in discussions with investors regarding supporting infrastructure. In some cases, the issue is to make sure that existing programs and investments are *gender-inclusive*. This includes making sure that females have access to education and training opportunities needed to compete for these opportunities. It is especially important to start addressing the gender gap in certain high-demand skills such as those in the Science, Technology, Engineering and Mathematics (STEM) group, as well as in employability skills. Efforts may be needed to provide women with information regarding plant openings and potential demand for labour. Where the public sector is funding (or partially funding) private training for entry level workers as part of an investment program to develop a new industry, paying training contractors based on gender-differentiated job placement targets may be appropriate (World Bank, 2015a).

In other cases, *gender-targeted approaches* may be necessary. An example of this would be creating programs just for women so that they have the social support to challenge gender norms in the workplace and economic life. An example is afterschool programs for adolescent females. These programs include a leader/mentor, and create a safe space for the females to discuss the hopes and aspirations and how they can realize them. Information about reproductive health is also provided. Such programs encourage adolescent females to stay in school and marry later (World Bank, 2015a). A gender-targeted dairy development program in Bangladesh found that the group approach to training was useful in building confidence and self-esteem in the female participants, again showing the importance of social support.

Changing gender norms around market work is easier said than done. In Kenya, an NGO offering vouchers for vocational training showed the female participants a presentation which informed them of the average income of people working in male dominated trades (such as construction or mechanics) and female dominated trades (such as sewing and baking). There was a large difference between the average earnings. After the presentation, the female participants indicated a desire to enrol in male dominated trades or ones split between males and females. However, the follow-up survey showed that this did not take place. In the end, the female participants stuck with the traditionally female trades (Hicks et al. 2015). Research in East Africa on why women stay in female-dominated sectors point to the lack of support from female role models in their lives to challenge the status quo (Alibhai, et al., 2015). Teachers in particular in Uganda were found to encourage adolescent females into female-dominated sectors.

Raising agricultural productivity is an important component of economic transformation, especially if this transformation is to be inclusive. In SSA, where labour productivity and land yields are lowest, research has demonstrated that a combination of norms, customs, property rights, lower education and the burden of the care economy, ensure that women are excluded. Livelihood programs that targeted poor women without assets in rural areas in South Asia were successful in breaking this cycle because they started by asking women what they needed, and provided social support throughout the initial two year period to help women maintain their livestock enterprise (Banerjee et al. 2015). Encouraging joint ownership of assets seems to matter. In their review of eight agricultural projects, Johnson et al. (2015) found that where women owned a larger share of household assets, they were more likely to participate and be successful in projects to promote off-farm livelihoods. Women also need to be actively invited to participate in the training/extension programs, indicating the importance of *developing a gender strategy during project design* (Johnson et al. 2015).

Policies and legal barriers which disadvantage women in economic life will also need to change. Legal barriers preventing women from owning property or accessing credit in their own name is one example. In rural areas, women need secure access to land, (or access to good quality land), in order to participate in programs and projects to raise agricultural productivity (Johnson et al 2015). World Bank (2015b) discusses how countries are changing their legal systems to improve opportunities for women in the labour force.

Prioritizing infrastructure investments which reduce the burden of household chores on women and their children can have large payoffs. In rural Peru, women who rely on firewood or charcoal as a source of energy allocated a smaller proportion of their time to self-employment activities and a larger proportion to housework compared to women who cooked with gas or electricity. Investments which reduce the burden of household chores can have a major growth impact, especially when the effect on human capital development of children is considered (Agénor, Canuto, et. al., 2012). In Ahmedabad, the slum upgrading project which provided a package of seven services to slum households, decreased the time needed for household chores and increased the amount of time women spent on productive activities by between *one and two hours per day*, and increased school attendance as well.

Strategies can increase *access to high-quality health services for women and children*. This includes reducing wait times which ration working women and their children out of care or add to women's 'time poverty'. Promoting female mobility by providing more transportation options that are safe for women, and by increasing overall safety in public areas as well as at home, will also help women benefit more from economic change.

Many of the policy measures needed to help women benefit from economic transformation are a standard part of low-income country development strategy (even if they are not being implemented very effectively). In some cases, the objective exists and programmes are in place, but they are not gender-sensitive (e.g. programmes to address the STEM skills deficit, or school-to-work transition programmes designed for and targeted to females).¹⁵ The contribution of adding a ‘gender in economic transformation’ lens to these issues is that the costs of *not* addressing them become clearer and are often found to be higher. For example, no Ministry of Health programme calls for having service points that treat women’s time as having little value. But weak implementation capacity means that this outcome happens. What the analysis presented here shows is that the *failure to address this problem* could have much bigger consequences when women are working outside the home and farm, which is especially tragic given the public good nature of immunisations, and the long-lasting effects of childhood illness and malnutrition.

Changing opportunities will mean *addressing rigid gender norms*. New opportunities will not be available to adolescent and adult females if they do not have the capability (power and agency) to take advantage of them. Experiments on how to empower women will be needed. For example, a pilot could be launched with an experimental evaluation to check whether targeting cash transfers to rural women changes their access to inputs and paid labour, raising their yields. Targeting adolescents and youth may be more effective (World Bank, 2015a). Engaging men in the dialogue is necessary.

Economic transformation strategies need to diagnose the current distribution of opportunities and constraints women face and monitor the gendered effects. This means analysing the gender roles within market systems – in both paid and unpaid work. It also means identifying gendered risks and vulnerabilities (such as lack of safety in public areas or the intrusion of the care economy into market work opportunities). While many countries now routinely produce employment data by gender, data on many of the other issues raised in this paper are not regularly collected. This includes data on time use, including travel time and wait times. Project design should be informed by this analysis, so these data are needed. Strategies to increase the voice of women in government decisions about expenditures such as infrastructure expansion may be needed, and gendered data collection can help here. Community scorecards and other measures to increase the accountability of public sector service providers will need to collect gender disaggregated data.

Economic analysis tends to assume that increased FLFP and increase female market work outside the home is normatively good.¹⁶ To the extent that development is about increasing opportunities and choices for all, this position cannot be justified. There are numerous examples where women’s reaction to higher male incomes was to leave the labour force – they voted with their feet. Other examples include rural women’s reaction to lower fertility: they did not spend more hours working outside the home, they took more leisure. The key point is that women’s welfare will not increase if they become even more ‘time poor’ through a combination of remunerative employment and work in the unpaid care economy; they will be better off if jobs that allow women to balance both roles will be valued, and if more or higher paid market work brings more equality at home.

¹⁵ Of course, causality could go both ways. Many of these programmes would contribute to advancing an economic transformation agenda as well (education, transportation).

¹⁶ For example, the World Bank’s gender section of its Country Policies and Institutional Assessment review gives countries more points for a high FLFP. Other gender equality indices such as Millennium Development Goals and Sustainable Development Goals do this as well.

Not only does the number of jobs created by sector during economic transformation need to be monitored, the quality needs to be monitored as well. Evidence suggests that having women work long hours in low paid jobs is usually not good for them or their families. In cases of extreme poverty, social protection programmes are called for, even in quite poor countries. Although most women working in the garment industry in low-income countries have stated that they are happy to have these jobs compared with the alternative of working in agriculture (often as very low wage labour), and overall, the net effect can be judged as positive for women's agency and opportunities, some negative health effects have been documented. These factories are rarely the model of worker health and safety.

Not surprisingly, women working in factory 'sweat shops' and doing factory piecework at home have a long (and painful) history of collective action in favour of employment protection legislation (Doepke et al., 2012). There is no question that too much employment protection too early in the transformation process can deter investment in labour intensive production, but too little can be harmful as well (World Bank, 2012). New evidence suggests that better working conditions is not just a question of legislation. The role of management understanding the trade-offs of working conditions and profits and productivity (including losses owing to an unhealthy workforce and/or high turnover caused by intolerable working conditions) is emerging as an important factor. In transforming economies, there may be scope for programmes to develop these management skills as a way of helping reduce the negative effects of economic transformation on all employees.

REFERENCES

- Afridi, F., Mukhopadhyay, A. and Sahoo, S. (2011) 'Female Labour Force Participation and Child Education in India: The Effect of the National Rural Employment Guarantee Scheme'. IZA Discussion Papers 6593. Institute for the Study of Labor (IZA).
- Agénor, Pierre-Richard, Otaviano Canuto, and others. (2012). "Access to Infrastructure and Women's Time Allocation: Evidence and a Framework for Policy Analysis." Policy Paper, no. 45. http://www.academia.edu/download/30369707/Agenor_OC_Infra_Gender_Growth-P45.pdf.
- Alibhai, Salman, Niklas Buehren, and Sreelakshmi Papineni. (2015). "Female Entrepreneurs Who Succeed in Male-Dominated Sectors in Ethiopia." The World Bank.
- Amuedo-Dorantes, Catalina, and Sara De la Rica. (2005). "The Impact of Gender Segregation on Male-Female Wage Differentials: Evidence from Matched Employer-Employee Data for Spain." http://papers.ssrn.com/sol3/papers.cfm?abstract_id=814505.
- Anderson, S. and Eswaran, M. (2009) 'What determines female autonomy? Evidence from Bangladesh', *Journal of Development Economics*, Elsevier, 90(2), pp. 179-191, November.
- Artecona, R. and Cunningham, W. (2002) 'Effects of Trade Liberalization on the Gender Wage Gap in Mexico'. Washington, DC: The World Bank.
- Baden, Sally. (2013). "Women's Collective Action: Unlocking the Potential of Agricultural Markets." Policy & Practice, March. <http://policy-practice.oxfam.org.uk/publications/womens-collective-action-unlocking-the-potential-of-agricultural-markets-276159>.
- Banerjee, Abhijit, Esther Duflo, Nathanael Goldberg, Dean Karlan, Robert Osei, William Parienté, Jeremy Shapiro, Bram Thuysbaert, and Christopher Udry. (2015). "A Multifaceted Program Causes Lasting Progress for the Very Poor: Evidence from Six Countries." *Science* 348 (6236): 1260799. doi:10.1126/science.1260799.
- Berniell, M. and Sánchez-Páramo, C. (2011) 'Overview of Time Use Data Used for the Analysis of Gender Differences in Time Use Patterns'. Background paper for the World Development Report 2012.
- Blackden, M., Canagarajah, S., Klasen, S. and Lawson, D. (2006) 'Gender and Growth in Sub-Saharan Africa Issues and Evidence'. UNU-WIDER Research Paper No. 2006/37.
- Blattman, C., Green, E., Annan, J. and Jamison, J. et al. (2013) 'Building Women's Economic and Social Empowerment through Enterprise: An Experimental Assessment of the Women's Income Generating Support (WINGS) Program in Uganda'. Innovations for Poverty Action. Washington, DC.
- Buvinic, M., Das Gupta, M. and Casabonne, U. (2009) 'Gender, Poverty and Demography: An Overview', *World Bank Economic Review*, World Bank Group, 23(3), pp. 347-369, November.
- Deaton, A. and Drèze, J. (2009) 'Food and Nutrition in India: Facts and Interpretations', *Economic and Political Weekly*, XLIV (7).
- Do, Q.-T., Levchenko, A. and Raddatz, C. (2011) 'Engendering Trade'. Policy Research Working Paper Series 5777. The World Bank.
- Doepke, M., Tertilt, M. and Voena, A. (2012) 'The Economics and Politics of Women's Rights', *Annual Review of Economics*, Annual Reviews, 4(1): pp. 339-372.

Doss, C. (2013) 'Intrahousehold Bargaining and Resource Allocation in Developing Countries'. Policy Research Working Paper Series 6337. The World Bank.

Duflo, E. (2011) 'Women's Empowerment and Economic Development'. NBER Working Papers 17702. National Bureau of Economic Research, Inc.

Filmer, D. and Fox, L. (2014) *Youth Employment in Sub-Saharan Africa*. Africa Development Series. Washington, DC: World Bank.

Fox, Louise and Sohnesen, Thomas Pave, (2013). "Household Enterprises in Mozambique: Key to Poverty Reduction but Not on the Development Agenda?" World Bank Policy Research Working Paper No. 6570. Available at SSRN: <http://ssrn.com/abstract=2310451> (Forthcoming, *Development Policy Review*).

Glick, P. (2002) 'Women's Employment and Its Relation to Children's Health and Schooling in Developing Countries: Conceptual Links, Empirical Evidence, and Policies'. Processed. Cornell University.

Heath, R. (2012) 'Women's access to labor market opportunities, control of household resources, and domestic violence'. Policy Research Working Paper Series 6149. The World Bank.

Heath, R. and Mobarak, A. M. (2014) 'Manufacturing Growth and the Lives of Bangladeshi Women'. IZA Discussion Papers 8483, Institute for the Study of Labor (IZA).

Hicks, Joan Hamory, CEGA Michael Kremer, Isaac Mbiti, and Edward Miguel. (2015). "Vocational Education in Kenya-A Randomized Evaluation." Accessed December 2. http://www.3ieimpact.org/media/filer_public/2015/07/21/qfr_ow164_vocational_education_in_kenya.pdf.

Jacoby, H. G. and Dasgupta, B. (2015) 'Changing Wage Structure in India in the Post-Reform Era: 1993-2011'. Policy Research Working Paper No. 7426, The World Bank.

Jensen, R. (2012) 'Do Labor Market Opportunities Affect Young Women's Work and Family Decisions? Experimental Evidence from India', *Quarterly Journal of Economics* 127(2): 535-586.

Johnson, Nancy L., Chiara Kovarik, Ruth Meinzen-Dick, Jemimah Njuki, and Agnes Quisumbing. (2015). "Gender, Assets, and Agricultural Development." IFPRI Discussion Paper 01436, April.

King, S., Sintés, H. and Alemu, M. (2012) 'Beyond participation: making enterprise development really work for women', *Gender & Development* 20(1): 129-144.

Kotsadam, A. and Tolonen, A. (2013) 'Mineral Mining and Female Employment'. OxCarre Working Papers 114. Oxford Centre for the Analysis of Resource Rich Economies, University of Oxford.

Klasen, S. and Pieters, J. (2015) 'What Explains the Stagnation of Female Labor Force Participation in Urban India?' Policy Research Working Paper Series 7222. The World Bank.

Maertens, M. and Swinnen, J. (2012) 'Gender and Modern Supply Chains in Developing Countries', *Journal of Development Studies*, Taylor & Francis Journals, 48(10): pp. 1412-1430, October.

Maertens, Miet, and Johan FM Swinnen. (2008). "Gender and Modern Supply Chains in Developing Countries." http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1360664.

Maertens, M. and Verhofstadt, E. (2013) 'Horticultural exports, female wage employment and primary school enrolment: Theory and evidence from Senegal', *Food Policy*, Elsevier, 43(C): pp. 118-131.

Marcus, Rachel, and Caroline Harper. (2014). "Gender Justice and Social Norms - Processes of Change for Adolescent Girls." Overseas Development Institute.

McMillan, M., Page, J. and te Velde, D. (2015) 'Supporting Economic Transformation'. Overseas Development Institute. Processed, August.

Milazzo, Annamaria, and Dominique Van De Walle. (2015). "Women Left behind ? Poverty and Headship in Africa." Policy Research Working Paper Series, June. <http://ideas.repec.org/p/wbk/wbrwps/7331.html>.

Miller, G. and Piedad Urdinola, B. (2010) 'Cyclical, Mortality, and the Value of Time: The Case of Coffee Price Fluctuations and Child Survival in Colombia', *The Journal of Political Economy* 118(1): 113-155.

Mu, Ren, and Dominique van de Walle. (2011). "Left behind to Farm? Women's Labor Re-Allocation in Rural China." *Labour Economics* 18 (December): S83–97. doi:10.1016/j.labeco.2011.01.009.

Oostendorp, Remco H. (2009). "Globalization and the Gender Wage Gap," *World Bank Economic Review*, World Bank Group, vol. 23(1), pages 141-161, January.

Pereznieto, P. and Taylor, G. (2014) 'A review of approaches and methods to measure economic empowerment of women and girls', *Gender & Development*, 22(2): 233-251.

Rodrik, D. (2013). 'Unconditional Convergence in Manufacturing' *The Quarterly Journal of Economics* 128 (1): 165-204.

Sen, A. (1999) *Development as Freedom* (1st ed.). New York: Oxford University Press.

Timmer, C. P. (2009) *A World without Agriculture*. Washington, DC: American Enterprise Institute.

UNU-WIDER (2014) 'Managing Structural Transformation: A Political Economy Approach'. WIDER Annual Lecture, Helsinki, Finland.

World Bank (2011) *The World Development Report 2012: Gender Equality and Development*. Washington, DC: World Bank.

World Bank (2012) *The World Development Report 2013: Jobs and Development*. Washington, DC: World Bank.

World Bank (2014a) *Social Safety Nets and Gender*. Washington, DC: World Bank.

World Bank (2014b) *Levelling the Field: Improving opportunities for Women Farmers in Africa*. Washington, DC: World Bank

World Bank (2015a) *The Spirit of Boldness: Lessons from The World Bank's Adolescent Girls Initiative*. Washington, DC: World Bank.

World Bank (2015b) *Women, Business, and the Law 2016*. Washington, DC: World Bank