Emigration, Finite Changes and Wage Inequality

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Abstract: Emigration leads to finite changes in structure of production and sectors vanish because they cannot pay higher wages. Does emigration of one type of labor hurt the other non-emigrating type in this set up? We demonstrate various scenarios when real incomes of the emigrating and the non-emigrating types do not move together. This generalizes some of the existing results in the literature. In particular, emigration can lead to a drastic change in the degree of inequality depending on which of the sectors survive in the post-emigration regime.

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1. Introduction

In recent years a body of literature has emerged analyzing the impact of international labor mobility on wage distribution in the source country.[1] In particular, this literature addresses the question how emigration of skilled and unskilled labor from low wage to high wage countries affects the degree of wage inequality in the low wage country. Marjit and Kar (2005) provide a simple model and derive an intuitively appealing condition under which wage distribution may go against the residual workers of the emigrating group. Using a specific factor model, this study shows that regardless of the emigrating category – skilled or unskilled – return to capital declines following emigration and subsequently raises the return for workers of the non-emigrating type.

Indeed, in some cases residual members of the non-emigrating factor may benefit more than the emigrating group affecting wage inequality in an unexpected manner. Thus, emigration of either skill type may unambiguously improve the relative wage of the non-emigrating workers. Several papers have recently extended this emigration-wage inequality link and provided valuable insights. For example, Oladi and Beladi (2007) introduce non-traded goods in connection with emigration of skilled and unskilled workers from a small open economy and evaluate its impact on both source and host countries. In particular, they show that immigration of both skilled and unskilled labor decreases skilled and unskilled real wages in the recipient country with wage gap widened (reduced) due to unskilled (skilled) immigration, if the non-traded sector is less capital intensive than the import competing sector. Individual wage implications are reversed for the source country with respect to both migrating types, but subject to the intensity assumption only one type would exacerbate the extent of

[1] Discussion on migration real wage linkage dates back considerably: Rivera-Batiz (1989), Quibria (1989) and Quibria and Rivera-Batiz (1989), etc. But, we study a phenomenon related to labor migration so far neglected.

inequality. In a related context, Beladi, Chaudhuri and Yabuuchi (2008) introduce unemployment of unskilled workers in a developing country and derive conditions under which inflow of skilled and unskilled workers may reduce wage inequality. However, it is not consistent with observed migration patterns where net outflow of either type is positive and large for developing countries. Except for refugee movements (primarily unskilled) and MNC or intergovernmental movements (mainly skilled) it is unlikely that such inflow is positive and would have much of an impact on wage gaps in poor countries. Empirically speaking, it has been recently shown in Mishra (2007) that emigration from Mexico to US over two census periods 1970 and 2000 display strong positive impact on Mexican wages along with rising wage inequality. Mckenzie and Rapoport (2007), however suggest inverted u-shaped relationship between emigration and inequality, such that communities with long history of migration face lower inequality in Mexico. On the other hand, Anwar (2006) shows that emigration of unskilled labor must increase wage inequality if the income share of capital in the industrial sector is larger than the service sector. Furthermore, in case of developed countries Oda and Stapp (2009) show that simultaneous inflow of skilled and unskilled labor and capital can cause wage inequality in favor of the skilled.

We offer a generalized model where many of these results should hold and hence help to synthesize issues related to emigration. In addition, we demonstrate that factor mobility can be critically responsible for 'finite changes' such that some sectors completely 'vanish' from the source country.

Between two alternative occupations a factor will always choose the one that promises higher rate of return. As factors of production are allowed free entry and exit in a global space the general lesson from trade theory suggests that the set of goods produced in a country may change along with that. In particular, given world prices certain production activities/services might turn out to be unprofitable for certain countries. Such 'finite' changes in trade theory do not receive much attention but surely opens up interesting possibilities. Jones (1996) and Findlay and Jones (2000) have considered implications of vanishing sectors in different contexts. Finite changes typically refer to circumstances when contraction of output is fairly drastic. There are general examples of finite changes resulting from major technological shifts or cost adjustments. The historic practice of writing long distance letters has been almost completely replaced by recent revolution in electronics, telecommunication and spread of internet facilities, with implications for specific industries/services. Similarly, kerosene, petroleum or even candles had high demands for lighting up households as substitutes for irregular supply of electricity even in developed cities of the South, until stable power grids supported by nuclear power plants started operating. Thus, kerosene/petroleum operated lanterns for example must have undergone 'finite' changes in production with rapid urbanization in the south and commensurate adequacy and regularity of supply of electricity.

In the present case, mobility of factors affect factor returns in such a way that production of certain commodities would no longer be viable. An example from the Indian tea industry demonstrates effect of domestic factor mobility. The tea industry in India depends heavily on garden laborers who develop a particular skill in plucking green leaves. Hand plucking of leaves have strong influence on quality and hence pricing of tea. However, in recent times higher industrial wages elsewhere have raised the opportunity cost of these workers resulting in large exodus from tea gardens. The tea gardens find it quite difficult to retain skilled workers by matching wages available in say, textile industries. Many tea gardens have resorted to mechanical equipments for harvesting leaves by sacrificing quality and price and might run out of business in near future.

Finally, Jones and Marjit (1992) provide an interesting perspective in a many factor many commodity world. In specific factor models (Jones, 1971) no sector can completely vanish because of the necessity of employing the specific factor. Of course, they do not consider the possibility that such specific factor is internationally mobile. In a standard Heckscher-Ohlin framework with two factors, however, a vanishing sector is clearly feasible under complete specialization.

This paper considers a 3 X 3 model where two sectors produce *X* and *Y* by using skilled and unskilled labor as specific factors and capital as the mobile factor as in Marjit and Kar (2005). There is a third sector that produces *Z* by using both types of labor and capital. Sectors *X* and *Y* may be identified as purely skilled and unskilled sector respectively, owing to proportionately greater use of the specific factors, while *Z* is the common good. Existence of the third sector allows participation of both types of labor in one activity and thus captures a more realistic scenario. In the Marjit and Kar (2005) specific-factor type framework emigration of either type of labor must improve the real wage of both while the owners of capital suffer, such that wage inequality or wage distribution is the key focus.

Introduction of the third sector, as in this model, opens up several other possibilities unaccounted for thus far. Interestingly, emigration in this structure may lead to closure of one of the sectors and reduce the 3 X 3 structure to a 2 X 3 system where only two commodities/services are since produced with one specific and one non-specific factor remaining functional within the country. For example, emigration of skilled workers may shut down sector *X* completely not only because such workers become *too costly* to hire but also because capital flight to *Z* replaces skilled workers there as well. We establish conditions under which this lowers the unskilled wage, an outcome never to be encountered in structures without a *mixed* sector. Two possibilities are worth mentioning under such circumstances. One, this might perpetuate the flight of skilled workers. Two, it exacerbates wage inequality as consistent with empirical observations in developing countries. The same story can be repeated in case of emigration of unskilled workers with an endogenous production structure being instrumental in driving distributional consequences in both cases.

Section 2 describes the model and pre-emigration as well as post-emigration equilibria. Section 3 discusses emergence of alternative production structures and their implications for skill-specific wages and overall wage inequality. The last section offers concluding remarks.

2. Model and Equilibrium

To start with we have a 3 X 3 model for a small open economy trading only in goods. *X* uses skilled labor and capital while *Y* uses unskilled labor and capital. *Z* uses both skilled and unskilled labor and capital. Technology is neo-classical with diminishing marginal productivity and CRS, markets are competitive and resources are fully employed. Following equations describe the model and use conventional symbols.

$$w_S a_{SX} + r a_{KX} = P_X \qquad (1)$$

$$w a_{LY} + r a_{KY} = P_Y \qquad (2)$$

$$w_S a_{SZ} + w a_{LZ} + r a_{KZ} = P_Z \qquad (3)$$

$$a_{SX} X + a_{SZ} Z = S \qquad (4)$$

$$a_{LY} Y + a_{LZ} Z = L \qquad (5)$$

$$a_{KX} X + a_{KY} Y + a_{KZ} Z = K \qquad (6)$$

(1)-(6) determines six unknown variables w_S, *r*, *w*, $X, Y\ and\ Z$ as in standard specific-factor models; where input-output coefficients are given by

$a_{ij} = a_{ij}(w_i / w_n)_j$; $i, n = S, L, K\ and\ j = X, Y;\ i \neq n$, and commodity prices are P_X , P_Y *and* P_Z while factor endowments *S*, *L* and *K*.

Now consider a situation where only skilled labor emigrates from the poor source country as domestic wage is lower than that in the richer destination country, $w_S < w_S^*$. Therefore, with sufficient emigration w_S rises up to w_S^* and is held fixed there in post-migration equilibrium. Since the economy is also small in the factor market, this implies one less variable, w_S and one less unit cost – unit price equality condition, namely equation (4) since *S* is not binding any longer. The new system solves for 5 variables from 5 equations.

This implies that the rise in skilled wage is not exogenous, but a result of emigration of skilled labor. The skilled wage will not undergo similar changes if for example, P_Z falls. It cannot unambiguously lead to a rise in w_S, whereas substantial reduction in supply of skill must raise skilled wage. *The comparative static changes* suggested in the paper begin here, drawing on the basis of changing factor prices (in equations 1-3). The factor price changes affect input coefficients and hence output levels in equations (4) – (6). Let us offer a brief thought experiment here. If the rise in skilled wage is so steep that production of *X* has to be discontinued (a finite change), factor resources are released into *Y* and *Z* and we have the usual Rybczynski type outcome. As in the standard Heckscher-Ohlin-Samuelson framework *changes in factor endowment cannot affect factor prices,* the same logic applies here and released *factors are absorbed through changes in quantities of Y and Z.* This is what happens *given factor prices and it is a pure endowment effect.* Now, as w_S goes up factor prices do change and input demand does adjust through changes in factor proportions. A rise in w_S is like a tax on *Z* and relative demand for *K* may actually increase leading to a drop in *w*. Note that, input demand does not remain constant in the process. *This is the factor price effect.* Only when we have complete specialization, endowments do affect factor prices.

So, in section 3, as w_S rises to w_S^* it helps to measure changes in *r** and two possibilities emerge, denoted by r_1^* *and* r_2^* in (7) and (8). If $r_1^* > r_2^*$ then commodity *Z* will no longer be produced, while $r_1^* < r_2^*$ implies that commodity *X* cannot be produced. We do not make prior assumptions regarding which sector should exist in the new equilibrium. It is directly guided by the change in factor prices, which keeps some sectors viable while the rest vanish. This happens due to changing input demands in each sector. In other words, none of the input demands is constant and these respond to changes in factor prices. However, physical mobility of factors does not impart any change on factor prices as verified for Heckscher-Ohlin-Samuelson frameworks.

So, the new $w_S^* > w_S$ can lead to alternative production structures. We can not rule out zero production for one of the sectors as goods outnumber factors of production under the changed scenario. Therefore any two quantitative price equations can solve for the remaining endogenous factor prices rendering the third competitive price equation redundant. In the redundant equation, if the unit cost (left hand side in any equation 1-3) exceeds the unit price (corresponding right hand side) the commodity becomes unviable under perfect competition and the sector vanishes. Conversely, if the unit cost in that sector becomes lower than the price then one of the factor returns must rise in equilibrium and should suck in that factor from other sectors. This too will jeopardize production in one or both sectors in the intersection set. Consequently, the exact match between average cost and price for the potentially vanishing sector has a probability of measure zero. Let us now derive the alternative scenarios that can emerge.[2]

3. Post-Emigration Production Structure

Consider solving *r* from (1) and (2) given $w_S = w_S^*$ and denote it as,

$$r_1^* = f(w_S^*) \tag{7}$$

Alternatively we can solve for *r* from (2) and (3) and call it,

$$r_2^* = \phi(w_S^*) \tag{8}$$

First, suppose $r_1^* > r_2^*$; then *Z* will not be produced. All capital will be absorbed in *X* and *Y*. All skilled labor will go in *X* and all the unskilled in *Y*. Note that, in the process as $w_S^* > w_S$, *r* must have fallen and *w* must have gone up. This is the model Marjit and Kar (2005) have worked with. Here, the non-production in sector *Z* and subsequent impact of emigration on wage distribution across skill types is an endogenous outcome and renders the results in Marjit and Kar (2005) a special case within this generalized structure.

Second, consider $r_1^* < r_2^*$ at $w_S = w_S^*$. In this case, all capital will have tendency to flow into the production of *Y* and *Z*, such that, all skilled workers who did not migrate will be forced to join sector *Z*, while the unskilled remain both in *Y* and *Z*. Sector *X* must vanish.

A third, and starker, possibility emerges when only sector *Z* remains functional and sectors *X* and *Y* both vanish. Note that, with *X* and *Y* set to zero equation (3) alone can not determine *w* and *r* even if $w_S = w_S^*$. Here we need the full-employment conditions to solve for *w* and *r*. So, equations (3), (5) and (6) simultaneously solve for *w*, *r* and *z*. We shall refrain from addressing this possibility because our intention is to offer a striking contrast to the

[2] Jones and Marjit (1992) discuss such finite changes in production structure in a multi-sector multi-variety trade model and prove a post-trade convergence property. Also see Jones (1996) and Findlay and Jones (2000).

already established result that emigration of one type of labor always helps the other non-emigrating type. The second structure shall prove to be sufficient for demonstrating our claim.

Consider the case where emigration of skilled labor leads to closure of sector *X*, and that Y and Z are the only products. Therefore, to derive the effect of such a change on *w* and *r*, we use Jones (1965). The following equations incorporate proportional changes in the variables denoted by '^'. From (2) and (3) using envelope condition, we get,

$$\hat{w}\theta_{LY} + \hat{r}\theta_{KY} = 0 \tag{9}$$

And,

$$\hat{w}\theta_{LZ} + \hat{r}\theta_{KZ} = -\hat{w}_S\theta_{SZ} \tag{10}$$

So,

$$\hat{w} = \frac{\hat{w}_S\theta_{SZ}\theta_{KY}}{\theta_{LY}\theta_{KZ} - \theta_{LZ}\theta_{KY}} \tag{11}$$

Such that, $\hat{w} \gtreqless 0$, *iff* $(\theta_{LY}\theta_{KZ} - \theta_{LZ}\theta_{KY}) \gtreqless 0$ (12)

Note that, as $w_S = w_S^*$ in the post migration regime, $\hat{w}_S > 0$, and θ_{ij}'s are income shares of each factor in the j^{th} industry. (12) suggests the usual Stolper-Samuelson conjecture that for *w* to increase, sector *Y* must be labor intensive. Viewed differently, emigration of skilled workers imposes a tax on the capital-intensive sector. Therefore we can construct the following proposition.

Proposition 1: *Emigration of skilled labor must reduce the wage rate of the unskilled workers iff the mixed sector, i.e., sector Z is labor intensive.*

Proof: See above discussion.

Similarly, if unskilled labor alone emigrates and the production structure reduces to sectors *X* and *Z* only, the wage implication for the skilled workers is available from the following equation.

$$\hat{w}_S = \frac{\hat{w}\theta_{LZ}\theta_{KX}}{\theta_{SX}\theta_{KZ} - \theta_{SZ}\theta_{KX}} \tag{13}$$

Proposition 2: *Emigration of one type of labor must reduce the wage of the non-emigrating type iff* $\theta_{KZ} < \min[\frac{\theta_{SZ}\theta_{KX}}{\theta_{SX}}, \frac{\theta_{LZ}\theta_{KY}}{\theta_{LY}}] = \tilde{\theta}_{KZ}$

Proof: We have already shown that emigration of skilled workers may lower the wage of unskilled workers if sector *Z* is labor intensive. Proposition (2) makes use of that information along with (13) to demonstrate that emigration of unskilled workers will also lower the return to skilled workers if and only if, the income share of capital in *Z* is lower than the minimum of (12) and (13), both of which must be negative for adverse impact on the wage of the non-migrating type. *QED.*

It is obvious that if $\theta_{KZ} < \tilde{\theta}_{KZ}$ and skilled labor emigrates, $\frac{w_S}{w}$ must go up aggravating wage inequality, and conversely if the unskilled emigrates $\frac{w_S}{w}$ must fall reducing wage inequality in the process. It is also to be noted that when w_S goes up and *w* goes down, *r* must increase. Interestingly, if both w_S and *r* go up, then sector *X* turns unviable as P_X does not change. Therefore, the outcome is consistent with the initial conjecture that the economy might be left with two sectors only; in this case *Y* and *Z*. Conversely, if *w* and *r* go up and w_S falls, production of *Y* must stop altogether.

Let us now consider the scenario where the new production structure yields similar results as in Marjit and Kar (2005) to the extent that the wage of the non-emigrant actually goes up. It is clear from (11) that

$$\hat{w} > 0, \ iff \quad \frac{\theta_{KZ}}{\theta_{LZ}} > \frac{\theta_{KY}}{\theta_{LY}} \tag{14}$$

Also, $$\hat{r} = \frac{-\theta_{LY}\theta_{SZ}}{\theta_{LY}\theta_{KZ} - \theta_{LZ}\theta_{KY}} \hat{w}_S < 0 \tag{15}$$

In this case it is not clear whether Marjit and Kar (2005) type production structure can be ruled out because in both set ups *r* actually goes down. We claim that if the following conditions hold then the said structure will not be the endogenous outcome.

$$\frac{\theta_{SX}}{\theta_{KX}} > \frac{\theta_{LY}\theta_{SZ}}{\theta_{LY}\theta_{KZ} - \theta_{LZ}\theta_{KY}} \tag{16}$$

(16) suggests that the decline in *r* if *X* and *Y* are produced, is greater than the decline in *r* when *Y* and *Z* are produced.

In other words, $$\frac{\theta_{SX}}{\theta_{KX}} \frac{\theta_{KY}}{\theta_{LY}} < \frac{\theta_{SZ}\theta_{KY}}{\theta_{LY}\theta_{KZ} - \theta_{LZ}\theta_{KY}} \tag{17}$$

Condition (17) similarly suggests that $\hat{w}$ is greater in magnitude when *Y* and *Z* are produced than when *X* and *Y* are produced. In fact, (16) and (17) guarantee that even if *r* goes down production of *X* can not be sustained in the new equilibrium and the emerging production pattern allows only *Y* and *Z* to be produced.

Let us now consider the issue of wage distribution or wage inequality. It is clear that when following emigration of skilled labor the unskilled wage goes down in absolute terms, wage inequality or wage gap must go up. But interestingly, even if $\hat{w}$ goes up (from 12 it means *Y*, and not *Z* is labor intensive), it is possible that $\frac{w_S}{w}$ rises.

From (11),

$$\hat{w} = \hat{w}_S \frac{\theta_{SZ}\theta_{KY}}{|\theta|} \tag{11'}$$

where, $|\theta| = (\theta_{LY}\theta_{KZ} - \theta_{LZ}\theta_{KY})$, and using (11)',

$$(\hat{w}_S - \hat{w}) = \frac{|\theta| - \theta_{SZ}\theta_{KY}}{|\theta|} \tag{18}$$

When $|\theta| = (\theta_{LY}\theta_{KZ} - \theta_{LZ}\theta_{KY}) < 0$, it implies, $\hat{w} < 0$ and $(\hat{w}_S - \hat{w}) > 0$, such that wage inequality must increase. However, if sector *Y* is labor intensive, then $|\theta| > 0$, and

$$|\theta| - \theta_{SZ}\theta_{KY} = \theta_{LY}\theta_{KZ} - \theta_{KY}(\theta_{LZ} + \theta_{SZ}) = \theta_{LY}\theta_{KZ} - \theta_{KY}(1 - \theta_{KZ})$$

$$= \theta_{LY}\theta_{KZ} - \theta_{KY} + \theta_{KY}\theta_{KZ} = \theta_{KZ}(\theta_{LY} + \theta_{KY}) - \theta_{KY} = \theta_{KZ} - \theta_{KY}. \tag{19}$$

Therefore, $(\hat{w}_S - \hat{w}) \underset{<}{\overset{>}{-}} 0$, iff $(\theta_{KZ} - \theta_{KY}) \underset{<}{\overset{>}{-}} 0$. (20)

(20) allows us to offer a definitive condition on wage inequality subject to skill emigration from the country. From (11) we know that $\hat{w} > 0$, *iff* $\theta_{KZ} > \tilde{\theta}_{KZ} = \frac{\theta_{LZ}\theta_{KY}}{\theta_{LY}}$. From (20), on the other hand, (w_S / w) must go up if $\theta_{KZ} > \theta_{KY}$. Comparing the two we offer the following proposition:

Proposition 3: *Emigration of skilled workers improves unskilled wage rate but the wage gap increases iff* $\theta_{KZ} > \max[\frac{\theta_{LZ}\theta_{KY}}{\theta_{LY}}, \theta_{KY}]$.

Proof: See discussion above.

In Marjit and Kar (2005) the only condition that was needed for the wage gap to increase was $\theta_{KY} < \theta_{KX}$. Since *X* ceases to be produced in the new structure a low value of θ_{KY} relative to θ_{KZ} is necessary for wage gap to increase.

As referred to earlier, Anwar (2006) uses a model with scale economies and variety of intermediate goods to argue that even if capital's income share is the same across sectors, emigration may still increase or decrease the wage gap. This has reference to Marjit and Kar (2005) results that for $\theta_{KX} = \theta_{KY}$, (w_S / w) does not change.

Note that, in the extended framework discussed here, (w_S / w) may go up or down independent of whether $\theta_{KX} = \theta_{KY}$ because production of *X* is no longer relevant in a structure where only *Y* and *Z* are produced.

The relevant condition now is given in terms of θ_{KY} and θ_{KZ}, and it directly follows from (20) that if $\theta_{KY} = \theta_{KZ}$, $\hat{w} > 0$, but $(\hat{w}_S - \hat{w}) = 0$.

Another possible scenario is where only X and Z are produced. Note that, for this to happen *w* must rise. If *X* continues to be produced then *r* must fall. If *Y* ceases to be produced a decline in *r* must be compensated by a rise in *w* so that average cost of producing *Y* exceeds P_Y.

If *X* and *Y* have to be produced then following must be true:

$$\hat{w} = \frac{\theta_{KY}\theta_{SX}}{\theta_{LY}\theta_{KX}} \hat{w}_S \qquad (21)$$

If instead, *X* and *Z* are produced then,

$$\hat{w} = [\theta_{KZ} \frac{\theta_{SX}}{\theta_{KX}} \hat{w}_S - \theta_{SZ}\hat{w}_S] \frac{1}{\theta_{LZ}}$$

Or,

$$\hat{w} = [\theta_{KZ} \frac{\theta_{SX}}{\theta_{KX}} - \theta_{SZ}] \frac{\hat{w}_S}{\theta_{LZ}} \qquad (22)$$

Therefore, if (X, Z) instead of (X, Y) have to be produced then the following must hold:

$$[\theta_{KZ}\frac{\theta_{SX}}{\theta_{KX}} - \theta_{SZ}]\frac{1}{\theta_{LZ}} > \frac{\theta_{KY}}{\theta_{LY}}\frac{\theta_{SX}}{\theta_{KX}}$$

Or, $$\frac{\theta_{SX}}{\theta_{KX}}(\theta_{KZ} - \frac{\theta_{KY}}{\theta_{LY}}] > \frac{\theta_{SZ}}{\theta_{LZ}} \qquad (23)$$

(23) implies that similarly as in Marjit and Kar (2005), emigration of skilled workers leads to an increase in the wage rate of the unskilled if any of these combinations are produced and the corresponding conditions satisfied.

4. Concluding Remarks

There has been a recent surge in the analysis of impact of factor mobility on factor price inequality. Several important contributions within the last few years developed theoretical and empirical models to explain how wage inequality, primarily, has behaved following greater international mobility of skilled and unskilled labor. Although there is consensus that skilled wage has risen more than the unskilled wage in both developed and developing countries, not surprisingly the analyses have taken various routes.

The present contribution not only envelops much of these results but adds another dimension, namely the post-emigration production pattern in the source country. By invoking a third sector that uses both skilled and unskilled labor we account for a large number of cases where vanishing sectors and wage inequality are joint outcomes of labor migration. This treatment is closer to reality and in sharp contrast with most of the previous studies where sector specificity of skill types dominates the outcomes. We establish that the direction of wage inequality – whether pro-skilled or anti-skilled crucially hinges on the income share of capital in the mixed sector in comparison to that in one of the surviving sectors. Possibility of ‘not small’ finite changes as discussed in relation to technical progress in Findlay and Jones (2000) applies here with respect to production re-organization in the source country. Emigration of skilled workers increases skilled wage rate in the source country. A rise in skilled wage up to the developed country level might lead to flight of capital towards other sectors in the economy. Consequently, the unit cost of production in the skill specific sector may become larger than the unit price under perfectly competitive conditions and a finite change in the nature of ‘vanishing’ skilled sector is imminent. This also opens up a starker possibility where each sector using a specific factor might vanish.

The effects of emigration on wage inequality offer another set of results where skilled wage and unskilled wage may no longer move in the same direction and may no longer be considered as snapshots of case-sensitive explanations. In fact, if the mixed sector is relatively more unskilled labor intensive vis-à-vis the unskilled labor specific sector, unskilled wage falls in absolute terms and wage inequality rises. However, if absolute reduction in unskilled wage is ruled out by violation of this intensity assumption, even then wage inequality must go up. In other words, vanishing sectors and increasing wage inequality are both robust when it comes to intensity assumptions, unlike some of the previous explanations for rising wage inequality. In brief, therefore, we not only provide a generalized account of earlier results but open up possibilities of exploring the effects of factor mobility beyond wage inequality only.

Another important avenue that one can explore is the growth implication of emigration. If emigration has a negative impact on return to capital, it may have an adverse impact on growth. But a positive impact is what we have tried to highlight in this paper. It seems that there is some potential in progressing along this line.

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