Inequality dynamics under trade in developing countries

Travis McArthur and Patcha Chaikitmongkol

December 16, 2014

1 Introduction

1.1 Motivation and Literature review

This section investigates the effect of trade on wage inequality by exploration of theoretical models, as well as empirical evidences.

Let's first go back to the basic Heckscher-Ohlin (HO) trade model with two countries (the North and the South) and two goods (high-skilled and low-skilled-intensive goods). The North (*the South*) has relatively large supply of high-skill labor (*low-skilled labor*) and thus has comparative advantage in high-skilled- (*low-skill*ed-) intensive goods. We can think of the North as developed countries and the South as developing counterparts. When trade opens, we assume that cost of producing each good become the same across countries. Assuming zero trade costs (transportation, tariffs, etc.–also known as ice-berg costs), price of goods also become the same across countries. Under comparative advantage framework, the North (*the South*) will export high-skilled- (*low-skill*ed-) intensive goods. Relative price of low-skilled intensive good will increase in the South. By Stolper-Samuelson theorem[1], this will raise the South's demand for low-skilled labor and their relative wage. Therefore, HO model implies that in the developing countries, trade should lead to lower *wage premium* (the ratio of wage between high-skilled and low-skilled labors).

This prediction of the HO theory applies the case of the East Asian tigers where trade liberalization was followed by decreasing inequality. During 1960s to 1970s, Hong Kong, South Korea, Singapore and Taiwan went through export-oriented industrialization. Wood (1994) finds that for these economies, wage premium went down at a faster rate after the liberalization comparing to other periods.

[1]Stolper and Samuelson theorem describes that the return to the intensively-used factor will increase if the relative price of the good increases.

Nevertheless, these evidences are not consistent with the experiences of Latin America and some other Asian countries. Hanson and Harrison (1999) studies the effect of Mexico's trade reform in 1985 on wage inequality. They find that trade exposes low-skill intensive industry to competition from other countries with large supply of low-skilled labor. This drives down the relative price of low-skilled-intensive goods and hence reducing relative wage for low-skilled labor. Beyer, Rojas and Vergara (1999) studies the relationship using Chile data during the 1980-90s. The authors confirm the findings of Hanson and Harrison (1999) . Hasan and Jandoc (2010) studies the relationship using data from the Philippines during the second half of the 1990s. They find that trade induces an employment shifts from exposed sectors to more protected sectors. In these latter sectors (especially service sector), wage premium tends to be higher, resulting in higher overall wage premium.

Why would some countries experience reduction in wage premium following trade liberalization while others experience increasing gap? Wood (1997) explains that the contrasting experience of East Asia (1960-70s) and Latin America (mid-1980s to 1990s) stems from differing world market environment in the two periods. He argues that by mid-1980s, China has emerged as an important player in the world economy. Moreover, in the latter period, the world has shifted toward using skill-complementary technology. Wood argues that these two factors are significant cause affecting the role of trade liberalization on wage inequality in Latin America.

Dornbusch, Fisher and Samuelson (1980) provides a formalized model explaining how trade can widen wage inequality. This model is based on the HO trade model with two countries. There are no longer just two goods in this model. Assume there is a continuum of goods which are ranked by level of skill needed in the production technology. After trade opens, prices of goods and wages equalize across countries. We cannot say for sure if a country will export a specific good. However, *on average*, the North (*the South*) will export high-skilled- (*low-skill*ed-) intensive goods. In other words, the North (*the South*) is the *"net"* exporter of high-skilled- (*low-skill*ed-) intensive goods. Let's now consider some comparative statics to see how can trade increase wage inequality the South (as well as the North since we assume factor-price equalization). First, consider a positive shock in the world demand for high-skilled-intensive goods. This decreases relative wage of low-skilled labor, leading to an increase in wage gap. Second, consider a positive shock the South's supply of low-skilled labor. This decreases relative price of low-skilled labor, and thus widens the wage inequality. If the two countries differ significantly, we can also have the case of complete specialization. In this case, the South exports goods ranged from the lower end of the skill-intensity rank up to a cutoff point. The North exports goods starting from the cutoff point up to the higher end of the skill-intensity rank. This allows us

to consider the case of technological catch-up of developing countries. With an improvement of production technology in the South, the country can export goods in the higher skill-intensity range, raising the cutoff point. This implies that wage of high-skilled labor (and thus wage inequality) will increase. Zhu and Trefler (2005) finds empirical evidence supporting how trade increases wage inequality through this technological catch-up in the developing countries.

Up to this point, it seems like Heckscher-Ohlin's prediction only held in the earlier wave of trade liberalization in East Asia and not after that. So, trade is bad for wage equality after all? The answer might be no, at least for the long run according to Atolia (2007).

Atolia (2007) constructed a model of trade for Latin American countries. Assume there are three sectors in the economy: non-traded (e.g. construction), export and import-competing sectors. Export sector produces low-skilled-intensive goods while import-competing sector produces high-skilled-intensive goods. Inputs in this model compose of capital, imported intermediate goods (i.e. machineries) and labor (low-skilled and high-skilled). Capital is produced using imported machineries and non-traded goods. It is mobile but subjected to adjustment costs. Labor is freely mobile across sectors. Under free trade, lowered tariffs on intermediate goods reduce costs of capital accumulation while tariff reduction in final goods expose import-competing sector to foreign competition. This implies that export sector will suddenly increase rate of capital accumulation due to cheaper price of capital. On the other hand, facing competition from abroad, import-competing sector will have to shrink–some firms will shift to other sector or go out of business. This transition will be slow as there is rigidity (costs of adjustment) in mobility of capital goods. In the economy following trade, there will be *"asymmetric capital accumulation*" in the economy as export sector suddenly increases its speed of capital accumulation while import-competing sector gradually decumulate its capital stock. Now let's assume that high-skilled labor is complementary to capital goods. Export sector will now need to hire more high-skilled labor to match the new level of capital goods. This will increase the demand for high-skilled labor and thus their relative wage. For the short-run, trade will therefore increase wage inequality through the process of *asymmetric capital accumulation*. In the long run, however, the economy will reach the new steady state. Therefore, in this model, the adverse effect of trade on wage inequality is temporary.

The main objective of our paper is to test the short-run prediction of Atolia (2007) model using the data from developing countries. If there is an empirical evidence that support Atolia's theory, then Heckscher-Ohlin's prediction that wage inequality would go down with trade might hold in the long run after all.

1.2 Research question and hypothesis

Main research question: Does trade liberalization increase wage inequality in the short run through *asymmetric capital accumulation*[2]?

Specifically, we would like to test:

1. If trade liberalization in intermediate goods (this refers to fixed inputs of production) increases overall capital accumulation? *(Note:* Ideally, we would like to test if there is an increases in capital accumulation in export sector. However, the data for capital stock by sectors are not available during the period of time we are interested in. We use the data of overall capital stock instead as an increase in capital accumulation in any particular sector will lead to an increase in overall capital accumulation.*)*
2. If trade liberalization in final goods decreases overall capital accumulation?
3. If the interaction between trade liberalizations in intermediate and final goods increases overall capital accumulation?
4. If capital accumulation increases *wage premium* (the ratio of wage between high-skilled and low-skilled labors)

Trade liberalization:	Capital Accumulation:	Wage premium:
Intermediate goods	$\Rightarrow \uparrow\uparrow \triangle K$	
Final goods	$\Rightarrow \downarrow \triangle K$	
Capital goods×Final goods	$\Rightarrow \uparrow \triangle K$	$\Rightarrow \uparrow w_H/w_L$

TRAVIS PART

__Estimating equations___

<Say cannot do sector-specific estimation>

$$\ln \frac{K_{it}}{K_{it-1}} = \alpha + \beta_{\tau K}\tau_{it}^{K} + \beta_{\tau C}\tau_{it}^{C} + \beta_{\tau K \times C}\tau_{it}^{K} \times \tau_{it}^{C} + u_{it}$$

where

[2]As explained in the above section, *asymmetric capital accumulation* is Atolia's term used to explain a sudden increase in rate of capital accumulation in export sector versus the gradual capital decumulation in import-competing sector.

K_{it} is the capital stock per capita in country i in time t,

$\tau_{it}^{K}$is the tariff on capital goods, and

$\tau_{it}^{C}$is the tariff on consumption goods.

This capital-tariff equation captures Atolia's predictions of the effect of trade liberalization on the rate of capital accumulation. Since a cut only to tariffs on consumption goods will cause the capital-intensive import-competing sector to contract, with no corresponding rise in capital in the export-oriented sector, we expect $\beta_{\tau C} > 0$. When both capital and consumption tariffs are cut, the export-oriented sector accumulates capital faster than the import-competing sector decumulates it, so we expect $\tau_{it}^{K} \times \tau_{it}^{C} < 0$. This cross term is interpreted as an interaction effect: the additional effect when a country is liberalizer in both capital and consumption goods trade. Atolia is silent on what would happen if only capital tariffs were cut, but the economy-wide lower price in capital should increase the incentive to accumulate capital, so we predict that $\tau_{it}^{K} < 0$.

The second equation that the Atolia model suggests is:

$\ln \frac{w_{H\,it}}{w_{L\,it}} = \alpha' + \beta_K \ln K_{it} + v_{it}$

where

$\frac{w_{H\,it}}{w_{L\,it}}$ is the ratio of high-skilled wage to low-skilled wage and

K_{it} is the capital stock per capita.

Under the Atolia assumption of complementarity between high skill labor and capital, a higher stock of capital should raise the wage premium for high-skill workers. Hence the prediction of the theory is $\beta_K > 0$.

Since capital appears on the left side of the first equation and the right side of the second equation, the structure of the two equations above may suggest a two-stage least squares approach. However, proceeding in that way would require us to assume that trade liberalization only affects the wage premium through its affect on capital accumulation, which we are not prepared to claim. Moreover, the capital-tariff equation deals with the *growth* of capital, while the wage-capital equation involves the *level* of capital, ruling out a two-stage least squares strategy.

We will use first difference to condition on country-specific effects. Our identification strategy is thus difference-in-differences, where the treatment is continuous (tariff and capital stock levels) rather than discrete. We need the parallel trend assumption for identification. This assumption requires countries

, except with This creates a difference-in-differences.

<Simply two reduced-form relationships.> , which will be augmented to 3sls when try to deal with endogeneioty in each eqn separately>

Table 1: Data sources

Variable	1st Period	2nd Period	Source
Per capita capital stock growth	1975-1990	1990-2004	Penn World Table
Per capita capital stock	1985-1990 mean	1999-2004 mean	Penn World Table
Disaggregated tariffs	1985-1993	2000-2004	Estevadeordal and Taylor
Disaggregated wages	1985-1991 mean	1999-2008 mean	Occupational Wages of the World
Aggregated 1985 tariffs			Estevadeordal and Taylor
Great Depression depth			Estevadeordal and Taylor

$$\ln \frac{w_{H\,it}}{w_{L\,it}} = \alpha + \beta_K K_{it} + v_{it}$$

__Data__

We used data from three sources: the Penn World Table, Estevadeordal & Taylor (2013), and Occupational Wages of the World. Table #<> summarizes the variables and their sources. Our sample size is limited by the coverage of the tariff data in Estevadeordal & Taylor and the wage data in Occupational Wages of the World.

We measured the rate of capital stock accumulation as the geometric growth between 1975 and 1990 for the first period and 1990 and 2004 for the second. This corresponds to the GDP growth period that Estevadeordal & Taylor (2013) use to estimate the effect of capital tariffs on GDP growth. For measuring capital stock levels, we take the average of two six-year periods to mitigate the impact of business cycles on the data.

Wages in supervisory and technical occupations were defined as "high skill", while everyone else, such as production line workers, were defined as "low skill". This is in accordance with Zhu & Trefler <year>. Only workers in the manufacturing sector were included. Since we did not have measurements of the number of workers in each occupation, we computed the simple average of all occupations in each skill category. Ideally, the periods of time for measurement of capital stock and wages would be the same, but missing occupational wage data was a serious problem. Therefore, we somewhat extended the period of time of measuring wage data to avoid dropping too many countries from the sample.

Estevadeordal & Taylor recorded three different tariff measures: consumption goods, intermediate goods, and capital goods. They could not obtain disaggregated tariff data for the same years in each country,

so the measured tariff rates are spread over a number of years. In their main regression specification, Estevadeordal & Taylor used the simple average of intermediate and capital goods tariffs to explain GDP growth. Therefore, we will use this average and call it capital goods tariff for the remainder of this paper. The number of countries available in the tariff dataset is limited, but there is no obvious reason that selection bias may be a factor in our analysis.

Summary statistics of the variables, after transformation and taking first differences, are available in Tables #<> and #<>. We use the World Bank's classification of developing country as of the 1980's.

Table 2: Summary statistics of developing countries

	Mean	Std. dev	Min	Max
%Δ of per capita K	-0.002	0.021	-0.043	0.040
$\ln(1+\tau_K/100)$	-0.155	0.121	-0.447	0.040
$\ln(1+\tau_C/100)$	-0.205	0.206	-0.719	0.122
$\ln(1+\tau_K/100)\times\ln(1+\tau_C/100)$	-0.109	0.132	-0.550	0.018
$\ln(w_H/w_L)$	0.007	0.279	-0.640	0.437
ln(Per capita K stock)	0.296	0.376	-0.447	1.263

Table 3: Summary statistics of developed countries

	Mean	Std. dev	Min	Max
%Δ of per capita K	-0.009	0.008	-0.028	0.010
$\ln(1+\tau_K/100)$	-0.037	0.040	-0.193	0
$\ln(1+\tau_C/100)$	-0.052	0.056	-0.247	0.017
$\ln(1+\tau_K/100)\times\ln(1+\tau_C/100)$	-0.008	0.014	-0.063	0.0001
$\ln(w_H/w_L)$	0.041	0.151	-0.284	0.404
ln(Per capita K stock)	0.320	0.141	0.129	0.670

<____Endogeneity in the capital-tariff equation____>

___Endogeneity in the wage-capital equation____

We should be concerned about simultaneous causation in equation #<>. Modeling only one side of the supply-demand relationship is a well-known pitfall in econometrics. However, the relationship between capital stock and the wage premium is indirect: it operates through the complementarity of capital and high-

skilled labor. Therefore, it is not appropriate to model the relationship as a full supply-demand simultanous equation system.

We will still take an instrumental variable approach. A straightforward instrument for the level of capital stock is r, the price of capital accumulation. In a closed economy, r is determined endogenously; firms' solutions to their profit maximization problems should ensure that $r = {}^{\partial F}/_{\partial K}$, where $F(\cdot)$ represents the aggregate production function. In an open economy, r can be determined exogenously. The import price of capital goods determines the domestic capital price in the Atolia model. Clearly we want to avoid assuming aspects to the Atolia model while we test it, however. We can rely on other models in which international financial markets can exogenously determine r<citation?>. Thus, r is determined in other countries rather than endogenously. In principle, this could lead to all countries facing the same r, which would present a statistical identification problem. We observe that r is not equalized across countries, though, so we can proceed <make citation of a paper dealing with this. Also, this challenges a bit our assertion that r is exogenously determined>.

According to the firm's optimization problem, if an exogenous shock to r leads to ${}^{\partial F}/_{\partial K} < r$, then capital should be accumulated faster. If ${}^{\partial F}/_{\partial K} > r$, then the capital stock should shrink. This leads to the following functional relationship: ${}^{\partial K}/_{\partial t} = G(r)$, i.e. the change of K over time is a function of r. Our RHS variable in equation #<> is in levels of K, not change, so we must integrate both sides with respect to time: $K = \int_a^b G(r)\, dt$. If $G(r)$ is simply linear, then we can approximate this relationship by simply summing over the value of r in each time period: $K = \sum_{t=a}^{b} r_t + \epsilon$. For an IV strategy, we need the assumption that r affects the wage premium only through its effect on capital accumulation. <TODO: justify a little>. The first stage of the model can then be expressed as

$$\triangle \ln K_{it} = \alpha'' + \beta_r \triangle \ln \left(\sum_{t=a}^{b} r_t \right) + \triangle \xi_{it}$$

and the second stage is just the original equation that we wanted to estimate:

$$\triangle \ln \frac{w_{H\,it}}{w_{L\,it}} = \alpha' + \beta_K \triangle \ln K_{it} + \triangle v_{it}$$

An estimate of r for each country and year is available from the Penn World Table. We will divide the price of investment by the price of consumption to obtain the real investment price. We choose the years 1975-1990 for the first period measurement of $\sum_{t=a}^{b} r_t$ and 1991-2004 for the second period, which matches the periods of measurement for capital stock growth in the tariff-capital equation.

The fatal flaw in the approach outlined above is that r turns out to be an extremely weak instrument for capital accumulation. The F-statistic for a regression of $\triangle \ln K_{it}$ on $\triangle \ln \left(\sum_{t=a}^{b} r_t \right)$ is 0.20. In light of the rule of thumb that an instrument is weak if the F-stat is less than ten, this instrument appears to be useless.

<Staiger and Stock (1997) http://www.econ.brown.edu/fac/Frank_Kleibergen/ec266/staigerstock1997.pdf> Therefore, we have to discard this approach. If we cannot detect an effect of the price of investment on capital accumulation, then it seems no other variable would be powerful enough to act as a strong instrument, so here we abandon our efforts to handle endogeneity in the wage-capital equation. As consolation, the weakness of r as an instrument for capital accumulation provides indirect evidence that the effect of the wage premium upon capital accumulation may be weak. That is to say, if the price of capital accumulation itself does not detectably affect capital accumulation, the price of another factor of production probably does not affect it either. Hence, the problem of endogeneity that spurred this exercise may not be worrisome. In any case, the results

___Results__

<say that throughout, our precision is limited by sample size>

Among developing countries, the correlation between changes in capital and consumption tariffs is 0.89. Thus, regressing capital accumulation against both variables (and their product) would inflate the variance of the estimated coefficients. Any effect may be masked by this variance inflation. Therefore, we will start by presenting a parsimonous specification that only includes the product of the two tariffs, which is our main coefficient of interest. Table 1 displays these results.

Given that many coefficients are not different from zero, the table shows t-statistics rather than standard errors so it is easier to assess the distance from statistical significance. Among developing countries, we detect no effect of the capital and consumption tariff cross term on the rate of capital accumulation, although the sign of the point estimate is consistent with the theory. The level of capital stock, however, does have an effect on the wage premium that is different from zero at the 5% level. We have estimated that a one percent rise in the per capita capital stock leads to a 0.3% rise in the ratio of high-skill wages to low-skill wages.

We also include an estimation of the same model with both developed and developing countries. Interaction terms separate the effects on the two groups. For the Atolia theory to be true, we need the effect to exist for developing countries, but not for developed countries. The results are consistent with the theory. The effect of the product of capital and consumption tariffs for developing countries is not statistically different from zero, but the estimated sign is negative, consistent with theory. Furthermore, the point estimate for developed countries is positive but not statistically significant. If these effects were statistically significant, we might conclude that the Atolia mechanism holds for developing countries but not developed countries. Finally, the results suggest that the positive effect of capital stock on the wage premium holds only for

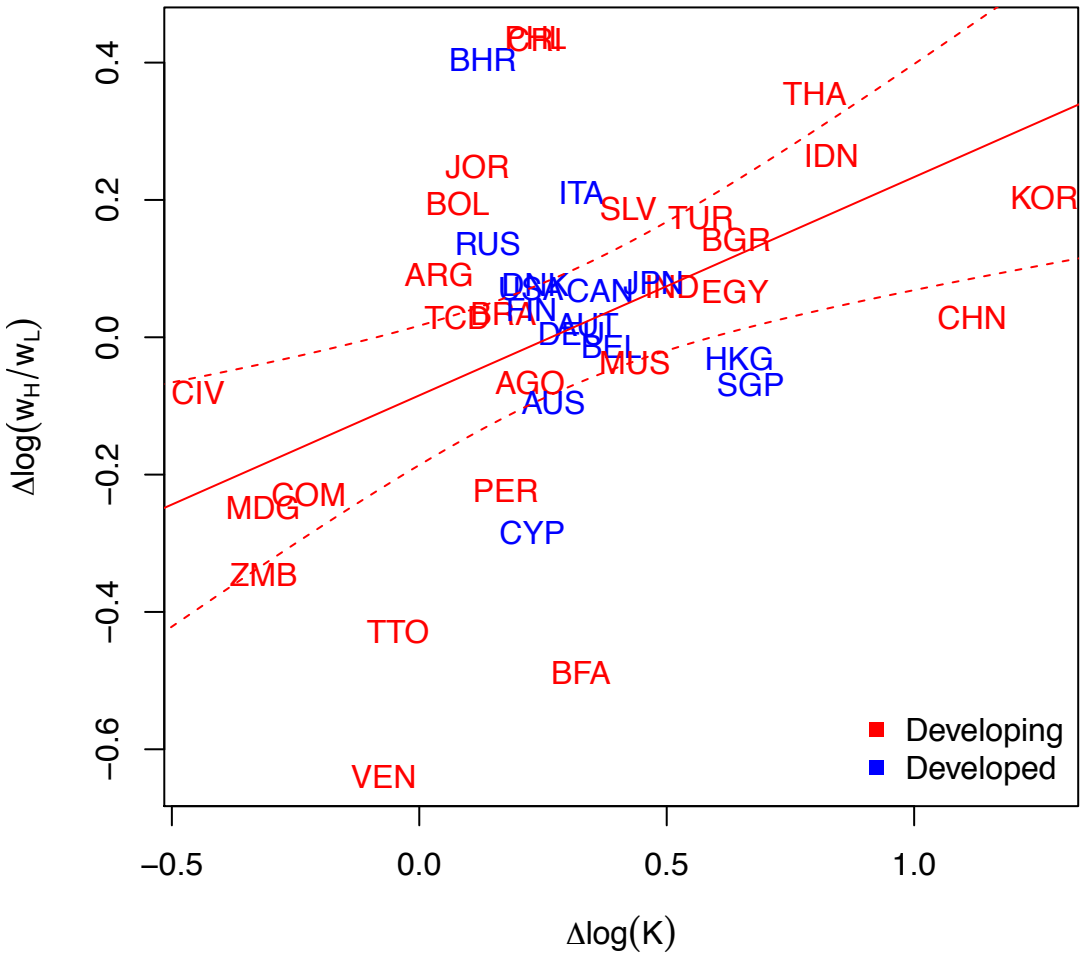
Table 4: First difference SUR without instrument on first equation
(t-statistics in parentheses)

	Sample			
	Developing countries		World	
	Dependent variable			
	1st eqn $\%\Delta$ of per capita K	2nd eqn $\ln(w_H/w_L)$	1st eqn $\%\Delta$ of per capita K	2nd eqn $\ln(w_H/w_L)$
(Intercept)	−0.008	−0.085	−0.006	0.144
	(−1.511)	(−1.324)	(−1.389)	(1.127)
$\ln(1+\tau_K/100)\times\ln(1+\tau_C/100)$	−0.042		0.306	
	(−1.414)		(1.115)	
ln(Per capita K stock)		0.318**		−0.311
		(2.536)		(−0.890)
Developing country			−0.002	−0.229
			(−0.303)	(−1.665)
$\ln(1+\tau_K/100)\times\ln(1+\tau_C/100)\times$ Dev cntry			−0.348	
			(−1.264)	
ln(Per capita K stock)× Developing country				0.629*
				(1.733)
R^2	0.081	0.238	0.123	0.224
Adj. R^2	0.045	0.207	0.060	0.161
Num. obs.	27	26	46	41
Residual ρ between equations		0.096		0.060

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

developing countries. This result is visualized in Figure 1.

Figure 1: Capital accumulation raises wage premium for developing countries



When the tariff level is instrumented by GATT membership × 1985 average tariff, the results for the developing country sample, shown in Table <>, are basically unchanged. On the other hand, the signs of the coefficients on the capital-tariff eqution for the world sample are the opposite of what they were in the uninstrumented regression. If these coefficients were statistically significant, it would challenge the theory that lower capital tariffs increase the capital stock for developing countries but not developed. However, the very low precision of the estimates here (t-stats around 0.4) means that we cannot conclude that any violation of the Atolia theory really exists. A Wu-Hausman test cannot reject the null hypothesis of no endogeneity, but the test is expected to have low power in this environment of a small number of observations.

For completeness, we also present the results with the "saturated" model of capital tariffs, consumption

Table 5: First difference 3SLS with GATT membership × 1985 average tariff as instrument on first equation (t-statistics in parentheses)

	Sample			
	Developing countries		World	
	Dependent variable			
	1st eqn $\%\Delta$ of per capita K	2nd eqn $\ln(w_H/w_L)$	1st eqn $\%\Delta$ of per capita K	2nd eqn $\ln(w_H/w_L)$
(Intercept)	−0.009	−0.085	−0.022	0.144
	(−1.608)	(−1.324)	(−0.745)	(1.127)
$\ln(1+\tau_K/100) \times \ln(1+\tau_C/100)$	−0.059		−1.845	
	(−1.431)		(−0.484)	
ln(Per capita K stock)		0.318**		−0.311
		(2.536)		(−0.890)
Developing country			0.013	−0.229
			(0.409)	(−1.665)
$\ln(1+\tau_K/100) \times \ln(1+\tau_C/100)\times$ Dev cntry			1.786	
			(0.469)	
ln(Per capita K stock)× Developing country				0.629*
				(1.733)
R^2	0.068	0.238	−1.244	0.224
Adj. R^2	0.031	0.207	−1.404	0.161
Num. obs.	27	26	46	41
F-stat on first stage	25.530		55.866	
P-value of Wu-Hausman endogeneity test	0.557		0.411	
Residual ρ between equations		0.118		−0.011

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

tariffs, and their product in Table #<>. As expected, the high correlation between the two tariffs greatly inflates the variance of the coefficients. The point estimates are consistent with the Atolia theory, however, since the sign of the capital tariff coefficient is negative while the sign of the consumption tariff is positive. We also estimated a three-stage least squares model. To instrument for the consumption tariff, we used the severity of the Great Depression × 1985 average tariff as Estevadoreal & Taylor did, but the variance of the coefficients is so large that the results are not worth presenting.

___ DRawbacks__

___Conclusion/discussion___

In light of our empirical test, we cannot reject the Atolia theory. The positive effect of capital accumulation on the wage premium among developing countries offers limited support for the theory. In some sense, this effect is the less important part of the theory since it could, arguably, be unrelated to trade. Throughout, our analysis suffers from low statistical power <><> <elasicity>

<TODO: Look at schooling - like the supply of high skilled labor>

<in our data table, can say that a var coresponds to something in the PWT>

<Should say something about having dif #'s of obseravtions in the two SUR equations>

1. References

[1] A. Wood, "Give heckscher and ohlin a chance!" *Weltwirtschaftliches Archiv*, vol. 130, no. 1, pp. 20–49, 1994.

[2] G. Hanson and A. Harrison, "Trade liberalization and wage inequality in mexico," *Industrial and Labor Relations Review*, vol. 52, no. 2, pp. 271–288, 1999.

[3] H. Beyer, P. Rojas, and R. Vergara, "Trade liberalization and wage inequality," *Journal of Development Economics*, vol. 59, pp. 103–123, 1999.

[4] R. Hasan and K. Jandoc, "Trade liberalization and wage inequality in the philippines," *ADB Economics Working Paper Series*, no. 195, 2010.

Table 6: First difference saturated SUR without instrument on first equation (t-statistics in parentheses)

	Sample			
	Developing countries		World	
	Dependent variable			
	1st eqn $\%\Delta$ of per capita K	2nd eqn $\ln(w_H/w_L)$	1st eqn $\%\Delta$ of per capita K	2nd eqn $\ln(w_H/w_L)$
(Intercept)	−0.007	−0.085	−0.005	0.144
	(−0.943)	(−1.324)	(−0.585)	(1.127)
$\ln(1+\tau_K/100) \times \ln(1+\tau_C/100)$	−0.066		0.196	
	(−0.665)		(0.129)	
$\ln(1+\tau_K/100)$	−0.016		0.108	
	(−0.184)		(0.174)	
$\ln(1+\tau_C/100)$	0.026		−0.053	
	(0.450)		(−0.198)	
ln(Per capita K stock)		0.318**		−0.311
		(2.536)		(−0.890)
Developing country			−0.002	−0.229
			(−0.181)	(−1.665)
$\ln(1+\tau_K/100) \times \ln(1+\tau_C/100)\times$ Dev cntry			−0.262	
			(−0.172)	
$\ln(1+\tau_K/100)\times$ Developing country			−0.124	
			(−0.199)	
$\ln(1+\tau_C/100)\times$ Developing country			0.079	
			(0.291)	
ln(Per capita K stock)× Developing country				0.629*
				(1.733)
R^2	0.092	0.238	0.133	0.224
Adj. R^2	−0.027	0.207	−0.027	0.161
Num. obs.	27	26	46	41
Residual ρ between equations		0.049		0.020

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

[5] A. Wood, "Openness and wage inequality in developing countries: The latin american challenge to east asian conventional wisdom," *The World Bank Economic Review*, vol. 11, no. 1, pp. 33–57, 1997.

[6] R. Dornbusch, S. Fischer, and P. Samuelson, "Heckscher-ohlin trade theory with a continuum of goods," *The Quarterly Journal of Economics*, vol. 95, no. 2, pp. 203–224, 1980.

[7] S. Zhu and D. Trefler, "Trade and inequality in developing countries: a general equilibrium analysis," *Journal of International Economics*, vol. 65, pp. 21–48, 2005.

[8] M. Atolia, "Trade liberalization and rising wage inequality in latin america: Reconcilation with hos theory," *Journal of International Economics*, vol. 71, pp. 467–494, 2007.