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The Uncertain Gains from Trade Facilitation

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On the eve of the ninth WTO ministerial conference the International Chamber of Commerce reiterated its claim that trade facilitation would add $1 trillion to the world's income.[1] The estimate is based on a study published by the ICC, which also claims that trade facilitation can create 18 million jobs in developing countries.[2]

Unfortunately, these figures depend on too many unjustifiable assumptions to be relied on. Inaccuracy accumulates in several stages of the estimation process: in estimating the gains from trade facilitation for a sample of countries, in scaling up the gains to the global level and in estimating the employment gains. The resulting figures are too uncertain to underpin any policy decisions.

Furthermore, the estimates only refer to gross gains excluding the costs – in terms of both investment and employment – associated with implementing trade facilitation. Yet, under a current proposal, developing countries are required to sustain the entire implementation cost without financial participation by developed countries.

It is hard to see how uncertain gains and unequal distribution of costs can justify diverting resources to trade facilitation from badly needed policies such as the strengthening of social safety nets.

1. ICC estimates of export, income and employment gains

The ICC estimates are summarized in Table 1. Export gains are obtained estimating a gravity equation that relates trade flows to measures of different dimensions of trade facilitation. Both GDP and employment impacts are based on these estimates.

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Increases in GPD are calculated as a fixed proportion of two-way trade (46 per cent for all countries), in turn obtained doubling the estimates of export gains. The fixed proportion chosen is the average of the proportions estimated in different studies, ranging from 11 percent to 109 percent, and mostly based on Computable General Equilibrium Models. This is old wine in new barrels, as CGE estimates are notoriously not robust to changes in elasticities.[3]

Increases in employment are calculated for each country multiplying its estimated export gains by the average labor-output ratio of its industrial sector.

All estimates obtained in this way are obviously very sensitive to changes in the parameter values, making the estimation of the latter a critical matter.

Table 1: ICC estimates of gains from trade facilitation

	A	B	C	D	E	F	G	H
	Export Gain	Two-Way trade gain (A×2)	Trade multiplier	GDP gain (B×C)	Employment intensity of GDP	Jobs created (A×E)	Jobs destroyed	Employment gain/loss (F-G)
	$ Billions	$ Billions		$ Billions	Employees/$BN of value added in industry	Thousands	Thousands	Thousands
East Asia	267	534	0.46	246	41,500	11,081	?	?
East Europe and Central Asia	101	202	0.46	93	20,500	2,172	?	?
Latin America and Caribbean	151	301	0.46	138	20,000	2,935	?	?
Middle East and North Africa	15	30	0.46	14	12,500	188	?	?
South Asia	5	10	0.46	5	122,500	613	?	?
Sub-Saharan Africa	30	60	0.46	28	34,500	1,035	?	?
Developing Ctr. Total	**569**	**1,137**	**0.46**	**523**	**31,673**	**18,022**	**?**	**?**
Developed Countries	475	949	0.46	437	5,500	2,610	?	?
World Total	**1,043**	**2,086**	**0.46**	**960**	**19,781**	**20,632**	**?**	**?**

2. Estimating the gains from trade facilitation

The first source of inaccuracy in estimating the gains from trade facilitation is the measurement of trade facilitation itself. Differently than exports, imports or production costs, trade facilitation is comprised of a variety of dimensions, such as availability of information on the internet or homogeneity of documentation, that are typically measured on an arbitrary scale. Such indices of trade facilitation may be useful for understanding broad patterns but they hardly contain the information necessary to establish accurate correlations with other variables.

Further inaccuracy in the estimation comes from the data used in the calculations. Widely cited empirical studies of trade facilitation[4] go back to pre-crisis years, when growth of GDP and commodities trade were significantly different than today. Even when not included directly in the estimation, growth and commodity prices may influence merchandise trade and relevant elasticities strongly.

3.   Scaling up and aggregating results

Additional inaccuracy derives from scaling up to the global level the results obtained for a sample of countries. In particular, the ICC study makes the following two assumptions:

a.   The ratio of developed countries' export gains to developing countries' gains is assumed constant. Relying on findings that gains for developed countries are about 84 percent of those for developing economies, the $1,137bn estimated gains for these countries are readily transformed into $949bn for developed countries. Such invariance assumption strongly affects the estimates but has no justification.

b.   Once the gains are so calculated for each country bloc of the sample, they are brought up to the global scale by applying a proportion.

Clearly, both assumptions further widen the interval encompassed by the estimates compromising their meaningfulness.

4.   Employment impact

The ICC study estimates a positive employment impact from trade facilitation in the order of 20 million jobs, of which 90 percent in developing countries. Unfortunately, these estimates suffer from flaws that make them hardly relevant to the trade policy debate.

Fundamental flaws affecting many official estimates of the gains from trade have been clearly highlighted in the last round of debate on liberalizations[5]. In that context, it became evident that liberalization may lead to higher unemployment by tilting income distribution in favor of workers in the exporting sectors. In economies where aggregate demand comes mostly from workers producing non-traded goods, redistributing income from these to workers in exporting industries may lead to lower economic activity. In this context job destruction is likely to outweigh job creation.

The ICC acknowledges these effects[6] but its estimates of employment creation only refer to jobs "supported" or, using a common term, jobs "created". Unfortunately, there is no reason to expect that these will outnumber the jobs destroyed as developing economies become more open to international trade.

5.   Uncertain export, income and employment gains

Implementing trade facilitation reforms is a costly process, likely requiring teams of specialized personnel and, in many countries, large international consultancy fees. This requires diverting resource from other services such as healthcare and education.

Although it is reasonable to expect that trade facilitation would lead to higher trade flows, there is no indication of large net benefits. The $1 trillion increase in global income estimated by the ICC is based on too many unjustified assumptions to determine any policy changes. The same is true for the estimate of 18 million jobs in developing countries. On the other hand, developing countries would be required to bear the entire

cost of trade facilitation without participation by developed countries. In this context, it is hard to see why trade facilitation should become anyone's policy priority.

Notes

[1] See ICC statement at: http://www.iccwbo.org/News/Articles/2013/Business-gives-last-push-to-seal-Bali-deal-and-salvage-Doha-Round/, accessed on December 2nd, 2013.

[2] See Hufbauer and Schott (2013).

[3] See Taylor and von Arnim (2006).

[4] Two widely cited studies are Wilson, Mann and Otsuki (2004) and Hufbauer, Schott and Wong (2010).

[5] See Taylor and von Arnim (2006) and Ackerman and Gallagher (2008).

[6] In the words of the authors (p. 55): "two-way trade expansion will *realign* the labor force between sectors [emphasis added]".

References

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