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**Trade Hallucination:  
Risks of Trade Facilitation and Suggestions for Implementation**

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**Abstract:**

Official estimates tend to overstate the benefits of trade facilitation and ignore its costs. When all underlying assumptions are brought to light, expecting large gains appears unreasonable. At the same time, estimated employment benefits may easily turn into net losses.

With fundamental uncertainty surrounding its effects, implementing trade facilitation without enhancing systems of social protection would be ill advised. Indeed, the net effect of trade facilitation may depend on the social policies it is complemented with.

While trade facilitation may bring extra business to import-export firms, it is not a feasible or sustainable growth strategy for all countries and it cannot be expected to deliver growth to the global economy.

# Trade Hallucination:

## Risks of Trade Facilitation and Suggestions for Implementation

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June 2014

### 1. Introduction

After a long freeze, the Doha round of trade talks delivered the Bali Agreement on Trade Facilitation. As countries move to the implementation phase, it is useful to consider the risks of the reform and the policies that would help mitigate them.

Trade facilitation aims at boosting international trade by reducing some of the costs that importers and exporters incur when shipping commodities across national borders. While trade *liberalization* focuses on reducing tariffs, trade *facilitation* focuses on a wide range of non-tariff factors that slow down or limit trade, including cumbersome customs formalities, poor transport infrastructure and more. Because they absorb resources, these factors increase the cost of trading even without involving direct payments such as import or export duties. Apart from this difference, liberalization and facilitation share the same basic logic: reducing trading costs leads to higher net exports and economic activity.

Unfortunately, the liberalizations of recent decades have not met their proponents' expectations. Increases in economic activity have disappointed while employment has often suffered. On a hopefully smaller scale, trade facilitation promises more of the same.

Furthermore, implementing the Bali agreement requires initial investment to reorganize multiple government procedures and build necessary infrastructure, although opinions differ on the importance of each measure. According to OECD (2013), the streamlining of formalities has the most trade-enhancing effect, while according to the World Bank (2010) physical infrastructure is of primary importance. The United Nations estimates this upfront cost to be in the order of \$1-15 million (UNCTAD, 2014), but what the figure includes is not clear. It is unlikely to include the expensive improvements of ports, roads and other infrastructures.

Regardless of its amount, the initial investment should be considered both from an economic and a financial perspective. Economically, it makes sense if over time the reform generates enough revenue for the country and the government. At first glance, the \$1 trillion global income gain predicted by the International Chamber of Commerce (2013), and the 12-15% reduction of trade costs predicted by OECD (2013, 2014) suggest that there is no cause for concern. But, when all underlying assumptions are brought to light, these figures fail to support any reasonable expectation that the reform may benefit developing economies. Not only are the estimates of gains marred by problems but the calculations overlook the array of costs that countries may incur once the reform is implemented.

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Even if the investment makes economic sense, financial constraints may bring additional challenges. For many governments obtaining liquidity, especially in hard currency, may require accepting unfavorable credit terms. Absent untapped credit potential, this may mean cutting important public programs. As discussed below, such actions go in the opposite direction of a sensible implementation of the reform. Remarkably, advocates of trade facilitation in the Bali negotiations did not commit to help skeptical counterparts finance its implementation. Yet some governments must now persuade private lenders that trade facilitation is sound and financially rewarding policy.

This paper reviews the assumptions underlying official analyses of trade facilitation and highlights overlooked costs. It also indicates a guiding policy principle for a safer implementation.

## 2. Uncertain Gains

Official predictions of the effects of trade facilitation rely on a series of assumptions that are hard to justify<sup>2</sup>. Based on such unfortunate practice, calculations published by the International Chamber of Commerce (2013) and by OECD (2013, 2014) contribute to the belief that the gains from trade reforms may be counted on. The focus here is on ICC estimates as they include a simple (although spectacular) figure for income gains, but the OECD studies share the same methodology for predicting trade gains.

The first, strong assumption made by ICC (2013) and OECD (2013) is that all impediments to trade can be fully removed. As both studies acknowledge, this is critical since estimated gains decrease quickly if not all dimensions of trade facilitation are implemented. However, as pointed out by Raza et al. (2014) in the context of the Trans-Atlantic Trade and Investment Partnership, many non-tariff barriers to trade may be hard to remove.

The ICC estimates are summarized in Table 1. As detailed below, they involve three steps: estimation of trade, GDP and employment gains. Export gains are obtained estimating a “gravity” model that relates trade flows to different dimensions of trade facilitation. Gains in GDP are then calculated doubling the export gains and applying a one-size-fits-all coefficient. This coefficient is constant across countries and across time and supposedly returns the increase in GDP “generated” by each dollar of extra export. Finally, employment creation is estimated multiplying the expected trade gains by the export sector’s labor-output ratio, assuming the latter remains constant over time in each country. The resulting figure for job creation is not complemented by an estimate of job destruction. However, according to the authors, “the calculation illustrates the potential for significant payoffs from trade facilitation, in particular for developing economies”. How such conclusion is reached remains unclear.

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<sup>2</sup> This section relies on Capaldo (2013).

Table 1: ICC estimates of gains from trade facilitation

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

Source: ICC (2013)

### 2.1. Estimating Trade Gains

The first problem that arises in attempting to estimate the effects of trade facilitation is assessing the reform in quantitative terms. Assessments of liberalizations solve this problem in a straightforward way: liberalizing can be thought of as cutting tariffs and the extent of the reform can be measured by the extent of the cuts. But for trade facilitation any measure is typically arbitrary. How does one put a figure on the availability of information on the Internet or on homogeneity of documentation? Clearly, there are many answers. But reliable measures are necessary if each dimension is supposed to explain well-measured flows such as imports and exports. Following standard practice, the ICC approach is to use indices of trade facilitation that hardly contain the information necessary for accurate correlations with trade variables. Therefore, the assessment of trade facilitation starts out in foggy territory. However, trade facilitation indices are used

to estimated trade flows by means of “gravity” models. Montes (2014) has highlighted the problems involved in this procedure.

Further inaccuracy in the estimation comes from the trade data used. Widely cited empirical studies of trade facilitation<sup>3</sup> go back to years before the Great Recession, when growth of GDP and commodities trade was significantly different from today. Growth and commodity prices may influence merchandise trade and model elasticities strongly, even when not included in the estimation directly. Also, pre-crisis trade flows supported unsustainable accumulation of foreign debts and other imbalances. Therefore, pre-crisis data are not very useful when trying to figure out the future effects of the reform.

## *2.2. Estimating GDP Gains*

GDP gains are calculated as a fixed proportion of two-way trade using a constant and universal coefficient equal to 0.46 – that is, \$1 of extra exports supposedly generates \$2 of extra two-way trade and \$0.92 of extra GDP.

Such mechanistic calculations may be a first step for more accurate assessments but they are shaky ground for any important policy choices. In the face of recurring economic instability, the assumptions that every economy reacts to an export increase in the same way and that such uniform behavior does not change over time cannot be accepted without a strong argument. Unfortunately no such argument is provided by the ICC.

Additionally, the rationale behind the specific coefficient chosen (0.46) appears thin: citing a multitude of studies that obtain widely different estimates (ranging from 11 percent to 109 percent) the ICC chooses the average. But a wide range of estimates suggests that aggregate export-GDP ratios are likely misleading.

To matters worse, the studies underlying the surveyed coefficients are mostly based on Computable General Equilibrium models. This is old wine in new barrels, as CGE estimates are notoriously sensitive to changes in elasticities.<sup>4</sup>

## *2.3. Scaling Up and Aggregating Results*

Additional inaccuracy in the estimates derives from the way in which the global figures are obtained: results are first calculated for a sample of countries and then scaled up to the global level. This may be standard practice but it leads to outcomes of questionable value.

In particular, the ICC study makes the following two assumptions:

- (1) The ratio of developed countries’ export gains to developing countries’ gains is assumed constant. Relying on findings that such ratio is about 84 percent, the \$1,137bn export gain estimated for developing countries supposedly points to a \$949bn gain for developed countries – another constant coefficient that strongly affects the estimates but has no justification.

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<sup>3</sup> Two widely cited studies are Wilson, Mann and Otsuki (2004) and Hufbauer, Schott and Wong (2010).

<sup>4</sup> See Taylor and von Arnim (2006).

(2) Once export 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 significance.

#### *2.4. Estimating the Employment Impact*

The ICC study estimates that trade facilitation will create 20 million jobs, of which 90 percent in developing countries. Each country's figure is calculated multiplying the predicted export gains (as explained in Section 2.1) by the export industry's labor-output ratio. Absent direct data, the latter is assumed to be half the labor-output ratio of the aggregate industrial sector (including traded and non-traded industries).

Unfortunately, the report does not provide any estimates of job destruction preventing any conclusions on the overall employment impact. As experience has shown, rapid trade expansion leads to both job creation and job destruction with an often unclear balance.

Fundamental flaws affecting many official estimates of the gains from trade have been clearly highlighted in multiple debates on liberalizations<sup>5</sup>. Indeed, it became evident that rapid trade expansion may lead to higher unemployment by tilting income distribution in favor of workers employed 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 hamper economic activity. In such cases job destruction is likely to outweigh job creation.

The ICC acknowledges these effects<sup>6</sup> but its estimates of employment creation only refer to jobs created<sup>7</sup>. Unfortunately, there is no reason to expect that these will outnumber the jobs destroyed as developing economies become more open to international trade.

In the well-researched case of the North-American Free Trade Agreement, no clear conclusion has emerged yet, after twenty years, on the overall employment impact. Ex-post assessments face the problem of distinguishing the changes caused by NAFTA from those caused by other factors (such as liberalization of trade with other countries, currency devaluations etc.). Among the latter, at least some are usually considered to have favored job creation. The same authors of ICC (2003) report predicted in 1992 a positive impact of NAFTA on US employment<sup>8</sup> but concluded, in their ex-post assessment, that actual effects had been hardly visible (Hufbauer and Schott, 2007).

In a testimony to the US Congress, Polaski (2006) noted that, twelve years after the agreement's signing, Mexico had gained 700,000 jobs in manufacturing and lost 2 million jobs in agriculture, a ratio of 1 to 2.86. Therefore, if we assume a "post-NAFTA" scenario for developing countries after 2013 and adopt the ICC's constant coefficient approach, we should expect that trade facilitation will destroy 2.86 jobs for every job it

<sup>5</sup> See Taylor and von Arnim (2006) and Ackerman and Gallagher (2008).

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

<sup>7</sup> ICC (2013) calls them "jobs supported".

<sup>8</sup> Hufbauer and Schott (1992, 2007).

will create. As shown in Table 2, this would mean that more than 51 million jobs would be destroyed in developing countries with a net employment loss exceeding 30 million jobs. The result certainly does not point to significant payoff from trade facilitation as ICC's calculations seem to imply.

Table 2: Net job losses in a “post-NAFTA” scenario

|                                    | F                                | Z  | G                                       | H   |
|------------------------------------|----------------------------------|--|---|---|
|                                    | Jobs created<br>(ICC prediction) | Job destruction<br>multiplier<br>(post-NAFTA scenario) | Jobs destroyed<br>(post-NAFTA scenario) | Employment gain/loss<br>(post-NAFTA scenario) |
|                                    |                                  |  | FxZ                                     | F-G   |
|                                    | Thousands                        | jobs destroyed/<br>jobs created                        | Thousands                               | Thousands                                     |
| East Asia                          | 11,081                           | 2.86   | 31,692                                  | -20,611                                       |
| Eastern Europe and<br>Central Asia | 2,172                            | 2.86   | 6,212                                   | -4,040  |
| Latin America and<br>Caribbean     | 2,935                            | 2.86   | 8,394                                   | -5,459  |
| Middle East and<br>North Africa    | 188                              | 2.86   | 538                                     | -350  |
| South Asia                         | 613                              | 2.86   | 1,753                                   | -1,140  |
| Sub-Saharan Africa                 | 1,035                            | 2.86   | 2,960                                   | -1,925  |
| <b>Developing Ctr. Total</b>       | <b>18,022</b>                    | <b>2.86</b>  | <b>51,543</b>                           | <b>-33,521</b>                                |

Source: ICC (2013) and author's calculations

### 3. Costs of Trade Facilitation

Although it may be reasonable to expect that trade facilitation will lead to higher trade flows, there is no evidence of large net benefits. The \$1 trillion estimate of global income gains by the ICC is based on too many unjustified assumptions to offer a credible prospect. The same is true for the estimated creation of 18 million jobs in developing countries.

While returns from trade facilitation are uncertain, implementing the reform will be a costly process, likely requiring teams of specialized personnel and, in many countries,



hefty international consultancy fees. To make matters worse, according to the Bali agreement, developing countries will be required to bear the entire cost of trade facilitation without participation from developed countries. Facing tight budgets and pressures to implement the reform, many governments may have to divert resources from services such as basic healthcare and education. It wouldn't be the first time that countries are pushed to invest their social budgets in an export-led growth strategy.

Beyond the financial cost of implementation, developing countries face economic costs with potential social consequences. As mentioned above, a major concern has to do with employment. Both ICC (2013) and OECD (2013, 2014) dismiss any concerns about employment essentially out of faith that trade growth in exporting sectors will absorb any jobs shed in other sectors. Timing is critical in this matter, as advocates of trade facilitation often admit that workers displacements may occur but insist that they will only be temporary. In an unfortunate reversal of the burden of proof, it is often forgotten that promising long-term gains in the face of short-term losses requires solid evidence. The official estimates of trade facilitation offer many assumptions but no evidence.

Since trade facilitation may cause a persistent employment loss, governments should prepare appropriate counter-measures in the form of social policies. Implementing systems of social protection that can support livelihoods by stabilizing incomes and ensuring basic services is a critical complement to trade reforms such as trade facilitation. While economies undertake reforms of uncertain consequences, social protection systems can absorb potential transition costs and help prevent adverse developments. ILO (2014) discusses the stabilizing effects of each aspect of social protection.

As trade facilitation is implemented, an area of potential loss is government employment. If the reform leads to a large increase in trade, increases in productivity may allow customs employees to face the higher workload without expanding the payroll. But if trade does not increase or if it doesn't increase immediately, government employment may have to be cut. Also, a trending approach to government re-organization is to outsource some functions to private firms. In these cases any increase in consumers' welfare and traders' profits will come at the cost of income in the public sector, in many countries the main opportunity for formal employment.

This reasoning challenges a common argument in favor of trade facilitation according to which a smaller bureaucracy will necessarily lead to higher administrative efficiency, reduction of illicit trafficking and improved tax collection (UNCTAD, 2014). Apart from administrative productivity, which obviously increases as a constant workload is borne by fewer public employees, the argument incurs the infamous paradox of a smaller regulatory apparatus expected to exercise better control. Recurring experiences have shown that reducing the size of government branches and agencies may help reduce corruption in the public sector but may compromise their effectiveness. As a result, illicit practices in the private sector may more than compensate reduced corruption in the government. Stimulating trade without putting in place the necessary regulatory infrastructure may lead to costly outcomes.

In general, it is reasonable to expect that trade facilitation will benefit some social groups while damaging others, as is the case with most trade reforms. Whether the net aggregate effect is positive or negative, appropriate systems of social protection are equally

necessary. If the net effect is negative, such systems can help support demand and incomes at least in the initial phase of the downturn. If the net effect is positive, social protection helps support the incomes that are lost or reduced in the process, especially when most gains accrue to a small group. In fact, the outcome of the reform is not independent of the structure and reach of social policy, especially in developing countries where job displacements are more likely to occur.

Finally, trade facilitation may be detrimental for economic activity if it contributes to a growing current account deficit. In general, when trade costs are slashed, both exports and imports will increase and their future balance may not be predicted. However, experience with liberalizations has shown that a higher current account deficit is a possible outcome. If this happens, trade facilitation would contribute to higher consumption of foreign currency and accumulation of external liabilities. This risk is often dismissed suggesting that the current account balance is determined by domestic savings and investments and that spontaneous adjustment of prices such as the exchange rate will be fast enough to prevent any enduring imbalance (UNCTAD, 2014). This view is somewhat outdated. On one hand, it ignores the findings of “structural gap” models<sup>9</sup>, according to which economies with limited access to international liquidity may have to accept a current account balance consistent with such external financing capacity. On the other hand, the view is not consistent with contemporary reality in which large private financial flows may easily crush most economies’ monetary independence. In a time of sovereign debt emergencies triggered by unstable private credit it is hard to believe that trade facilitation is a safe policy for the current account.

#### **4. Trade Facilitation as a Development Tool?**

Apart from uncertain estimates and ignored costs, it is worth noting that trade facilitation reforms are sometimes seen as “development tools” (UNCTAD, 2014). The underlying idea is that trade facilitation offers opportunities for capacity building in public sectors and investment in human and institutional capacity. Although these virtuous effects may occur, the argument points to a lurking contradiction.

Capacity building is often critical in removing bottlenecks that prevent an economy from developing. But it is only useful to trade expansion if countries face enough net external demand. Yet all countries cannot at the same time face higher net external demand – believing they can is a *trade hallucination*. The importance of seeking a sustainable trade expansion is clearly analyzed in UNCTAD (2013). By pushing for improved supply conditions, the Bali Agreement does not offer a viable growth strategy to all countries. In fact, it requires all countries to implement reforms from which only some countries will be able to benefit. Who wins and who loses remains to be seen but the arguments advanced in this paper suggest that trade facilitation is likely to reinforce the current pattern of global income distribution, with potential negative impacts on developing countries and already disadvantaged individuals therein.

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<sup>9</sup> See Taylor (1994) for a summary.

## **5. Conclusions**

As countries move to implement trade facilitation, it is useful to consider the risks of the reform and the policies that would help mitigate them. While potential benefits are uncertain, its costs may be large enough to damage a country's economy.

Official estimates tend to overstate the benefits of trade facilitation and ignore the costs. When all assumptions underlying the calculations are brought to light, expecting a \$1tn gain appears unreasonable. At the same time, estimated employment benefits may easily turn into losses if a "post-NAFTA" scenario is assumed.

With fundamental uncertainty surrounding the reform's effects, implementing trade facilitation without enhancing systems of social protection would be ill advised. In the event of a downturn, well-planned social protection measures can help the economy recover by supporting livelihoods and stabilizing aggregate demand. Indeed, the net effect of trade facilitation may depend on the social policies it is complemented with.

In general, the risks that call for appropriate social protection systems highlight the importance of a growth strategy that is feasible and sustainable for all countries. While it may bring extra business to import-export firms trade facilitation is not such a strategy and it cannot be expected to deliver growth to the global economy.

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