Review of "Determinants of transport costs – are they uniform across

countries?", by Hannah Schürenberg-Frosch.

Summary

This paper aims to look at determinants of transport costs. It proposes a measure for transport costs based on input-output tables. It discusses likely correlates of the measure and interprets results.

General comments

My main problem is with the measure for transport costs. The paper proposes to use the cost share of transportation in agricultural and total output as an internationally comparable measure of transport costs. In the paper this transport margin is often wrongly referred to as 'transport costs'. Transport costs would normally be defined as cost per ton (or for very voluminous goods perhaps per cubic meter) for particular transactions. Ceteris paribus (with the same output price and the same set of transactions) a change in transport costs would lead to an equal relative change in transport margin, but one can easily imagine that a change in transport costs induces a change in transactions. To give an extreme example: two villages in autarky would have close-to-zero transport margin. A road between the two villages might reduce transport costs to the point where they decide to specialize and trade leading to an increase in transport margin. I think the proposed measure would need to be investigated more carefully before introducing it in a cross-country regression setting.

A second problem with the transport margin is measurement. Input-output tables are complicated constructs and trade and transport margins are even more difficult to estimate. It is easy to imagine that transport activities carried out internally by a firm would not be listed separately as transport output, especially in developing countries. Specializing transport activities in separate firms would therefore have an effect on the reported transport margin. Contrary to the paper's claim, this would make the transport margin internationally not comparable. Comparability will also be problematic if output prices are very different from international prices: a high price caused by protection would lead to artificially low transport margin. (For this reason I disagree with footnote 5.)

As for the explanatory variables used, it would be good to add references supporting the particular measures used (road density, population density, precipitation, climate) even if the chosen measures seem the obvious choice.

The paper finds that transport margins are different between rich and poorer countries and investigates the effect of corruption on transport margins. I find this analysis unconvincing. It is clear that corruption can lead to ineffective (or diverted) public investments, but the paper does not look directly at the link between transport investments and transport margins. Instead it looks at the link between road density (a result of transport investments) and transport margins. The paper should therefore explain how corruption can have an impact on transport margins for a given system of roads; in other words, embezzlement of funds for investments cannot be the explanation.

Specific comments

Page 8, paragraph 3: why would a bigger population lead to higher transport margins?

Page 8, footnote 9. Why would GDP not depend on "the transport cost variable", especially if interpreted as a proxy for true transport costs? Most economists (and indeed the introduction in the paper) suggests that low transport costs could lead to increases in GDP. The potentially endogeneity of GDP is treated in a very cavalier way in the paper.

Page 9 last line: what is the role of SAMs here? Are input-output tables not sufficient to extract a transport margin?

Page 10, 2 lines from below: degrees Celsius -> degrees Celsius squared?

Page 12, paragraph 1, last line: which distributional tests?

Page 12, last line: 0.077 and 0.334 presumably refer to a table of regression from a previous version.

Page 13, paragraph 3: "high temperatures" -> extreme temperatures?

Page 13, last paragraph: can you explain the big *negative* coefficients (around 65% lower transport margins) on the low income dummy? Especially considering the last paragraph of page 15, which seems to argue that higher corruption (to be found in the poorer countries) should lead to *higher* transport costs.

Page 24, first paragraph: "These results ... show that our proxy for transport costs ...". Even plausible 'results' cannot show that one variable is a good proxy for another. That has to be investigated separately.