

I will number my response to the comments the same way as the comments themselves ((1) to (5)).

(1) It is correct that the model has two domestically produced goods. There is an exported good and a second good. This second good can be interpreted as a non-traded good, and I do so, by permitting its producer price to differ from the producer price of exports. There is, however, no problem assuming the two domestically produced goods to be identical – so the same good is produced for the home market and for exports. It turns out that no conclusion of the model changes if we assume that there is one good produced that is both sold at home and exported.

(2) I agree that in the model *“the origin-based VAT is essentially a domestic sales tax on domestic goods plus a tariff on exported goods. Similarly, the destination-based VAT in this model is basically a domestic sales tax on domestic goods plus a tariff on imports”*.

But that is as it should be. A tariff on imports is a tax on imports. A tax on exports is a tariff on exports. The tax treatment of imports in eq. (14) is consistent with a destination-based VAT, which taxes the full value of the imports:

$$\begin{aligned}\underline{\Pi} &= \frac{\underline{P}_d}{1+\theta} \underline{Q}_d + \underline{P}_x \underline{X} - (1+\theta) e \underline{P}_m^* \underline{M} - \underline{w}(\underline{L}_d + \underline{L}_x) \\ \underline{T} &= \frac{\theta}{1+\theta} \left[ \underline{P}_d \underline{Q}_d + (1+\theta) e \underline{P}_m^* \underline{M} \right]\end{aligned}\tag{1}$$

With a destination-based VAT all domestic sales of the imported good are taxed at the VAT rate  $\theta$ .

(3) If the country produces a single good that can either be consumed at home or exported the producer price of that good has to be the same for domestic sales and exports.

So, in the origin-based VAT case we have  $\frac{\bar{P}_d}{1+\theta} = \frac{\bar{P}_x}{1+\theta} = e \bar{P}_x^*$ . In the destination-based VAT case we

have  $\frac{\underline{P}_d}{1+\theta} = \underline{P}_x = e \underline{P}_x^*$ . So indeed, the relative producer price of exports and domestically sold and produced goods is 1 in the origin regime – as it should be since the producer can choose whether to sell the single domestically produced good at home or abroad and both domestic sales and exports are taxed at the same rate. The neutrality proposition and the exchange rate effects associated with it are not affected in any way by this. When we interpret the domestically produced and sold good as a non-traded good, neutrality required that the relative producer price of exports and the non-traded good does not change as a result of the switch from an origin-based to a destination-based VAT. When the domestically produced and sold good is identical to the export good, it is also true the relative producer price of exports and the non-traded good,  $R_x^f$ , does not change as a result of the switch from an origin-based to a destination-based VAT – it just happens to be unchanged at a value equal to 1. Of course

$\frac{\underline{P}_x}{\underline{P}_d} = \frac{1}{1+\theta}$ : the tax-inclusive relative price of exports to the domestically produced and sold good falls by the same percentage as the VAT rate. Neutrality lives.

(4) See (3).

(5) As long as I am simply considering the implications of different assumptions about nominal price rigidities, there is indeed no need to go beyond what I do in the paper. Of course, this will not do for

those who doubt the existence of nominal price rigidities. In that case a have to reword the analysis in terms of different types of nominal price *constancy*, where this constancy cannot be rationalized with an appeal to nominal rigidity/stickiness etc., but has to be motivated as the equilibrium behavior of nominal prices that are, in principle fully flexible. I would have to show that there are domestic and foreign monetary policy actions that will actually support the assumed nominal price constancies as an equilibrium outcome. Doing that satisfactorily would have doubled the length of the paper. I agree that my analysis therefore only applicable (even for a Keynesian who believes in nominal price rigidities) for the relatively short term, when such nominal rigidities are likely to be present, before some type of Phillips curve mechanism moves them from their predetermined initial values.