## Answers to Hubert Escaith

Guillaume Daudin\*

October 12, 2018

## 1 Why not based on VA trade?

Why don't we simply:

- 1. Compute the origin of the VA content of each good
- 2. Study how the price evolve following a shock on the price of VA in a country or another ? Intuition:

That would not do because the price of, e.g. French VA does not change for everybody.

Doubt: is that enough an argument? 2 sectors, 2 countries

$$A = \begin{pmatrix} a_{1,1} & a_{2,1} \\ a_{1,2} & a_{2,2} \end{pmatrix} \tag{1}$$

$$A = \begin{pmatrix} a_{1,1} & a_{2,1} \\ a_{1,2} & a_{2,2} \end{pmatrix}$$

$$I - A = \begin{pmatrix} 1 - a_{1,1} & -a_{2,1} \\ -a_{1,2} & 1 - a_{2,2} \end{pmatrix}$$

$$(2)$$

$$(I-A)^{-1} = \frac{1}{(1-a_{1,1})(1-a_{2,2}) - a_{1,2}a_{2,1}} \begin{pmatrix} 1-a_{2,2} & a_{2,1} \\ a_{1,2} & 1-a_{1,1} \end{pmatrix} = \begin{pmatrix} u & v \\ w & x \end{pmatrix}$$
(3)

demande française = 
$$d = \begin{pmatrix} h \\ f \end{pmatrix}$$
 (4)

$$(I-A)^{-1} d = \begin{pmatrix} uh + vf \\ wh + xf \end{pmatrix}$$
 (5)

<sup>\*</sup>PSL, Université Paris-Dauphine, Sciences Po, OFCE. E-mail: gdaudin@mac.com