Comments on: *Services Development and Comparative Advantage in Manufacturing* by Liu, Matoo, Wang and Wei

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Contributions

• Important linkages between services and manufacturing!

• Literature: services offshoring/reforms tend to increase productivity of manufacturing

• This paper:
  – Role of domestic services (finance and business) development in determining specialization in manufacturing sectors that use services intensively
  – Role of imported services inputs
Empirical specification... Hypothesis 1

Empirical specification à la Romalis:

$$RCA_{ist} = \beta_0 + \beta_3 z_{st}^* Z_{it} + \gamma X + \alpha_i + \alpha_s + \alpha_t + e_{ist}$$

• The interaction terms allow testing whether certain factors determine countries' specialization in industries that intensively use these factors.

• $Z$=country development in services sector

• $z$=US domestic services input/VA

$Hp1 = \beta_3 > 0$
Results for Hp 1 are robust

Suggestions to strengthen the paper

• Give a sense of the magnitude of the effects:
  – How much exports share of leather, say, increase with a standard deviation improvement in business (financial) services
Suggestions to strengthen the paper

Add some more controls

• Romalis’ specification is typically used to assess the role of capital, skills and institutions to determine export ...

... Add traditional interaction variables $k*K$, $h*H$, $i*I$ to the endowment controls already included

• ... control for the possibility that a country's development level drives specialization in business intensive and service intensive sector eg. by adding the interaction “$\alpha_s*GDP_{pc}$”
Hypothesis 2: import of foreign inputs replace low development of the services sector

Empirical specification à la Romalis:

\[ \text{RCA}_{ist} = \beta_0 + \beta_3 z_{st} Z_{ist} Z_{it} + \gamma X + \alpha_i + \alpha_s + \alpha_t + e_{ist} \]

The interaction terms allow testing whether certain factors determine countries’ specialization in industries that intensively use these factors. 

\(Z\) = country development in services sector  
\(z\) = dummy built on US domestic services input/VA and used to split the sample in More or LESS service intensive sectors

- \(Z_{ist}\) = foreign services/(domestic+foreign services)

Paper Claim:

\(\text{Hp2} = \beta_3 < 0\) “in services intensive sectors \((z=1)\) domestic services development \((Z)\) is less important the higher a country’s openness to foreign services inputs \((Z)\)”
Comments on Hypothesis 2 estimation strategy

- estimation of a triple interaction may be easier to interpret than the current sample split
- results seem to indicate that the relevant endowment is “domestic development + access to foreign inputs” ... it may be good to have both factors separately in the regression