<table>
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<th>Title</th>
<th>ICT contribution to economic growth</th>
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<tr>
<td>Author(s)</td>
<td>Li, Mengling</td>
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ICT PRODUCING SECTORS

ICT USING SECTORS

ICT as a General Purpose Technology

Positive

ICT Investment K(t) = current period

TFP Growth

Mathematical Model

\[ \Delta TFP = \left[ F_c - 1 \right] \beta k_t^\ast + \left( \frac{(1-\delta)}{(1+g)} \right) \beta k_{t-1}^\ast + s_c \Delta z, \]

where \( \bar{k} = s_{K,IT} \left[ \Delta k_{IT} + \alpha \ln \left( \frac{p_{IT}}{p_k} \right) \right]. \)

Data and Regression

Use industry level data to estimate the coefficients (OLS Regression)

\[ \Delta p_i^\ast = c + a k_{i,t-1}^\ast + b k_i^\ast + \epsilon_i, \]

\( \bar{k} = s_{K,IT} \Delta \ln k_{K,IT}. \)

CONCLUSIONS

Both US and South Korea cases are consistent with the GPT theory - positive but lagged effect of ICT capital growth to TFP growth was more significant in South Korea in the early 1990s.

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