Comments:
Sarah Lynne Daway-Ducanes, "Financial Market Development as a Source of Manufacturing Growth"

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Stop the suspense.
Very nice paper!!
Good
contribution

Problems with variables and approach

- For many endogenous variables, there is ceteris paribus, an optimum—don't want too little or too much. Say R&D/GDP
  - If we see deviations from optimum, why? What are implications?
- Dependent variables will depend on setting of a number of policy variables
- And some of the explanatory variables depend on these policy variable, including those variables that have an optimum, like R&D/GDP, conditioned on these variables
- Changes in setting of policy variables directly affect growth of real GDP
- And indirectly through effects on explanatory variables.
- Some variables are too simple—see real interest rates

The U.S. 2017 Tax Act—Implications for Asia (and Europe!!!)

- *Do not believe* that the 2017 Act is just a tax break for the rich
- If *incentives matter*, Act is a big stimulus for U.S. economy
- Act shifts *international competition* for investment in favor of U.S.
- Warning: Act sets off ***"Race to the Bottom"*** for governments
- Or: Act sets off ***"Race to the Top"*** for consumers, entrepreneurs
- Two alternative reactions: *Restrictions* on trade and capital flows, versus *liberalization*, especially capital accounts
- Restrictions, especially capital market ***restrictions***, will just make enhanced competition ***worse*** for Asia (and Europe!!!)

U.S. Tax Act of 2017

- Simplest user cost of capital: $P \times MPP_K = P_K (RR - \Delta P_{K,t} / P_{K,t-1})$
- Simplify by setting: $P/P_K = 1$, $\Delta P_{K,t} / P_{K,t-1} = 0$
- Then, $MPP_K = G_{Kit} = RR$
- User cost of capital depends on ***RR***; corporate tax rate ***τ***; economic and tax depreciation rates ***δ***, ***dp***; tax credit ***k***; state, local, property taxes …
- ***Two*** instruments in ACT: ***τ*** and ***depreciation dp*** allow for ***two*** targets
- ***Expensing*** (depreciation tool) makes the user cost equivalent to τ = 0
- $\boldsymbol{MPP_{Kit} = G_{Kit} = [\frac{1}{(1-\tau)}\frac{1}{(1+RR)}]\left[(RR+\delta) - RR\,\tau\,dp\left(1-\frac{1}{(1+RR)^{\gamma}}\right)\right]} = rhs.$
- $MPP_{Kit} = \left[1 - \frac{(1-\delta)}{(1+RR)}\right] = \frac{(RR+\delta)}{(1+RR)} = rhs.$

21% vs 14%

- → Maximum ***capital intensity*** for each project, maximum ***before-tax rent*** for each project, maximum number of ***acceptable projects*** → unambiguously expansionary

Tax rate on rent (profits)

- Given the decisions based on the expensing regime:
- Corporate tax rate τ sets the "average" rate of tax on rent (before endogenous use of tax shields)
- Lower the better for firms, international competition
  - Tax shields are separate, endogenous choice, made after all the economic choices (size, resource use) are made, though affects the go/no-go decision
- Expensing gives U.S. big edge over all countries that do not allow expensing
- 21 percent statutory corporate tax rate gives U.S. edge over about half of countries
- Countries ***exporting*** to, ***importing*** from, ***competing*** with must recognize new rules of the international competition

Integrated international financial markets

- Denote the surprise in international risk-factor ***k*** in period ***t*** as $F^W_{k,t}$, and the idiosyncratic risk term on asset j in period t as $\varepsilon^W_{j,t}$. The actual rate of return on asset j in period t is

$$R_{j,t} = RR^W_j + \beta_{M,j}\,(R^W_{M,t} - ER^W_{M,t}) + \Sigma^K_{k=1}\,\beta_{k,j}\,F^W_{k,t} + \varepsilon^W_{j,t},$$

where $E(R^W_{M,t} - ER^W_{M,t}) = 0 = EF^W_{k,t}$ for all k,t, and $\varepsilon^W_{j,t} = 0$ for all j,t

$$RR^W_j = r_f + \beta_{M,j}\,(ER^W_M - r_f) + \Sigma^K_{k=1}\,\beta_{k,j}\,RP^W_k$$

- Think about this for the four-factor model—the Fama-French 3-factor model, plus the Carhart momentum measure. The ***required*** rate of return on asset j in each period t is:

$$RR_j = r_f + \beta_{M,j}\,(ER^W_M - r_f) + \beta_{HML,j}\,RP^W_{HML} + \beta_{SMB,j}\,RP^W_{SML} + \beta_{MOM,j}\,RP^W_{MOM}$$

- The ***actual*** return on asset j in period t is:

$$R_{j,t} = RR_j + \beta_{M,j}\,(R^W_{M,t} - ER^W_{M,t}) + \beta_{HML,j}\,F^W_{HML,t} + \beta_{SMB,j}\,F^W_{SMB,t} + \beta_{MOM,j}\,F^W_{MOM,t} + \varepsilon_{j,t},$$

where $E(R^W_{M,t} - ER^W_{M,t}) = 0 = E\varepsilon_{j,t} = EF^W_{HML,t} = EF^W_{SML,t} = EF^W_{MOM,t}$ for all j,t.

- But what about **The Philippines** if financial markets are not integrated with World?

Suppose Philippines' financial markets are *not integrated* with world

- The actual rate of return on asset j in period t in The Philippines is

$$R_{j,t} = RR^P_j + \beta_{M,j} (R^P_{M,t} - ER^P_{M,t}) + \Sigma^{Kp}_{k=1} \beta_{k,j} F^P_{k,t} + \varepsilon^P_{j,t},$$

where $E(R^P_{M,t} - ER^P_{M,t}) = 0 = EF^P_{k,t}$ for all k,t, and $\varepsilon^P_{j,t} = 0$ for all j,t

$$RR^P_j = r_f + \beta_{M,j} (ER^P_M - r_f) + \Sigma^{Kp}_{k=1} \beta_{k,j} RP^P_k$$

- Does $K_P = K$? Are the k_P the same as the k? Are the $F^P_{jt} = F^W_{jt}$? Are the $RP^P_k = RP^W_k$?
- If The Philippines ***are integrated*** with the world market, just use $(ER^P_M - r_f)$, and $\boldsymbol{RP^W_k}$ for k=1,K—done!
- Otherwise, lots of potential for getting the wrong RR_j
- Many people ***underestimate the consequences*** of mistakes in RR_j