"Exorbitant Privilege and Exorbitant Duty" P.O. Gourinchas, H. Rey, N. Govillot Comments

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Contribution of the paper

- Update and improve the Gourinchas-Rey (2007) database on U.S. foreign assets and liabilities
  - Quarterly data: 1952q1 – 2009q4
- Document the existence of:
  - ***Exorbitant privilege*** = Positive excess return of US external assets over external liabilities.
  - ***Exorbitant duty*** = US provides insurance to the rest of the world in times of global stress.
- Provides a calibrated model that is consistent with structure of external returns for the U.S.
  - 2 country, 2 sector DSGE model

Contribution of the paper

- Features of the model:
  - Differences in country size (H larger than F)
  - Differences in risk aversion (H is less risk averse)
  - Likelihood of disasters ("*rare events*")
  - Possibility of default
  - Complete markets
- Model reproduces H country's (U.S.) facts:
  - Exorbitant privilege of H in normal times
  - Exorbitant duty of H in stress times
  - H country running trade deficits on average
 - Leveraged H's portfolio

Outline of the comments

1. Exorbitant privilege: Why U.S. is unique?
2. Implications for Emerging Markets
3. Incomplete markets
4. Where the shock originates?
5. Heterogeneity in the degree of risk aversion
6. Production economy and probability of disasters
7. Why EMs have different NFA composition?

Exorbitant privilege

assets. Cumulated capital gains and investment income are assumed to be zero in 1980, whereas the cumulated current account (excluding income) starts at the same level of the international investment position.[6]

Chart 1. Decomposition of net foreign assets. 1980–2007 (USD billion)
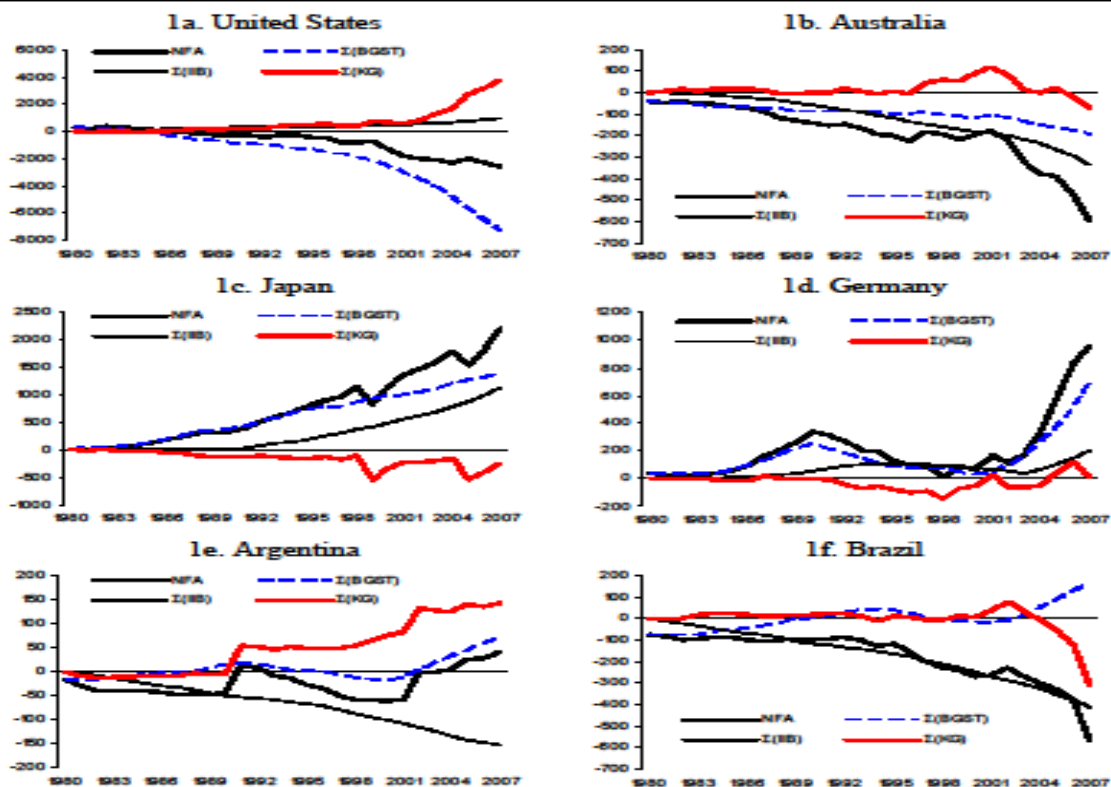
Notes. The charts display the net foreign asset position (NFA) of each country and its decomposition according to a slightly modified version of equation (3) in the main text:

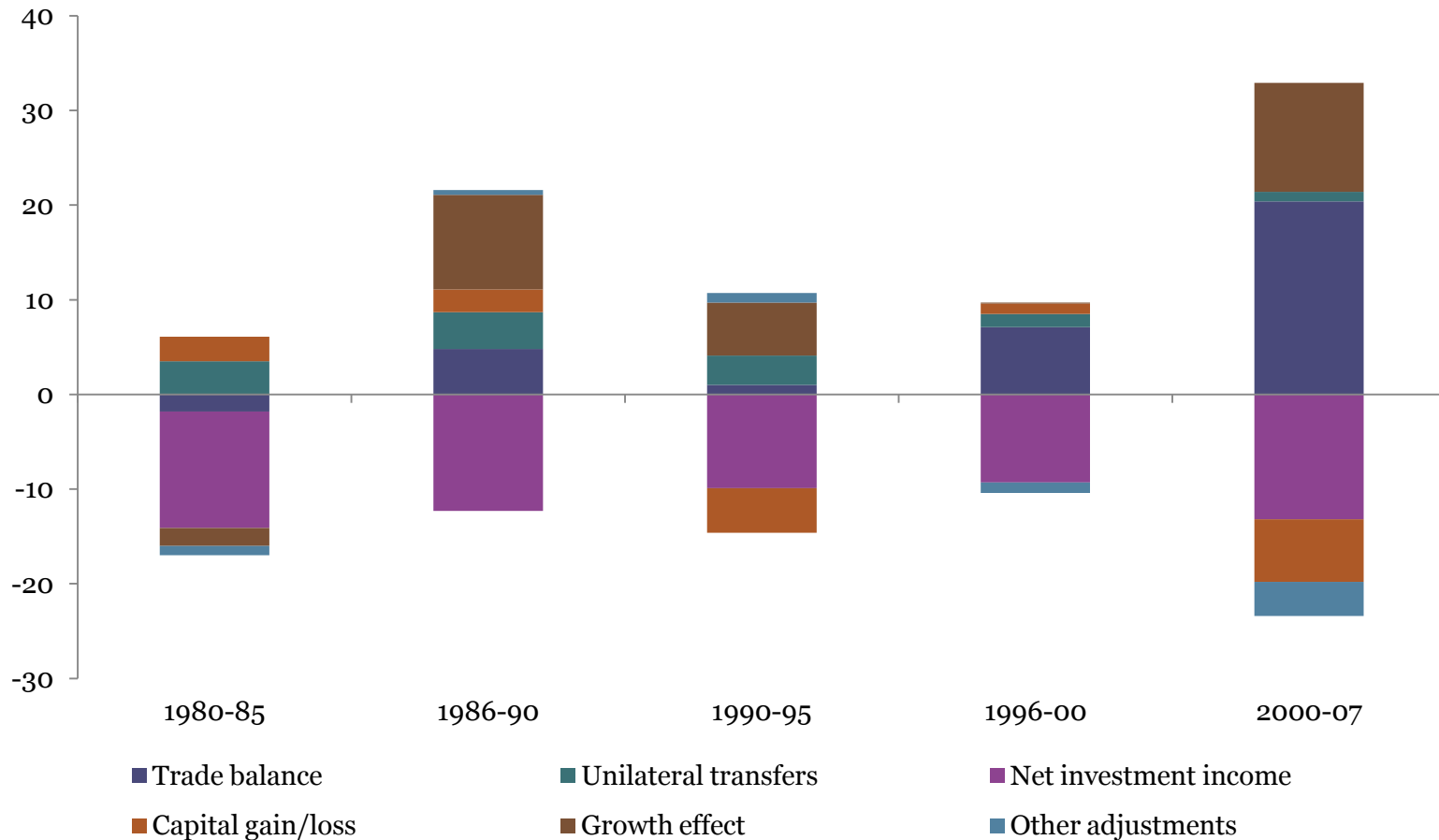$$NFA \equiv \sum(BGST) + \sum(IIB) + \sum(KG) + \sum(EO + KA)$$

Exorbitant privilege

Contribution to ΔNFA (*1980-2007, % of GDP*)

Source: Habib, M.M. (2006) "Excess returns on net foreign assets: The exorbitant privilege from a global perspective." ECB Working Paper 1158, February.

Exorbitant privilege

Contribution to ΔNFA: Evolution over time (*% GDP*)

Source: Habib, M.M. (2006) "Excess returns on net foreign assets: The exorbitant privilege from a global perspective." ECB Working Paper 1158, February.

Implication for EMs

- From the intertemporal resource constraint:

$$(1 + r_t^A)\frac{NFA_t}{Y_t} = -\left[\frac{TB_t}{Y_t} + (r_t^A - r_t^L)\frac{L_t}{Y_t}\right] + (1 + g_t)\frac{NFA_{t+1}}{Y_{t+1}}$$

- EM Assets - Diversified in different currencies
- EM Liabilities – Rising liabilities in LCU
- What if domestic currency (say, real) depreciates?
  - Permanent effect on TB
  - Increase in **r^L** and decrease in **r^A**.
  - Higher value in LCU for assets, and moderate effect on liabilities (if rising LCU financing)

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- What happens during disasters?
- Stock returns low enough relative to bond returns (Gourio, 2010a)
- EMs: Long in riskless assets and short in risky assets (Lane and Milesi-Ferretti, 2007)
- Returns on EMs' liabilities are lower than returns on EMs' assets.

Incomplete Markets

- Complete financial markets are assumed in this paper.
- Discuss possible effects of market incompleteness on the qualitative results of the model.
- Incomplete markets inhibit the degree of international risk-sharing.
- Incomplete markets key in modeling current crisis (Buiter, 2009)
  - Default, bankruptcy, insolvency are impossible to explain within the complete markets paradigm.

Where the shock originates?

- Does it matter where the shock originates?
- This paper? It does not as long as shock leads to global stress.
- Equity premium (Gourio, 2010a)
  - 0.2% without disasters
  - 5.6% with disasters
  - 3.5% with disasters and government defaults
- Shock needs to be very large (Gourio, 2010).
  - Exclude ten disasters larger than 40% (World War II)
  - Equity premium reduced to 0.8%
  - Large disasters: Occur only in Center countries? Can it be generated by EMs? Connectivity?

Heterogeneity in risk aversion

- Heterogeneity in the degree of risk aversion is key to generate positive excess return of gross external assets over liabilities.
  - Home country (USA) should be less risk averse.
- What explains differences in risk aversion?
  - GRG – Home country has superior technology to reduce risks.
  - This superiority reflects interaction between domestic financial development and financial fictions.
- This issue needs further attention
  - Appeal to microeconomic experiments on basic and enduring tastes.
  - Experiments derived from rankings on gambles, attitude surveys and physiological measures.

Heterogeneity in risk aversion

- Risk aversion is not an exogenous parameter.
- Differences in risk aversion determined distance to the frontier "risk-reducing technology"
  - In turn, related to domestic financial development.
- Risk aversion may change under a profound financial distress (say, the current global financial crisis).
  - Evidence of declining risk appetite around the world.

Production economy

- Endowment economies.
- Disaster = Large drop in traded output
  - Constant risk premia
- Evidence of time-varying risk premia
- Need to relax assumption of constant probability of disaster.
- Constant probability ignores feedback between risk premia and economic activity.
  - Rising probability of disaster leads to collapse in investment and recession
  - Rising risk premia associated to increasing cost of capital.
  - Rising demand for precautionary savings leads to a fall in yields to less risky assets and increasing spreads on risky ones.

Production economy

- Gourio (2010b)
  - Constant probability of disaster: Path for macro quantities implied by model similar to that of model without disasters
  - Rising probability of disasters is "observationally equivalent" to preference shocks.
    - These shocks play an important role in macro dynamics.
- Richer dynamics when modeling production economies
  - Disaster may affect capital and TFP
  - Adjustment costs
  - Lower returns on capital following disasters.

Why EMs have different NFA composition?

- Model cannot account for large NFA debtor position of Home country in good times.
- Why emerging markets tend to be short equity and either short or long debt?
  - Advanced countries: Long equity, short debt
- Financial frictions associated with underdeveloped financial markets (Smith and Valderrama, 2008; Caballero et al. 2008)
  - It is costlier for EM firms to borrow internationally than it is for firms in advanced countries (Zervos, 2004).
  - Higher debt costs lower debt inflows and raises debt outflows (precautionary saving)
  - Equity assets relatively cheaper in EMs: FDI inflows to EMs.

Why EMs have different NFA composition?

- Risk plays a key role in explaining NFA composition of EMs
- With incomplete financial markets, households face shocks that they cannot diversify and thus hold precautionary savings
- Facing rising costs of access to international markets, firms reduce investment and dividends to domestic households.
- Adverse productivity shocks to domestic firms reduces value of the firm (below its fundamental value) and leads to foreign purchases of domestic firms (M&As)

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