Implications of Risk for Saving, Investment and Welfare

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I study how financial market incompleteness and risk influence saving, investment and welfare. The first paper develops a model with entrepreneurial risk which can explain the positive correlation between growth and current account surpluses common to developing countries; in the second paper I test the key implications using household data. The third paper shows that hedging can lead to substantial welfare gains for commodity exporters.

1 Growth and Capital Flows with Risky Entrepreneurship (job market paper)

Contrary to the prediction of benchmark neoclassical models, growth accelerations in developing countries tend to be associated with current account improvements, resulting from larger increases in saving than in investment. I argue that this can be driven by the behavior of entrepreneurs facing incomplete financial markets and risky investment. The uninsurable risk of losing invested capital forces entrepreneurs to rely on self-financing to build up their firms. As new business opportunities open up, entrepreneurs increase their saving to finance the investment that produces growth. The key insight is that saving has to rise more than investment in order to allow also for the accumulation of precautionary assets. As a consequence, entrepreneurs generate a net saving increase that sustains persistent net capital outflows. Plausibly calibrated simulations produce sizeable quantitative effects. I then show that the introduction of state contingent claims reduces capital outflows, speeds up growth and leads to substantial welfare gains.

2 Saving and Investment in Developing Countries (in progress)

This paper uses household level data to investigate the determinants of rising saving rates in fast growing developing countries. Instead of relying on standard demographic factors (which have been found to have little explanatory power), I argue that during a period of high growth investment opportunities may play a crucial role in stimulating saving. Preliminary results from Taiwan show that the increase in aggregate saving has been almost entirely driven by the rising saving rates of high income households who, under incomplete financial markets, are the ones more likely to start up an investment.

3 Macro-Hedging for Commodity Exporters (with Olivier Jeanne and Eduardo Borensztein, in progress)

This paper shows that forward contracts and options can substantially reduce the optimal net foreign asset position of commodity exporters and boost national welfare. We compute welfare gains as a function of the maturity of the hedging instrument and three key parameters of the commodity price process: the autocorrelation coefficient, the shock variance and the worst possible shock realization (which determines the no-default borrowing constraint). The last element is particularly important since a large share of the total welfare gains comes from the relaxation of this constraint, rather than from the reduction in price variance.