ECON COMPREHENSIVE PAPERS DISTINCTION 2013

The Behavioral Effects Of Early Intervention For Children
From Low-Income Households
By Ben Bedore

This paper seeks to evaluate the effects of an early childhood intervention program through the lens of modern human capital theory. Data from a child health clinic validate the assumptions of human capital theory. This paper concludes that Penfield Children Center’s new intervention program significantly improves behavior and noncognitive human capital. Past intervention programs are considered and compared with the costs of Penfield Clinic’s treatment. Finally, recommendations for future cost-benefit studies of the program are offered with several potential cost-savings channels.

***

Does Currency Matter?
Home Trade Bias in the European Union
By Joseph Camarda

This paper empirically analyzes whether or not there exists a difference in the level of home bias in trade in the goods market between members of the euro area and members of the European Union which are not members of the euro area. I do so by applying a standard gravity model, either in the form of a standard OLS, random effects panel model or Seemingly Unrelated Regressions system to panel data on trade for all 27 European Union member nations for the years 1999-2011. I find that over the entire time period as a whole there exists no significant difference in the size of the border effect for euro area and non-euro area members of the European Union, however when broken down into smaller time-intervals, euro area members typically display lower levels of the home trade bias, particularly in the years before the economic crisis of the late 2000’s.

***

The Effect of Microfinance on Human Capital Formation:
Evidence from Rural Thailand
By Sana Rafiq

In this paper, I test the impact of microfinance loans on education spending of 1200 households from 64 towns and villages in Thailand. I compare the expenditure on education amongst households that borrow from only MFIs, only non-MFIs and both sources of loan by using data from Townsend Thai Project. The results of the paper indicate that households that borrow from MFIs are more likely to spend on education, especially those with female borrowers. However, the spending on education varied depending on the individual and household characteristics such as family income, child’s age and gender, the gender of loan taker, and the specific lending organization. This study makes important contributions to our understanding of how to more effectively foster the development of human capital through microfinance by analyzing the channels through which microfinance loans influence household spending on education.
A Microstructure Approach to Exchange Rate Determination in the Chinese Foreign Exchange Market
By Wenli Rui

The low explanatory power of macro-based FX models has prompted researchers to seek other approaches to understand exchange rate dynamics. The microstructure theory, which emphasizes trading’s role in equilibrium price formation, emerged as a potential candidate for studying exchange rates. The microstructure theory contends that trading affects exchange rates because FX markets are not transparent. Private information about FX fundamentals is only gradually revealed in the trading process and incorporated into prices. A key microstructure variable that facilitates the transmission of private information into prices is order flow. Order flow is signed transaction volume based on whether it is buyer-initiated (positive flow) or seller-initiated (negative flow). Positive/negative flow reflects buying/selling pressure on a currency and will increase/decrease the currency price. This paper applies a microstructure Portfolio Shifts model to analyze RMB/USD spot transactions in the Chinese FX market. I find strong evidence of order flow’s impact on the RMB/USD rate.

***

Tipping the Balance of Innovation: Who Takes Advantage of Intellectual Property Rights In Developed and Developing Countries
By Adam Scherling

This paper examines the proportion of patents issued to residents in developed and developing countries, focusing in particular on the effects of an increase in intellectual property rights. Analysis is performed on two variations of a panel data set of developed and developing countries from 1980 to 2005, including data on patenting, intellectual property rights, research and development, foreign direct investment, and other related variables. The results suggest that strong intellectual property rights have a robust, positive effect on the proportion of patents granted to residents in developed countries and a weak, negative effect of intellectual property rights among developing countries. Other important factors that are consistently shown to increase the proportion of patents granted to residents in developing countries are research and development expenditures and educational attainment.
LOOP and the Internet Marketplace
Examining the Importance of Google Search Traffic in Explaining the Existence and Persistence of Arbitrage Opportunities on eBay
By Ben Southgate

This paper examines 12,887 individual eBay, English-style, completed auctions of the Otterbox Defender iPhone 4/4S cell-phone case over a 90 day period, with sales and purchases occurring in both the USA and Canada, all collected from Terapeak.com. Findings suggest a potential negative cost to transporting the case across the border, in opposition to previous studies of the “border effect”. Furthermore, time series analysis of $q_t = \ln(ECA_t) + \ln(PUS_t) - \ln(PCA_t)$, or the real exchange rate, suggests that $\Delta q_t \equiv t-q_{t-1}$ US is determined by a stationary AR(1) process, indicating a shock half-life time of $\approx 10$ hours. Finally, Google Search traffic for “Otterbox Defender” within the USA appears to positively correlate with PUS,t.

The Impact of Eurasian Watermilfoil on Residential Lakeshore Property Value in Washington County, MN
By Max Timm

Eurasian watermilfoil (Myriophyllum spicatum) is an aquatic invasive species that is detrimental to water recreation and the trophic state of a lake. Once established within a lake, milfoil can never be eradicated due to its quick and unpredictable growth rate. This study examines lakeshore property sales transactions from 2001 to 2011 on twenty different lakes in Washington County, MN. Through a difference-in-differences application of the hedonic pricing theory, this study utilizes fixed and random effects models to value the effect of a milfoil infestation. Results indicate that a milfoil infestation reduces property value between 10 and 13 percent. Since milfoil is an aquatic plant, this study investigates whether observed behavior is reactive to the raised level of aquatic plant coverage that inhibits recreation instead of an invasive species infestation. Future studies are necessary to determine whether a non-plant aquatic infestation, such as the zebra mussel, produces similar discounts in property value.