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Asiaphoria Meets Regression to the Mean

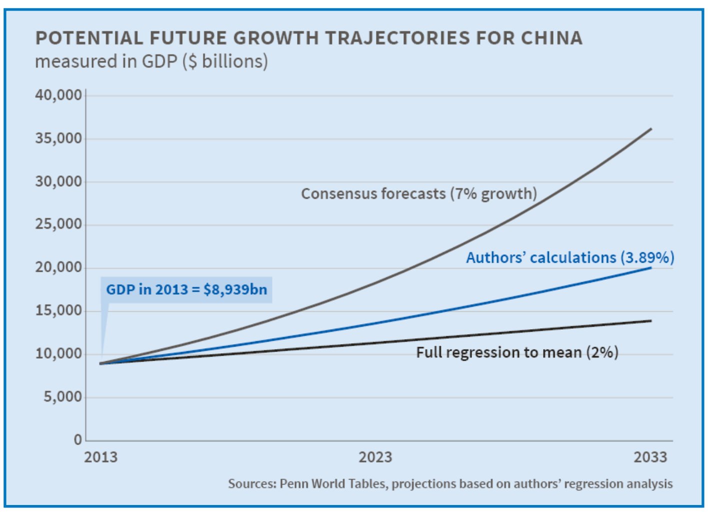
Much analysis and forecasting treats a country's past growth experience as the best source of information on its future growth prospects. Because of this tendency, Asiaphoria—a relatively uncritical enthusiasm for the growth prospects of Asian economies—has arisen repeatedly. This was observed with regard to Japan in the 1960s, and it is seen today with regard to China and India.

One OECD report forecasts per capita growth from 2011 to 2030 of 6.6 percent for China and 6.7 percent for India. The World Bank and the Development Research Center of the State Council of China project annual output-per-worker growth rates of 8.3 percent from 2011 to 2015, 7.1 percent from 2016 to 2020, and 6.2 percent from 2021 to 2025. In official projections through 2030, the U.S. intelligence community presents scenarios implying that China's share of the world economy will grow from 6.4 percent in 2010 to between 17 and 23 percent in 2030. For India the estimates for the same periods suggest growth from 1.8 percent of the world economy to between 6.5 and 7.9 percent. Some other estimates of China's and India's growth rates are even higher.

In **Asiaphoria Meets Regression to the Mean** (NBER Working Paper No. 20573), authors **Lant Pritchett** and **Lawrence H. Summers** examine historical data on growth rates and conclude that with economic growth, as with investment returns, past performance is no guarantee of future performance. They demonstrate that regression to the mean is the single most robust and empirically relevant fact about cross-national growth rates. The lack of persistence in country growth rates over medium- to long-run horizons implies that a country's current growth has less predictive power for future growth than many analyses assume.

> Typical degrees of regression to the mean imply substantial slowdowns in China and India relative even to currently cautious forecasts.

It might be the case that China will continue to experience annual per capita growth for another two decades at a 9, or even 7 or 6 percent rate. Given the regression to the mean present in the cross-national data, however, where growth rates historically have averaged 2 percent with a standard deviation of 2 percent, the authors conclude that continued rapid growth would be an extraordinary event. China's super-rapid growth has already lasted three times longer than a typical episode and is the longest ever recorded. Similarly, while it might be the case that Indian growth will continue at 6 percent per year, this would also require a relatively rare degree of growth persistence.



The authors' findings suggest that in projecting a country's growth rates over the long term, forecasters should give heavy weight to the growth rates of all countries, rather than to the historical growth experience of the country being studied. They believe that, historically, most economic forecasting errors have come from placing excessive weight on a country's recent past. This can explain why official forecasts usually miss discontinuities in a nation's growth trajectory.

While the post-financial crisis recovery in the United States has been slower than many initially expected, and the recovery in Europe is even slower and weaker, Pritchett and Summers note that the fallout for the global economy has been much less than feared. This has been due in large part to sustained growth in China and India, which has generated positive spillovers for other economies.

Though the prevailing view in many quarters today is that rapid global growth will continue with Asia as the engine, the authors point out that that Asiaphoria proved unrealistic following the rise of Japan, the growth of the Asian Tigers (Korea, Taiwan, Singapore, and Hong Kong), and the emergence of the Asian Dragons (Malaysia, Indonesia, and Thailand).

Continuation of rapid growth in Asia is only one possible path forward, and the authors call attention to the substantial possibility that the global economy will follow another one. Typical degrees of regression to the mean imply substantial slowdowns in China and India relative even to currently cautious forecasts. They also observe that high-growth episodes often end with full, and abrupt, regression to the mean.

—Les Picker

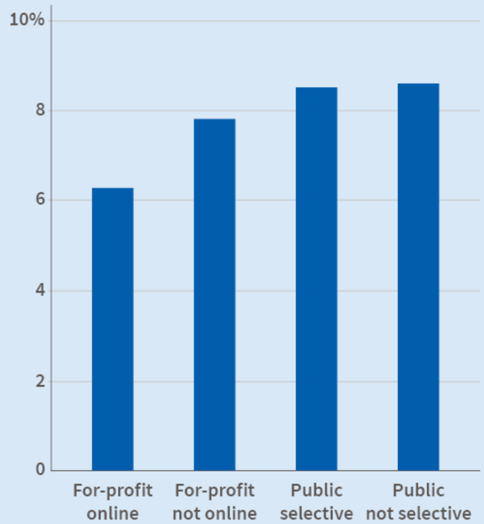
The Value of Postsecondary Credentials in the Labor Market

Employers looking at applicants with bachelor's degrees in business are 22 percent less likely to call back graduates from for-profit online schools than those from non-selective public institutions, according to a new study comparing employer perceptions of public and for-profit institutions of higher education.

"These online, for-profit colleges have been responsible for 21 percent of the growth in all bachelor's degrees and 33 percent of the growth in bachelor's degrees in business over the last decade," write David J. Deming, Noam Yuchtman, Amira Abulafi, Claudia Goldin, and Lawrence F. Katz, authors of **The Value of Postsecondary Credentials in the Labor Market: An Experimental Study** (NBER Working Paper No. 20528). "Yet it is precisely the bachelor's degrees granted by the fastest-growing set of institutions that are associated with the worst callback outcomes for jobs requiring a bachelor's degree."

Between April and November 2014, the researchers used a large employment website to send 10,492 hypothetical résumés to employers posting business and healthcare-related openings in five major cities: Chicago, Los Angeles, Miami, New York, and the San Francisco Bay Area. For business positions requiring a bachelor's degree, the researchers sent four otherwise identical résumés for each position: two from local public universities varying by selectivity, one from a local for-profit institution and one from a national, online, for-profit school. The authors took an analogous approach in applying to business jobs not requiring a bachelor's degree and to healthcare sector positions. Of all résumés sent to job openings, 8.2 percent received a callback.

> There is little evidence that obtaining credentials from for-profit institutions improves the job prospects of workers who would otherwise not attend college.



Source: Authors' experiment focusing on job postings requiring a B.A.

The rate of callbacks depended on the type of job being offered. For example, the preference for graduates of public universities over for-profits was clear for business job openings requiring a bachelor's degree. On average, 8.5 percent of applicants with a degree from a public institution received callbacks, in contrast to only about 6.3 percent of applicants with degrees from online for-profit schools. There was some variation among the for-profit schools, too, with employers preferring locally operated for-profit schools (7.8 percent callback rate) to the online for-profits.

For business job openings not requiring a bachelor's degree, there was no statistically significant difference by sector of postsecondary credential, and less than one percentage point difference for online for-profit bachelor's degree-holders relative to those with no postsecondary degree.

Employers offering jobs in the healthcare sector not requiring a certificate were 57 percent less likely to call back applicants with a certificate from a for-profit school than from a community college. For health jobs that did not require a credential, 8.9 percent of applicants with a public certificate got callbacks, compared with 4.2 percent of those with a for-profit certificate and 5.9 percent for those with no postsecondary degree. For jobs requiring a certificate, public certificates modestly outperformed for-profit ones, 5.8 percent to 4.9 percent.

The study found that that having a B.A. degree from a selective public university did not generate more callbacks, on average, than a degree from a non-selective public school. In fact, for low-paid business vacancies, the callback rate was modestly lower for the group with degrees from selective institutions. But for high-paid jobs, it was significantly higher. The authors conclude this indicates that "employers value both college quality and the likelihood of a successful match when contacting job applicants."

"Because yearly tuition at a for-profit college typically greatly exceeds that at a public university and for-profit degrees seem to be less valued by employers, the for-profit degree appears to be the less attractive investment," according to the authors. They note, however, that public colleges are often overcrowded and that for-profits may be able to more rapidly move into expanding fields not well-served by public institutions. In that case, the most appropriate comparison would be between a for-profit credential and no post-secondary credential. The study findings, however, provide little evidence that obtaining a for-profit credential will improve the job prospects of workers who would otherwise not attend college at all.

—Laurent Belsie

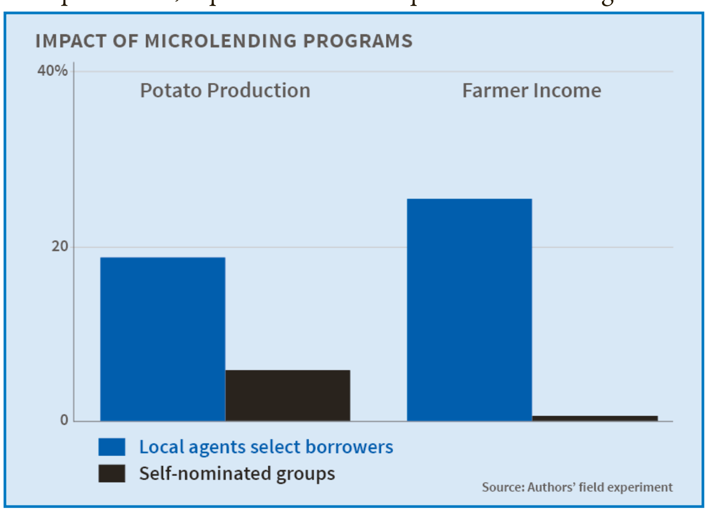
An Evaluation of Agent-Intermediated Microloans in India

In recent years, the concept of "micro-lending" or "micro-financing," has held out hope that small loans to borrowers who lack access to formal financial institutions could improve economic well-being in impoverished areas of developing economies. This possibility has been called into question by a number of studies suggesting that traditional microcredit does not necessarily lead to higher productivity and incomes for poor farmers and entrepreneurs.

In **Financing Smallholder Agriculture: An Experiment with Agent-Intermediated Microloans in India** (NBER Working Paper No. 20709), **Pushkar Maitra**, **Sandip Mitra**, **Dilip Mookherjee**, **Alberto Motta**, and **Sujata Visaria** argue the problem may lie with how borrowers are selected and how traditional microloan deals are structured. In a field study in the West Bengal region of India, they found that crop yields and income of potato farmers increased when local trader-lender agents were given authority to select borrowers for individual-liability loans.

Many traditional microfinance programs employ a variation of a scheme called Group-based Lending (GBL), which effectively requires a group of self-selected borrowers to band together to take on joint responsibility and liability for loans. Though attractive in some respects, GBLs can have drawbacks, such as the frequent meetings agents and borrowers must attend to verify a loan plan's progress, a process that drives up administrative costs and consumes the time of participating farmers. The authors also note that, in joint-liability programs, peer pressure from group members can discourage borrowers from expanding the scale of borrowing and taking risks, and there is no mechanism to screen out unproductive borrowers.

> Allowing local trader-lenders to select borrowers appears to increase farm output more than group-based lending does.



The authors explore a new mechanism called Trader Agent Intermediated Lending (TRAIL) for selecting farmers with small landholdings to receive unsecured individual-liability loans for agricultural working capital. Randomly selected agents, who would get commissions based on the repayment of interest from loans, would recommend potential borrowers from their own village networks whom they believed were the most promising and low-risk recipients for loans. The agents then would not be involved in the actual financial transactions between the lender and borrowers. In turn, farmers who were recommended by the agents would be randomly selected by the lender to take part in TRAIL programs. The authors evaluated the impact of the program by comparing outcomes for farmers who were randomly selected to take part with outcomes for those who were not.

In a field experiment conducted in 48 villages in two districts of West Bengal during 2010–12, the authors implemented and assessed the results of TRAIL programs in 24 villages and GBL programs in the other 24 villages.

They found that TRAIL loans increased cultivation of potatoes, the major cash crop in the region, and farm incomes by 17 to 21 percent, while GBL loans had only "insignificant and highly dispersed effects." The authors argue that TRAIL agents, motivated by incentives tied to the loan-repayment structure, tended to select borrowers they were familiar with and considered low-risk and productive in general. The borrowers were motivated by promises of lower credit costs and future increased credit access based on their crop performance and loan repayment record.

For TRAIL borrowers, the authors estimated a rate of return on investments in potato cultivation of between 70 and 115 percent. "In contrast we do not find that increased expenditure on cultivation resulted in an increase in output for GBL borrowers," the authors say.

In addition, the average repayment rate at the end of two years was 98 percent for TRAIL loans and 91 percent for GBL loans.

"These results indicate that the TRAIL scheme successfully harnessed local network relationships between loan agents and borrowers to create a 'win-win' situation where both borrowers and agents benefitted, while generating high loan take-up, high repayment rates and lower administrative costs," the authors conclude.

—Jay Fitzgerald

Mortgage Rates, Household Balance Sheets, and the Real Economy

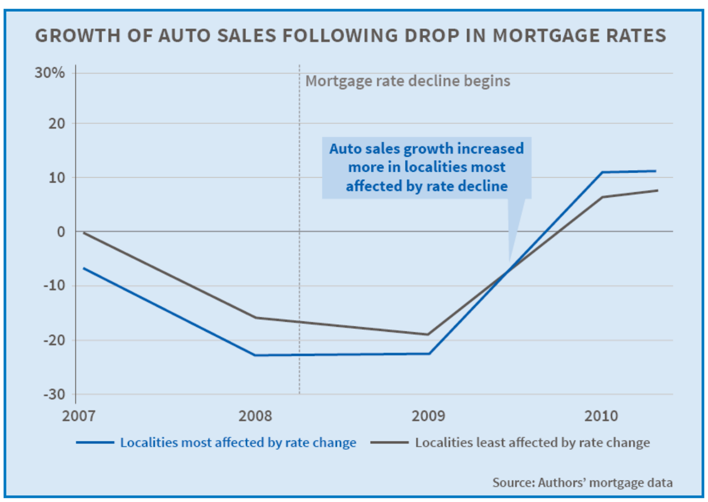
Economists have long debated the effects of monetary policy on the real economy. During the Great Recession, the Federal Reserve reduced short-term interest rates and made large purchases of mortgage-backed securities in an attempt to stimulate household spending and support the prices of assets such as houses. However, empirical evidence on the consequences of these extraordinary policy interventions is fairly limited.

In **Mortgage Rates, Household Balance Sheets, and the Real Economy** (NBER Working Paper No. 20561), authors **Benjamin J. Keys**, **Tomasz Piskorski**, **Amit Seru**, and **Vincent Yao** provide evidence on the impact of lower interest rates on mortgage borrowers and broader economic outcomes during this significant economic downturn.

The authors use a comprehensive proprietary dataset belonging to a large financial institution for their analysis. This loan-level panel data on millions of U.S. mortgage borrowers in the agency market has detailed information on loan, property, and borrower characteristics and monthly payment history on mortgage debt. All records in this data were matched to consumer credit bureau records.

The authors find that the large interest rate declines due to monetary policy changes by the Federal Reserve had a direct and substantial impact on household balance sheets and on local economies in which a substantial share of consumers were affected by the rate declines. Consumers who experienced reductions in their debt service costs due to rate declines reduced their credit card debt, were more likely to purchase new automobiles, and were less likely to be delinquent on both secured and unsecured debt. These outcomes in turn had significant impacts on foreclosures, house prices, and employment in regions with large numbers of consumers that benefited from rate reductions.

Consumers whose mortgage interest rate fell were more likely to reduce their credit card debts and buy new cars.



The authors suggest that policies aimed at reducing mortgage rates can have a meaningful impact on macroeconomic conditions by improving household balance sheets. By reducing the interest rates of borrowers with adjustable-rate mortgages (ARMs), low interest rate policies may achieve effects similar to mortgage modification programs. They may also take effect more quickly. Temporary payment reductions induced by ARMs may achieve outcomes similar to permanent reductions of mortgage principal, but do so in a potentially more cost-effective way. For the average ARM borrower in the authors' data sample, monthly mortgage payments declined by about $150.

By automatically reducing mortgage rates when market rates are low, ARMs can also help alleviate other frictions in the mortgage refinancing market, according to the authors. For example, rate resets allow refinancing of borrowers regardless of the extent of their housing equity or creditworthiness. They can also help to reduce frictions due to limited competition in the loan-refinance market.

Existing research provides evidence of significant inertia and inattention in mortgage refinancing decisions by borrowers. As ARM contracts do not require the active participation of borrowers in the process of rate reduction, they can help reduce the impact of these factors for mortgage refinancing.

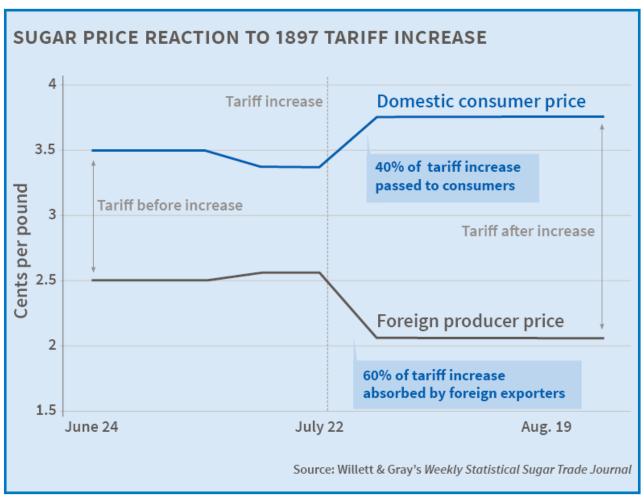
The data indicate that a sizable part of the initial stimulus provided by lower mortgage rates may have been transferred to the banking sector through the repayment of consumer debt. Credit-constrained households, defined as those carrying significant credit card debt balances, initially allocate nearly 70 percent of the liquidity provided by lower mortgage payments to paying down their unsecured debt. This debt deleveraging process can significantly dampen the initial consumption response of these borrowers. These findings suggest that in order to stimulate household consumption government policies could also consider directly targeting the cost of servicing credit card and other higher-interest debts.

—Les Picker

The Impact of Tariff Changes: U.S. Sugar Duties, 1890–1930

In **Tariff Incidence: Evidence from U.S. Sugar Duties, 1890–1930** (NBER Working Paper No. 20635), **Douglas A. Irwin** uses a unique dataset to provide new empirical evidence on whether domestic consumers or foreign exporters bear the burden of import duties and how tariffs affect the terms of trade.

This paper uses high-frequency data on raw cane sugar imports into New York City from 1890 to 1930. Over this time period, the United States consumed about a quarter of the world's sugar, making it possible that it might be able to shift some of the burden of its tariffs onto its trading partners. The study explores whether large and unilateral tariff changes that were implemented by the United States during the period had significant influence on the world price of sugar.



Since the data contain both the pre-duty import price and the post-duty market price, the author can compare the response of prices on both sides of the tariff wall to every tariff change. The results, based on eight tariff changes that included both increases and decreases, suggest that the price responses depended on the direction of the tariff change. Tariff reductions were immediately and fully passed on to domestic consumers with no apparent impact on the import price, while tariff increases were shared between foreign suppliers and domestic consumers, with the foreign suppliers bearing the larger portion.

> Tariff reductions were fully passed on to domestic consumers, but the burden of increases was shared by consumers and foreign exporters.

This difference is mostly explained by demand responses around the time of tariff changes. Since these changes are known in advance and are expected to remain in place for many months, if not years, market participants shift the timing of their purchases in different ways, depending on whether tariffs are increased or decreased, with different effects on import prices.

When tariffs increase, importers shift more of their purchases to the weeks prior to the implementation of the higher tariff. In the data, the largest tariff increase—roughly 40 percent—led to a tripling of imports in the months preceding the tariff hike and a collapse of sugar purchases for several months afterwards. This shifting of purchases explains the upward pressure on prices prior to the tariff increase and the downward pressure on prices immediately following the event.

On the other hand, the incentive to shift purchasing behavior was low with tariff reductions, because the lower tariff was expected to remain in place for some time. While there was some postponement of purchases in anticipation of the lower tariff, the data do not reveal a surge in demand immediately following the decrease in the tariff. Consequently, there was little effect on world prices. The pass-through of the tariff reduction to domestic prices was nearly instantaneous and contemporaneous with the change in the tariff rate. The author suggests that an implication of the results is that even large countries need not fear an adverse terms-of-trade effect from a unilateral tariff reduction.

—Claire Brunel

The Real Effects of Capital Controls: Evidence from Brazil

The massive surge of foreign capital to emerging markets following the global financial crisis of 2008–09 has led to renewed debate about the merits and consequences of international capital mobility. While the free flow of international capital can reduce the cost of capital, increase investment and growth, and boost international diversification for foreign investors, it also can pose significant risks for the recipient economies if subject to sudden stops or reversals. To manage the risks associated with the recent capital inflow boom, several emerging markets have imposed taxes or capital controls to curb the flow of foreign capital into their economies.

In **The Real Effects of Capital Controls: Financial Constraints, Exporters, and Firm Investment** (NBER Working Paper No. 20726), **Laura Alfaro**, **Anusha Chari**, and **Fabio Kanczuk** consider the booming economy of Brazil. They analyze firm-level data that make it possible to study how capital controls affected the stock market performance of Brazilian firms and the competitiveness of exporters.

In March 2008, Brazil imposed a 1.5 percent tax on foreign capital inflows that were used to purchase fixed-income securities. This tax was removed in October 2008, after a sharp decline in foreign investment that was attributable primarily to the global economic downturn. The tax was reinstated in October 2009 as the Brazilian economy rapidly recovered, and expanded to a 2 percent tax on fixed-income, portfolio, and equity investments. After a series of further increases, in October 2010 the tax on fixed-income investments was raised to 6 percent.

> The market value of Brazilian companies, especially smaller and purely domestic firms, declined in response to the imposition of capital controls.

The researchers find a significant decline in stock market returns of Brazilian firms coincident with the imposition or tightening of capital controls. The average firm declined in market value by 3.4 percentage points in a two-day period corresponding to announcement of more-stringent capital controls when the authors allow the effect to vary by firm size. They also find that the decline in value was smaller for large firms, suggesting that these businesses were partially shielded from the impact of controls. When the authors distinguish between controls on debt and on equity flows they find that the negative stock market returns associated with new controls on equity flows were larger than those for controls on fixed-income investments.

Another key finding is that firms engaged in exporting experienced smaller negative returns than firms that sold only to the domestic market. The authors observe that exporters "may have access to foreign currency proceeds, and therefore not be affected by the capital controls to the same extent as purely domestic firms." Exporting firms may also be affected positively by capital controls if the controls lead to a depreciation of the Brazilian real, which in turn would make Brazilian exports more competitive.

Finally, the market value and investment of external finance-dependent firms was negatively impacted by the controls. Because the study uses firm-level data, it is possible to compare the investment effects on firms of different sizes. For firms below the median firm size, investment fell to an average of 1.7 percent between 2009 and 2011, from an average annual rate of 8.9 percent in the prior two years. Firms that do not produce for export markets saw an even sharper decline in investment, while exporters actually increased their investment during this period.

—Matt Nesvisky

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