Jeffrey A. Frankel

In the years since the severe global financial crisis of 2008, macroprudential policies have attracted interest as a potential additional set of tools to complement ordinary monetary policy, a possible means of counteracting financial market excesses and subsequent crashes.

In the six years since my last report, members of the International Finance and Macroeconomics Program have written over 600 working papers. Many have been published subsequently in leading journals. There is not space here to summarize all or most of them. Instead, I will concentrate on recent research on international macroprudential regulation. All of the working papers in the International Finance and Macroeconomics Program can be found on the program’s publications page, http://www.nber.org/papersbyprog/IFM.html.

We have long had microprudential regulation of banks and securities markets. But macroprudential thinking begins with the observation that the whole of the financial system is more than the sum of the parts. A micro-prudential regulation might, for example, limit the loan-to-value ratio for individual mortgages or set capital minimums for individual lenders at levels that are figured by taking the probability of housing price fluctuations as exogenous. Thus it is a “partial equilibrium” approach. A macro-prudential approach recognizes that housing prices are endogenous, and that during a credit-fueled housing boom, the probability of a crash is greater and so regulations on individual borrowers and lenders may need to be set more stringently.

Financial regulators need to think about business cycle fluctuations, and macroeconomic policy-makers need to think about financial regulation. It is not just banks and private financial institutions that were led by a micro perspective into thinking that default probabilities were independent across households, and that therefore treated mortgage-backed securities as virtually riskless. Some regulatory agencies also neglected the correlation across borrowers and so underestimated...
One root source of capital market imperfections is the need for borrowers to have collateral in order to prove their creditworthiness. A debtor who is up against a collateral constraint may be forced to sell assets (“fire sale”), driving down the market price and thereby putting other borrowers up against their own constraints. Javier Bianchi and Enrique Mendoza show how overborrowing carries a pecuniary externality because private agents do not internalize how the price of assets used for collateral responds to collective borrowing decisions.8 Their model suggests that financial innovation may have played a role in the financial crisis of 2008–09.9

Many observers warn of the moral hazard dangers of bailing out creditors or lenders in a financial crisis. But if the time-consistent system features government intervention during the deleveraging phase of the cycle, it is anathema to private creditors without ex ante macroprudential policy, as under the Basel Committee’s six-pillar prudential framework. Hence, the need for prudential policies such as debt limits and rollover requirements for banks’ foreign-currency deposits.

In open economies, prudential regulation cannot be imposed domestically without regard to the international activities of financial institutions. In some cases, authorities may decide to treat foreign debt as carrying extra risk beyond that of domestic liabilities and, for example, set higher rollover requirements for banks’ foreign-currency deposits than for domestic deposits. The tightening of capital, liquidity, or leverage requirements or other regulations on domestic banks in one country may cause a “leak” abroad, in the sense that some of the projects that might previously have been funded by domestic banks may now be financed from abroad.10

This 21. Cross-country Differences in the Use of Macroprudential Policies

Figure 1

- Regulation of Foreign Liabilities

In open economies, prudential regulation cannot be imposed domestically without regard to the international activities of financial institutions. In some cases, authorities may decide to treat foreign debt as carrying extra risk beyond that of domestic liabilities and, for example, set higher rollover requirements for banks’ foreign-currency deposits than for domestic deposits. The tightening of capital, liquidity, or leverage requirements or other regulations on domestic banks in one country may cause a “leak” abroad, in the sense that some of the projects that might previously have been funded by domestic banks may now be financed from abroad.10

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This
• Capital Flow Management Policies Include Macroprudential and Capital Controls

Although the theory of pecuniary externalities offers an explanation why financial markets do not always deliver the best outcomes and so why macroprudential regulation might be justified, a finer-grained analysis is needed if the conclusions are to be of practical use. What is different about the danger of overborrowing internationally as opposed to domestically? What is different about controls on international capital flows as opposed to domestic prudential regulation?

Macroprudential regulations and capital controls have come to be grouped together as Capital Flow Management policies, which have been found capable of reducing financial fragility. Distinguishing between macroprudential regulation (to limit leverage) and capital controls (to induce precautionary behavior) is potentially important. Anton Korinek has argued that the latter may be relevant only for those emerging market countries in which foreign-currency debt could render devaluation contractionary.24

• Capital Controls vs. Exchange Rates

The theory of overborrowing as a pecuniary externality can help update the traditional point that capital controls can be used to insulate a pegged-currency country from external shocks. Controls can be used to reduce capital inflows in boom times and then reversed in bad times, like an umbrella that one uses only when it is raining. Another analogy, introduced by Michael Klein, is gates that can be opened or closed with the cycle (Brazil, South Korea) versus walls that are up permanently (China and India).26 Of course capital controls7 also have drawbacks, such as raising firms’ cost of capital28 or lacking enforceability.29

• Regulation to Influence Liability Composition

Some kinds of regulation aim to alter the composition, rather than the total level, of foreign liabilities. Capital controls may, for example, seek to alter the maturity composition of liabilities, reducing short-term capital flows that are prone to sudden reversals.30 Another concern is the currency composition of liabilities. Emerging market countries have in the past borrowed abroad primarily in dollars or other foreign currencies, rather than in their own currency. In the case of bank borrowing, such short-term foreign exchange liabilities are an example of the “core” funding sources (i.e., sources other than customer deposits) that are no longer tailored to their own economic circumstances.31

One study of 51 emerging market economies over the period 1995–2008 suggests that some countries were able to use foreign currency-related prudential measures, domestic prudential measures, and financial-sector capital controls to reduce both the share of foreign exchange lending in total domestic bank credit and the share of portfolio debt in total external liabilities, which enhanced their resilience when the financial crisis hit in 2008–09.33

3. The Role of Reserves and the Precautionary Approach to the National Balance Sheet

A broader definition of macroprudential policies would include other efforts to strengthen the national balance sheet, such as increased holdings of foreign exchange reserves by the central bank, as precautions to reduce financial fragility:

- Foreign Exchange Reserves

In the decade following the crises of the 1990s, central banks in emerging markets increased their foreign exchange reserves. One important reason was the precautionary motive: They believed it would help protect their countries against the worst effects of a financial or balance of payments crisis.34 This belief was tested during the global financial crisis, a common shock experienced by all countries. Some studies have found that countries holding a high level of foreign exchange reserves indeed tended to come through 2008–09 in better shape than others.35

(See Figure 3 on next page.) In particular, countries that had a high ratio of foreign exchange reserves to external borrowing were not hit as badly as those with a low ratio.36 Again in 2013, countries that had been holding more reserves seemed better able to withstand the shock of higher U.S. interest rates that was associated with suggestions of a less-expansionary monetary policy.37 Some other studies, however, have found less evidence of an effect.38

- Alternatives also include Reserves and Appreciation

A complete set of alternative policies for managing a capital boom could include not just capital flow management policies but also conventional counter-cyclical macroeconomic actions such as tightening monetary policy, tightening fiscal policy,39 and allowing the currency to appreciate.40 How authorities manage a boom has a big influence on a country’s vulnerability to subsequent adverse shocks.

4. Revisions in the Trilemma, Global Liquidity Conditions, and International Coordination

A long-standing principle in international macroeconomics, often associated with Robert Mundell, goes by the name of “the Impossible Trinity.” Also called the “trilemma,” the proposition states that even though a country might wish to have a fixed exchange rate, to retain its own monetary policy, and to avoid the flow of finance to emerging countries, these three goals cannot all be achieved.41

The logic is simple. If there are no differences between the domestic currency and foreign currencies and no barriers to the cross-border movement of capital, then the domestic interest rate is tied to the world interest rate, and so the country cannot set its own interest rate. (In terms of Figure 4, no one can float more workable than the corner choices.)42 Do floating rates in fact insulate countries from foreign interest rates as advertised? Do macroprudential regulations offer a solution? Or is there a new need for international policy coordination across central banks so that the Federal Reserve, for example, would take emerging markets’ interests into account when it sets interest rates?

- Do Floating Rates Really Insulate?

In some theoretical models, domestic market imperfections may prevent floating rates from performing the shock absorption role claimed in traditional macroeconomic analysis. Some, such as Emmanuel Farhi and Iván Werning, find that in such circumstances taxation of capital flows can be welfare-improving.43 Others find that capital controls are of limited help.44

Figure 3

Reserve sales (1) and purchases (2) during country-specific crises


Figure 4

The Trilemma

Money and Exchange Rate Stability

Financial Integration

Global Liquidity Conditions

International Coordination

This principle helps explain the travails of the eurozone. Member countries have found it difficult to live with central bank policies that are no longer tailored to their own economic circumstances.45 It also helps explain past crises such as currency crashes in emerging markets. When the Federal Reserve has raised interest rates, it has sometimes forced Mexico to choose between an unwanted tightening of its own monetary conditions and an unwanted abandonment of the peso’s peg to the dollar. This area of research is of particular interest at a time when quantitative easing by the Federal Reserve has come to an end and many observers are concerned that an expected increase in U.S. interest rates might once again reverse the flow of finance to emerging countries and trigger new crises.

Research questions abound. Does the trilemma mean that emerging markets should turn back the clock on capital controls? Does it mean that the movement toward floating exchange rates is the answer? Are intermediate regimes such as managed floating more workable than the corner choices?42 Do floating rates in fact insulate countries from foreign interest rates as advertised? Do macroprudential regulations offer a solution? Or is there a new need for international policy coordination across central banks so that the Federal Reserve, for example, would take emerging markets’ interests into account when it sets interest rates?

- Do Floating Rates Really Insulate?
Hélène Rey finds that one global factor explains an important part of the time-varying global factor can be interpreted as the perceived importance of risk, as reflected in measures of volatility such as the VIX. This global factor, she notes, is in turn a driver of this global factor “fear index.”

Another response to the problem of spillovers from US monetary policy to emerging market countries is a call from emerging market leaders like Raghuram Rajan, Governor of the Reserve Bank of India, for the major central banks to coordinate monetary policy with an eye toward international repercussions. Of course the mandate of the Federal Reserve, and of other central banks, is to act to promote the best interest of its own economy. But that need not rule out taking into account international repercussions of monetary policy moves or coordinating with other countries. Specialist policies may themselves need to be coordinated internationally.

Interest Rates at the Zero Lower Bound

A particular version of the monetary independence problem may arise when countries are seeking to ease monetary policy in the presence of a liquidity trap. For example, interest rates may already be at the zero lower bound, as has been the case in Japan since the late 1990s and other major countries since 2009. If the textbook theory is right, currency depreciation offers another channel for monetary stimulus besides the interest rate. But if floating exchange rates in fact do not allow sufficient monetary independence, again there may be a role for capital flow management measures. Some argue that, in a global economy with open financial markets, the problem of the zero lower bound introduces a new dimension to the international policy dilemma.

Central Bank Coordination

After all, many countries with floating exchange rates suffer effects of the U.S.-originated global crisis in 2008–09. Macropolicies regulations might reduce vulnerability to such liquidity and risk shocks. The issue is very relevant in 2015, as fears rise that coming increases in U.S. interest rates might trigger emerging market crises as in the past.

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31 H. S. Shin an K. Shin, "Procyclicality and Monetary Aggregates," NBER Working Paper No. 16836, February 2011. During a boom phase in bank lending, which is reflected in monetary aggregates, banks increasingly look beyond their "core" funding source, deposits, to other funding sources, which increase vulnerability.

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49 B. Eichengreen, "Does the Federal Reserve Care about the Rest of the World?" NBER Working Paper No. 19405, September 2013. Return to text

A great deal of evidence suggests that different patterns of economic development are causally related to differences in economic institutions. Countries that create inclusive and secure property rights and the rule of law grow, while those that do not stagnate or decline. But why do economic institutions vary so much across, and even within, countries? Though there are different approaches to this question, a central one emphasizes that economic institutions (conceived broadly to include economic policies) are outcomes of processes of collective choice. Such choices are shaped by the political institutions that distribute power, aggregate preferences and interests, place constraints, and determine the payoffs to different strategies in the political process. This perspective suggests that there ought to be evidence of systemic relationships between political institutions, economic institutions and policies, and economic outcomes.

Perhaps the largest research effort has gone into investigating the impact of democracy on economic growth. There is obviously a strong correlation between levels of GDP per capita and the extent of democracy, yet at the same time theoretical work suggests that not all the mechanisms unleashed by moving political institutions from autocratic to democratic are positive for economic growth.

Democratization tends to shift power away from narrow elites towards the mass of people. That can favor redistribution, the provision of public goods, and expansion of the role of the state in society. These very processes may or may not be good for economic growth. Redistribution can lead to distortions and disincentives or it can stimulate growth. The same is true of the expansion of the size or role of the state. Finally, democratic political competition can be very clientelistic, mitigating against the provision of public goods. There is also obviously a considerable amount of heterogeneity in this process. Dictatorships and democracies alike vary greatly in their institutional architecture—such as in the extent of checks and balances—and societies that have ostensibly democratic politics may have political power concentrated in the hands of a small group of economic elites or bureaucrats.

Despite this evident heterogeneity, it is interesting to ask what the average effect of moving from autocratic to democratic political institutions is on economic policies and institutions and on economic growth. We do that in our paper with Suresh Naidu and Pascual Restrepo. Ours is hardly the first study of this relationship. Interestingly, the conventional wisdom has been that democratization has at best small positive effects on economic growth. Our paper shows that this “non-result” is driven by the complicated dynamics of GDP around democratization. As economic growth takes place, democratizations are often precipitated by recessions and negative economic shocks. Clearly, unless one controls for this properly, one can easily make a spurious inference about the impact of democracy. We control for this using two different strategies. The first is to control for lags of GDP in linear regressions. The second is to adapt to our panel context the semi-parametric time-series estimators that could be correlated with countries’ economic growth. We also investigate some of the mechanisms via which this may happen and find broadly consistent positive effects of democracy on tax-to-GDP ratio and primary school enrollment rates. But, as already noted, there is much more to the variation in political institutions than differences in democracy. Indeed, the quantitative magnitude of the results discussed above implies that the main institutional difference between poor and rich countries is most likely not that the former tend to be undemocratic while the latter are democratic. Our study, like most, uses a minimalist definition of democracy which leaves out detailed features of the institutions of countries that help determine the strength of checks and balances and constraints on the use of power. Moreover, how a given set of formal political institutions functions varies greatly across societies.

Finally and equally importantly, there are major differences across and within nations in the way the state is organized. Having a state with “capacity” to regulate, implement and govern, to establish order, monopolize force, and raise revenues—is potentially an important prerequisite for democracy.
economic growth. A large social science literature suggests that many facets of modernity are consequences of the development of states, local government capacity, and economic growth[11] but also identifies[12] and values.[13]

To see why the nature of the state might be an important determinant of comparative development, consider the following famous puzzle identified by Robert Fogel and Stanley Engerman: “In the 1600s and 1700s, Portugal was the world’s leading economic power. A century later, it had become a colonial backwater. What happened?”

A recent study[14] of state capacity in 1850 has yielded a surprising answer. Portugal’s state capacity was much lower in colonial times than in the precolonial period. This was due to a combination of factors, including the rapid growth of the colonial population and the limited resources available to the Portuguese state. The study highlights the importance of considering the historical context when evaluating state capacity.

In conclusion, we believe that the study of state capacity and economic development is a promising area for future research. There is much to learn from the rich historical record, and new methods and tools are being developed to help us understand how states function and how they shape the course of history.


The Economics of Happiness

John F. Helliwell

This emerging field broadens economic analysis by using measures of subjective well-being to help address a core issue in economics — how to make best use of limited resources. It redif- ned “best use.” It is now more than 40 years since Richard Easterlin first advocated using measures of subjective well-being to judge the quality of life.1 I came to see the necessity of such a broadening only after seeing that it was inadequate to assess the consequences of democracy2 and of social capital3 solely in terms of their linkages to economic growth. Measures of subjective well-being seemed like natural candidate measures of welfare. But to understand and assess their suitability required a broadening of the disciplinary perspective. A useful starting point was to see if life satisfaction assessments from around the world supported Aristotle’s prediction that people would report higher life satisfaction if they had better living and life circumstances, in the form of family, friends, good health, and sufficient material means, while also being supported from the one side by positive emotions and on the other by a sense of life purpose. Aristotle’s pre- sumptions were supported remarkably well by World Values Survey data, with two-level modeling revealing the joint importance of individual and national-level variables.4 The fact that life eval- uations could be explained by income and other life circumstances permitted calculation of compensating differentials and of the relative importance of different aspects of life.5 My subsequent work expanded the analysis to show that life evaluations depend more on the quality of government than on the institutions of democracy, thereby especially when the former is at low levels, that workplace trust, as shown in the figure, is a very strong pre- dictor of life satisfaction, even more so for women than men,6 and that the qual- ity and quantity of social connections at work, at home, and in the neighbor- hood are perhaps the most important supports for life satisfaction.7 But what about suicide in those supposedly happy Scandinavian coun- tries? A proper answer to this question required expertise from other disciplines — between the suicide and life satisfaction models.8 Social trust and community connections were strongly and equally important in both mod- els. Indeed, subsequent research sug- gested that higher levels of social trust were associated with significantly lower death rates from both suicides and traf- fic fatalities.9

The apparent usefulness of happiness data spurred deeper digging and a mixture of research methods to untangle two-way linkages between subjective well-being and other variables. It also led to research to establish the mean- ing and value of different ways of measuring subjective well-being,10 to assess the extent to which there are interpersonal and international differences in how happiness is measured and determined, to evaluate the extent to which the well- being effects of income and other factors depend on com- parison with others,11 and to use subjective well-being data to focus on the quality of eco- nomic development.12

Three recent sets of results invite special attention.

Life Evaluations versus Emotional Reports

It is important to distinguish two importantly different measures of sub- jective well-being: life evaluations and emotional reports. The former are rep- resented by three main types of survey question: How satisfied are you with your life as a whole these days? How happy are you with your life these days? and the Centrality ladder, used in the Gallup World Poll, asking people to evalu- ate their lives today on a scale with the best possible life as a 10 and the worst possible life as a zero. These three ways of evaluating lives deliver answers that are structurally identical, in the sense of being explained by the same variables with the same coefficients, despite hav- ing distributions with different means.13 Emotional reports, or measures of affect, can be either positive or negative, and generally refer to either current emotions or those in a recent time period, usu- ally yesterday. Typical paper used to assess emo- tive affect would be worry, anger, depres- sion, and anxiety, with typical measures of positive affect including happiness and enjoyment, sometimes bunched together with more evidently behavioral measures like smiling and laughter. People answer life evaluation questions and reports of emo- tions yesterday in appropriately different ways, with weekend effects appearing for yesterday’s emotions but not for life eval- uations.14 Life evaluations, much more than current or remembered emotions from yesterday, are linked strongly and durably to levels and changes in a vari- ety of circumstances.15 It is only within a few of the frequent findings that married people are on average happier than singles in other- wise the same life circumstances has been interpreted by some as showing only that already-happy people were more likely to get and stay married. There is no reason to think that happiness among working paper.15 Shawn Grover and I explain the return to base- line by defining the comparison group closely. Although the individuals studied did indeed return to their pre-marriage levels of life satisfaction, they were still happier than they would have been with- out getting married, since most of the marriages were occurring at ages when the average life satisfaction was drop- ping, as part of a U-shaped age pattern that doesn’t change in many societies. In addition, the pre-marriage baseline was set too close to the point of marriage, thus already incorporating the happiness contrast to control for a relationship that was established with the eventual mar- riage not yet taken place. To be really convincing, however, our research needed to make full allowance for the reverse effects running from happiness to mar- riage. We did this by including each indi-
vidual's measured life satisfaction several years in the past to capture any set point effect.

Finally, in attempting to find an explanation for the size and long duration of the happiness effects accompanying marriage in our U.K. sample, we took advantage of a question in another part of the survey asking each respondent to identify their best friend, with spouse or equivalent being one of the categories offered. The life satisfaction effects of being married, relative to being single, were always large and significant, and were more than 50 percent larger for those who reported their spouse as their best friend. The relationship was also evident for the growing group who were living as a couple but not married—these were the same relationship was also evident for their spouse as their best friend. The percent larger for those who reported on average happier than the singles, but especially so to the extent they regarded their partner as their best friend.

Thus the research showed large and durable life satisfaction effects from a key change in life circumstances, reconciled the life-course and cross-sectional estimates, and developed evidence for a social and friendship-based basis for the well-being benefits of marriage. The paper thereby supports both the ability of life satisfaction measures to capture the well-being effects of changes in life circumstances and the importance of social factors in explaining levels and changes of life satisfaction.


18 J. F. Helliwell and H. Huang, "New Measures of the Costs of Unemployment," NBER Working Paper No. 16829, February 2011, and in Economic Inquiry, 52(4), 2014, pp.1485–1502. This paper shows that the spillover well-being losses of local unemployment on those still employed are in aggregate larger than the individual costs for the unemployed themselves. Return to text


Understanding the Effects of Early Investments in Children

Diane Whitemore Schanzenbach

A growing economics literature is seeking to understand the effects of early childhood influences on later life outcomes. While much recent work explores the effects of health measured at birth, my work and that of others demonstrates the importance of events in early life — but after birth — on long-term outcomes.

A recent review by Douglas Almond and Janet Currie concludes that child and family characteristics measured at school entry explain as much of the variation in adult outcomes as factors such as years of education that are more typically studied by economists.1 James Heckman argues that the rates of return to human capital investment in disadvantaged populations are highest in early life.2

In a series of studies, my coauthors and I have estimated the long-term impacts of interventions in early life. We find that there are promising interventions for children in school settings and through social safety net programs that impact outcomes measured in later adolescence and into adulthood.

Early Life Interventions and Adult Economic and Health Outcomes

The food stamp program is a central part of the U.S. safety net, and provides vouchers to participants that can be used to purchase food at grocery stores. Participation in the food stamp program increases the total resources available to a family, pushing out the budget constraint and raising consumption levels among participants. When the program was introduced in the 1960s, it was rolled out slowly, over a 13-year period, on a county-by-county basis. Hillary Hoynes, Almond, and I investigate the impact of this safety net transfer by exploring this variation across geography and time of the introduction of the program.

One of our first studies found that babies who were in utero when food stamps were introduced in their county weighed more at birth.3 But the availability of food stamps at other points during childhood may also have had an impact. In our recent work, we use the Panel Study of Income Dynamics (PSID) to test whether children born prior to the introduction of food stamps in their county also benefited from the program.4 We start with the cohort of children that we initially observe in the 1968 PSID, follow them into adulthood, and measure their completed education, earnings, and detailed health outcomes such as general health status, height and weight, presence of chronic conditions, and work/activity limitations. We find that individuals with access to food stamps before age five had measurably better health in adulthood, exhibiting improved overall health and lower rates of obesity, diabetes, and high blood pressure.

For women, we also find that childhood access to the food stamp program increases economic self-sufficiency in adulthood. Those with access to food stamps as children were more likely to graduate from high school, earn more, and rely less on the social safety net as adults than those who did not. Interestingly, we find positive but diminishing impacts of food stamps by the child’s age when the program was introduced in the child’s county. These findings suggest that there are important long-term returns to family income from social supports during early life, and that income-support programs have benefits that have not previously been well quantified.

Expanding Access to Preschool

Another promising intervention in early life is access to high-quality educational environments. In his 2013 State of the Union address, President Obama proposed a universal pre-kindergarten education program in the United States. The $75 billion proposed “Preschool for All” initiative calls for dramatic increases in the availability of high-quality early life preschool programs and in the quality of these programs nationwide.

The Preschool for All initiative shares many characteristics with the state universal preschool programs that have been offered in Georgia and Oklahoma since the 1990s. While high rates of return have been documented for preschool programs targeted to children of low socioeconomic status, less is known about the impacts of universal preschool programs.5 Elizabeth Casadio and I draw together data from multiple sources to estimate the impacts of these “model” state preschool programs and their enrollment and a broad set of short- and longer-term family and child outcomes.6

Using data from the Current Population Survey’s October supplement on school enrollment, we find that the universal state programs have increased preschool enrollment by 20 percentage points, primarily driven by children who otherwise would not have attended preschool and other families effectively received sizable income transfers from the program, their academic achievement not having improved in either grade.

We view these results as highly consistent with the broad patterns in the preschool literature, with highest economic returns coming from programs that are both high quality and highly targeted, and returns diminishing as the students’ counter-factual experiences in the absence of a public preschool program increase.

Long-run Impacts of Early Elementary School Experiences

Another widely-discussed early-life intervention is improvement in the quality of schooling for students in the early elementary grades. Project STAR was a randomized experiment conducted in Tennessee in which over 11,000 students and their teachers were assigned to classrooms that varied in class size and other measures of quality. The experiment included one cohort of children that started kindergarten in the 1985–86 school year. By now, the students in the original cohort have become adults, and researchers have been able to use a variety of administrative databases to follow their progress to determine whether the intervention had meaningful lasting impacts.

Susan Dynarski, Jouha Hyman, and I measured the impact on educational attainment in adulthood of being randomly assigned in grades K-3 to a small class (with on average 15 students) instead of a larger class (with on average 22 students).7 Using a data match obtained from the National Student Clearinghouse, we find that assignment to a small class increases the probability of attending college by 2.7 percentage points.

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The impacts are considerably higher among populations with traditionally low rates of postsecondary attainment. For example, the estimated impacts on college attendance are 5.8 percentage points among black students, and 4.4 percentage points among Hispanic students who were eligible for a subsidized school lunch at the time of the original experiment. Among students attending schools with the lowest projected probability of attending college, the impact is 11 percentage points. In addition, small classes in the early grades improve the likelihood of earning a college degree, and majoring in a more technical and high-earning field, such as science, technology, engineering, mathematics, business, or economics.

Using administrative tax return data, we are able to broadly assess the scope of adult outcomes studied in the project. For example, John Friedman, Nathaniel Hilger, Emmanuel Saez, Danny Yagan, and I analyzed the impacts of the experiment on outcomes ranging from earnings to retirement savings, home ownership, and marriage.7 While we study long-term impacts, the relationship to a variety of observable characteristics such as class size and teacher experience, we also estimate “classroom effects”—the combined effects of teachers, peers, and other class-level shocks—on later life outcomes. An analysis of variance revealed that kindergarten classroom assignment has significant impacts on earnings and other adult outcomes, leading us to ask whether administrative tax returns were correlated with class effects on kindergarten test scores. To address this, we proxy for classroom quality with the sibling correlation of an individual’s classmates, measured at the end of kindergarten. Using this proxy measure, we find that class quality impacts immediate test scores, that the boost dissipates later in elementary school, and that it reappears strongly across a variety of adult outcomes including earnings. While the test-score impacts faded away in later grades, we were able to detect sustained impacts on non-cognitive skills, suggesting a possible mechanism for the long-term effects. The presence of these class quality impacts is similar for students who entered the experiment later, suggesting that a better classroom environment from ages five through eight can have substantial long-term benefits.

In both Project STAR papers, we find that the actual long-run impacts were larger than what would have been predicted based on the short-run test score gains. This finding is consistent with a growing body of research on early-life interventions, and raises challenging evaluation problems. Policymakers often rely on short-run outcomes such as standardized test scores to gauge the effectiveness of educational interventions. But, as suggested in our research, if these measures systematically underestimate the long-term impacts of early childhood programs, over-reliance on short-run outcomes may lead to abandonment of some policies that would pass a long-term cost-benefit analysis.


How Powerful Are Fiscal Multipliers in Recessions?

Alin Auerbach and Yuriy Gorodnichenko

In policy and academic discussions of recent years, few topics have generated more interest than fiscal multipliers, which measure how much a dollar of additional government spending or reduced taxes raises output. Indeed, the magnitude of fiscal multipliers is at the core of debates about whether governments should try to stimulate their economies during a recession. Bitter disagreement in the United States and elsewhere about the course of fiscal policy during the Great Recession reflects in part how little is known about multipliers and how important this matter is for policy.

While previous research studied the effects of fiscal policy on the economy,1 a key question is how powerful fiscal policy measures are. Returning to the question of how much the need to stabilize the economy requires raising output by about $1.50 to $2 a dollar increase in government spending raises challenging evaluation problems. Policymakers often rely on short-run outcomes such as standardized test scores to gauge the effectiveness of educational interventions. But, as suggested in our research, if these measures systematically underestimate the long-term impacts of early childhood programs, over-reliance on short-run outcomes may lead to abandonment of some policies that would pass a long-term cost-benefit analysis.

In our initial work on this question we use a “smooth transition vector autoregression” (STVAR) that allows for transition of the economy between the two regimes characterized by potentially different responses to fiscal shocks.2 With only a handful of post-World War II recessions, generally short in length, a key advantage of this approach is that it exploits intensive as well as extensive margins of business cycle fluctuations. What matters is not only whether the economy is in a recession but also how deep the recession is. Our approach postulates a function measuring the probability of being in a given regime (recession or expansion) that depends on the state of the economy. The higher the probability of a regime, the larger the fiscal multiplier. This implies that the size of the government spending multiplier will reflect conditions in that regime rather than in the alternative regime. We calibrate this function in such a way that the implied frequency of the economy being in recession matches the frequency of U.S. recessions as determined more recently.

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Alan Auerbach is the Robert D. Burch Professor of Economics and Law and directs the Burch Center for Tax Policy and Public Finance at the University of California, Berkeley, where he has taught since 1994. Auerbach has been an NBER research associate since 1978, the year he received his Ph.D. from Harvard University and joined the NBER’s Program in Business Taxation and Finance, the ancestor of today’s Public Economics Program. He also is a member of the Economic Fluctuations and Growth Program. His research interests span the fields of public economics and macroeconomics, with a particular focus on fiscal policy. In the recent work on fiscal multipliers, on the interaction of demographics and long-run fiscal policy and the effects and design of capital income taxation.

Auerbach previously has served as editor of the Journal of Economic Perspectives and American Economic Journal: Economic Policy and as vice president of the American Economic Association. He is currently president of the National Tax Association. He is also a Fellow of the Econometric Society and the American Academy of Arts and Sciences. A New York native, Auerbach received his B.A. from Yale University. He lives in Berkeley with his wife, Gay, with whom he enjoys hiking and (when there is snow) skiing around California.

HISTORICAL MULTIPLIER FOR TOTAL GOVERNMENT SPENDING
Government spending raises output more in recessions than in expansions

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Alan S. Blinder is the C.banks Professor Emeritus and the Institute Professor of Economics. A New Jersey native, Blinder earned his Ph.D. at the University of Michigan. He lives in Oakland, California, with his wife—all also professors at UC Berkeley—and son.

Yuriy Gorodnichenko is an associate professor at the University of California, Berkeley, department of economics, and a research associate in the NBER. Gorodnichenko is an applied macroeconomist. A significant part of his research has been about monetary policy (effects, optimal design, inflation targeting), fiscal policy (counter-cyclical policy, government spending multipliers), taxation (tax evasion, inequality), economic growth (long-run determinants, globalization, innovation, financial frictions), pricing, and business cycles. He serves on many editorial boards, including the Review of Economics and Statistics and VoxUkraine (http://voxuakraine.org). He has written over 40 papers since he joined UC Berkeley in 2007; his work has been published in leading economics journals and cited in policy discussions and media. He has received numerous awards for his research and advising.

A native of Ukraine, Gorodnichenko received his B.A. and M.A. at EERC/Kyiv-Mohyla Academy (Kyiv, Ukraine) and his Ph.D. at the University of Michigan. He lives in Oakland, California, with his wife—also a professor at UC Berkeley—and son.
nomic models predict an appreciation. We demonstrate that this puzzle evaporates when one considers responses at a higher frequency: On average, on days when the ZLB is binding, the U.S. dollar appreciates significantly. Thus, the standard macroeconomic framework is suitable for analyses of the international effects of fiscal shocks.

During the Great Recession, countries around the world adopted expansionary fiscal policies aimed at countering the large negative shocks to their economies. These actions occurred in spite of skepticism among many economists about the potential of fiscal policy to stimulate economic activity. The results of our related work suggest that fiscal policy activism may indeed be effective at stimulating output during a deeper recession, and that the potential negative side effects of fiscal stimulus, such as increased inflation, are also less likely in these circumstances. These empirical results call into question the results from the new Keynesian literature, which suggests that fiscal shocks to government spending, even when increasing output, will crowd out effects of fiscal stimulus, such as increased inflation, are also less likely in these circumstances. These empirical results call into question the results from the new Keynesian literature, which suggests that fiscal shocks to government spending, even when increasing output, will crowd out

Fryer Receives John Bates Clark Medal

NBER Research Associate Roland G. Fryer, Jr. received the American Economic Association’s John Bates Clark Medal for 2015. This annual award recognizes the American economist under the age of 40 who has made the most substantial contributions to economic thought and knowledge. This year’s prize citation highlights Fryer’s “innovative and creative research contributions [that] have deepened our understanding of the sources, magnitude, and persistence of U.S. racial inequality,” and his evaluations of various policies that are designed to improve economic opportunities for disadvantaged children. It calls Fryer “the leading economist working on the economics of race and education.”

Fryer is the Henry Lee Professor of Economics at Harvard University and a research associate in the NBER Labor Studies and Education programs. He received his B.A. from the University of Texas at Arlington in 1998 and his Ph.D. from the Pennsylvania State University in 2002.

Other current NBER research associates who have received the Clark Medal include Daniel McFadden, Martin Feldstein, Joseph Stiglitz, James Heckman, Jerry Hausman, Sanford Grossman, Paul Krugman, Lawrence Summers, David Card, Kevin Murphy, Andrei Shleifer, Steven Levitt, Daron Acemoglu, Susan Athey, Emmanuel Saez, Esther Duflo, Jonathan Levin, Amy Finkelstein, Raj Chetty, and Matthew Gentzkow. Other NBER associates who won the Clark Medal are Franklin Fisher, now an emeritus member of the Board of Directors, and the late research associates Gary Becker, Milton Friedman, and Zvi Griliches.

Conferences

Retirement & Health Benefits in the Public Sector

An NBER conference, “Retirement & Health Benefits in the Public Sector,” took place in Cambridge on April 10–11. Research Associates Robert L. Clark of North Carolina State University and Joseph P. Newhouse of Harvard University organized the meeting. These papers were discussed:

- Jeffrey R. Brown, University of Illinois at Urbana-Champaign and NBER, and George Pennacchi, University of Illinois at Urbana-Champaign, “Discounting Pension Liabilities: Finding Versus Value” (NBER Working Paper No. 21276)
- Jeffrey Clemens, University of California, San Diego, and NBER, and David M. Cutler, Harvard University and NBER, “Impact of ACA on State and Local Health Plans”
- Alan R. Weil, Project Hope, “State Health Plans and Their Impact on State Budgets”
- Robert L. Clark and Emma Hanson, North Carolina State University; and Olivia S. Mitchell, University of Pennsylvania and NBER, “Lessons for Public Pensions from Utah’s Move to Pension Choice”

4 For example, we can differentiate between i) a period of binding ZLB in a recession and ii) a period of binding ZLB in an expansion. For the United States, we have enough daily observations to precisely estimate responses of macroeconomic variables to government spending shocks during these regimes.
Economics of Culture and Institutions

An NBER conference, “Economics of Culture and Institutions,” took place in Cambridge on April 11. Research Associate Alberto Bisin of New York University and Faculty Research Fellow Paola Giuliano of the University of California, Los Angeles, organized the meeting. These papers were discussed:

- Daniel Chen, ETH Zürich, and Susan Yeh, George Mason University, “How Do Rights Revolutions Occur? Free Speech and the First Amendment”
- Yihui Pan, University of Utah; Stephan Siegel, University of Washington; and Tracy Yue Wang, University of Minnesota, “The Cultural Origin of Preferences: CEO Cultural Heritage and Corporate Investment”
- Eugenio Proto and Andis Sofianos, University of Warwick, and Aldo Rustichini, University of Minnesota, “Higher Intelligence Groups Have Higher Cooperation Rates in the Repeated Prisoner’s Dilemma”
- Giovanni Mastrobueni, University of Essex, and Daniele Terlizzese, Bank of Italy, “Rehabilitating Rehabilitation: Prison Conditions and Recidivism”
- Jeffrey Butler, Einaudi Institute for Economics and Finance (Rome); Pierluigi Conzo, University of Turin; and Martin A. Lenoch, University of Mainz, “Social Identity and Punishment”

These papers are at http://www.nber.org/confer/2015/CIs15/summary.html

Economics of Field Experiments

An NBER conference, “Economics of Field Experiments,” took place in Cambridge on April 10–11. Research Associates Abhijit Banerjee and Esther Duflo of MIT organized the meeting. These papers were discussed:

- Abhijit Banerjee; Syvain Chassang, Princeton University; and Erik Snowberg, California Institute of Technology and NBER, “Decision Theoretic Approaches to Experiment Design and External Validity”
- Duncan Simester, MIT, “Field Experiments in Marketing”
- Federico Finan, University of California, Berkeley, and NBER; Benjamin A. Olken, MIT and NBER; Rohini Pande, Harvard University and NBER, “Government Workers in Developing Countries”
- Alan S. Gerber, Yale University and NBER, and Donald Green, Columbia University, “Field Experiments on Voter Mobilization: An Overview of a Burgeoning Literature”

Summaries of these papers are at http://www.nber.org/confer/2015/RHBs15/summary.html

Innovation Policy and the Economy

The NBER’s 16th annual Innovation Policy and the Economy conference took place in Washington on April 14. The conference was organized by Research Associates Scott Stern of MIT and Josh Lerner of Harvard University. These papers were discussed:

- Yael Hochberg, Rice University and NBER, “Accelerating Entrepreneurs and Ecosystems: The Seed Accelerator Model”
- Fiona Scott Morton, Yale University and NBER, and Carl Shapiro, University of California, Berkeley, and NBER, “Patent Assertions: Are We Any Closer to the Aligning Reward to Contribution?”

Summaries of these papers are at http://www.nber.org/confer/2015/IPEs15/summary.html
30th Macroeconomics Annual Conference

The NBER’s 30th Annual Conference on Macroeconomics, organized by Research Associates Martin Eichenbaum of Northwestern University and Jonathan Parker of MIT, took place in Cambridge on April 17–18. Theses papers were discussed:

- Nicola Gennaioli, Bocconi University: Tuoran Ma, Harvard University; and Andrei Shleifer, Harvard University and NBER, “Expectations and Investment” (NBER Working Paper No. 21260)
- Chun Chang, Shanghai Jiao Tong University; Kaiji Chen, Emory University; Daniel F. Waggoner, Federal Reserve Bank of Atlanta; and Tao Zha, Emory University and NBER, “Trends and Cycles in China’s Macroeconomy” (NBER Working Paper No. 21244)
- Hanming Fang, University of Pennsylvania and NBER; Quanlin Gu and Li-An Zhou, Peking University; and Wei Xiong, Princeton University and NBER, “Demystifying the Chinese Housing Boom” (NBER Working Paper No. 21112)
- Daron Acemoglu, MIT and NBER; Ufuk Akcigit, University of Pennsylvania and NBER; and William Kerr, Harvard University and NBER, “Networks and the Macroeconomy: An Empirical Exploration”
- Regis Barnichon, CREI (Barcelona), and Andrew Figura, Federal Reserve Board, “Declining Desire to Work and Downward Trends in Unemployment and Participation” (NBER Working Paper No. 21522)
- Cristina Arellano, Federal Reserve Bank of Minneapolis and NBER; Andrew Atkeson, University of California, Los Angeles, and NBER; and Mark L. J. Wright, Federal Reserve Bank of Chicago and NBER, “External and Public Debt Crisis”

Summaries of these papers are at http://www.nber.org/confer/2015/Macro15/summary.html and full texts of the papers and video presentations are at http://www.nber.org/macroannualconference/macroannual_2015.html

Conference on the Economics of Aging

The NBER’s Conference on the Economics of Aging took place in Carefree, Arizona on April 30 and May 1. Program Director David A. Wise of Harvard University organized the meeting. These papers were discussed:

- James M. Poterba, MIT and NBER; Steven F. Ventre, Dartmouth College and NBER; and David A. Wise, “Assets at End of Life and When First Observed: Looking Backwards”
- Michael Chernest and David M. Cutler, Harvard University and NBER; Kaushik Ghosh, NBER; and Mary Beth Landrum, Harvard University, “Understanding the Improvement in Disability Free Life Expectancy in the U.S. Elderly Population”
- Philip Armour and Susan Rohweder, RAND Corporation, and Michael D. Hurd, RAND Corporation and NBER, “Trends in Pension Cash-Out at Job Change and the Effects on Long-Term Outcomes”
- Florian Heiss, University of Düsseldorf; Daniel L. McFadden, University of California, Berkeley, and NBER; Joachim Winter and Amelie C. Wuppermann, University of Munich; and Yoasou Cho, University of Southern California, “Three Measures of Disease Prevalence: The Good, the Bad, and the Ugly”
- Raquel Fonseca, Université du Québec à Montréal; Arie Kapteyn, University of Southern California and NBER; and Jinkook Lee and Gema Zamarro, University of Southern California, “Does Retirement Make You Happy? A Simultaneous Equations Approach”

Multiple Equilibria and Financial Crises

An NBER conference, supported by New York University, the Federal Reserve Bank of San Francisco, the Barry Family Trust, and the University of California, Los Angeles, titled “Multiple Equilibria and Financial Crises” took place in San Francisco on May 14–15. Research Associates Roger Farmer of University of California, Los Angeles, and Jesj Benhabib of New York University organized the meeting. These papers were discussed:

- Romain Rancière, Paris School of Economics, and Aaron Tornell, University of California, Los Angeles, “Financial Liberalization, Debt Mismatch, Allocative Efficiency, and Growth”
- Edouard Schaaf, New York University, and Matthieu Taschereau-Dumouchel, University of Pennsylvania, “Coordinating Business Cycles”
- Mikhail Golosov, Princeton University and NBER, and Guido Menzio, University of Pennsylvania and NBER, “Agency Business Cycle”
- Dmitry Plottnikov, International Monetary Fund, “Hysteresis in Unemployment and Jobless Recoveries”
- Roger Farmer, “Global Sunspots and Asset Prices in a Monetary Economy” (NBER Working Paper No. 20831)
- Assaf Patir, Hebrew University of Jerusalem, “Synchronization and Bias in a Simple Macroeconomic Model”
- Gianluca Benigno, London School of Economics, and Luca Fornaro, CREI (Barcelona), “Stagnation Traps”
- Guillaume Rocheteau, University of California, Irvine; Randall Wright, University of Wisconsin–Madison and NBER; and Sylvia Xiaolin Xiao, University of Wisconsin–Madison, “Open Market Operations”
- Fugong Dong, Shanghai Jiao Tong University; Pengfei Wang, Hong Kong University of Science and Technology; and Yi Wen, Federal Reserve Bank of St. Louis, “Credit Search and Credit Cycles”
- Guido Lorenzoni, Northwestern University and NBER, and Iván Werning, MIT and NBER, “Slow Moving Debt Crises” (NBER Working Paper No. 19228)

Summaries of these papers are at http://www.nber.org/confer/2015/MEFCs15/summary.html

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• Amitabh Chandra, Harvard University and NBER, and Jon Skinner, Dartmouth College and NBER, “Racial Disparities in Hospital Quality”
• Jay Bhattacharya and Thomas E. MaCurdy, Stanford University and NBER, “Challenges in Controlling Medicare Spending: Treating Highly Complex Patients”
• James Banks, University of Manchester; Richard Blundell, University College London; Zoë Oldfield, Institute for Fiscal Studies (London); and James P. Smith, RAND Corporation, “House Price Volatility and the Housing Ladder” (NBER Working Paper No. 21255)

Summaries of these papers are at http://www.nber.org/confer/2015/AG15/summary.html
The Economics of Commodity Markets

The NBER held its annual Universities Research Conference in Cambridge on May 15–16. Research Associates Kenneth Singleton of Stanford University and Wei Xiong of Princeton University organized the meeting on the topic, “The Economics of Commodity Markets.” These papers were discussed:

- Harrison Hong, Princeton University and NBER; Áureo de Paula, University College London; and Vishal Singh, New York University, “Hoarding Behavior and Commodity Bubbles” (NBER Working Paper No. 20974)
- Sylvain Leduc, Federal Reserve Bank of San Francisco; Kevin Moran, Université Laval (Quebec City); and Robert Vigfusson, Federal Reserve Board, “A Decade of Learning: The Role of Beliefs in Oil Futures Markets During the 2000s”
- Itay Goldstein, University of Pennsylvania, and Liyan Yang, University of Toronto, “Commodity Financialization: Risk Sharing and Price Discovery in Commodity Futures Markets”
- Erik P. Gilje, University of Pennsylvania; Robert C. Ready, University of Rochester; and Nikolai Roussanov, University of Pennsylvania and NBER, “Tracking, Drilling, and Asset Pricing: Estimating the Economic Beneﬁts of the Shale Revolution”
- Rabah Arezki, International Monetary Fund; Valerie A. Ramey, University of California, San Diego, and NBER; and Liangang Sheng, Chinese University of Hong Kong, “News Shocks in Open Economies: Evidence from Giant Oil Discoveries” (NBER Working Paper No. 20857)
- Darien Huang, University of Pennsylvania, “Gold, Platinum, and Expected Returns”
- Thomas Cover, University of Chicago, “Experiential and Social Learning in Firms: The Case of Hydraulic Fracturing in the Bakken Shale”
- Davidson Heath, University of Southern California, “Unspanned Macroeconomic Risks in Oil Futures”
- Ke Tang, Tsinghua University, and Haoxiang Zhu, MIT and NBER, “ Commodities as Collateral”

Summaries of these papers are at http://www.nber.org/confer/2015/URCs15/summary.html

The 17th Annual CCER-NBER-Tsinghua University Conference on China and the World Economy

The seventeenth annual CCER-NBER-Tsinghua University Conference on China and the World Economy took place at the China Center for Economic Research (CCER) of Beijing University on June 16–19. The conference was jointly organized by Shang-Jin Wei of Columbia University and the Asian Development Bank (on leave from NBER), Yang Yao of CCER, and Chong-en Bai of Tsinghua University. These papers were discussed:

Development and Growth

- Jinfeng Luo and Yi Wen, Tsinghua University, “Institutions Do Not Rule: Reassessing the Driving Forces of Economic Development”
- Shang-Jin Wei, “Inferring the Unofﬁcial Income of the Ofﬁcials: With an Application to China”

Education

- Eric A. Hanushek, Stanford University and NBER, “Minimal Skills, Knowledge Capital, and Economic Growth”
- Binzhao Wu and Xiaohuan Zhong, Tsinghua University, “Mismatch in China’s College Admission”

Energy and the Environment

- James B. Bushnell, University of California, Davis, and NBER, “Emission Uncertainty and Cap and Trade Market Design”
- Mar Reguant, Stanford University and NBER, “Wind Uncertainty in Electricity Markets: Practical Challenges”
- Hua Wang, The World Bank, “Economic Cost of Environmental Pollution in China”

Industrial Organization and Regional Economics

- Joseph Gyourko, University of Pennsylvania and NBER, “Real Estate Market in China”
- Hanning Fang, University of Pennsylvania and NBER; Quanlin Gu and Li-An Zhou, Peking University; and Wei Xiong, Princeton University and NBER, “Demystifying the Chinese Housing Boom” (NBER Working Paper No. 21112)
- Xiaobo Zhang, CCER, “E-commerce Development in China”

International Finance

- Michael B. Devereux, University of British Columbia and NBER, and Wei Dong and Ben Tomlin, Bank of Canada, “Exchange Rate Pass Through, Currency of Invoicing, and Market Share”
- Jianguo Xu, CCER, “Capital Account Liberalization and Economic Growth Revisited: Different Effects of Inflow and Outflow Liberalization”

Labor Economics

- Wouter Dessein and Tano Santos, Columbia University, “Managerial Style and Attention”
- Wei Huang, Harvard University; Xiaoyan Lei, CCER; and Ang Sun, Renmin University of China, “The Great Expectations: Impact of One-Child Policy on Education of Girls”
- Kevin Milligan, University of British Columbia and NBER, “Work Capacity of Older Workers: Canada and the United States”

Public Finance

- James M. Poterba, MIT and NBER, “Drawdown Patterns in Tax-Favored Retirement Saving Accounts”
- Fan Zhang, CCER, “The Credit Risk of China’s Local Government Debt”
Trade

- Meixin Guo and Lin Lu, Tsinghua University, “Trade Costs and Income Inequality in China”
- Kalina Manova, Stanford University and NBER, “China’s International Trade: Finance, Quality and Global Value Chains”
- Miaohua Yu, CCER, “Distribution Outward FDI and Firm Heterogeneity: Evidence from Chinese Firms”

East Asian Seminar on Economics

The NBER, the Australian National University, the Peking University China Center for Economic Research, the Chung-Hua Institution for Economic Research (Taipei), the Hong Kong University of Science and Technology, the Korea Development Institute, the National University of Singapore, the Tokyo Center for Economic Research, and Tsinghua University jointly sponsored the NBER’s 26th Annual East Asian Seminar on Economics. It took place in San Francisco on June 18–19. Research Associates Takatoshi Ito of Columbia University and Andrew K. Rose of the University of California, Berkeley, organized the conference, which focused on “Financial Stability.” These papers were discussed:

- Oscar Jordà, Federal Reserve Bank of San Francisco; Moritz Schularick, University of Bonn; and Alan M. Taylor, University of California, Davis, and NBER, “Leveraged Bubbles”
- Sumit Agarwal, Jessica Pan, and Wenhao Qian, National University of Singapore, “Age of Decision: Pension Savings Withdrawal and Consumption and Debt Response”
- Frederic S. Mishkin and Kenichi Ueda, International Monetary Fund, “The Effects of Unconventional Monetary Policies on Bank Soundness”
- Woon Gyu Choi, Bank of Korea, and David Cook, Hong Kong University of Science and Technology, “Policy Conflicts and Inflation Targeting: The Role of Credit Markets”
- Hao Wang and Hao Zhou, Tsinghua University; Honglin Wang, Hong Kong Institute for Monetary Research; and Lisheng Wang, Chinese University of Hong Kong, “Shadow Banking: China’s Dual-Track Interest Rate Liberalization”
- John D. Burger, Loyola University Maryland; Rajeswari Sengupta, Indira Gandhi Institute of Development Research (Mumbai); Francis E. Warnock, University of Virginia and NBER; and Veronica Caicedo Warnock, University of Virginia, “U.S. Investment in Global Bonds: As the Fed Pushes, Some EMIs Pull” (NBER Working Paper No. 20571)
- Tim Robinson, University of Melbourne, and Fang Yao, Reserve Bank of New Zealand, “Loan-to-Value Ratio Policy and Business Cycles”
- Andrés Fernández, Inter-American Development Bank; Alessandro Rebucci, Johns Hopkins University; and Martin Uribe, Columbia University and NBER, “Are Capital Controls Countercyclical?”
- Jiseob Kim, Korea Development Institute, “How Loan Modifications Influence the Prevalence of Mortgage Defaults”
- Chung-Hua Shen, National Taiwan University; Hao Fang, Hwa Hsia University of Technology (New Taipei City); and Yen-Hsien Lee, Chung Yuan Christian University (Taoyuan City), “How Early of the Early Warning Signal in Banking Crisis? The Three Booms, Credit, Housing, and Capital, Cases”

Summaries of these papers are at http://www.nber.org/confere/2015/EASE15/summary.htm

Program and Working Group Meetings

Productivity, Innovation, and Entrepreneurship

The NBER’s Productivity, Innovation, and Entrepreneurship Program, co-directed by Nicholas Bloom of Stanford University and Josh Lerner of Harvard University, met in Cambridge on March 20. These papers were discussed:

- Ariel Dora Stern, Harvard University, “Innovation under Regulatory Uncertainty: Evidence from Medical Technology”
- Prithwiraj Choudhury and Tarun Khanna, Harvard University, “Ex-Ante Information Provision and Innovation: Natural Experiment of Herbal Patent Prior Art Adoption at the USPTO and EPO”
- Paul Gompers, Harvard University and NBER; Steven N. Kaplan, University of Chicago and NBER; and Vladimir Mukhrayamov, Harvard University, “What Do Private Equity Firms Say They Do?” (NBER Working Paper No. 21153)
- Antoine Dechezleprêtre and Ralf Martin, London School of Economics, and Myra Mohnen, University College London, “Knowledge Spillovers from Clean and Dirty Technologies”

Summaries of these papers are at http://www.nber.org/confere/2015/PRI15/summary.html

International Trade and Investment

The NBER’s Program on International Trade and Investment, directed by Robert Feenstra of the University of California, Davis, met in Cambridge on March 20-21. These papers were discussed:

- Michael Dickstein, Stanford University and NBER, and Eduardo Morales, Princeton University and NBER, “What do Exporters Know?”
- William Lincoln, Johns Hopkins University, and Andrew McCallum, Federal Reserve Board, “The Rise of Exporting By U.S. Firms”
- Ryan Monarch, Federal Reserve Board, “It’s Not You, It’s Me: Breakups in U.S.-China Trade Relationships”
- Illeen Kondo, Federal Reserve Board, “Trade Reforms, Foreign Competition, and Labor Market Adjustments in the U.S.”
- Emily Blanchard; Chad Bown, The World Bank; and Robert Johnson, Dartmouth College and NBER, “Global Supply Chains and Trade Policy”
- Delina Agnosteva and Yoto Totos, Drexel University, and James Anderson, Boston College and NBER, “Intra-National Trade Costs: Assaying Regional Frictions”

Summaries of these papers are at http://www.nber.org/confere/2015/ITIs15/summary.html
Environmental and Energy Economics

The NBER's Program on Environmental and Energy Economics met in Cambridge on March 26–27. Program Director Don Fullerton of the University of Illinois at Urbana-Champaign and Research Associate Matthew E. Kahn of the University of California, Los Angeles, organized the meeting. These papers were discussed:

- Ann Ferris, Ronald Shadbegian, and Ann Woloverton, Environmental Protection Agency, and Wayne B. Gray, Clark University and NBER, "Do Renewable Portfolio Standards Affect Manufacturing Activity Through Higher Electricity Prices?"
- Garth Heutel, Georgia State University and NBER; Juan Moreno-Cruz, Georgia Institute of Technology; and Soheil Shayanegh, Carnegie Institution of Washington, "Solar Geoeconomics, Uncertainty, and the Social Cost of Carbon"
- Stephen P. Holland, University of North Carolina at Greensboro and NBER; Erin T. Mansur, Dartmouth College and NBER; Nicholas Muller, Middlebury College and NBER; and Andrew Yates, University of North Carolina at Chapel Hill, "Measuring the Spatial Heterogeneity in Environmental Externalities from Driving: A Comparison of Gasoline and Electric Vehicles"
- Klaus Desmet, Southern Methodist University; David Kristzian Nagy, Princeton University; and Esteban Rossi-Hansberg, Princeton University and NBER, "The Geography of Development: Evaluating Migration Restrictions and Coastal Flooding" (NBER Working Paper No. 21007)
- Marco Gonzalez-Navarro, University of Toronto, and Matthew Turner, Brown University, "Subways and Urban Growth: Evidence from Earth"
- Christopher Timmins, Duke University and NBER, and Ashley Visissing, Duke University, "Valuing Leases for Shale Gas Development"
- Christiane Baumeister, Bank of Canada, and Luzt Kiliian, University of Michigan, "A General Approach to Recovering Market Expectations from Futures Prices with an Application to Crude Oil"
- Mark R. Jacobsen, University of California, San Diego, and NBER; Christopher R. Knittel, MIT and NBER; and M. Sallee, University of Chicago and NBER; and Arthur van Benthem, University of Michigan; and Robert Gordon, Twenty-First Securities Corporation, "Choosing Between the Estate Tax and Basis Carryover Regime of 2010"
- Jason M. DeBacker, Middle Tennessee State University; Bradley Heim and Anh Tran, Indiana University; and Alexander Yuskavage, Department of the Treasury, "Once Bitten, Twice Shy? The Lasting Impact of IRS Audits on Individual Tax Reporting"
- Julie Berry Cullen, University of California, San Diego, and NBER; Nicholas Turner, Department of the Treasury; and Ebola L. Washington, Yale University and NBER, "Political Alignment and Tax Evasion"
- Tatyana Deryugina, University of Illinois at Urbana-Champaign; Laura Kawano, Department of the Treasury; and Steven D. Levitt, University of Chicago and NBER, "The Economic Impact of Hurricane Katrina on its Victims: Evidence from Individual Tax Returns" (NBER Working Paper No. 20713)
- Kirk B. Doran, University of Notre Dame; Alexander M. Gelber, University of California, Berkeley, and NBER; and Adam Isen, Department of the Treasury, "The Effects of High-Skilled Immigration on Firms: Evidence from H-1B Visa Lotteries" (NBER Working Paper No. 20668)

Summaries of these papers may be found at: http://www.nber.org/confen/2015/IFMs15/summary.html

Public Economics

The NBER's Program on Public Economics met in Cambridge on April 9–10. Program Co-director Raj Chetty of Harvard University and Research Associate John N. Friedman of Brown University organized the meeting. These papers were discussed:

Behavioral Responses to Taxation: Research Using Administrative Tax Data

- George Bulman, University of California, Santa Cruz, and Caroline M. Hoxby, Stanford University and NBER, "The Returns to the Federal Tax Credits for Higher Education" (NBER Working Paper No. 20833)
- Patricia Tong, Department of the Treasury, and Li Zhou, University of Alberta, "The Impact of Place-Based Employment Tax Credits on Local Labor: Evidence from Tax Data"
- Michael P. Devereux and Li Liu, University of Oxford, "Incorporation for Investment"
- David Joulaiaian, Department of the Treasury; James M. Poterba, MIT and NBER; and Robert Gordon, Twenty-First Securities Corporation, "Choosing Between the Estate Tax and Basis Carryover Regime of 2010"
- Lutz Kilian, University of Michigan; and Robert Gordon, Twenty-First Securities Corporation, "Choosing Between the Estate Tax and Basis Carryover Regime of 2010"
-lucenta Desroylins, University of Illinois at Urbana-Champaign; Laura Kawano, Department of the Treasury; and Steven D. Levitt, University of Chicago and NBER, "The Economic Impact of Hurricane Katrina on its Victims: Evidence from Individual Tax Returns" (NBER Working Paper No. 20713)
- Kirk B. Doran, University of Notre Dame; Alexander M. Gelber, University of California, Berkeley, and NBER; and Adam Isen, Department of the Treasury, "The Effects of High-Skilled Immigration on Firms: Evidence from H-1B Visa Lotteries" (NBER Working Paper No. 20668)

Public Economics Spring Program Meeting

- Michael Geruso, University of Texas at Austin and NBER, and Timothy J. Layton, Harvard University, "Upcoding or Selection? Evidence from Medicare on Slishy Risk Adjustment" (NBER Working Paper No. 21222)
- Jonas Kolodrub, Uppsala University; Camille Landais and Johannes Spinnewijn, London School of Economics; and Peter Nilsson, Stockholm University, "The Optimal Timing of Unemployment Benefits: Theory and Evidence from Sweden"
- John Beshires, David Lalibson, and Birgitte C. Madrian, Harvard University and NBER, and James J. Choi, Yale University and NBER, "Does Front-Loading Taxation Increase Savings? Evidence from Roth 401(k) Introductions" (NBER Working Paper No. 20738)
- Patrick M. Kline and Christopher R. Walters, University of California, Berkeley, and NBER, "Evaluating Public Programs with Close Substitutes: The Case of Head Start"
Corporate Finance

The NBER’s Program on Corporate Finance met at the University of Chicago on April 10. Research Associates Thomas Philippon and Jeffrey Wangler of New York University organized the meeting. These papers were discussed:

- Manuel Adelino, Duke University, Antoinette Schoar, MIT and NBER; and Felipe Severino, Dartmouth College, “Changes in Buyer Composition and the Expansion of Credit during the Boom” (NBER Working Paper No. 20848)
- Claire Céleriére, University of Zurich, and Boris Vallée, Harvard University, “Returns to Talent and the Finance Wage Premium”
- Harrison Hong, Princeton University and NBER, and Inessa Liskovich, Princeton University, “Crime, Punishment and the Halo Effect of Corporate Social Responsibility”
- Craig Doidge and Alexander Dyck, University of Toronto; Hamed Mahmudi, University of Oklahoma; and Aazam Virani, University of Arizona, “Can Institutional Investors Improve Corporate Governance Through Collective Action?”

Summaries of these papers are at http://www.nber.org/confer/2015/CFs15/summary.html

Political Economy

The NBER’s Program on Political Economy met in Cambridge on April 10. Program Director Alberto Alessina of Harvard University organized the meeting. These papers were discussed:

- Sergei Guriev, Sciences Po (Paris), and Daniel Treisman, University of California, Los Angeles, and NBER, “How Modern Dictators Survive: Co-optation, Censorship, Propaganda, and Repression” (NBER Working Paper No. 21136)
- Andrea Prat, Columbia University, “Media Power”
- Thomas Dohmen, Benjamin Enke, and Armin Falk, University of Bonn; David Huffman, University of Oxford; and Uwe Sunde, University of Munich, “Patience and the Wealth of Nations”
- Leonardo Bursztyn, University of California, Los Angeles, and NBER; Michael J. Callen, Harvard University; Bruno Ferman, Getúlio Vargas Foundation (Rio de Janeiro); Ali Hasanain, Lahore University of Management Sciences; and Noam Yuchtman, University of California, Berkeley, and NBER, “Identifying Ideology: Experimental Evidence on Anti-Americanism in Pakistan”

Summaries of these papers are at http://www.nber.org/confer/2015/CEs15/summary.html

Chinese Economy

The NBER’s Working Group on the Chinese Economy met in Cambridge on April 10–11. Working Group Director Shang-Jin Wei of Columbia University and Research Associate Hanning Fang of the University of Pennsylvania organized the conference. These papers were discussed:

- Xiaoxue Zhao, Duke University, “To Reallocate or Not? Optimal Land Institutions under Communal Tenure: Evidence from China”
- Teng Li, Haoming Liu, and Alberto Salvo, National University of Singapore, “Severe Air Pollution and Labor Productivity”
- Nancy Qian, Yale University and NBER, and Jaya Wen, Yale University, “The Impact of Xi Jinping’s Anti-Corruption Campaign on Luxury Imports in China”
- Brett Ambrose, Pennsylvania State University; Yongheng Deng, National University of Singapore; and Jing Wu, Tsinghua University, “Understanding the Risk of China’s Local Government Debt: Its Linkage with Property Markets”
- Carlos Garriga, Federal Reserve Bank of St. Louis; Yang Tang, Nanyang Technological University (Singapore); and Ping Wang, Washington University in St. Louis and NBER, “Rural-Urban Migration, Structural Transformation, and Housing Markets in China”
- Nathaniel Baum-Snow, Brown University and NBER; Loren Brandt, University of Toronto; J. Vernon Henderson, London School of Economics; Matthew Turner, Brown University; and Qinghua Zhang, Peking University, “Transport Infrastructure, Urban Growth, and Market Access in China”
- Donghua Chen, Nanjing University; Dequan Jiang, Wuhu University; Alexander Ljungqvist, New York University; and Zhenghua Zhou, University of Colorado Colorado Springs, “State Capitalism vs. Private Enterprise” (NBER Working Paper No. 20930)
- Ke Tang, Tsinghua University, and Huoxiang Zhu, MIT and NBER, “Commodities as Collateral”
- Huowei Huang, London School of Economics; Jiandong Ju, Shanghai University of Finance and Economics; and Vivian Z. Yue, Emory University, “A Unified Model of Structural Adjustments and International Trade: Theory and Evidence from China”
- Ying Bai, Hong Kong University of Science and Technology, and Ruixue Jia, University of California, San Diego, “Elite Recruitment and Political Stability: The Impact of the Abolition of China’s Civil Service Exam”

Summaries of these papers may be found at: http://www.nber.org/confer/2015/CEs15/summary.html

Asset Pricing

The NBER’s Program on Asset Pricing met at the University of Chicago on April 10. Research Associates Nikolai Roussanov and Jules H. van Binsbergen of the University of Pennsylvania organized the meeting. These papers were discussed:

- William Fuchs and Brett Green, University of California, Berkeley, and Dimitris Papanikolaou, Northwestern University and NBER, “Adverse Selection, Slow Moving Capital, and Misallocation”
Health Economics

The NBER's Program on Health Economics met in Cambridge on April 17. Program Director Michael Grossman of the Graduate Center of the City University of New York and Research Associate Theodore Joyce of Baruch College organized the meeting. These papers were discussed:

- **Nicole B. Garleanu**, University of California, Berkeley, and NBER; **Stavros Panagacis**, University of Chicago and NBER; and Jianfeng Yu, University of Minnesota, "Impediments to Financial Trade: Theory and Measurement"
- **Andrea Buffa**, Boston University; **Dimitri Vayanos**, London School of Economics and NBER; and **Paul Woolley**, London School of Economics, "Asset Management Contracts and Equilibrium Prices" (NBER Working Paper No. 20460)
- **Martin Lettau**, University of California, Berkeley, and NBER; **Sydney C. Ludvigson**, New York University and NBER; and **Sai Ma**, New York University, "Capital Share Risk and Shareholder Heterogeneity in U.S. Stock Pricing" (NBER Working Paper No. 20744)
- **Peter Feldhütter** and **Stephan Schaefer**, London Business School, "The Credit Spread Puzzle in the Merton Model — Myth or Reality?"
- **Anna Cieslak**, Northwestern University, and **Adair Morse** and **Annette Vissing-Jorgensen**, University of California, Berkeley, and NBER, "Stock Returns over the FOMC Cycle"

Summaries of these papers are at [http://www.nber.org/confere/2015/BEs15/summary.html](http://www.nber.org/confere/2015/BEs15/summary.html)

Behavioral Finance

The Behavioral Economics Working Group held a meeting on Behavioral Finance at the University of Chicago on April 11. Research Associate James J. Choi of Yale University and Faculty Research Fellow Kelly Shue of the University of Chicago organized the meeting. These papers were discussed:

- **Hong Ru**, MIT, and **Antoinette Schoar**, MIT and NBER, "Do Credit Card Companies Screen for Behavioral Biases?"
- **Joshua Madsen**, University of Minnesota, and **Marina Niessner**, Yale University, "Is Investor Attention for Sale? The Role of Advertising in Financial Markets"
- **Erik Eyster**, London School of Economics; **Matthew Rabin**, University of California, Berkeley; and **Dimitri Vayanos**, London School of Economics and NBER, "Financial Markets where Traders Neglect the Informational Content of Prices" (NBER Working Paper No. 21224)
- **Dong Lou** and **Christopher Polk**, London School of Economics, and **Spyros Skouras**, Athens University of Economics and Business, "A Trick of War: Overnight Versus Intraday Expected Returns"
- **Olivier Dessaint**, University of Toronto, and **Adrien Matray**, HEC Paris, "Do Managers Overreact to Salient Risks? Evidence from Hurricane Strikes"

Summaries of these papers are at [http://www.nber.org/confere/2015/BEs15/summary.html](http://www.nber.org/confere/2015/BEs15/summary.html)

Cohort Studies

The NBER’s Working Group on Cohort Studies met in Cambridge on April 17–18. Working Group Director Dora Costa of the University of California, Los Angeles, and Research Associate Robert Pollack of Washington University in St. Louis organized the meeting. These papers were discussed:

- **Alissa Goodman**, Heather Joshi, Bilal Nasim, and Claire Tyler, University College London, "Social and Emotional Skills in Childhood and Their Long-Term Effects on Adult Life"
- **Gabriella Conti**, University College London, "Explaining the Relationship between Early Life Factors and Later Outcomes: Behavioral and Biological Pathways"
- **Eric Schneider**, University of Sussex, "Fetal Health Stagnation: Have Health Conditions in Utero Improved in the U.S. and Western and Northern Europe over the Past 150 Years?"
- **Aryeh Stein**, Emory University, "Child Growth and Human Capital: Data from COHORTS"
- **Daniel W. Belsky**, Avshalom Caspi, Renate Hours, Harvey J. Cohen, David Corcoran, Hona Lee Harrington, Jon Schafer, Karen Sugden, Benjamin Williams, Anatoli I. Yashin, and Terrie Moffitt, Duke University; Andrea Danese, King’s College London; Solomon Israel, Hebrew University of Jerusalem; M. E. Levine, University of California, Los Angeles; and **Richie Poulton**, University of Otago, "Quantification of Biological Aging in Young Adults"
- **Dave Donaldson**, Stanford University NBER, and **Daniel Keniston**, Yale University NBER, "How Positive Was the Positive? Investment and Fertility in the Aftermath of the 1918 Influenza in India"
- **Chulhee Lee** and **Esther Lee**, Seoul National University, "Son Preference, Sex-Selective Abortion, and Parental Investment in Girls in Korea: Evidence from the Year of the White Horse"
- **Joanna Lahey**, Texas A&M University NBER, and **Douglas Oxsley**, University of Wyoming, "Discrimination at the Intersection of Age, Race, and Gender: Evidence from a Lab-in-the-Field Experiment"
- **Avron Spiro**, Boston University, "Long-Term Psychological Outcomes of Military Experience"
- **Hans Henrik Steversten** and **Miriam Wüster**, Danish National Centre for Social Research, "Discharge on the Day of Birth, Parental Response, and Health and Schooling Outcomes"
- **Adam Isen**, Department of the Treasury; **Maya Rossin-Slater**, University of California, Santa Barbara; and **Reed Walker**, University of California, Berkeley, and NBER, "Heart and Long-Run Human Capital Formation"
- **Achyuta Adhvaryu**, University of Michigan; **Steven A. Bednar**, Elion University; **Teresa Molina** and **Anant Nshadhaham**, University of Southern California; and **Quynh T. Nguyen**, The World Bank, "Salt Iodization and the Enfranchisement of the American Worker"
• **Robert Gibbons**, MIT organized the meeting. These papers were discussed:

The NBER’s W orking Group on Organizational Economics met in Cambridge on April 24–25. W orking Group Director

Summaries of these papers are at [http://www.nber.org/confer/2015/CSs15/summary.html](http://www.nber.org/confer/2015/CSs15/summary.html)

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**Organizational Economics**

The NBER’s Working Group on Organizational Economics met in Cambridge on April 24–25. Working Group Director Robert Gibbons of MIT organized the meeting. These papers were discussed:

• David C. Chan, Jr., Stanford University and NBER, “Tacit Learning and Influence behind Practice Variation: Evidence from Physicians in Training”

• Maia Halonen-Akarwijuka, University of Bristol, and Oliver D. Hart, Harvard University and NBER, “Short-Term, Long-Term, and Long-term Contracts” (NBER Working Paper No. 21005)


• Robert Akerlof, University of Warwick, and Richard Holdren, University of New South Wales, “Movers and Shakers”

• Rebecca Henderson, Harvard University and NBER, and Hazhir Rahmandad and Nelson P. Repenning, MIT, “Making the Numbers’ Short Termism & the Puzzle of Only Occasional Disaster” (NBER Working Paper No. 16367)

• Alexander Peskakhovich, Harvard University, and David Rand, Yale University, “Habits of Virtue: Creating Norms of Cooperation and Defection in the Laboratory”

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**Children**

The NBER’s Program on Children met in Cambridge on May 1. Program Director Janet Currie of Princeton University orga-

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**Education Program**

The NBER’s Program on Education met in Cambridge on April 30. Program Director Caroline M. Hosby of Stanford University organized the meeting. These papers were discussed:

• Judith Scott-Clayton, Columbia University and NBER, and Lauren Schudde, Columbia University, “Performance Standards in Need-Based Student Aid”

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**Effective Learning and Students Outcomes in California Community Colleges”**

**Markus Nagler, University of Munich; Marc Pioquintik, Ifo Institute for Economic Research (Munich); and Martin R. West, Harvard University and NBER, “Weak Markets, Strong Teachers: Recession at Career Start and Teacher Effectiveness”**

Summaries of these papers are at [http://www.nber.org/confer/2015/CHEDs15/summary.html](http://www.nber.org/confer/2015/CHEDs15/summary.html)

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Summaries of these papers are at [http://www.nber.org/confer/2015/OEs15/summary.html](http://www.nber.org/confer/2015/OEs15/summary.html)

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Summaries of these papers are at [http://www.nber.org/confer/2015/CSs15/summary.html](http://www.nber.org/confer/2015/CSs15/summary.html)

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Summaries of these papers are at [http://www.nber.org/confer/2015/OEs15/summary.html](http://www.nber.org/confer/2015/OEs15/summary.html)

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Summaries of these papers are at [http://www.nber.org/confer/2015/OEs15/summary.html](http://www.nber.org/confer/2015/OEs15/summary.html)
Improving the Measurement of Consumer Expenditures

Edited by Christopher D. Carroll, Thomas F. Croswley, and John Sabelhaus

Robust and reliable measures of consumer expenditures are essential for analyzing aggregate economic activity and for measuring differences in household circumstances. Many countries, including the United States, are embarking on ambitious projects to redesign surveys of consumer spending, with the goal of better capturing consumer expenditure data. Subsequent chapters highlight the range of objectives that expenditure surveys may satisfy, compare the data available from consumer expenditure surveys with that available from other sources, and describe how current survey practices in the United States compare with those in other nations.

Innovation Policy and the Economy, Volume 15

Edited by William R. Kerr, Josh Lerner, and Scott Stern

The 15th volume of Innovation Policy and the Economy is the first to focus on a single theme: high-skilled immigration to the United States. The first paper is the product of a long-term research effort on the impact of immigration to the United States of Russian mathematicians beginning around 1990 as the Soviet Union collapsed. The second describes how obtaining an undergraduate degree from a U.S. university can open an important pathway for immigrants to participate in the U.S. labor market in IT occupations. The third paper considers the changing nature of postdoctoral positions in science departments, which are disproportionately held by immigrant researchers. The fourth considers the role of U.S. firms in high-skilled immigration. The final paper describes how strong growth in edge production has reduced the share of world scientific activity in the United States, increased the immigrant proportion of scientists and engineers at U.S. universities and firms, and fostered cross-border collaborations for U.S. scientists.

The Color Factor: The Economics of African-American Well-Being in the Nineteenth-Century South

Edited by Christopher D. Carroll, Thomas F. Croswley, and John Sabelhaus

Despite the many advances that the United States has made in racial equality over the past half century, numerous events within the past several years have proven prejudice to be alive and well in modern-day America. In one such example, Governor Nikki Haley of South Carolina dismissed one of her principal advisors in 2013 when his membership in the ultra-conservative Council of Conservative Citizens (CCC) came to light. According to the Southern Poverty Law Center, its 2001 the CCC website included a message that read “God is the one who divided mankind into different races... Mixing the races is rebelliousness against God.” This episode reveals America’s continuing struggle with race, racial integration, and race mixing — a problem that has plagued the United States from its earliest days.

The Color Factor: The Economics of African-American Well-Being in the Nineteenth-Century South

Edited by Howard Bodenhorn

In the first full-length study of the ways in which skin color intersected with policy, society, and economy in the 19th century South. With empirical and statistical rigor, the investigation confirms that individuals of mixed race experienced advantages over African Americans in multiple dimensions — in occupations, family formation and family size, wealth, health, and access to freedom, among other criteria. The text is a valuable resource for students, social scientists, historians, and anyone hoping to gain a deeper understanding of the historical roots of modern race dynamics in America.