

November 2015

INSIDE THIS ISSUE

- The Growing Importance of Social Skills in the Labor Market
- Mortgage Refinancing, Consumer Spending, and Competition
- Who Gets into Gifted and Talented Education Programs?
- Workfare and Human Capital Investment: Evidence from India
- Creation of the Euro and Productivity Growth in Southern Europe

Liquidity, Mortality, and Early Social Security Claiming

Although full retirement age is 66, eligible Americans may choose to begin receiving Social Security retirement benefits at any time between age 62 and age 70. Even though benefits are reduced for those claiming before age 66, and increased for those who postpone claiming until age 70, roughly a third of beneficiaries claim benefits as soon as possible, at age 62.

In **The Financial Feasibility of Delaying Social Security: Evidence From Administrative Tax Data** (NBER Working Paper No. 21544), [Gopi Shah Goda](#), [Shanthi Ramnath](#), [John B. Shoven](#), and [Sita Nataraj Slavov](#) use data on people born in 1940 to explore why individuals choose earlier retirement with lower benefits.

The researchers conclude that liquidity constraints “are not likely to be the main reason a significant segment of the population chooses to claim early.” Detailed tax return data for 1999 to 2011 suggest that most of those who claimed Social Security before the full retirement age had sufficient liquid assets to delay Social Security benefits until full retirement age. About a third of this group had Individual Retirement Account (IRA) assets equal to at least two years of average Social Security benefits.

About a quarter had IRA assets equivalent to at least four years of benefits. Using estimates of total non-retirement financial wealth from the Health and Retirement Study (HRS), which includes checking and

Many of those who choose early benefits have sufficient assets to delay. Early claimers have worse self-reported health, shorter life expectancy, and are more likely to die earlier.

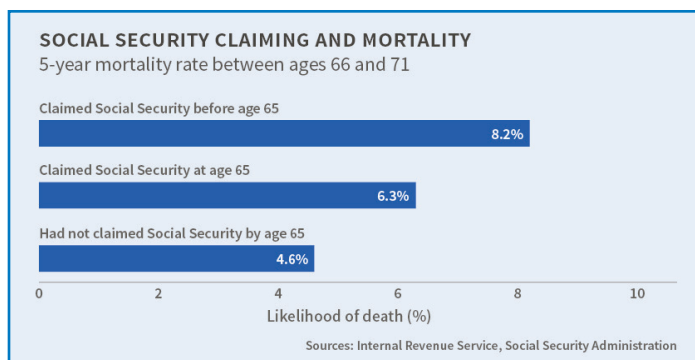
savings accounts, certificates of deposits, and stock, bond, and mutual fund holdings, about 64 percent of retirement-age Americans had wealth equal to at least two years of average Social Security benefits, and 54 percent had four years. Yet the vast

that their life expectancy will be shorter, and are more likely to die earlier than those who claim later. Individuals claiming Social Security benefits before they turn 65 had an 8.2 percent mortality rate in the five-year

period between age 66 and age 71. Those who claimed benefits after age 65 had a 4.6 percent chance of dying during that period.

A similar analysis, using more-detailed data from the HRS to control for wealth, age, race, education, and gender, produced similar results. It suggested that those who claim Social Security before age 66 are 3.3 percent less likely to report being in good or excellent health and have a 2.07 percent lower probability of living to age 75. Even though the mortality differences between early claimers and late claimers are significant, they are not large enough on average to eliminate the gain from delayed claiming.

The researchers note that their results are consistent with earlier work showing that retired individuals draw down their personal wealth more slowly than the life



majority of individuals—about 72 percent—claim before full retirement age.

The researchers find that individuals may be exploiting information about their own health; those who choose early benefits have worse self-reported health, think

cycle model would predict. Only 33 percent of the sample claimed Social Security benefits after they began making withdrawals from their IRA, while 57 per-

cent of the sample claimed Social Security benefits prior to making any IRA withdrawals. There is no evidence that spousal health, long-term care insurance coverage,

or expectations about changes in Social Security benefits correlate with early receipt of benefits.

—Linda Gorman

The Growing Importance of Social Skills in the Labor Market

Automation has played an important role in the recent evolution of the U.S. labor market, transforming the relative demand for workers with various skills and in different occupations. In **The Growing Importance of Social Skills in the Labor Market** (NBER Working Paper No. 21473), [David J. Deming](#) demonstrates that high-paying, difficult-to-automate jobs increasingly require social skills. Nearly all job growth since 1980 has been in occupations that are relatively social-skill intensive, while jobs that require high levels of analytical and mathematical reasoning, but low levels of social interaction, jobs that are comparatively easy to automate, have fared comparatively poorly.

Social skills are important in the modern labor market because computers are still very poor at simulating human interaction. Skill in social settings has evolved in humans over thousands of years. Human interaction in the workplace involves team production, with workers playing off of each other's strengths and adapting flexibly to changing circumstances. Such non-routine interaction is at the heart of the human advantage over machines. The growing importance of social skills can potentially explain a number of other trends in educational outcomes and the labor market, such as the narrowing—and in some cases reversal—of gender gaps in completed education and earnings.

Deming explains the importance of social skills by observing that workers naturally vary in their ability to perform the great variety of workplace tasks. Teamwork

cognitive skill, non-cognitive skill, and a wide variety of other determinants of wages. He also finds that cognitive skill and social skill are complements in the determination

Labor market rewards to performing routine tasks have fallen, while the returns to workers' ability to cooperate and adapt to changing circumstances have risen.

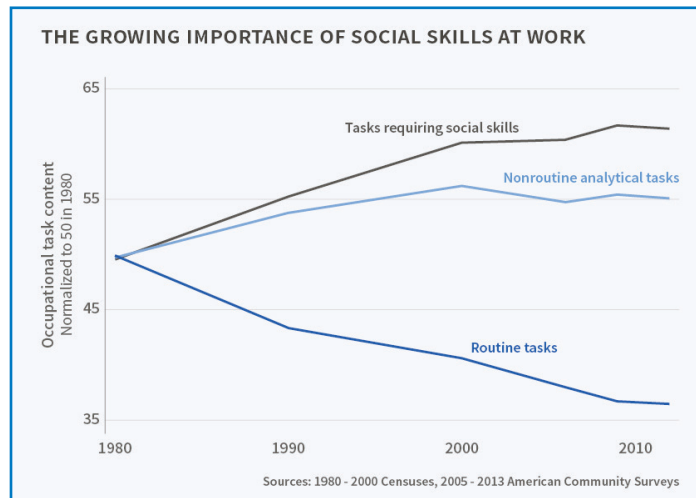
therefore increases productivity through comparative advantage. He suggests that the benefits of teamwork can only be realized through costly coordination among workers, and he models social skills as a

of wages, and that skill complementarity has grown over time. Finally, he finds that workers with greater social skills are more likely to work in social skill-intensive and less-routine occupations and to earn a relatively higher wage return in these occupations.

While Deming does not address where social skills come from and whether they can be affected by education or public policy, he suggests the possibility that increases in social skills are a key mechanism for the long-run impacts of early-childhood interventions. He notes that if social skills are learned early in life but are not expressed in academic out-

comes such as reading and math achievement, and if they are important for adult outcomes such as employment and earnings, this would explain how the impact of early interventions on test scores could decay over time even though the impact of these interventions on earnings could remain substantial.

—Les Picker



reduction in worker-specific coordination costs. Workers with high social skills can “trade tasks” at a lower cost, enabling them to work with others more efficiently.

Deming tests this framework's predictions about the sorting of workers and the relative returns to skills across occupations. He finds that the wage return to social skills is positive even after controlling for

Mortgage Refinancing, Consumer Spending, and Competition

A number of government entities launched policies and programs designed to deal with the critical economic problems arising from the financial crisis of 2008, the housing market collapse, and the Great Recession. The Federal Reserve maintained a low-interest rate monetary policy in an effort to spur growth and help the housing industry, while Congress passed the American Recovery and Reinvestment Act of 2009, among other stabilization and stimulus programs. What were the effects of such programs?

In **Mortgage Refinancing, Consumer Spending, and Competition: Evidence from the Home Affordable Refinancing Program** (NBER Working Paper No. 21512), [Sumit Agarwal](#), [Gene Amromin](#), [Souphala Chomsisengphet](#), [Tomasz Piskorski](#), [Amit Seru](#), and [Vincent Yao](#) examine the nation's largest housing-recovery initiative, the Home Affordable Refinancing Program (HARP). They find that it spurred substantial mortgage refinancing activity and freed up resources for households to spend on other items. But they also find that the HARP participation rate and additional consumer spending didn't reach their full potential, partly due to impediments to competition within the refinancing market that hampered many borrowers from benefiting fully from the program.

Started in early 2009 by the U.S. Treasury and the Federal Housing Finance Agency, HARP focused on assisting millions of "underwater" American households whose mortgages, issued with help of government-sponsored entities, exceeded

the value of their homes, particularly those with especially high loan-to-value ratios. HARP was designed to provide federal credit guarantees to borrowers with insufficient credit to refinance their loans, thereby

off, while the private refinancing market remained relatively frozen in the immediate post-crash years. Indeed, more than three million eligible borrowers, primarily with fixed-rate mortgages, refinanced at lower

The Home Affordable Refinancing Program led to more household spending but impediments to competition kept it from reaching its full potential.

helping them take advantage of the Fed's low interest rate policy.

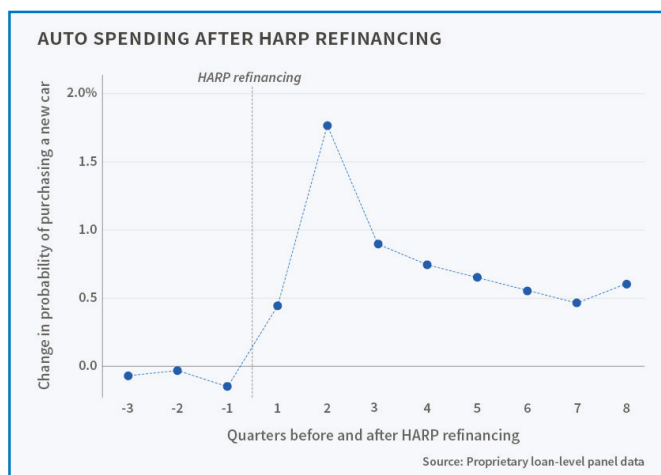
HARP began in fits and starts. It serviced a relatively small number of borrowers in its early years and required constant rule revisions to make it more viable, including periodic increases in the loan-

interest rates through HARP.

On average, borrowers saw a reduction of about 140 basis points in their interest rate as a result of HARP refinancing. That averaged out to about \$3,500 in annual savings per borrower. The researchers found that many of these HARP participants sub-

sequently increased purchases of durable goods, such as autos, and also increased spending on other items and on services. These effects were particularly evident in regions that were hardest hit by the housing-market contraction, and therefore more exposed to the HARP program. These regions also saw declines in foreclosure rates and faster recoveries in house prices after HARP became operational.

But the researchers also found that competitive frictions in the refinancing market—among both incumbent loan servicers and new servicers—may have hampered the HARP program's overall impact. They estimate that these frictions reduced the take-up rate among eligible borrowers by between 10 and 20 percent and cut interest rate savings by between 16 and 33 basis points, amounting to \$400 to \$800 dollars of annual foregone savings per borrower. The largest effects were among the most indebted borrowers; they were the primary target of HARP.



to-value eligibility rate. The researchers reviewed millions of mortgage records of both HARP and non-HARP borrowers and tracked the borrowing and spending patterns of the mortgagors. To analyze and compare HARP's impact, they divided the households in the data set into two categories—those with loan guarantees from government-sponsored entities and those whose loans were not government-backed.

The researchers found a large difference in refinancing activity between the two groups of borrowers. HARP took

“Our findings suggest that significant number of eligible borrowers did not take advantage of the program,” the researchers conclude. “While certainly

the borrower specific factors or other institutional frictions (e.g., like servicer capacity constraints) may help account for this muted response, our paper finds

that limits to competition in [the] refinancing market can also help explain part of this shortfall.”

—Jay Fitzgerald

Who Gets into Gifted and Talented Education Programs?

In Can Universal Screening Increase the Representation of Low Income and Minority Students in Gifted Education? (NBER Working Paper No. 21519), [David Card](#) and [Laura Giuliano](#) explore the experience of a school district that they describe as “one of the largest and most diverse” in the nation.

Until 2005, the district selected candidates for its elementary-level gifted and talented program from among first- and second-graders recommended by parents and teachers. This pool was then winnowed based on IQ scores and evaluation for such traits as motivation, creativity, and adaptability. While the district offered free IQ testing, private psychologists did a thriving business administering tests to more affluent students who wanted to skip the queue or try again if their initial scores fell short.

To qualify for gifted status, students generally had to score at least 130 on the IQ test. However, to offset economic and linguistic disadvantages, a lower threshold of 116 applied to students who received subsidized lunches or were designated as English language learners. Despite this effort to level the playing field, enrollment in the gifted program was skewed toward white students from higher-income families. Blacks and Hispanics made up fewer than 30 percent

of the students in the program, although they accounted for 60 percent of the district’s students overall.

In 2005, the district introduced a universal screening program to supplement the more informal referral process. All second-graders were given a standardized test that assessed cognitive ability through questions composed of sym-

relaxation in eligibility standards. During the same time frame, no significant changes in levels of gifted students identified were reported by other, comparable

The gap between disadvantaged students and well-off students shrank when universal screening supplanted the traditional referral system.

universal screening program to supplement the more informal referral process. All second-graders were given a standardized test that assessed cognitive ability through questions composed of sym-

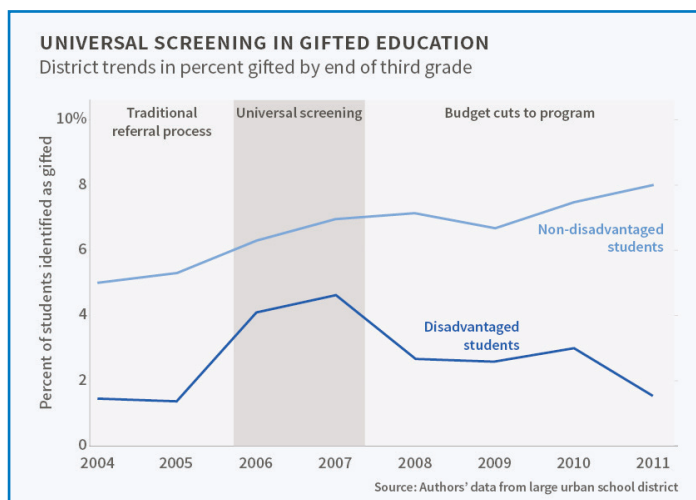
school districts in the state that continued to use traditional screening methods.

Before universal screening, “black and Hispanic students, free/reduced price lunch participants, English language learners, and girls were all systematically ‘under-referred’ to the gifted program,” the researchers find. With universal screening, the number of Hispanic students increased by 130 percent and the number of black students by 80 percent.

The newly identified students performed as well on IQ tests as students nominated under the previous system, though they had scored lower on standardized achievement tests. “We hypothesize that par-

ents and teachers often failed to recognize the potential of many poor and immigrant children with less than stellar achievement levels, accounting for their likelihood of being under-referred,” the researchers write.

Skeptics of the new screening process expressed concern that the newly identified students would flounder in the gifted program. In fact, they showed greater gains on reading and math tests than those students



bol and shapes. If students scored above 130 — or above 115 for those classified as disadvantaged — they were referred to a district psychologist for free IQ testing.

In the period 2004–05, prior to implementation of universal screening, 3.3 percent of all students were identified as gifted. In 2006–07, after the program was implemented, the rate jumped to 5.5 percent. This surge occurred without any

referred under the traditional system.

Implementing the universal system was expensive. The district conducted 1,300 additional IQ tests annually, incurring high overtime costs. In the wake of the 2007 recession, the cash-strapped district cut overtime and thus the number of free tests it administered. Enrollment in

the gifted program dropped sharply. In 2011, when the district decided for budget reasons to suspend the universal screening program, the gifted participation rate among disadvantaged students fell back to pre-2005 levels.

“At a minimum,” the researchers conclude, “our findings suggest that the under-

representation of poor and minority students in gifted education is not due solely to the lower IQ scores of these students. A substantial share of the gap appears to be caused by the failure of the traditional parent/teacher referral system to identify high-ability disadvantaged students.”

— Steve Maas

Workfare and Human Capital Investment: Evidence from India

Dozens of nations in recent years have implemented programs guaranteeing employment on public works projects — workfare — in an effort to reduce poverty. In **Workfare and Human Capital Investment: Evidence from India** (NBER Working Paper No. 21543), [Manisha Shah](#) and [Bryce Millett Steinberg](#) examine the impact on human capital investment of one of the world’s largest workfare programs, India’s National Rural Employment Guarantee Scheme (NREGS).

The authors explore the possibility that workfare programs, which require beneficiaries to work on local public works projects in order to receive benefits, could increase the opportunity cost of schooling, lowering human capital investment even as incomes increase due to increased labor demand. They find that while NREGS may transfer resources to the poor, it also reduces educational attainment among adolescents.

India’s National Rural Employment Guarantee Act, passed in 2005, created a program that provides rural households with up to 100 days of annual employment on public works projects at the local minimum wage. The program was intro-

duced in 200 of the poorest districts in the country early in 2006. Another 130 districts were added to the program in 2007,

A large workfare program in India led to increased school dropout rates and lower test scores among poor youth.

followed by another 270 in 2008, when the program covered the entire country. By 2010, approximately 53 million households were participating in the program

Analyzing changes in school enroll-

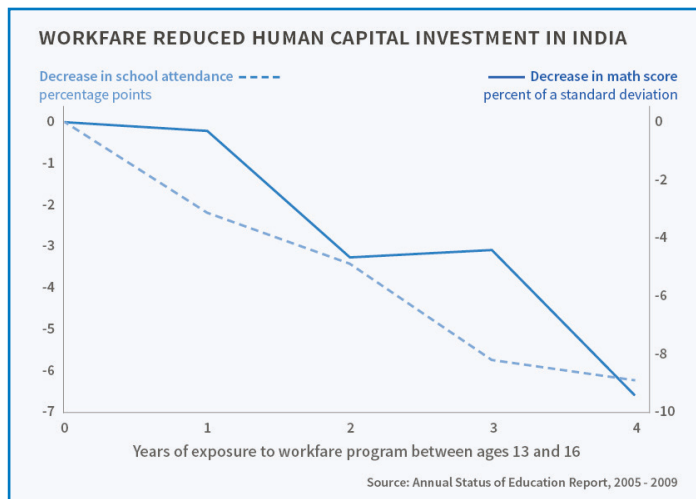
ment rates and national test scores as the workfare program rolled out across India, the researchers find that enrollment and test scores both dropped following the program’s introduction in a region. By 2010, five years after the program was introduced, between 650,000 and 2.5 million Indian

adolescents may have quit school in favor of work, amounting to a significant loss in the development of human capital. Each additional year of exposure to the program from 2006–09 saw math scores for 13- to 16-year-olds decrease by 2 percent of a standard deviation and enrollment rates fall by 2 percentage points.

The workfare program was designed in part to encourage the employment of females. However, the researchers report, the data suggest that while boys who left school took on jobs normally performed by men, girls who dropped out often were assuming domestic chores at home, most likely substituting for their mothers, whose labor force participation increased.

The impacts for younger children are mixed. In fact, exposure to NREGS during ages 2–4 may have increased test scores and enrollment rates, likely because of increases in family income due to the program.

— Matt Nesvisky



ment rates and national test scores as the workfare program rolled out across India, the researchers find that enrollment and test scores both dropped following the program’s introduction in a region. By 2010, five years after the program was introduced, between 650,000 and 2.5 million Indian

Creation of the Euro and Productivity Growth in Southern Europe

A possible explanation for the divergence in productivity growth between northern and southern Europe since the adoption of the euro in 1999 is that capital inflows to the south were allocated inefficiently by the region's less-developed financial markets. Gita Gopinath, Sebnem Kalemli-Ozcan, Loukas Karabarbounis, and Carolina Villegas-Sanchez explore this theory in **Capital Allocation and Productivity in South Europe** (NBER Working Paper No. 21453).

"We show that the cross-sectional correlation between capital and firms' productivity decreased over time," they write. "This suggests that capital inflows were increasingly directed toward less productive firms." They present an economic model in which firms face transitory idiosyncratic productivity shocks and there are borrowing constraints that keep smaller firms from taking out loans. They demonstrate that a decline in real interest rates can trigger a huge influx of capital which goes to the largest, but not necessarily the most productive, companies.

Using a firm-level dataset covering roughly 75 percent of the Spanish manufacturing sector, the authors find that the standard deviation of the firms' return on capital rose between 1999 and 2012. This dispersion was clear prior to the financial

crisis; it accelerated in the post-crisis period. In the meantime, the standard deviation of

fall for southern Europe, which in turn triggered an influx of capital. The authors sug-

Falling real interest rates in the south following the adoption of a common currency triggered an influx of capital, but the capital did not necessarily flow to the most productive firms.

the return on labor hardly changed at all.

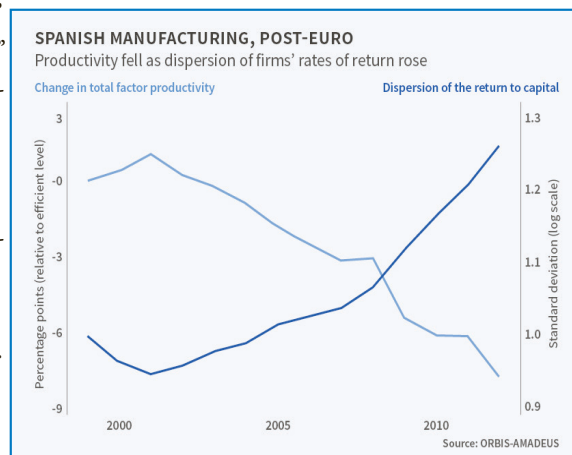
"The striking difference between the evolution of the two dispersion measures argues against the importance of changing distortions that affect both capital and labor at the same time," the authors write.

gest that as the cost of borrowing fell, larger firms increased their investment, and experienced a falling return on capital, while smaller firms that could not borrow, and that relied on internally-generated funds for investment, invested less and did not experience declining returns.

The authors suggest that as a result of falling real interest rates, "capital flows into the [manufacturing] sector, but not necessarily to the most productive firms, which generates a decline in sectoral TFP [total factor productivity]."

The study also examines data from Italy, Portugal, Germany, France, and Norway. Both southern European nations—Italy and Portugal—experienced an increase in the dispersion of the return to capital similar to Spain's, while France, Germany, and Norway did not. The southern countries also experienced much slower growth of total factor productivity than the northern countries. This is consistent with less-well-developed capital markets in the south impeding the efficient allocation of capital.

— Laurent Belsie



"For example, this finding is not consistent with heterogeneity in price markups driving trends in dispersion."

When the euro was created in 1999, countries that adopted it needed to initiate policies that would help the nations in the eurozone to converge. One result of these efforts was that real interest rates began to

NBER

The National Bureau of Economic Research is a private nonprofit research organization founded in 1920 and devoted to objective quantitative analysis of the American economy. Its officers are:

James M. Poterba—President & Chief Executive Officer
Martin B. Zimmerman—Chairman
Karen N. Horn—Vice Chairman

The **NBER Digest** summarizes selected Working Papers recently produced as part of the Bureau's program of research. Working Papers are intended to make preliminary research results available to economists in the hope of encouraging discussion and suggestions for revision. The **Digest** is issued for similar informational purposes and to stimulate discussion of Working Papers before their final publication. Neither the Working Papers nor the **Digest** has been reviewed by the Board of Directors of the NBER.

The **Digest** is not copyrighted and may be reproduced freely with appropriate attribution of source. Please provide the NBER's Public Information Department with copies of anything reproduced.

Individual copies of the NBER Working Papers summarized here (and others) are available free of charge to Corporate Associates and to the affiliates of other organizations, such as universities and colleges, with subscriptions. For all others, there is a charge of \$5.00 per downloaded paper or \$10.00 per hard copy paper. Outside of the United States, add \$10.00 per order for postage and handling. Advance payment is required on all orders. To order, call the Publications Department at (617) 868-3900 or visit www.nber.org/papers. Please have the Working Paper Number(s) ready.

Subscriptions to the full NBER Working Paper series include all 1000 or more papers issued each year. Subscriptions are free to Corporate

Associates. For others within the United States, the standard rate for a full subscription is \$9000; for academic libraries and faculty members, \$7200. Higher rates apply for foreign orders. The on-line standard rate for a full subscription is \$2160 and the on-line academic rate is \$1000.

Partial Working Paper subscriptions, delineated by program, are also available. For further information, see our Web site, or please write: National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398.

Requests for **Digest** subscriptions, changes of address, and cancellations should be sent to **Digest**, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398 (please include the current mailing label), or by sending email to subs@nber.org. Print copies of the **Digest** are only mailed to subscribers in the U.S. and Canada; those in other nations may request electronic subscriptions at www.nber.org/drs/subscribe/.