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Recalls from Unemployment

Unemployed individuals are typically assumed to be searching for a job in an environment in which they have imperfect information about employers, and employers have imperfect information about potential employees. This lack of information, coupled with the heterogeneity of jobs and workers, slows the job-finding process. However, if a worker who separates from an employer and experiences a spell of unemployment eventually returns to work for her former employer, then much of the heterogeneity may be irrelevant. The employer and the employee already know what to expect from each other. In **Recall and Unemployment** (NBER Working Paper No. 19640), **Shigeru Fujita** and **Giuseppe Moscarini** show that recalls from former employers are surprisingly common. They study the implications of these recalls for individual labor market experiences as well as for the efficiency of the labor market matching process.

The authors study data from the Survey of Income and Program

Participation (SIPP), and find that more than 40 percent of the workers who become unemployed

“More than 40 percent of the workers who become unemployed end their unemployment spell by returning to work for their last employer.”

end their unemployment spell by returning to work for their last employer. These recalls include both workers on temporary layoffs and permanently separated workers. More than 20 percent of recalls are permanently separated workers who had no expectation of recall.

Unemployment spells that end with recalls are shorter, by about a month on average, than other unemployment spells. In other words, the probability of finding a new job at a different employer is much lower than the average exit rate from unemployment. The individuals who are recalled have longer job tenure before separation than other unemployed individuals. Recalls are also associated with better wage changes and with much lower occupational mobility. The

well-documented negative duration dependence of unemployment—the tendency for the

probability that an unemployed worker will become employed to decline with the length of the unemployment spell—nearly disappears once recalls are excluded. These findings suggest that recalls circumvent the usual search frictions of the worker-to-firm matching process.

In a recession, the probability that an unemployed worker will be recalled by her previous firm declines, but this decline is much smaller than the drop in the probability of being hired by a new employer. Because recalls are relatively stable over the business cycle, the probability of finding a new job at a new employer is more pro-cyclical and more volatile than the probability of being recalled. After removing recalls from the data on job finding, it

appears that labor market “mismatch” was considerably larger during the Great Recession, and smaller in its aftermath, than conventional estimates would suggest.

Recalls were relatively steady during the Great Recession in part because new jobs were so scarce that workers remained available for recall for much longer. Recalls

helped to sustain the overall hiring rate during the Great Recession, but they did not rise as much as new hiring when the economy recovered in 2010–12.

— Claire Brunel

The Effects of Expanded Medicaid Coverage

Most studies of Medicaid focus on the effects of the program on health expenditures or health outcomes. In **The Impact of Medicaid on Labor Force Activity and Program Participation: Evidence from the Oregon Health Insurance Experiment** (NBER Working Paper No. 19547), authors **Katherine Baicker, Amy Finkelstein, Jae Song, and Sarah Taubman** consider a set of additional effects. They focus on how Medicaid coverage affects enrollees’ labor market activity and their take-up of government benefits such as disability insurance and welfare. The authors build on an ongoing study of a 2008 policy change in Oregon in which the state initiated a limited expansion of its Medicaid program for low-income, uninsured adults, drawing approximately 30,000 names by lottery from a waiting list of 90,000. Those selected won the chance to apply for Medicaid and to be covered if they met eligibility requirements. The lottery increased enrollment in Medicaid by about 25 percent, with virtually no impact on the coverage rate for private insurance.

The authors note that the income ceiling for Medicaid eligibility may discourage employ-

“Expanding Medicaid in Oregon did not affect beneficiaries’ employment or earnings.”

ment and earnings, and that Medicaid insurance coverage itself may reduce the beneficiaries’ incentive to seek employment as a way to obtain health insurance. If access to Medicaid reduces beneficiaries’ earnings, this could in turn increase eligibility for, and hence participation in, other means-tested programs. It is also possible that participation in Medicaid may increase participation in other government programs by increasing awareness of these programs or by reducing the transaction costs of applying. These possibilities have raised concern that expanding Medicaid would reduce earnings and tax revenues, while contributing to additional increases in government spending.

By exploiting the random nature of increased access to Medicaid in Oregon, this study is able to provide evidence on the effect of program access that avoids many of the usual con-

cerns about non-random selection into government programs. The results suggest that expanded

Medicaid coverage in Oregon did not affect beneficiaries’ employment or earnings over the first one to two years. The authors note that their results are subject to a margin of error, but they are precise enough to rule out either positive or negative employment effects of more than a few percentage points. The authors also find that Medicaid coverage increases the probability that a household receives food stamps. They find no substantial effects on the use of a range of other government programs including Temporary Assistance for Needy Families (TANF), Supplemental Security Income (SSI), and Social Security Disability Insurance (SSDI).

These are the latest results from the Oregon Health Insurance Project, which uses the random assignment associated with the eligibility lottery to study the impact of covering low-income, uninsured adults with Medicaid. Other

key findings from the first one to two years of Medicaid coverage include: 1) Medicaid coverage increases health care use including emergency department visits, hospital admissions, outpatient visits, prescription drugs, and preventive care, as well as self-reported access to care; 2) Medicaid reduces expo-

sure to financial risk, including the probability of having unpaid medical bills sent to collection agencies, and virtually eliminates the risk of catastrophic out-of-pocket medical expenditures; and 3) Medicaid improves some measures of health, specifically self-reported health, and reduces rates

of depression but has no statistically significant effect on measured physical health outcomes such as blood pressure or cholesterol levels. More detail on these and other findings can be found on the study's website (www.nber.org/oregon).

— Les Picker

Pass-Through of Emissions Charges in Electricity Markets

In **Pass-through of Emissions Costs in Electricity Markets** (NBER Working Paper No. 19613), **Natalia Fabra** and **Mar Reguant** analyze the Spanish wholesale electricity market before and after the European cap-and-trade program for carbon emissions was introduced. They find that the average pass-through in this market is over 80 percent, implying that a one euro increase in emissions costs translates into an average increase in wholesale electricity prices of more than 80 cents. They also find that firms are more able to pass through costs during periods of high demand. In fact, the pass-through estimate goes up from an average 80 percent to 100 percent during peak times when the generating firms supplying electricity face no start-up costs.

The availability of high-frequency and highly disaggregated data makes electricity markets an attractive setting for studying pass-through. Because electricity markets are organized as

auctions, it is possible to observe not only market clearing prices and quantities but also hourly

“...the average pass-through in this market is over 80 percent...”

demand and supply schedules. It is also possible to construct reliable engineering-based marginal cost estimates for production, given that the electricity production function is well known and that fossil fuels are traded in international markets with readily observable prices. In addition, marginal emissions costs can be measured very accurately since they depend on the carbon price and on the emissions rate of the price-setting unit, whose identity is revealed by bids. This institutional setting makes it possible to analyze how cost shocks induced by changes in carbon prices are passed through to prices.

The high pass-through rate that the authors find can be explained by three facts. First, electricity is traded through high-frequency auctions in which many

buyers have very inelastic demand. Second, cost shocks are highly correlated across firms. Third, the

costs of price adjustment are very small, which means that it costs electricity producers very little to alter their prices to pass on cost increases from emissions charges.

The institutional features of electricity markets also allow the authors to separately estimate how firms incorporate cost shocks into their strategic behavior. They find that firms fully internalize the carbon price as the relevant opportunity cost of using permits despite the fact that these were allocated for free. This suggests that auctioning of permits should not result in inflationary effects on prices, at least in the short run.

Electricity generators earned substantial profits from enactment of the carbon trading program because they were able to raise wholesale prices to cover the

cost of permits and they received a free endowment of permits. This generated substantial politi-

cal controversy, which provides a reminder of the importance of considering distributional effects

when designing environmental policies.

— Matt Nesvisky

Prizes and Productivity

The production of knowledge is central to long-term economic growth. Yet little is known about how knowledge is produced, making it difficult to design incentives to elicit effort from knowledge producers. Prizes are a common incentive for knowledge production; hundreds of scientific prizes are awarded throughout the world and across all scientific disciplines. Although these prizes are frequently awarded with the explicit goal of inspiring more and better scientific work, whether they are effective remains an open question.

In **Prizes and Productivity: How Winning the Fields Medal Affects Scientific Output** (NBER Working Paper No. 19445), authors **George Borjas** and **Kirk Doran** examine the impact of winning the Fields Medal on the post-medal productivity and research choices of mathematicians. The Fields Medal is the most prestigious award in mathematics, awarded every four years to a mathematician under the age of 40. Established by the Canadian mathematician John Charles Fields, the medal is often thought of as the “Nobel Prize of Mathematics.”

The authors use archival data from the American Mathematical Society and the Mathematics Genealogy Project

“...there is a negative relationship between productivity and winning the Fields Medal...”

to estimate the age-productivity profile of these exceptional mathematicians along a number of different dimensions, including the number of papers published, citations received, and students mentored.

The authors find that the age-productivity profiles of the Fields Medal winners and the losing contenders in their cohort are similar until the year in which the medal is awarded. After the award, the rate of output of the Fields medalists, regardless of how it is measured, declines noticeably.

The authors also find that the medalists exhibit far greater cognitive mobility, shifting across sub-fields within mathematics, in the post-medal period. The winners are more likely to pursue topics that are not related to their pre-medal work. Because cognitive mobility is costly and additional time is required to prepare a paper in an unfamiliar field, the increased rate of

cognitive mobility reduces the medalists’ rate of output in the post-medal period. The data suggest that about half of the

decreased productivity in the post-medal period can be attributed to the increased propensity for experimentation.

Although there is a negative relationship between productivity and winning the Fields Medal, the authors caution that other types of prizes may have different post-prize productivity effects. The Fields Medal is awarded at a relatively young age and the timing of the prize could have a significant impact on post-prize incentives. Similarly, mathematics is an unusual field in that researchers typically do not need expensive infrastructure to produce theorems. Prizes in the physical sciences, and even in economics, may open up funding opportunities that could significantly increase post-prize productivity for the winners.

The findings suggest that the post-prize productivity impact of winning a prestigious award can be substantial, affecting both the

quantity and type of research the winners produce. The authors argue that the increased opportunities provided by the Fields

Medal discouraged the recipients from continuing to produce the pure mathematics for which the medal was awarded,

and encouraged time-consuming investments in ever more distant locations in the space of ideas.

— Les Picker

Use-It-or-Lose-It Budget Rules

Federal agencies spend an average of 4.9 times more in the last week of their fiscal year than in a typical week during the rest of the year, according to **Do Expiring Budgets Lead to Wasteful Year-End Spending? Evidence from Federal Procurement** (NBER Working Paper No. 19481), a new study by **Jeffrey Liebman** and **Neale Mahoney**. When unspent funds expire at the end of the fiscal year, agencies rush to spend their money even when that results in funding lower quality projects.

Although there is ample anecdotal evidence of wasteful year-end government spending, systematic empirical evidence is scarce. The authors examine a new dataset of 14.6 million federal procurement contracts between 2004 and 2009, and find that on average 8.7 percent of the agencies' spending occurs in the last week of the budget year, nearly five times the normal weekly level of 1.9 percent. The procurement data underlying this study represent nearly a sixth of federal spending, and procurement is the area over which agencies have the most discretion on the timing of outlays.

One of the novel features of this study is an analysis of con-

tracts for 686 major federal information technology (IT) projects which account for 12 percent of all procurement spending. These

“...IT projects that were procured in the last week of the fiscal year were between two and six times more likely to have a lower quality rating...”

projects, worth \$130 billion, also show a surge in spending during the last week of the fiscal year. The quality of these projects is rated by agency chief information officers. The authors find that IT projects that were procured in the last week of the fiscal year were between two and six times more likely to have a lower quality rating than projects that were funded at other times during the year.

The evidence from the one federal agency with rollover authority, that therefore does not face use-it-or-lose-it incentives, supports the importance of these rules. Since 1992, the Department of Justice has had special authority to roll over up to 4 percent of its annual appropriations for spending on IT and related projects. On non-IT projects, its last-week spending surges just like that of other federal agencies, with 9.3 percent of its annual spending occurring

in the last week of the fiscal year. But on IT spending, the surge is modest: spending in the last week is 3.4 percent of annual spend-

ing. While the quality of other agencies' last-week IT projects is 1.9 percentage points lower on average than those in the rest of the year, the Justice Department's only last-week IT project received the highest rating of its 15 IT projects. The authors conclude that “the one federal agency that has the ability to roll over unused funding for IT projects does not exhibit a year-end spike in spending or drop-off in quality in this category of spending.”

The study also models the consequences of changing budget rules to allow some rollover of excess funds into the next budget year. The authors suggest that this would allow agencies to raise the average quality of the projects they fund. “Congress could provide the agency 87 cents on the dollar, and the value of spending would be the same as in the no-rollover regime,” they conclude. The authors esti-

mate that even if Congress were willing only to allow agencies to

roll over funds half of the time or for a three-month period, the agen-

cies would still receive 90 percent of the benefit.

—Laurent Belsie

Birth Order and Student Performance

Does birth order correlate with student performance, and if so, why? In **Strategic Parenting, Birth Order and School Performance** (NBER Working Paper No. 19542), **V. Joseph Hotz** and **Juan Pantano** present both empirical and theoretical evidence on these questions. They study all children born to the female respondents in the 1979 National Longitudinal Survey of Youth in families of two, three, or four children.

They find that birth order affects perceived academic performance for 10- to 14-year-olds. On average, mothers with two children were almost 8 percent less likely to say that their second child was one of the best in his class. Earlier-born children also had higher scores on the Peabody Individual Achievement Test and

the Peabody Picture Vocabulary Test at age ten. The effects of birth order persisted for second chil-

“... mothers with two children were almost 8 percent less likely to say that their second child was one of the best in his class.”

dren even when the sample was restricted to “intact” families in which children’s performance had not been affected by divorce or other family disruptions.

The evidence suggests that earlier-born siblings are more likely to be “subject to rules about TV watching and to face more intense parental monitoring regarding homework” and that “mothers are more likely to report that they would increase the supervision of one of their children in the event that child brought home a worse than expected report card when the child in question was one of

her earlier-born children.”

The authors draw on game-theoretic models that empha-

size reputational concerns in an attempt to explain the correlation between birth order and children’s school performance. They conjecture that earlier-born siblings will put forth more effort in school and end up performing better because parents are more likely to set higher standards for earlier-born children and to impose consequences for poor performance. The study concludes that “parental reputation dynamics may explain part of the observed birth order effects in school performance.”

—Linda Gorman

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