Funny Money and Phone Payments

BY CHARLES GERENA

"Estimating the Volume of Counterfeit U.S. Currency in Circulation Worldwide: Data and Extrapolation." Ruth Judson and Richard Porter, Federal Reserve Bank of Chicago Policy Discussion Paper 2010-02, March 2010.

Between one-half and two-thirds of all U.S. dollars in Circulation are held beyond the country's borders because it is considered stable currency in many regions. But with popularity comes potential complications: Not all that money is real.

Ruth Judson and Richard Porter of the Chicago Fed examined data from the Federal Reserve's cash offices and the Secret Service to estimate how much counterfeit money is in circulation. Their answer: Not a lot. The authors' best guess is that \$60 million to \$80 million of counterfeit currency is circulating worldwide, which is only one fake note for every 10,000 real notes. For the denominations most commonly handled by U.S. consumers, the incidence of counterfeits that cannot be detected with minimal authentication effort is even smaller — about three for every 100,000 real notes.

Why? The barriers to entry for counterfeiters are high. "Producing high-grade counterfeits requires access to presses, inks, and high-grade paper," the authors write. "In addition, the notes must then be either passed or distributed to others for passing, which is a complicated undertaking when large volumes of notes are produced."

"Mobile Payments in the United States at Retail Point of Sale: Current Market and Future Prospects." Marianne Crowe, Marc Rysman, and Joanna Stavins, Federal Reserve Bank of Boston Public Policy Discussion Paper No. 10-2, May 2010.

cell phone users are everywhere, whether behind the wheel or standing in line at Starbucks. And they're doing more with their mobile devices, which are capable of streaming movies or locating the nearest restaurant. Yet Americans haven't taken to using their devices to make mobile payments, according to a recent paper by a team of economists at the Boston Fed.

"The scope for bundling mobile payments with valueadded services is great, and consumers are already conditioned to expect, and have shown a willingness to pay for, an ever-expanding array of innovative applications on their smart phones," the authors note. "And this technology could greatly increase the efficiency of the U.S. payment system by offering a payment method that would encourage the transition to electronic payments even for small dollar purchases."

However, implementing such a system would be expen-

sive, at least initially, for both merchants and cell phone manufacturers. There are also security concerns, though the authors note that mobile payments arguably would be no less secure than payments made by swiping a card with a magnetic stripe.

Japan and South Korea have managed to integrate cell phones into their payment systems. In the case of Japan, "the country is predominantly urban and densely inhabited, has a population that is homogeneous and technically sophisticated but highly cash intensive, and relies heavily on mass transit." Train commuters in eastern Japan first used contactless cards to pay their fares. Then, the same technology was added to cell phones.

In contrast, "the United States' large geographic size, dispersed population, and decentralized transit agencies make U.S. transportation systems less useful to serve as the gateway for widespread adoption of mobile payments." Also, countries with a higher percentage of consumer transactions paid in cash have a larger potential market for mobile payments, since they typically replace low-value cash transactions. By one estimate, cash accounted for only 14 percent of the value of consumer transactions in the United States.

"Hiring, Job Loss, and the Severity of Recessions." R. Jason Faberman, Federal Reserve Bank of Philadelphia *Business Review*, Second Quarter 2010, pp. 16-24.

What difference does it make if people are unemployed during a recession because of a slowdown in hiring or a rise in job losses? It can say a lot about the nature of that recession, according to a paper by R. Jason Faberman of the Philadelphia Fed.

During a severe recession, there is usually a sharp drop in output, and companies reduce their payrolls through layoffs and voluntary worker separations. Moderate recessions, in contrast, are characterized by smaller declines in output and weaker hiring by firms.

So, the nature of a recession "will greatly affect the composition and consequences of the unemployed," notes Faberman. The recessions of the 1970s and 1980s, for instance, "saw steep declines in employment and sharp increases in unemployment. At the same time, the pace of layoffs was very high but relatively short-lived," Faberman writes. The less severe recessions of 1990-1991 and 2001, in contrast, were characterized by "a moderate rise in job losses but a relatively steep drop in hiring, particularly during the 2001 recession. Furthermore, the 1990-1991 and 2001 recessions had declines that persisted well after the official end of the recession."