KATHLEEN DOOHER

DO IT YOURSELF

Improved self-checkout technology means retailers can now offer more choice for customers in how they pay.

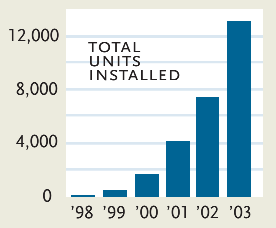
Self-checkout checking in?

FROM STOP & SHOP to Home Depot, seasoned shoppers have begun to forego typical checkout lanes with a human cashier in favor of the do-it-yourself machinery of automated checkouts. However, although self-checkouts have become more popular, a Food Marketing Institute survey found that just 30 percent of retailers are testing them today. Of course, any new technology needs some time to get going, right?

Yet, self-checkouts aren't new. The first automated checkout system, manufactured by a company called CheckRobot, appeared more than 15 years ago in Atlanta's Kroger supermarkets. Why did it take over a decade before the technology spread?

One possibility is that today's technology-savvy consumers are more comfortable with robotic sophistication, although the Kroger executives who evaluated the 1980s experiment were surprised at how quickly shoppers took to their system. A more likely factor is cost. Improvements in the machines' ease of use, scanning accuracy, and database technology (for keeping track of items) have all worked to reduce operating expenses. At the same time, increased competition among checkout manufacturers has driven down the unit purchase price. It now takes only 15 months for a device to pay for itself through labor cost savings, down from 30 months in 1991.

Check this out



SOURCE: IDC, 2003

But perhaps the biggest factor is a heightened attention to design. Unlike the earlier one-size-fits-all machines, today's modular terminals can accommodate both a large conveyor-belt device for a home furnishing warehouse and a small kiosk-like device for a convenience store. At least one manufacturer, NCR, also helps stores design their checkout area based on layout and staff configuration. These innovations have allowed retailers to rethink how they use the machines. Now, instead of replacing staffed aisles with self-checkout lanes to cut costs, as originally conceived, retailers add them as a way to increase customer satisfaction by offering more choice in how to check out.

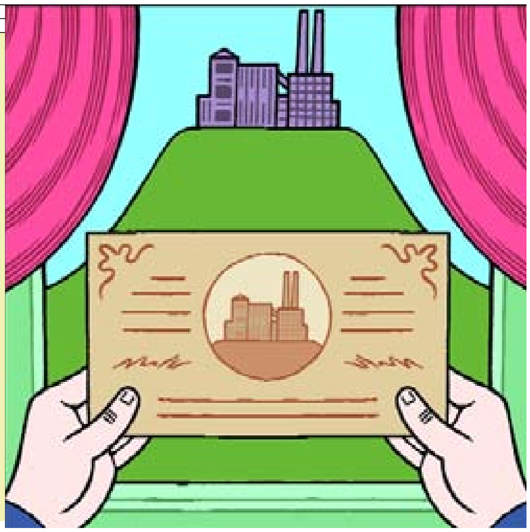
There are still some snags: items without bar codes often do not ring up correctly, machines are not always user-friendly, some systems did not initially accept the new $20 bills, and, according to a study by IHL Consulting Group, they can actually be slower than a fully staffed checkout in certain circumstances. But more flexibility in how and where self-checkouts are set up will ultimately make the scanners more cost-efficient and popular with consumers, possibly enough to become commonplace in mainstream stores and thrive in niche markets. While they may not completely replace human cashiers anytime soon, as the kinks are worked out, self-checkouts may well check in for good.

—*Brad Hershbein*

Local restocking

When it comes to picking stocks, investors may not have to look that far from home. According to University of Illinois finance professors Zoran Ivkovich and Scott Weisbenner, annual returns on local investments—nationally traded companies located within 250 miles of the particular investor holding them—outperform non-local stocks in the local investor's portfolio by 3.2 percent; among smaller, non-S&P 500 stocks, the local premium is even greater, at 6.2 percent. And this risk-adjusted premium has not diminished over time.

Why is there such a difference between the performance of investors' local and non-local investments, and why does it persist? Ivkovich and Weisbenner posit that investors can employ local knowledge to make better distinctions among local firms than among firms located farther away. >>next page



MICHAEL KUPPERMAN

Observations

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<< But, in theory, the higher returns should boost investor demand for stocks with relatively large local ownership—especially if the stocks are of small companies—driving up their price and eliminating the return premium. History suggests at least one possible solution to this conundrum: Most investors may not yet know how to use this information to their benefit.

Some analysts believe such was the case with the "January effect," first discussed in the late 1970s. Researchers found that investors would sell losing stocks at the end of the year in order to offset capital gains taxes and then buy them back in January, driving up that month's returns. Knowledgeable investors could buy in December and sell in January, making an easy profit. According to more recent research, however, the January effect has diminished somewhat as individual investors have learned the game and better information technology has made it easier and faster for them to manage their own trades.

Will the local premium found by Ivkovich and Weisbenner follow a similar path? Currently, personal investors typically invest in only a couple of local publicly held firms, and few rigorously compute their gains and losses, so the benefits from local stock ownership may not be that obvious. Additionally, the information necessary to identify the best local stocks is harder to get. It is difficult for investors to know who the smart locals are, and other effects such as state taxes and trading regulations may complicate the process.

Still, as Internet communications and online databases become more sophisticated, it may become easier for investors to perform the calculations. Also, firms may start to advertise the percentage of local residents who own shares of their company if they think it will encourage other investors to buy their stock. In the long run, the opportunity for financial gain may vanish as investors catch on; in the short run, investors may have much to gain by thinking local.

—*Brad Hershbein*

issues in economics

What is the cost of deflation?

THE PROSPECT OF DEFLATION—a falling overall price level—received a fair amount of attention during late 2002 and 2003. Prompted by a steady decline in the core rate of inflation to levels not reached since the early 1960s, many people began to wonder about the economic consequences when the inflation rate drops below zero. Although the ongoing economic recovery suggests that there is a low probability of deflation in the near future, questions about the impact of falling prices are worth considering.

With core inflation running at its lowest levels since the early 1960s, many have wondered about the economic impact when inflation drops below zero.

At first glance, falling prices might seem like a good thing. Who wouldn't want the prices of the things he or she buys to be cheaper? But in a period of deflation, overall prices drop—including the price of labor (wages), houses and other assets, and most goods and services. In the simplest example of deflation, all prices and wages fall at the same rate. In this instance, the purchasing power of incomes and the relationship be-

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