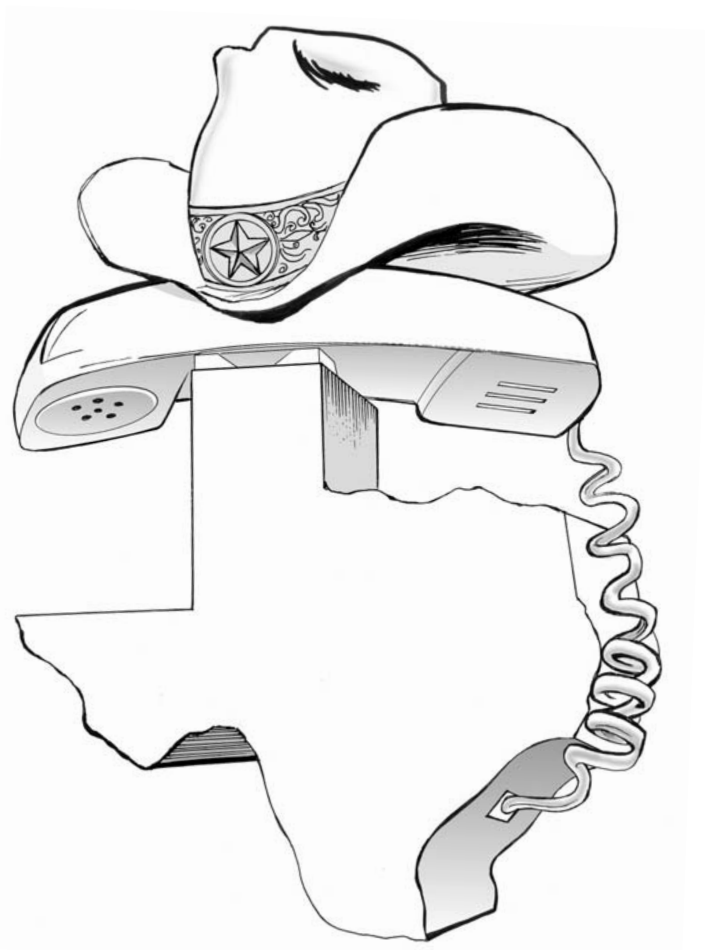
The Mercatus Center at George Mason University is an education, research, and outreach organization that works with scholars, policy experts, and government officials to bridge academic theory and real-world practice. The center's Regulatory Studies Program works within the university setting to improve the state of knowledge and debate about regulations and their impact on society. More information about the center can be found on the Web at www.mercatus.org.

Universal Phone Service

The federal Universal Service Fund subsidizes telecommunications providers that serve high-cost rural areas, low-income consumers, and some schools and hospitals. In May, the Federal-State Joint Board on Universal Service recommended that the Federal Communications Commission "take immediate action to rein in explosive growth in high-cost universal service support." The Joint Board also committed "to making recommendations regarding comprehensive high-cost universal service reform" by October's end.

To achieve comprehensive reform on the federal level, the Joint Board can learn from the experience of similar state universal service programs. The Texas Universal Service Fund is a salient example. In 2005, Texas enacted sweeping legislation that deregulated rates and directed the Texas Public Utility Commission (PUC) to reform the state's universal service programs.



PURPOSE The Telecommunications Act of 1996, which created the federal fund, mandates that "quality services should be available at just, reasonable, and affordable rates." Similarly, the Texas fund is meant to "assist telecommunications providers in providing basic local telecommunications service at reasonable rates in high cost rural areas."

These programs best satisfy their public interest objectives when they achieve reasonable rates at the smallest possible social cost. Social cost can be split into two parts: actual assessment revenue collected and deadweight loss from the method of collection. In a forthcoming study in the *Texas Review of Law and Politics*, Jerry Ellig and I document several ways in which the PUC can achieve the purposes of universal service with less cost.

To raise money for the fund, Texas levies a uniform percentage assessment on all intrastate telecommunications services — including long distance and wireless. The assessments raised approximately $618 million in 2005, but they generated $151 million in economic "deadweight loss" because demand for wireless and long distance service is very price-sensitive. Texas consumers and telecom companies sacrificed a lot of value because of the price increase attributable to universal service assessments.

To reduce the deadweight loss from the assessments, the PUC could substitute a flat per-number charge for the percentage fee on total revenue. Our estimates show that if the PUC did this, deadweight loss from raising the required revenues could shrink by 57 percent.

On the other end, several ways exist to maintain "reasonable" rates and reduce disbursements to companies. Here are two:

First, the PUC could eliminate urban/rural rate disparities. The cost of providing traditional wireline telephone service in urban areas is generally lower than in rural areas because more customers are available in urban areas to help cover fixed network costs. In Texas, however, the PUC explicitly keeps basic rural rates below their urban counterparts. Texas statute requires that basic local rates remain "reasonable." But the PUC hinted in a recent report that higher rural rates could still meet the reason-ableness standard. If rural basic rates were allowed to rise and equal

KEVIN TUMA (3)

similar urban rates, the PUC could save a substantial amount of subsidy money. The size of the cost savings would depend on the benchmark for equalization. If, for example, each individual company was allowed to raise its own rural basic rates to meet its comparable urban rates, Texas could save $46 million per year. More dramatically, if the PUC eliminated urban/rural rate differentials on all subsidized lines across the state, the program would shave $183 million off the $512 million 2005 subsidy.

Second, the PUC could update provider cost estimates. Because subsidy amounts are higher for companies whose estimated costs are higher, a calculation that includes lower cost estimates would decrease subsidy payments. Today's estimated costs for telecommunications providers in Texas are based on 2000 data. It is likely that per-line costs have decreased since then for two reasons. The first is that economic growth and migration have likely increased population density in many formerly rural areas that are now outer suburbs, vacation communities, or retirement havens. The second is that newer competing technologies — wireless, satellite, and Voice over Internet Protocol — achieve universal service more cheaply than traditional wireline service. If service costs have indeed decreased in the past seven years, the subsidy amount should reflect it.

FEDERAL LESSONS The Joint Board and the FCC can benefit from this analysis. In its upcoming recommendations, the Joint Board can focus on raising money with as little deadweight loss as possible, cutting taxpayer subsidies to corporations as long as rural rates remain "reasonable" and recognizing that technological advances have changed the cost to deliver telephone service.

Reasonable people can disagree about what rates are "reasonable" and how much the federal and state governments should do to connect poor and rural residents to the rest of the world. But by any standard, we should avoid needless waste.

— Joseph A. Rotondi

Subprime Mortgage Lending

Should "borrowers beware" of subprime mortgages, which lead to "an endangered dream" of homeownership, as headlines in the *Washington Post* and *Wall Street Journal* recently said? Or is "debt once again miscast as the villain," as a *New York Times* columnist wrote? Those are the basic questions that the federal financial regulatory agencies are asking in a proposed statement responding to the recent collapse of many subprime mortgage lenders.

One of the main questions that the agencies ask is whether subprime mortgages are "inappropriately risky." Evidence shows that for lenders and borrowers acting in good faith, they are unequivocally beneficial.

Subprime borrowers usually have riskier credit histories than prime borrowers. Lenders charge higher interest rates or include terms such as prepayment penalties to offset the higher risk. Despite the higher costs, subprime mortgage originations have increased more than five-fold over the past decade. Millions of borrowers previously unable to obtain mortgage financing can now purchase their own homes. As subprime mortgages have become more widespread, the national homeownership rate jumped from a plateau of around 65 percent to its current level, near 69 percent.

But when the housing market declined in early 2007 and foreclosures increased sharply, subprime lending drew the attention of consumer interest groups and regulators. Many people see higher interest rates and restrictive terms, and conclude that subprime lending is predatory. True, there are some fraudulent or deceptive lenders; but in most cases lenders charge higher rates and fees not in a cynical grab for higher profits, but because subprime borrowers are riskier than prime borrowers. Moreover, most lenders offer loans only to the best subprime borrowers, those who nearly qualify for prime mortgages.

Prime borrowers are very reliable customers for lenders. In the fourth quarter of 2006, foreclosures for that group were only 0.5 percent of loans. Subprime borrowers were riskier; in the same quarter, foreclosures accounted for 4.53 percent of loans. While subprime borrowers are nearly 10 times as likely as prime borrowers to meet foreclosure, more than 95 percent of borrowers do not reach foreclosure. If the subprime mortgage market had not expanded over the past decade, that 95 percent figure would represent millions of responsible would-be borrowers without an opportunity to own a home.

An alternative explanation to the subprime crisis is that subprime borrowers were most exposed to the housing bubble. The majority of subprime loans carry adjustable rates, and interest rates began to rise at the same time as housing prices fell, leaving borrowers facing higher mortgage payments as they were losing equity in their homes. This "perfect storm," as economist Todd Sinai of the University of Pennsylvania calls it, resulted in borrowers stretched to their financial max.

REGULATION The proposed statement issued by the five regulatory agencies reinforces previous guidelines on subprime lending and questions whether new controls over the industry are necessary. The current and proposed regulations include both substantive regulations and disclosure regulations. These are two of the most common regulatory regimes for credit markets, but each must be carefully designed in order to be effective.

Substantive regulations, in fact, are generally thought by economists to be ineffective. In the subprime market, one of the prime targets for regulation is the prepayment penalty. Lenders add this penalty to a mortgage because prepayment and refinancing are very common in the subprime market. After a few months of regular payments, subprime borrowers may be able to qualify for a prime loan or a subprime loan with better terms than their current loan. The prepayment penalty allows lenders to recoup the initial expenses of a mortgage. When lenders originate loans without these fees, they often simply charge a higher interest rate, raise down payment requirements, or require that fees be paid upfront and not financed with the rest of the loan. If lenders cannot substitute different methods of mitigating risk, they often stop offering those loan products.

Disclosure regulations can be more effective, but they must also be carefully designed. Many required disclosures are irrelevant to a large group of borrowers. And requiring every possible disclosure is counterproductive, resulting in information overload. A 2002 Federal Trade Commission study found that certain disclosures (in this case, of mortgage broker compensation) may confuse borrowers and lead them to make poor decisions. Some of the published comments for the proposed statement have already raised the issue of complicated disclosure rules.

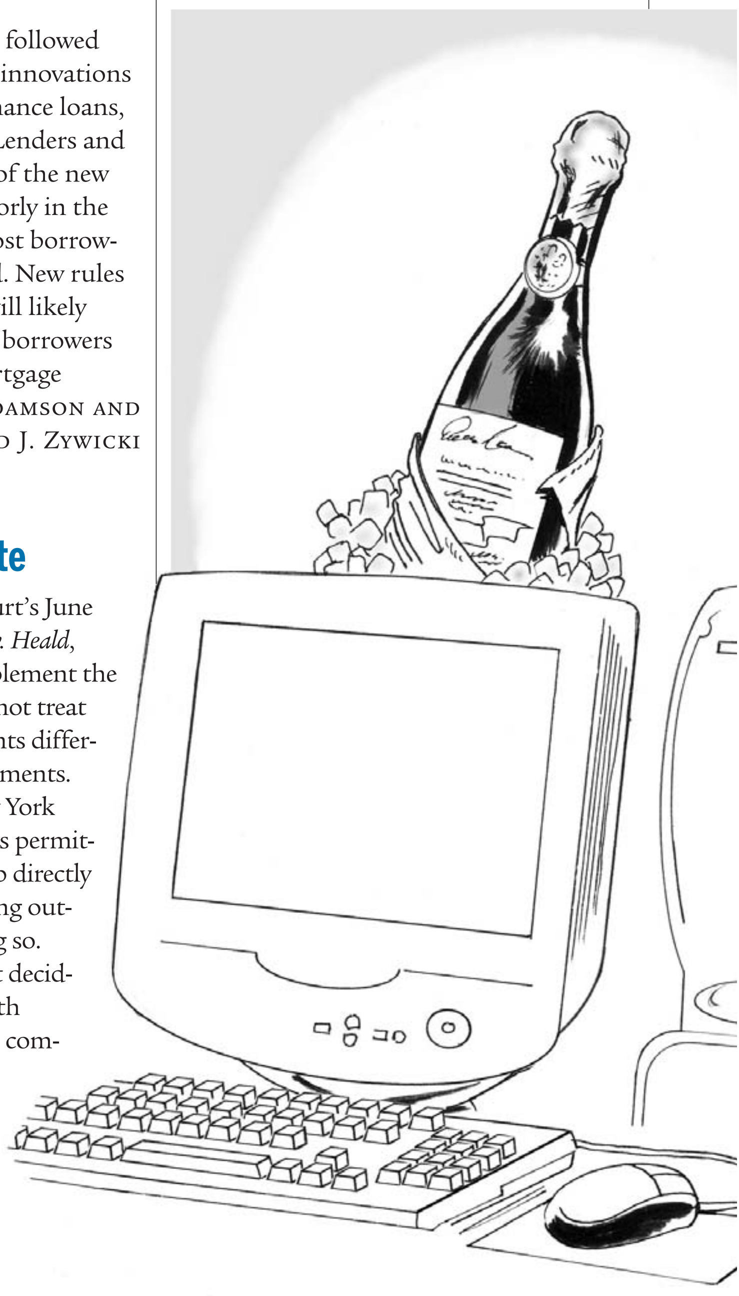
The subprime crisis has followed the pattern of other credit innovations — credit cards, personal finance loans, and other recent options. Lenders and borrowers take advantage of the new product, and some fare poorly in the speculative bubble. But most borrowers are better off in the end. New rules for the subprime market will likely result in many responsible borrowers made unable to access mortgage financing. — Joseph Adamson and Todd J. Zywicki

Uncorking E-Commerce: Update

Ever since the Supreme Court's June 2005 decision in *Granholm v. Heald*, states have struggled to implement the Court's mandate that they not treat in-state direct wine shipments differently from out-of-state shipments. The case arose because New York and Michigan both had laws permitting in-state wineries to ship directly to consumers but prohibiting out-of-state wineries from doing so. Because the Supreme Court decided that states must treat both sources the same, states can comply either by permitting direct shipment from out of state or by prohibiting it for both in-state and out-of-state sellers.

New research confirms what most economists would suspect: consumers are a lot better off if states permit direct shipment by out-of-state sellers. In 2003, Virginia decided to legalize direct shipment of beer and wine from any out-of-state seller licensed to sell in its home state. We utilized Virginia's "natural experiment" with direct wine shipment to assess how legalization of out-of-state direct shipment affects wine prices.

For a sample of highly popular wines identified by *Wine and Spirits* magazine's annual restaurant poll, we gathered price data online and in Northern Virginia wine stores in 2002 and 2004, one year before and one year after legalization. Since wine is heavy and costly to ship, we also gathered data from UPS on shipping costs to



Northern Virginia from the least expensive online seller.

Employing only the 2002 data, in a 2004 paper published in *Business and Politics* we found that a consumer buying the entire sample could have saved more than $3 per bottle by purchasing online and shipping via ground, the least expensive method. The price savings are even larger for the expensive wines costing more than $20 or $40 per bottle. For those wines, significant savings are available even when shipping via air. For wines priced under $20, shipping costs impose a heavy price penalty for online purchases. Most of the differences were statistically significant. We found that a consumer who sought to purchase the lowest online- or offline-priced bottle could save anywhere between 1.6 and 9.7 percent, compared to buying everything offline (even accounting for shipping costs) if direct shipment were legal.

What a difference two years make! In a paper published in the *Journal of Law, Economics, and Policy* in 2006, we replicated those calculations using the 2004 data. For almost every price range and shipping method, the online cost savings are lower in 2004 than in 2002, which suggests that online and bricks-and-mortar prices have converged. Convergence is, however, not complete; online cost savings are still available for bottles costing more than $20.

A paper in the August 2007 *Journal of Politics* reaches even more intriguing findings using a somewhat different approach. This paper used regression analysis to analyze determinants of the percentage difference between online and offline prices in 2002 and 2004. We found that the price spread between online and bricks-and-mortar sellers fell by about 40 percent between 2002 and 2004, a finding difficult to attribute to any factor other than legalization of out-of-state direct shipment. Perhaps even more interesting, we found that Northern Virginia retail prices were unrelated to shipping costs from out-of-state in 2002, but correlated with shipping costs in 2004.

In other words, prior to the legalization of direct shipment, Virginia retail prices were completely unresponsive to interstate shipping costs, and markups were largely attributable to the average bottle price. When direct shipment was legalized, however, Virginia retailers responded to out-of-state competition by lowering their prices from where they had been in 2002 and by effectively pegging their markups to out-of-state shipping costs. Consistent with the intentions of the Dormant Commerce Clause, removal of Virginia's direct shipment ban increased competition in local markets.

This is not a complete surprise, given that many of the Northern Virginia retailers we studied also sell wine online and thus presumably know what prices they have to beat if they want to sell to Virginia consumers. But it is striking to see such clear evidence that bricks-and-mortar retailers responded to online competition once it became legal.

Hopefully, these findings will help inform other states as they debate whether to comply with *Granholm* by prohibiting all direct wine shipment or allowing direct shipment from out of state. — Jerry Ellig and Alan Wiseman