Following the recent financial crisis there has been a surge of interest in regulating consumer financial products. In the U.S., the Dodd-Frank “Wall Street Reform and Consumer Protection Act” of 2010 established a Consumer Financial Production Bureau to monitor and regulate mortgages, credit cards, and similar products. In July 2013, the European Commission proposed new consumer financial protection legislation to simplify disclosures and tighten guidance requirements related to financial products.

As one of the major regulatory responses to the financial crisis, in May 2009 President Obama signed the Credit Card Accountability Responsibility and Disclosure (CARD) Act, which was drafted to “implement needed reforms and help protect consumers by prohibiting various unfair, misleading and deceptive practices in the [U.S.] credit card market.”

In Agarwal, Chomsisengphet, Mahoney and Stroebel (2013) we analyze the effectiveness of two key aspects of the CARD Act:

(i) Regulatory limits on the ability of banks to charge certain types of credit card fees (in particular late fees and over-limit fees), which became effective in February and August of 2010;

(ii) Attempts to affect consumers’ repayment behavior by requiring credit card bills to provide clear information on the costs of only making the minimum payment, which became effective in February 2010.
The effectiveness of these types of policies has been hotly debated. Proponents of the CARD Act argued that credit card markets had become increasingly unfair with firms taking advantage of consumers' behavioral biases (e.g., present bias and inattention) to earn large profits, often from unsophisticated consumers. Skeptics argued that limits on fees would be offset through increases in other prices (for example, interest rates) or would lead to a reduction in credit, and that “nudges” would have at best a limited impact on consumer behavior.

We conduct a quantitative analysis of the effects of the CARD Act’s provisions using a unique dataset on over 150 million credit card accounts held by the eight largest U.S. banks. We find that regulations to limit fees were highly effective. Over-limit fees dropped from an annualized 1% of average daily balances (or ADB, which corresponds closely to total borrowing) to zero in February 2010 (see Figure 1). Late fees dropped by 0.5 percentage points in February 2010 and another 0.5 percentage points in August 2010, for a combined decline of 1 percentage point on a base of 2%.

Note: Figure shows monthly averages of annualized fees as a percentage of ADB over all reporting accounts, weighted by ADB. Vertical bars are plotted in February 2010 and August 2010, the two key implementation dates for the CARD Act. Labels are ordered by the absolute magnitude of the fees in April 2008.
Combined across the various implementation phases, the CARD Act seems to have reduced overall fee cost by an annualized 2.8% of borrowing volume. **This translates into annual cost savings for U.S. credit card users of $20.8 billion per year.**

The regulatory limits on fees had the largest effect on the borrowing costs of consumers with the lowest FICO scores, who paid the highest fees before the CARD Act. Figure 2 plots total fees as a percentage of ADB for different FICO score groups. For accounts with FICO scores below 620 (corresponding to the bottom 20% of the distribution), total fees dropped by about 14 percentage points on a pre-CARD Act base of 23.3 percent.
Consistent with a model of low fee salience and limited market competition, we find no evidence of an offsetting increase in interest charges or a reduction in access to credit. **Taken together, we interpret these results as demonstrating that regulating “hidden fees” can bring about a substantial reduction in borrowing costs without necessarily leading to an offsetting increase in interest charges or a reduction in access to credit.**

We also analyze the CARD Act requirement to report the interest savings from paying off balances in 36 months rather than only making minimum payments. The figure below shows an example of how this information is being displayed to consumers on their monthly credit card statements.

<table>
<thead>
<tr>
<th>If you make no additional charges using this card and each month you pay ...</th>
<th>You will pay off the balance shown in this statement in about ...</th>
<th>And you will end up paying an estimated total of ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only the minimum payment</td>
<td>10 years</td>
<td>$3,284</td>
</tr>
<tr>
<td>$62</td>
<td>3 years</td>
<td>$2,232 (Savings of $1,052)</td>
</tr>
</tbody>
</table>

*Note: Figure provides an example of the disclosure statement on monthly credit card reports required by the CARD Act.*

We find that this “nudge” increased the number of account holders making the 36-month payment value by 0.5 percentage points, with a similarly sized decrease in the number of account holders paying less than this amount. Overall, this “nudge” generated modest annual interest savings of about $71 million for U.S. consumers.

**References**