

BAD APPLES OR **BAD LAWS?**

Testing the Incentives of Civil Forfeiture



BAD APPLES OR **BAD LAWS?**

Testing the Incentives of Civil Forfeiture

Bart J. Wilson and Michael Preciado*

September 2014



*The authors contributed equally to this report.



Executive Summary

This report summarizes the results of an original study designed to test the incentives created by civil forfeiture laws. Civil forfeiture laws allow the government to take property suspected of involvement in criminal activity without convicting or charging the owner with a crime. In most states and under federal law, law enforcement agencies can keep some or all of the proceeds from property they forfeit.

Opponents contend that civil forfeiture laws encourage law enforcement to seize property instead of fight other crimes, leading to systematic abuse. Proponents counter that any abuse is the result of a few “bad apples,” and that civil forfeiture laws create a “win-win”: Criminals lose and the public wins as more resources are available for law enforcement to fight more crime. Using a laboratory experiment, the study tests these competing claims to explore how people respond to the incentives of civil forfeiture.

The results of the experiment point to a clear conclusion: Civil forfeiture encourages choices by law enforcement officers that leave the public worse off. Without civil forfeiture, experiment participants were inclined to help each other, even when there was nothing to gain. But under civil forfeiture, when participants could gain financially by taking property from others, that is overwhelmingly what they did. Only sometimes did they use their proceeds to create a “win-win” and make fellow participants better off.

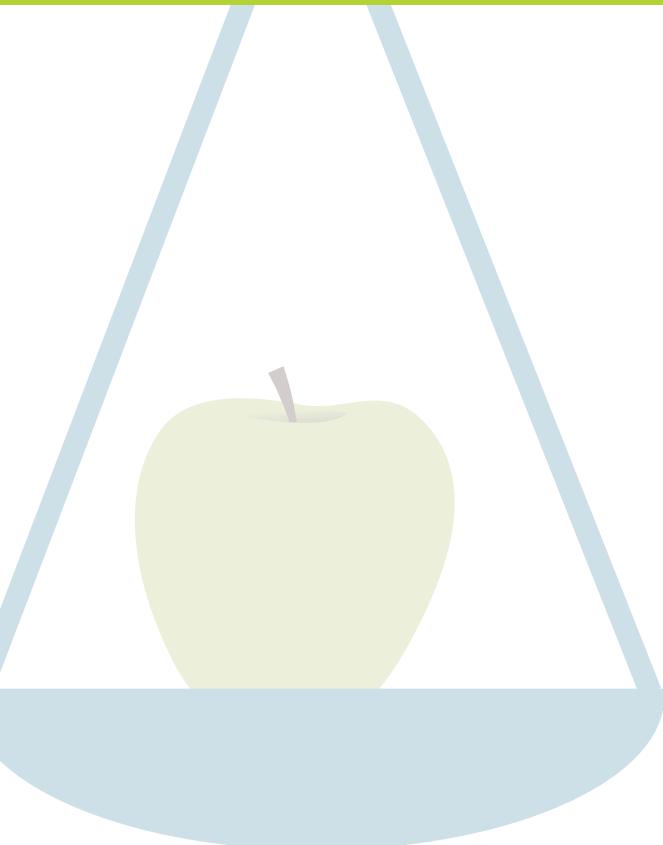
The experiment’s results suggest that the problem with civil forfeiture is not one of “bad apples” but bad laws that encourage bad behavior—it is not the players, but the game. When civil forfeiture puts people in a position to choose between benefiting themselves or the overall public, people choose themselves.

Introduction

In 2003, Rochelle Bing, a home health assistant in Philadelphia, purchased a modest row house on the north side of the city. Six years later, city police decided to take her home—without even charging her with a crime. Police had raided the house and arrested her adult son for selling eight packets of cocaine to an undercover officer. Bing was not present at the raid and had nothing to do with her son’s crime—he sold illegal drugs in her house without her knowledge or consent. But because drugs had been sold from her home, the police had the authority to seize and forfeit her house.¹

The government’s power to take property suspected of involvement in a crime, like Rochelle Bing’s house, is called civil forfeiture. Unlike criminal forfeiture, where people must be convicted of a crime before the government can take their property, civil forfeiture permits law enforcement to take property regardless of the owner’s guilt or innocence. It is based on the idea that the property itself is guilty. Indeed, people not even charged with a crime can see their property taken. Beyond this, laws in most states and at the federal level permit law enforcement agencies to keep some (if not all) of the proceeds from the property they forfeit.

Forfeiture is a large and growing law enforcement activity. In 2013, the U.S. Department of Justice’s forfeiture fund, the largest of several federal funds, held more than \$1.8 billion—up substantially since 1986, the year after the fund was created, when it took in just \$93.7 million.² Many states do not collect or publish data on forfeiture activity under state law,³ but federal data indicate that forfeitures by state and local law enforcement working with the federal government are also on the rise.⁴ State and local agencies received



\$658 million from such forfeitures in 2013, a nearly three-fold increase since 2001.⁵

On one hand, proponents of civil forfeiture contend that its use gives law enforcement the incentive to target large-scale criminal organizations, that it has allowed law enforcement to dismantle criminal organizations, and that any instances of abuse have occurred only on a small scale. On the other hand, opponents of civil forfeiture contend that its use displaces legitimate law enforcement objectives: Law enforcement tends to focus on maximizing forfeiture revenue rather than reducing crime with the largest societal impact. That being so, opponents of civil forfeiture contend that the incentives created by it have led to systematic abuse.

This report presents an original laboratory experiment designed to test these competing claims



Based on the findings below, we conclude that public welfare is greater in a world without civil forfeiture than in a world with it.

by examining the choices people make under the rules of civil forfeiture. We tasked volunteer participants with making trade-offs in a virtual world that mirror the choices law enforcement officers make with and without the ability to forfeit assets and keep the proceeds. Our goal was to assess whether people acting under the rules of civil forfeiture are more or less likely to make choices that improve public welfare.

Based on the findings below, we conclude that public welfare is greater in a world without civil forfeiture than in a world with it.

The Rules of Civil Forfeiture

For law enforcement, civil forfeiture is considerably easier than criminal forfeiture.⁶ Not only is no conviction required, but law enforcement can seize property based on mere probable cause. Once property is seized, it is up to a property owner to try to win it back in court, often a lengthy and costly process. And the legal proceeding is against the property, not the owner—this is why forfeiture cases have names like *United States v. 434 Main Street, Tewksbury, Massachusetts*⁷ or *United States v. \$671,160.00 In U.S. Currency*⁸—so the owner does not enjoy many of the constitutional protections afforded the criminally accused. If a property owner does challenge the forfeiture, in most states and under federal law the government must prove only by a “preponderance of the evidence” that the property was used in or is the proceeds of a crime. Preponderance of the evidence is a substantially lower hurdle than the “beyond a reasonable doubt” standard required for criminal convictions; it means that the government must show that the property is more likely than not connected to a crime.

Owners who are innocent of any wrongdoing may raise an “innocent owner” defense and argue for the return of their property, but in most jurisdictions, the burden is on the property owner to establish his or her innocence—the opposite of the American tradition of innocent until proven guilty.⁹

In most states and under federal law, the rules of civil forfeiture also permit law enforcement agencies to keep some (if not all) of the proceeds from property they forfeit.¹⁰ In 26 states, law enforcement agencies are entitled to 100 percent of forfeiture proceeds, as are federal agencies forfeiting under federal law. Only eight states bar law enforcement from using forfeiture proceeds.¹¹ The rest allocate

between 50 and 95 percent of forfeiture proceeds to law enforcement. Some states, such as Arizona and Texas, allow forfeiture funds to be used not just for law enforcement expenses, but also for salaries, benefits and overtime.¹²

Critics of civil forfeiture contend that current laws—the relative ease of taking property and the financial incentive to do so—create a toxic mix likely to lead to systematic abuse. They point to cases like that of Russ Caswell, whose family-run motel in Tewksbury, Mass., was targeted for forfeiture by local and federal agents for allegedly facilitating drug crimes, even though Caswell went to great lengths to prevent crime on his property and cooperate with police.¹³ The government justified the seizure on the basis of just 15 drug-related arrests in 14 years, when Caswell rented 200,000 rooms during that time span.¹⁴ The motel, which Caswell owned free and clear, was worth an estimated \$1.5 million, and proceeds from a successful forfeiture would have been split by local and federal law enforcement—had a federal judge not dismissed the forfeiture action after years of litigation.¹⁵

Opponents also point to incidents across the country where police have been accused of taking cash and cars from highway drivers without charges of any kind.¹⁶ For example, an officer in Humboldt County, Nev., pulled over Tan Nguyen for driving three miles over the speed limit, searched his car and found a briefcase with \$50,000 in cash and cashier’s checks.¹⁷ Nguyen explained that he won the money at a casino. Although the officer could not find any drugs, he claimed he smelled marijuana and confiscated the money. The county later returned the funds, but only after Nguyen brought a federal lawsuit.¹⁸

Victor Guzman, a church secretary from El Salvador, faced a similar ordeal.¹⁹ When a Virginia state trooper pulled him over for speeding, he disclosed that he was carrying \$28,500 in parish-

ioners' donations to buy land for their church. The money was promptly confiscated, despite no evidence of illegal activity.

Opponents of civil forfeiture argue not only that it encourages such takings, but also that it diverts law enforcement attention and resources from efforts that would better serve the public.

In Tennessee, for example, a local news investigation discovered that officers from a drug task force were 10 times more likely to patrol the westbound lanes of I-40 than the east.²⁰ Illegal drugs from Mexico are thought to travel east on I-40, while drug profits travel west. As one observer concluded, "For police coffers, it was better to let the drugs come into Nashville, be sold and then seize the cash as the dealers left town."²¹

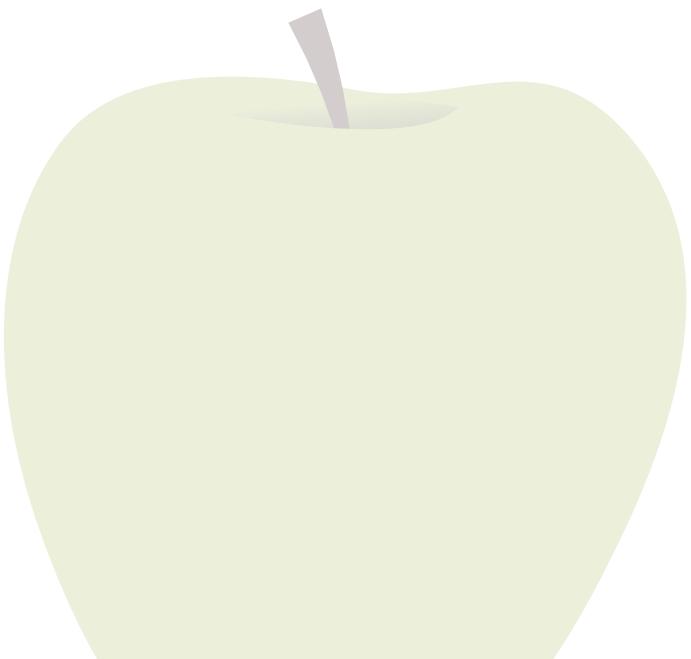
A co-author of a classic study on forfeiture observed up-close law enforcement pursuing cash instead of crime, as he acted as a confidential informant for a narcotics squad.²² In one example, police knew that \$7,000 to \$13,000 worth of cocaine was being stored in a drug house. Yet instead of implementing search and arrest warrants immediately, the police calculated the rate at which the cocaine was being sold: "Less drugs meant more cash, and the agent's objective was to seize currency rather than cocaine."²³ Only after enough cocaine was sold to produce a desirable amount of money did police conduct the raid.²⁴

Proponents of civil forfeiture counter that such abuses are rare—the result of a few "bad apples." More commonly, civil forfeiture improves public welfare, they argue, by crippling criminal organizations and cleaning up communities.²⁵ Civil forfeiture, proponents claim, also enables law enforcement to repurpose criminal assets for the fight against crime.²⁶ And proponents note that forfeiture can be used to compensate crime victims; for example, in April 2013, the U.S. Department of Justice an-

nounced that it had returned more than \$1.5 billion to crime victims since January 2012, mostly in cases of white-collar crime and fraud.²⁷

Opponents charge, however, that all too often forfeiture revenue is not used to improve public welfare, and examples of abuse with forfeiture funds abound: steak dinners, parties, a margarita machine, a tanning bed, a weekend home for a local sheriff, a Zamboni, gold-plated police whistles, a Hawaiian vacation for a district attorney's staff, tickets to see NBA player Dwight Howard, CeeLo Green tickets, workout equipment, flat-screen televisions and Disney destination trainings.²⁸ And even legitimate law enforcement expenses may not yield improvements in public safety: There is little empirical evidence to suggest civil forfeiture has led to any reduction in overall criminal conduct.²⁹

In short, critics argue that the rules of civil forfeiture—its relative ease and the ability to use proceeds for law enforcement purposes—lead to abuse and the distortion of law enforcement priorities, while proponents see the same rules as creating a "win-win": The bad guys lose and the public prospers.³⁰



Using a Laboratory Experiment to Test the Incentives of Civil Forfeiture

In essence, critics and proponents of civil forfeiture take opposing views on the incentives it creates. Does it encourage law enforcement to seize property instead of fight other crimes? Or does it encourage law enforcement to do more for the public, thanks to the additional resources civil forfeiture provides?

To answer those questions, we designed an experiment to test how people respond to the incentives law enforcement officers face under civil forfeiture. We created a computer game that mirrors the choices law enforcement officers make with and without the ability to take and keep property, and we recorded what volunteer participants—undergraduate students—did. Participants were motivated by real cash rewards based on their performance.

This research method, known as experimental economics, offers a powerful way to examine how people interact with each other under different sets of rules. With a laboratory experiment, we can determine the precise sets of rules or conditions we want to test—here, civil forfeiture versus no civil forfeiture—and build them into the game, and we can randomly assign participants to the different conditions. That way, we can be confident that any differences in behavior result from the different sets of rules, not something else.

Experimental economics is an important tool in the research toolkit, and it has been used to study numerous topics, such as FCC auctions, electricity markets and pollution permits.³¹ In 2002, the committee for the Nobel Prize in Economic Sciences recognized the contributions of the field when it honored Vernon Smith, one of its pioneers, for

laying the groundwork for this empirical tool of economic analysis.

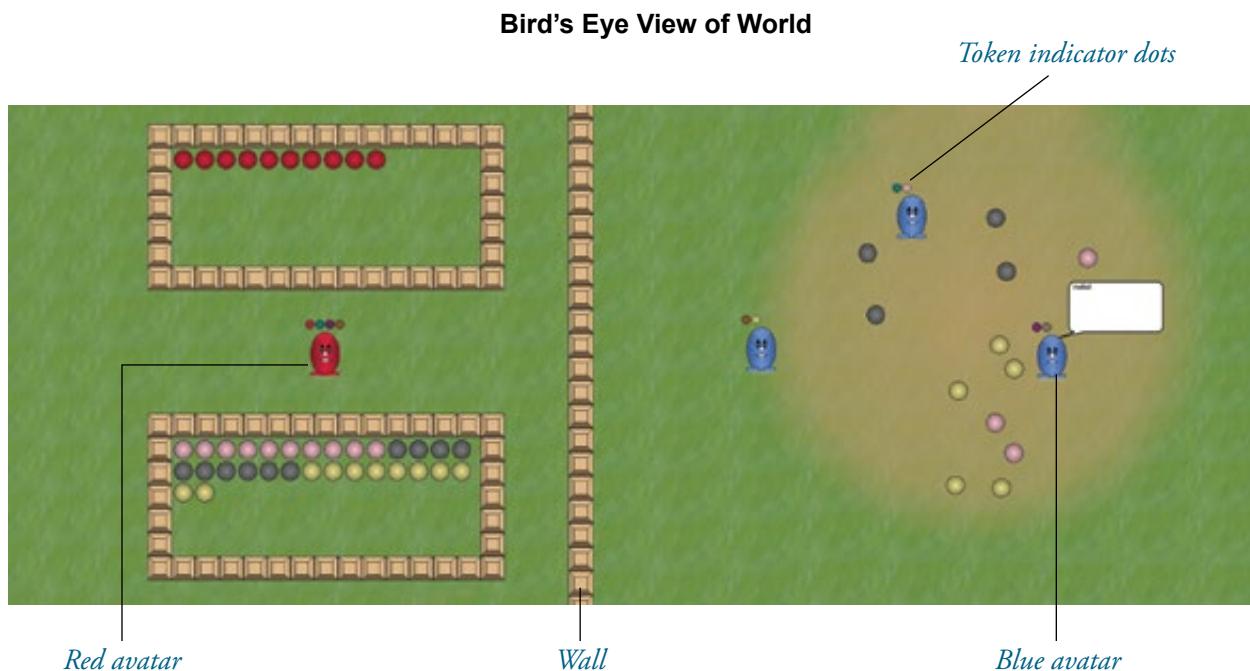
Economic experiments can complement other types of research, such as observational studies. For example, earlier research gathered data on state and local law enforcement's use of federal forfeiture procedures and concluded that agencies were more likely to use federal procedures instead of state procedures when doing so increased their likelihood of keeping forfeiture proceeds.³² Other research suggests agencies actively seek civil forfeiture revenue.³³ Our experiment adds to this literature by isolating the incentives civil forfeiture laws create—something observational studies cannot do with the same precision—and examining how they are likely to affect behavior.

The use of undergraduate volunteers as subjects is common practice among experimental economists.³⁴ To be sure, we are not claiming that a typical undergraduate possesses the same knowledge, experience or moral code as an actual law enforcement officer.³⁵ But in our experiment, they face similar trade-offs. Both weigh whether to take goods that may belong to others, and both weigh whether to use those goods to benefit others or themselves. Our experiment is not about particular people, but about the choices anyone is likely to make with and without civil forfeiture.

Our experiment is not about particular people, but about the choices anyone is likely to make with and without civil forfeiture.

The World of the Experiment

To determine whether the choices people make under the rules of civil forfeiture are likely to improve public welfare, we designed a computer game with an experimental world that presents participants with the same types of choices law enforcement officers must make under civil forfeiture. A bird's eye view of the world is shown below. Participants encounter several variations of this world in multiple brief game periods.



There are four participants in each instance of the experimental world. One controls a red “avatar” and three control blue avatars. Participants were randomly assigned to the avatars. The red avatar starts each game period to the left of the wall that divides the screen, while the blue avatars are on the right.

The experimental world also has beige-colored walls, one that divides the screen and at least one box. There are also various colored tokens that the participants can pick up to earn cash—if they can get past the walls to reach them. Participants, however, can only pick up certain tokens. The small colored dots above each avatar indicate which tokens each participant is able to pick up at any time.

Table 1 summarizes the various abilities of the red and blue avatars. Those of the red avatars differ in game periods when civil forfeiture is possible and when it is not.

Table 1: Abilities of Red and Blue Participants

			
	Red (Sheriff)	Blue (Citizens)	
	No Civil Forfeiture	Civil Forfeiture	All Periods
Tokens to collect	None	Red and bright (all colors)	Pastel and bright (each blue avatar assigned one of three colors of each type)
Hammers	2 per period of play, each knocks down one wall	2 per period of play with potential for more, each knocks down one wall	None
How to earn cash	Knock down walls with hammers—15¢ per wall	1) Knock down walls with hammers—15¢ per wall 2) Collect tokens—3¢ per token	Collect tokens—3¢ per token
How to use earnings	Convert earnings from knocking down walls to cash to be paid after experiment	1) Convert earnings from knocking down walls to cash to be paid after experiment 2) Purchase extra hammers for 7 tokens (21¢) each 3) Convert tokens to cash to be paid after experiment	Convert tokens to cash to be paid after experiment

The blue avatars represent citizens at large, while the red represents a law enforcement officer, or for simplicity's sake, a "sheriff." The participants were not told what the avatars represent, nor that the experiment is about law enforcement and civil forfeiture; they knew themselves and their fellow participants as simply blue or red avatars.³⁶

Blue participants, or citizens, can do only one thing—pick up tokens of their assigned color to earn real cash rewards of three cents per token. To pick up tokens contained within walls, citizens need the help of the sheriff, the only player who can knock down walls with a hammer and clear a path to the tokens. In our experiment, knocking down walls is analogous to fighting crimes: By knocking down walls—eliminating crime—the sheriff provides public benefits to the citizens, enabling them to collect tokens. Put simply, the bigger the decrease in crime, the bigger the increase in public welfare. At the beginning of each game period, the sheriff is given two hammers; using both earns her 30 cents per period.

In some of the game periods, no civil forfeiture is possible. The only thing the sheriff can do to earn money is knock down walls (i.e., eliminate crime). In other periods, however, civil forfeiture is introduced, and the sheriff can also collect tokens (i.e., take property).

The different colored tokens function like different types of goods. Red tokens are like the illicit proceeds of suspected crimes, like cash from a suspected drug dealer. Just as real citizens cannot claim such property, neither can blue participants—only sheriffs can and only when they have the power of civil forfeiture.

Bright tokens are like citizens' property that, under civil forfeiture, can be taken by law enforcement—such as a mother's house when her son sells drugs from the porch without her knowledge or consent, or a highway driver's cash. Each citizen is assigned one color that it alone can collect. And in civil forfeiture periods, sheriffs can also collect bright tokens, and they can take all colors.

Pastel tokens can only be collected by citizens, never by the sheriff. These represent the benefits to the public when law enforcement fights crime, like safer neighborhoods in which to be a shopkeeper.

Experimental Procedures

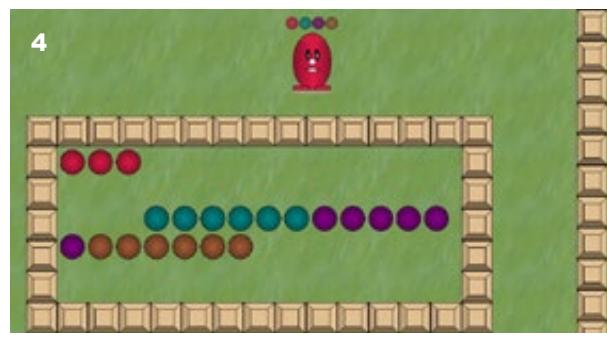
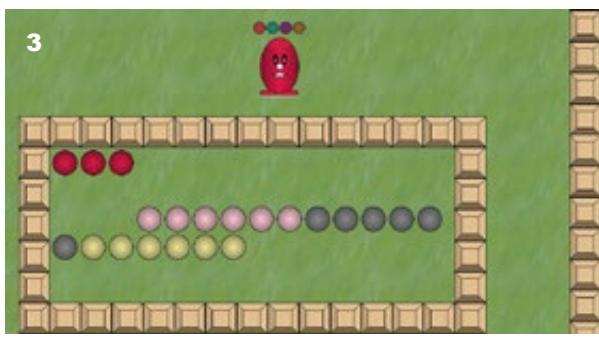
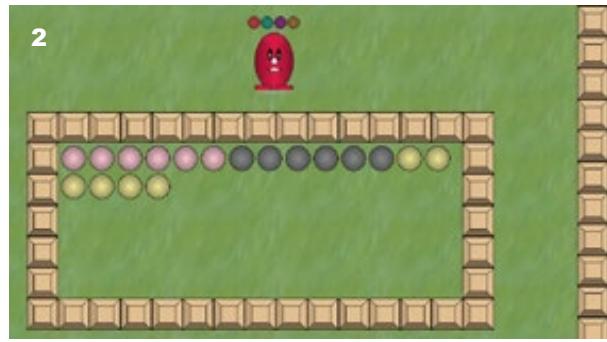
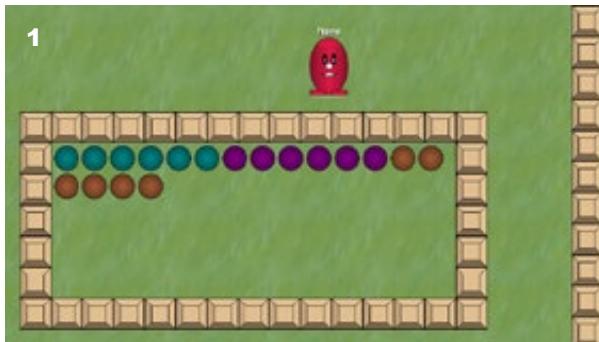
When we conducted the experiment, participants encountered 35 periods of game play, each lasting 60 seconds.³⁷ By varying the arrangements of walls and tokens in each period, we tested different hypotheses regarding how red participants would react to various rules. The first eight periods consisted of four baseline scenarios, each played once with and once without civil forfeiture. These gave participants some (paid) practice with the game. The next 27 periods were divided into three groups of nine periods. For half of the participants, the first group of nine periods was played with civil forfeiture, the second group without, and the third group with again. The other half of participants experienced the opposite order.³⁸ Within each group of nine periods, participants encountered three different scenarios, described below, as well as one variation, described in Appendix A.³⁹

The experiment was conducted over three consecutive days in February 2014 at Chapman University in 10 one-hour sessions of 24 undergraduates each, for a total of 240 participants (60.8 percent women, 39.2 percent men).⁴⁰ Each volunteer participated in only one session.

At the beginning of each session, an experiment monitor seated the participants in visually-isolated carrels with a computer. The participants read simple instructions that explained how to manipulate their particular avatars—red or blue—and how to earn cash. (For the full instructions, see Appendix B.) Participants were free to ask questions at any time, and the experiment began only after everyone completed the instructions. A participant received seven dollars for showing up on time plus what he or she earned in the experiment.⁴¹

Baseline Scenarios

The left halves of the four baseline set-ups are shown below. In each, the three blue avatars, not pictured here, are to the right of the dividing wall. Data from the baseline scenarios are not included in the results. Instead, they gave participants experience collecting tokens both when civil forfeiture was possible and when it was not.



The first and fourth baseline scenarios have bright tokens. If the sheriff uses both hammers, the citizens can move to the left half of the screen and collect their assigned colors—unless, under civil forfeiture, the sheriff decides to collect them instead. In contrast, the second and third baseline scenarios have pastel tokens, which only citizens can access regardless of whether there is civil forfeiture. Thus the sheriff's only choice is whether to use both hammers and grant the citizens access to the tokens.

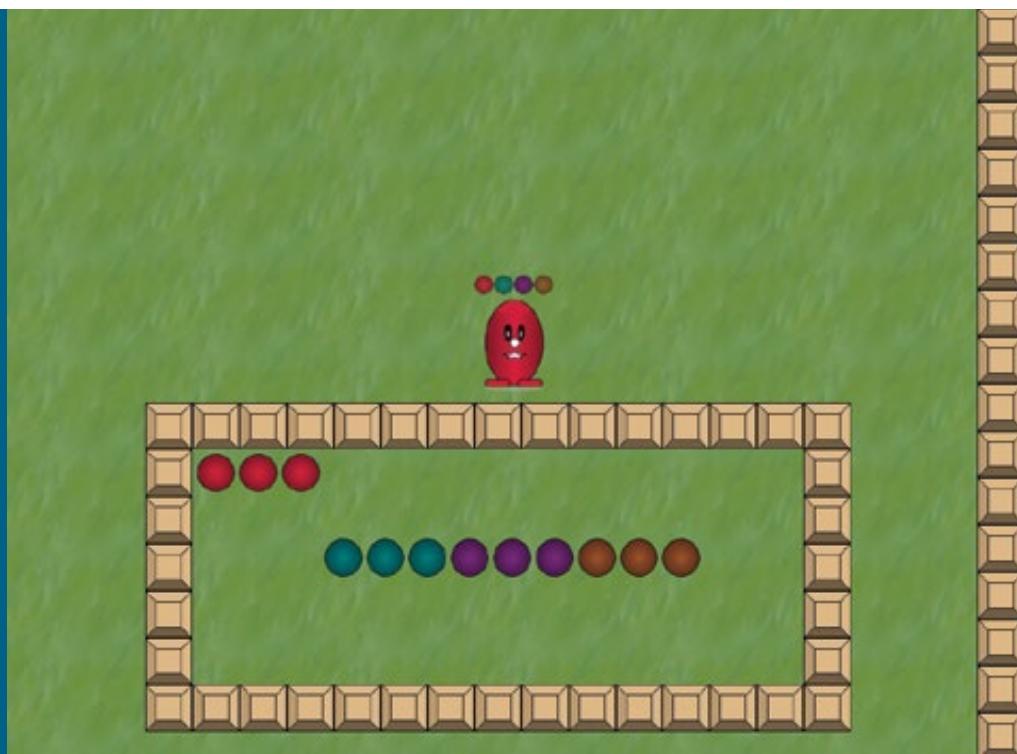
In addition to familiarizing participants with the game, playing the baseline scenarios demonstrates that when sheriffs claim bright tokens, they are taking money from real human beings, their fellow participants. All players can see that at certain times, citizens can collect these tokens, but at other times, sheriffs can take them instead.

Testing the Rules of Civil Forfeiture: Experiment Scenarios and Results

After the baseline scenarios, participants encountered several different scenarios multiple times, sometimes with and sometimes without civil forfeiture. Each scenario enabled us to test different theories about choices sheriffs would make under the rules of civil forfeiture. For a video demonstration of these scenarios, visit www.ij.org/bad-apples-or-bad-laws.

Scenario 1: Will law enforcement seize property from the public?

The first scenario simply tests whether, when given the opportunity, law enforcement will seize property the public can also use. As shown below, Scenario 1 has 12 tokens. In periods without civil forfeiture, the only choice the sheriff faces is whether to knock down both walls to earn 30 cents, allowing citizens to access the nine bright tokens. If she does, each citizen can pick up three tokens and earn nine cents. In periods with civil forfeiture, citizens can still collect three tokens each, and so too can the sheriff, who can pick up the three red tokens. Or the sheriff can take all the tokens.

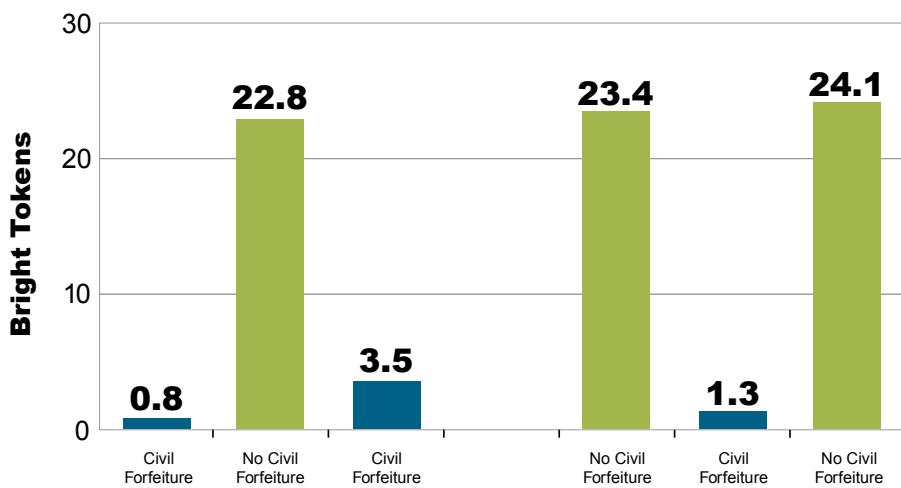


Finding 1: Given the chance, sheriffs overwhelmingly chose to seize property from the public.

The results from Scenario 1, shown in Figure 1, suggest that if law enforcement can pursue forfeitable goods at the public's expense, it will. In Figure 1, each bar represents three periods of Scenario 1, played with or without civil forfeiture.⁴² Citizens were substantially better off in periods without civil forfeiture, collecting nearly all of the 27 available bright tokens—22.8, 23.4 and 24.1. But under civil forfeiture, citizens collected just 0.8, 3.5 and 1.3 bright tokens, as sheriffs swept them up instead. (See Appendix A for the full results of Scenario 1.)

Scenario 1 demonstrates that the temptation to obtain property that others have a claim to—the grandmother's house or the highway driver's cash—is strong.

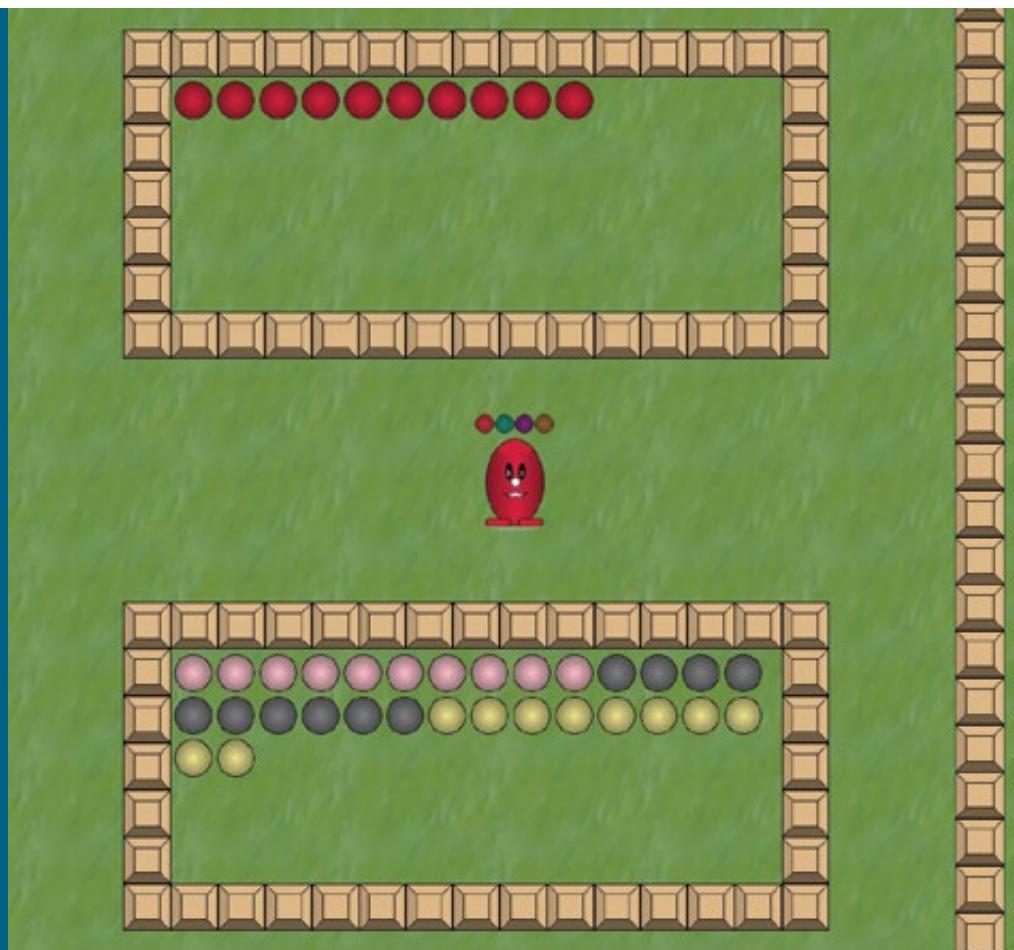
Figure 1:
Average Number of Bright Tokens Collected by Citizens in Scenario 1



Note: Each bar represents three periods of Scenario 1 played with or without civil forfeiture. In three periods, citizens could have collected 27 bright tokens (three per citizen per period).

Scenario 2: Will law enforcement prioritize forfeiture and use the proceeds to help the public?

The second scenario, shown below, tests whether the rules of civil forfeiture encourage the pursuit of property over improving public welfare. In Scenario 2, the sheriff faces a choice similar to a real law enforcement officer deciding which side of the highway to patrol. The top box holds red tokens that only the sheriff can collect and only under civil forfeiture; it is like the side of the highway where drug proceeds travel. The bottom box contains pastel tokens that only citizens can collect; it is like the side of the highway where drugs travel. The sheriff has only two hammers, so she must choose between clearing a path to the pastel tokens for citizens or breaking open the top box with red tokens. In other words, she must choose between pursuing the drugs or the cash.



When there is no civil forfeiture, there is nothing for the sheriff to gain by “pursuing the drugs” and helping the public; she will earn 30 cents regardless of which two walls she knocks down. Under civil forfeiture, however, there is a reason *not* to help the public—“pursuing cash” by collecting red tokens.

But Scenario 2 gives the sheriff a third option. She can take the “cash” and spend it on “fighting more crime” by purchasing an extra hammer. Then, she can knock down all three walls and help citizens access the pastel tokens. This would be akin to law enforcement using illicit drug proceeds to help the public by fighting more crime.

Notably, Scenario 2 does not require the sheriff to devote all forfeiture proceeds to fighting crime. Buying a third hammer costs seven red tokens (21 cents). The sheriff can keep the other three red tokens, plus earn another 15 cents by using the third hammer, so the net cost to the sheriff of helping the public is only six cents. In Scenario 2, the sheriff can make citizens better off and gain from civil forfeiture—though not quite as much as if she simply keeps all the proceeds.

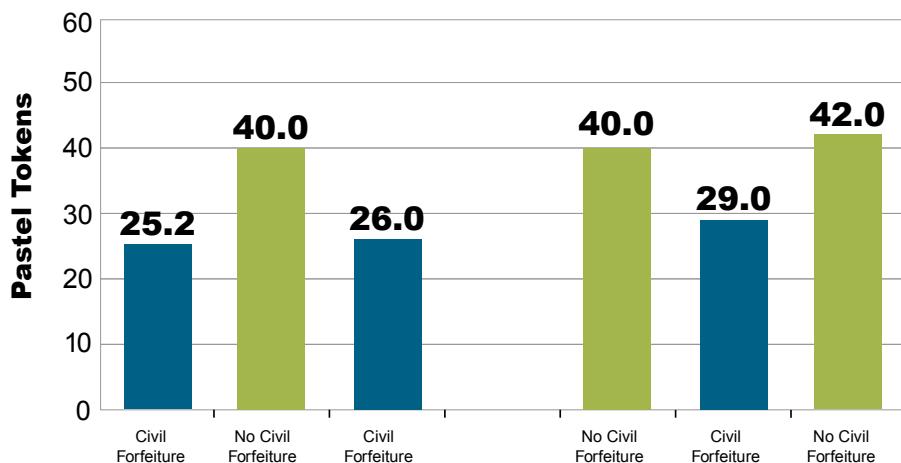
Finding 2: Sheriffs prioritized forfeitures and did not use proceeds to help citizens.

Results from Scenario 2 indicate that civil forfeiture distorts policing priorities and that the proceeds of civil forfeiture do *not* benefit the public. When civil forfeiture was introduced, the public lost: Citizens collected fewer tokens.

In Scenario 2, sheriffs rarely missed an opportunity to collect a red token, snapping up 1,750 out of 1,800—97.2 percent—across all civil forfeiture periods. When given the opportunity, sheriffs nearly always chose to fight the crime with the forfeiture payoff (collect red tokens), instead of the one that would help the public (give citizens access to the pastels). They pursued the cash, not the drugs.

The findings from Scenario 2 suggest that under civil forfeiture, when law enforcement agencies can keep the proceeds, they are likely to pursue revenue and unlikely to use it to further public safety.

Figure 2:
Average Number of Pastel Tokens Collected by Citizens in Scenario 2



Note: Each bar represents two periods of Scenario 2 played with or without civil forfeiture. In two periods, citizens could have collected 60 pastel tokens (10 per citizen per period).

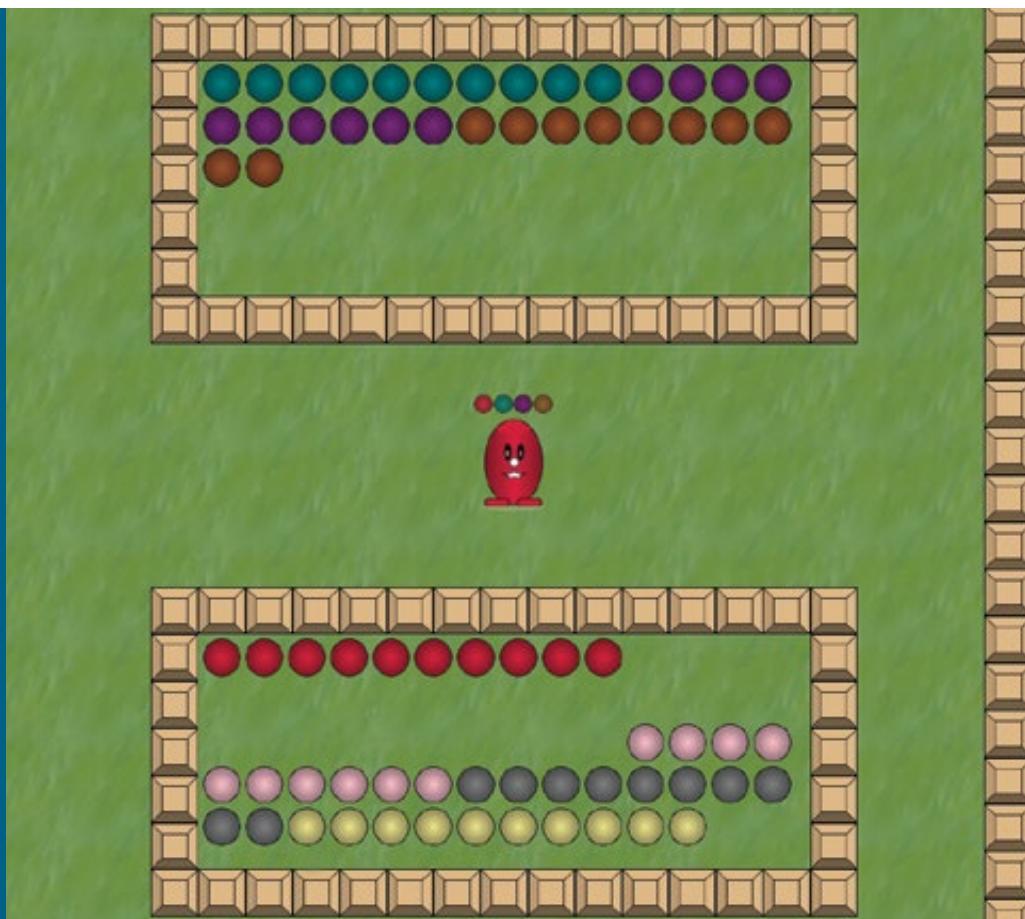
Sheriffs were significantly more likely to help the public access pastel tokens when there was no civil forfeiture, even though there was nothing for them to gain. Each bar in Figure 2 indicates the average number of pastel tokens collected by citizens in two periods of Scenario 2.⁴³ Of 60 possible pastel tokens, citizens collected an average of 40.0, 40.0 and 42.0 in periods without civil forfeiture, but only 25.2, 26.0 and 29.0 under civil forfeiture. Statistical testing reveals the differences between periods with and without civil forfeiture is significant. (See Appendix A for details.) Despite the boost in law enforcement resources civil forfeiture provided, citizens were worse off.

The findings from Scenario 2 suggest that under civil forfeiture, when law enforcement agencies can keep the proceeds, they are likely to pursue revenue and unlikely to use it to further public safety.

Scenario 3: Can civil forfeiture improve public welfare?

Unlike the previous scenarios, Scenario 3 creates an opportunity for citizens to be better off under civil forfeiture than they are without it.

In Scenario 3, shown below, the sheriff faces one choice in periods without civil forfeiture: whether to clear a path for citizens to collect tokens. As in Scenario 2, the sheriff gains nothing from helping the public. But if she does, because there are only two hammers, she can clear a path to bright tokens or pastels, but not both. Either way, as long as she clears a path, citizens can collect 10 tokens each.



Under the rules of civil forfeiture, by contrast, the sheriff faces two basic choices. First, she must decide whether to take the red and bright tokens—whether to pursue forfeiture revenue from suspected illicit activity, property of citizens or both. Second, she must decide whether to spend a portion of any tokens collected to clear a path for citizens. In other words, she must choose

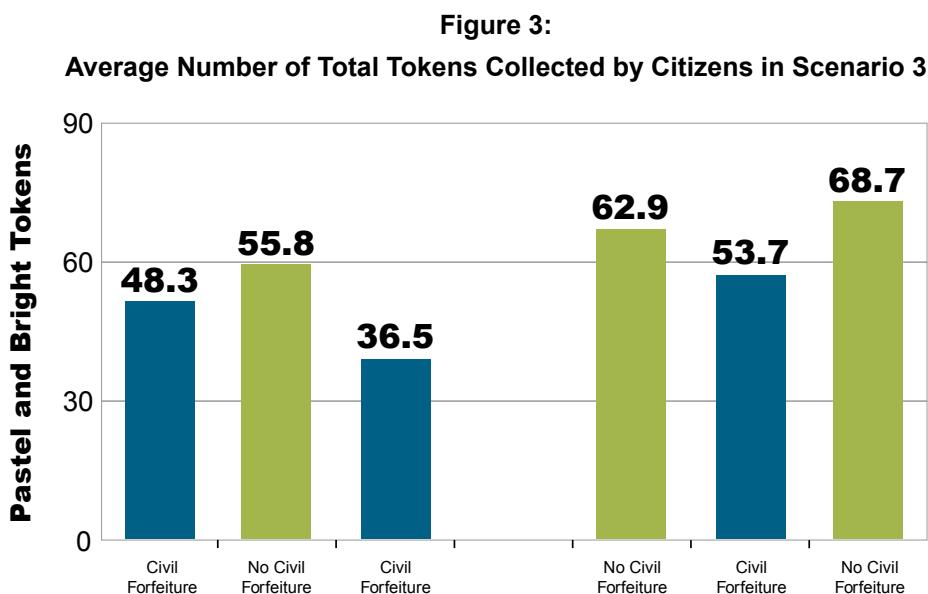
whether to use forfeiture proceeds to improve public welfare. As in Scenario 2, the net cost to the sheriff is only six cents.

In Scenario 3, the world with civil forfeiture could be better than the world without for citizens—if the sheriff chooses. By taking only the red tokens, buying another hammer and knocking down all the walls, the sheriff can clear paths to both the bright and pastel tokens—20 tokens per citizen. This would be akin to law enforcement forfeiting suspected drug money and spending a portion on further crime fighting to improve public safety—while not taking citizens’ property.

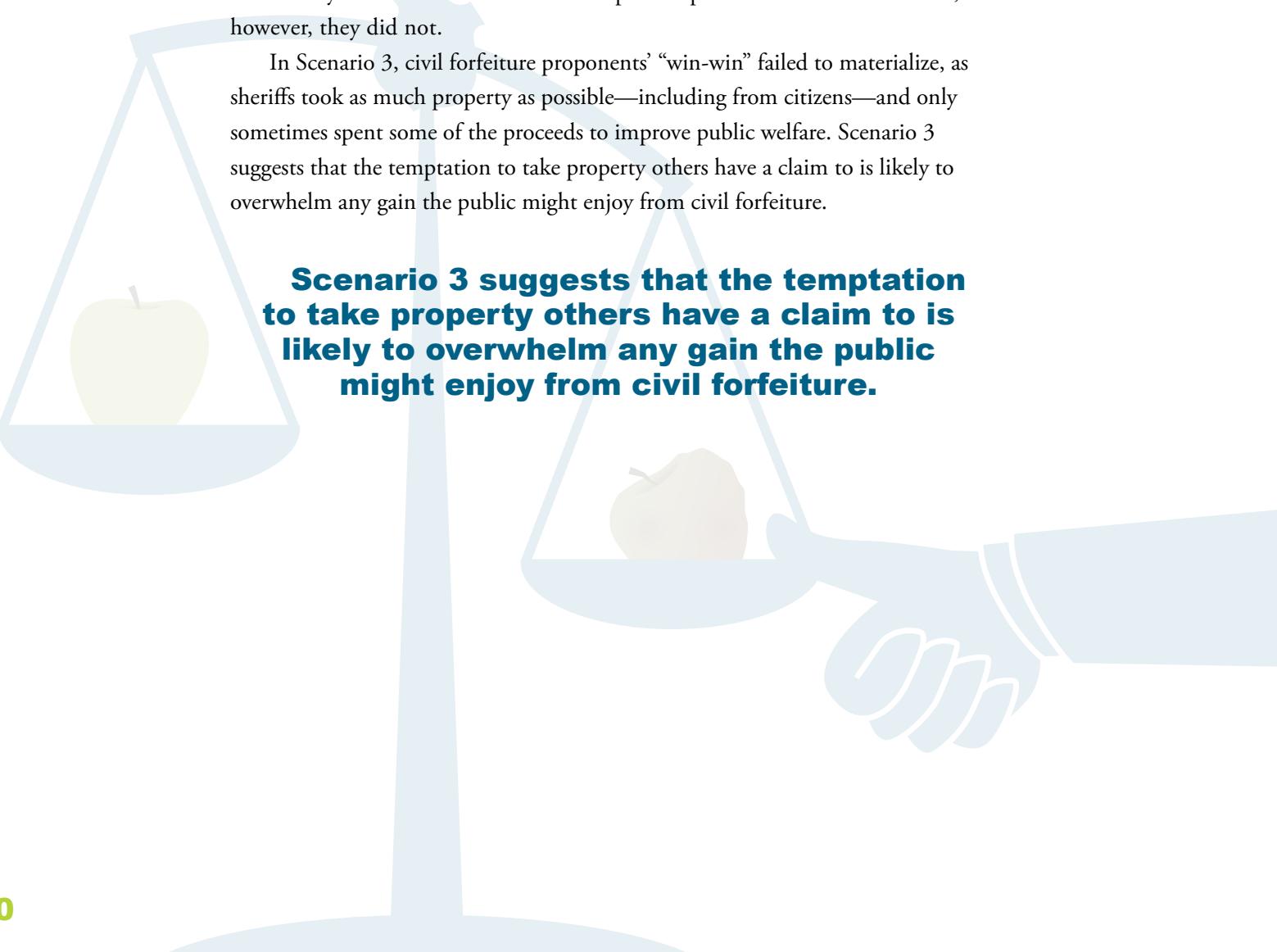
This is how proponents envision civil forfeiture: a “win-win” that turns criminal profits into resources for law enforcement. Public welfare is improved and citizens’ property is secure.

Finding 3: If law enforcement can take property from citizens, civil forfeiture is unlikely to improve public welfare.

Results from Scenario 3 suggest that public benefits from civil forfeiture will prove elusive. Citizens were never better off under civil forfeiture in this scenario—and sometimes they were worse off.



Note: Each bar represents three periods of Scenario 3 played with or without civil forfeiture. In three periods without civil forfeiture, citizens could have collected 90 pastel and bright tokens (10 per citizen per period). In three periods with civil forfeiture, citizens could have collected 180 tokens (20 per citizen per period).



Under civil forfeiture, sheriffs collected nearly every token they could—97.4 percent of red tokens and 99.6 percent of bright tokens. In other words, the red participants nearly always chose to take the equivalent of both the drug proceeds and the house of the mother whose son sold drugs without her knowledge or consent.

This left only the pastel tokens for citizens to collect, guaranteeing that citizens would not be better off. Figure 3 makes this clear. Each bar indicates the average number of pastel or bright tokens collected by citizens in three periods of Scenario 3.⁴⁴ Citizens did reasonably well when there was no civil forfeiture, collecting 62, 70 and 76 percent of available tokens. But, although it was a possibility under Scenario 3, citizens did not collect more tokens under civil forfeiture.

Indeed, statistical testing reveals that citizens sometimes did significantly worse under civil forfeiture. At other times, there was no statistically significant difference, meaning citizens did about the same on average with or without civil forfeiture. (See Appendix A for details.) This suggests that sometimes sheriffs did buy and use a hammer to clear a path to pastel tokens.⁴⁵ Other times, however, they did not.

In Scenario 3, civil forfeiture proponents’ “win-win” failed to materialize, as sheriffs took as much property as possible—including from citizens—and only sometimes spent some of the proceeds to improve public welfare. Scenario 3 suggests that the temptation to take property others have a claim to is likely to overwhelm any gain the public might enjoy from civil forfeiture.

Scenario 3 suggests that the temptation to take property others have a claim to is likely to overwhelm any gain the public might enjoy from civil forfeiture.

Conclusion

Our results point to a clear conclusion: Civil forfeiture encourages choices by law enforcement officers that leave the public worse off. The experiment suggests two reasons. First, people appear to have few qualms about taking what others could have. In Scenarios 1 and 3, seizing bright tokens—goods that the public could also claim—was not a rare occurrence. It is overwhelmingly what people did, rather than share.

Second, given limited resources and given the opportunity, people prioritize acquisition over helping others. Under the rules of civil forfeiture, in Scenario 2, sheriffs nearly always chose to take property and were less likely to help the public, even with the additional resources that forfeiture bestowed, than they were when the rules of civil forfeiture were not in effect.

Scenario 3 illustrates both of these reasons civil forfeiture is unlikely to result in public benefit. Sheriffs nearly always chose to take as much as possible, including goods that citizens could claim. Only sometimes did they use the proceeds to benefit the public. Even though Scenario 3 gave sheriffs an opportunity to make the public better off with civil forfeiture than without, citizens were not better off—and were sometimes worse off.

Altogether, our findings suggest that it should not be surprising to see law enforcement use the rules of civil forfeiture to their own advantage instead of the public's advantage.

They also help explain why sometimes forfeiture funds wind up being spent on steak dinners, law enforcement junkets and concert tickets. But more than that, they suggest that even legitimate law enforcement expenditures made from forfeiture funds may not advance public well-being as much as officer or agency well-being, including the pursuit of additional forfeiture revenue.

What about the rules of civil forfeiture encourages choices that do not benefit the public? Civil forfeiture creates a “zero-sum” world, where the only way to benefit is at another’s expense. Specifically, the rules of civil forfeiture make it possible for law enforcement to gain at the public’s expense, and our results suggest that the temptation to do so is strong.

**Our results
point to a clear
conclusion:
Civil forfeiture
encourages
choices by law
enforcement
officers that
leave the public
worse off.**

This behavior did not go unnoticed by the blue participants. During the experiment, citizens had the opportunity to chat with each other. The sheriffs did not, nor could they see the chat. Here is a sample of what citizens said to each other in real-time:

Real-Time Comments by Blue Participants

- omg hes stealing them all
- he has too much power
- red has no incentive to help us
- were his peasants
- If they're doing this just to be greedy; that's messed up...
- trying to determine just how misanthropic the red guy can be
- the red is really heartless
- i feel so powerless!
- some reds just wanna see the world burn
- im personally offended
- he knows exactly what he's doing
- not cool red
- we are a metaphor for the 3 little pigs/and he is the big bad wolf
- k thanks for eating our coins red
- red will steal them from you
- red can take all of our colors
- this is one of those examples where greed isn't good
- why be so mean?
- totally not cool
- antisocial red
- red person is the worst
- this fool sucks
- he just ate all our things
- thief!
- I hate red.
- SO NOT COOL AT ALL
- not a homie
- die avatar



One blue participant summed up the problem nicely: “[T]here is no incentive for him to help us, it is all whether or not he wants to be nice.” In contrast, participants in other laboratory experiments (under different sets of rules) consistently trust and are decidedly worthy of that trust—even across time.⁴⁶ Why the difference? Because when the rules of the game are such that you and I must work *together* to create value, we find a way to make us both better off. But when the rules of the forfeiture game pit you *against* me, people choose “me.” There is no “we” in the forfeiture game.

Indeed, even in this experiment, sheriffs were more inclined to “be nice” when there was no financial incentive urging them not to be. More often than not, in periods without civil forfeiture, sheriffs were nice, choosing to benefit the public by giving citizens access to pastel or bright tokens, even though there was nothing for them to gain in doing so.

Forfeiture proponents may object that there are disincentives to abusing the power and proceeds of civil forfeiture—for example, laws that define acceptable uses of forfeiture funds, the moral code of law enforcement officers, the risk of bad publicity and democratic accountability. Additionally, they may object that civil forfeiture is not actually as easy as picking up a token nor does it yield pure profit, as successful civil forfeitures take resources and time. Of course, even with such disincentives, we still see increasing use of forfeiture, as well as documented abuses. Moreover, research suggests that when states remove the financial incentive to forfeit by barring law enforcement from using forfeiture proceeds, the lure of such proceeds is strong enough to compel law enforcement to circumvent their own states’ laws and forfeit instead under federal law, which does permit agencies to claim a portion of proceeds.⁴⁷

More fundamentally, however much any disincentives actually check law enforcement behavior, they would not alter our central finding that allowing law enforcement to take property and keep the proceeds creates incentives for abuse. Any disincentives may explain why abuse is not more rampant. Our results explain why abuse happens at all: The rules of civil forfeiture encourage it.

The problem with civil forfeiture is not one of “bad apples” but bad rules that encourage bad behavior—it is not the players, but the game. We find that the public is better off in a world where law enforcement is not allowed to take and keep property using civil forfeiture. When civil forfeiture puts people in a position to choose between benefiting themselves or the overall public, people choose themselves.

The problem with civil forfeiture is not one of “bad apples” but bad rules that encourage bad behavior—it is not the players, but the game. When civil forfeiture puts people in a position to choose between benefiting themselves or the overall public, people choose themselves.

Appendix A: Statistical Results⁴⁸

For the results from Scenarios 1 through 3, each unit of observation is one replication of the virtual world with four people. There are a total of 60 observations—30 from the YNY “switchover,” where participants experienced a group of nine periods with civil forfeiture (Y), followed by nine periods without civil forfeiture (N), and then a group of nine periods with civil forfeiture (Y), and 30 from the opposite, or NYN, switchover.

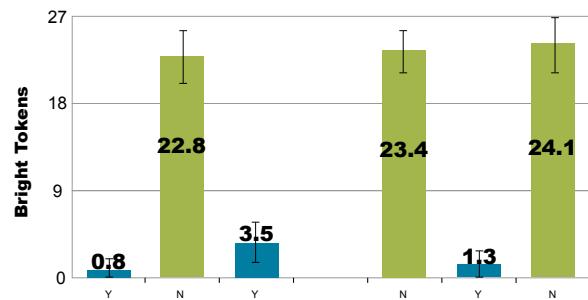
For citizen data, we sum the tokens collected for all three individuals, and within a group of nine periods we also sum the tokens over all n trials for a scenario. Figures 4 through 7 present the same results in the main text, but with the addition of 95 percent confidence intervals about the mean. Solid bars indicate regimes in the YNY switchover and trellis-shaded bars regimes in NYN.

To take advantage of the paired comparisons, the same red avatar with and without civil forfeiture, let the subscript $i = \{1, 2, 3\}$ denote the position of treatment condition, Y or N, within a switchover design. For example, N_2 is the N regime in the YNY switchover.

Scenario 1

Figure 4 presents the results from Scenario 1 and indicates that the treatment effects are clearly robust to the ordering of conditions.

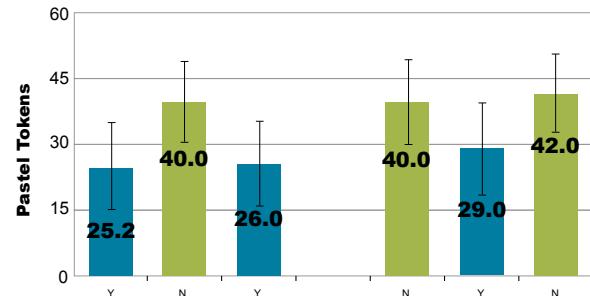
Figure 4:
Average Number of Bright Tokens Collected by Citizens in Scenario 1 With 95% Confidence Intervals



Scenario 2

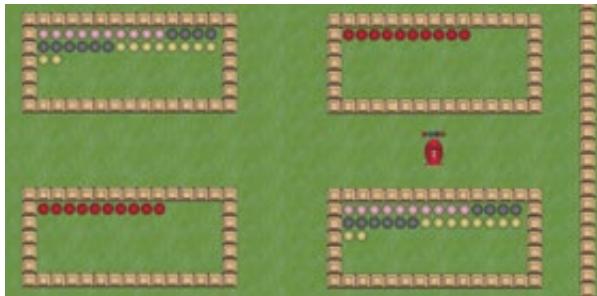
The results from Scenario 2 are shown in Figure 5. Using a Wilcoxon signed-rank test, we reject the null hypothesis of no difference in the treatment conditions, Y_1 vs. N_2 ($W = -88$, $z = -2.26$, $p = 0.0238$, two-tailed test) and N_2 vs. Y_3 ($W = 84$, $z = 2.37$, $p = 0.0178$, two-tailed test). Between switchover designs, the difference between Y_1 vs. N_1 is also statistically different using a Mann-Whitney test ($U_{30,30} = 583$, $p = 0.0502$, two-tailed test). However, the difference in treatment conditions is not as statistically robust in the NYN switchover design: N_1 vs. Y_2 ($W = 55$, $z = 1.71$, $p = 0.0873$, two-tailed test) and Y_2 vs. N_3 ($W = -64$, $z = -1.64$, $p = 0.1010$, two-tailed test). The return to baseline in both sequences also indicates that there are no hysteresis effects of the order in presenting the treatment conditions to the participants.

Figure 5:
Average Number of Pastel Tokens Collected by Citizens in Scenario 2 With 95% Confidence Intervals



We also tested a variation on Scenario 2, illustrated below with one period in each group of nine. It is identical to Scenario 2, except that it doubles the boxes. The choices faced by the sheriff remain the same: Pursue drugs or cash and keep proceeds or use a portion to help the public. The key difference is that if the sheriff breaks down both red walls first, the amount of proceeds needed to help the public doubles from six to 12 cents, as sheriffs must then buy two hammers to clear a path to pastel tokens. In percentage terms, the cost remains the same, but in terms of amount of proceeds and mouse clicks, the cost is slightly higher. The variation tests whether the slightly higher cost makes a difference.

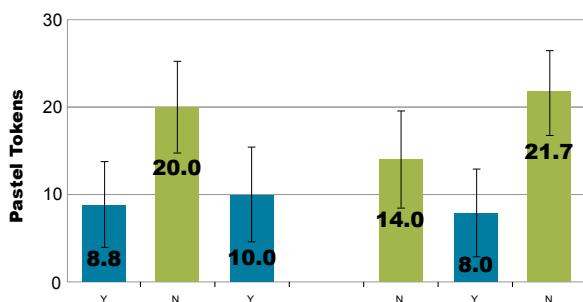
Scenario 2 Variation



Results from the Scenario 2 variation, presented in Figure 6, reinforce the conclusion that civil forfeiture encourages law enforcement to pursue crimes with a potential financial payoff and that proceeds are unlikely to be reinvested to public benefit. As in Scenario 2, citizens are significantly worse off under civil forfeiture. Using a Wilcoxon signed-rank test, we reject the null hypothesis of no difference in the treatment conditions, Y_1 vs. N_2 ($W = -89$, $z = -3.09$, $p = 0.0020$, two-tailed test) and N_2 vs. Y_3 ($W = 65$, $z = 2.53$, $p = 0.0114$, two-tailed test). And once again, sheriffs collected nearly as many red tokens as possible—96.7 percent of the 1,800 total available across all periods.

In comparing Scenario 2 to its variation, the mean number of pastel tokens as a percentage of the total available drops from 42% (25.2 of 60 in Y_1) in Scenario 2 to 29.3% (8.8 of 30 in Y_1) in the variation, but we fail to reject the null hypothesis of no difference in the number of pastel tokens collected as a percentage of the total available ($U_{30|30} = 533$, $p = 0.2247$, two-tailed test). The small increase in cost appears not to have made a difference.

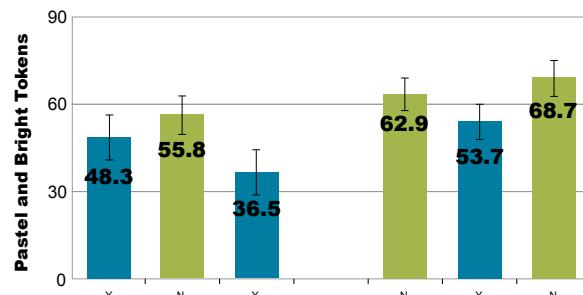
Figure 6:
Average Number of Pastel Tokens Collected by Citizens
in Scenario 2 Variation With 95% Confidence Intervals



Scenario 3

In Scenario 3 (results shown in Figure 7), using a Wilcoxon signed-rank test, we cannot reject the null hypothesis of no difference in Y_1 vs. N_2 ($W = -58$, $z = -1.00$, $p = 0.3173$, two-tailed test), but we can reject the null hypothesis for N_2 vs. Y_3 ($W = 116$, $z = 2.16$, $p = 0.0308$, two-tailed test). For the other switchover design, we cannot reject the null hypothesis of no difference in N_1 vs. Y_2 ($W = 73$, $z = 1.35$, $p = 0.1770$, two-tailed test), but we can reject the null hypothesis for Y_2 vs. N_3 ($W = -80$, $z = -2.26$, $p = 0.0238$, two-tailed test). Using a Mann-Whitney test, there is no difference between Y_1 and N_1 ($U_{30|30} = 534$, $p = 0.2193$, two-tailed test) or N_2 and Y_2 ($U_{30|30} = 458$, $p = 0.9115$, two-tailed test), but we can reject the null hypothesis of no difference between Y_3 and N_3 ($U_{30|30} = 640$, $p = 0.0045$, two-tailed test). In sum, four of the pairwise comparisons show no difference, while three show citizens significantly worse off under civil forfeiture.

Figure 7:
Average Number of Total Tokens Collected by Citizens
in Scenario 3 With 95% Confidence Intervals



Appendix B: Instructions to Participants

Instructions to Red Avatars:

<page 1>

Welcome

This is an experiment in decision making. The instructions are simple, and if you follow them carefully and make good decisions you can earn a considerable amount of money which will be paid to you in CASH at the end of the experiment.

In this experiment, you will be represented by the **Red** avatar you see in the middle of the screen. You and the other people in the experiment can move around the environment by *left* clicking on the spot you wish to

move to. **Do this now.** Notice that a **red circle** marks the spot your avatar is moving towards.

<page 2>

Hammers and Walls

You can earn money two ways. The first is by knocking down walls with a hammer. Each wall that you knock down generates **15 cents** in earnings. Each period you are endowed with **2 hammers**.

To knock down a wall, right click on the wall. **Do this now.** Notice how your earnings in the bottom right of the screen have increased. Only you have the ability to knock down walls.

You will not be able to knock down walls for the first **15 seconds** of a period.

<page 3>

Tokens

Sometimes you may be able to collect tokens. Tokens may be used to produce more hammers or to generate earnings.

You can only collect tokens of certain colors. **Blue avatars** can also collect tokens. The colors that you and others can collect are listed above the avatar. Knock down the wall around the **red tokens** and **pick up all of the tokens now** by walking over the top of them.

To convert 7 tokens into a hammer, click on  the button. **Do this now.**

To convert the remaining tokens into earnings, click on  button. **Do this now.** Each token you convert generates **3 cents**. Unconverted tokens are wasted at the end of a period.

<page 4>

Conclusion

This is the end of the instructions. If you have any questions, please raise your hand and a monitor will come by to answer them. If you are finished with the instructions, please click the **Start** button. The instructions will remain on your screen until the experiment begins. We need everyone to click the **Start** button before we can begin the experiment.

Instructions to Blue Avatars:

<page 1>

Welcome

This is an experiment in decision making. The instructions are simple, and if you follow them carefully and make good decisions you can earn a considerable amount of money which will be paid to you in CASH at the end of the experiment.

In this experiment, you will be represented by the **Blue** avatar you see in the middle of the screen. You and the other people in the experiment can move around the environment by *left* clicking on the spot you wish to move to. **Do this now.** Notice that a **red circle** marks the spot your avatar is moving towards.

<page 2>

Tokens

Your task is to collect tokens. Each token you collect generates **3 cents**. You can only collect tokens of certain colors. The colors that you and others can collect are listed above the avatar. **Go pick up 3 tokens now by walking over the top of them.**

You will notice walls as you walk around. A **red avatar** has the ability to knock down the walls.

<page 3>

Chat

Blue avatars in the experiment may chat. Type your messages at the top right of the screen and then press ENTER or click the  Chat button. Your chat will appear next to your avatar as long as you don't click anywhere else on the screen. **Try this now.** The **red avatar** cannot chat nor see chat.

You are free to discuss any and all aspects of the experiment, with the following exceptions: you may not reveal your name, discuss side payments outside the laboratory, or engage in inappropriate language (including such shorthand as 'WTF'). If you do, you will be excused and you will not be paid.

<page 4>

Conclusion

This is the end of the instructions. If you have any questions, please raise your hand and a monitor will come by to answer them. If you are finished with the instructions, please click the **Start** button. The instructions will remain on your screen until the experiment begins. We need everyone to click the **Start** button before we can begin the experiment.

Endnotes

- 1** Thompson, I. (2013, August 5). Law to clean up “nuisances” costs innocent people their homes. *ProPublica*. Retrieved from <http://www.propublica.org/article/law-to-clean-up-nuisances-costs-innocent-people-their-homes>
- 2** U.S. Department of Justice Office of the Inspector General Audit Division. (2013, February). Audit of the assets forfeiture fund and seized asset deposit fund annual financial statements fiscal year 2013. Washington, D.C.: U.S. Government Printing Office; U.S. Department of Justice. (1997). Annual report of the Department of Justice asset forfeiture program: Fiscal years 1995 and 1996. Washington, D.C. The Department of Justice’s Assets Forfeiture Fund holds proceeds from both criminal and civil forfeitures.
- 3** Williams, M. R., Holcomb, J. E., Kovandzic, T. V., & Bullock, S. (2010). Policing for profit: The abuse of civil asset forfeiture. Arlington, VA: Institute for Justice.
- 4** Through a program called “equitable sharing,” state and local law enforcement can work with the federal government to forfeit assets, as long as the underlying offense is a violation of federal law for which forfeiture is permitted. State and local agencies can receive up to 80 percent of the proceeds from forfeitures in which they participated.
- 5** U.S. Department of Justice. (2002, May 13). Equitable sharing payments of cash and sale proceeds executed during fiscal year 2001, by recipient agency. Retrieved July 8, 2014, from <http://www.justice.gov/jmd/afp/02fundreport/2013afrr/report2b.htm>; U.S. Department of Justice. (n.d.). Equitable sharing payments of cash and sale proceeds executed during fiscal year 2014, by recipient agency. Retrieved July 8, 2013, from <http://www.justice.gov/jmd/afp/02fundreport/2001CA-FRAReports/Report2b.htm>
- 6** This is not only the view of civil forfeiture critics, but also that of proponents. One Assistant U.S. Attorney, who called it “a prosecutor’s secret weapon,” wrote: “Civil forfeiture laws make it easier to seize potentially forfeitable personal property than their criminal forfeiture counterparts,” and noted among their advantages that “[c]ivil forfeiture cases do not require the criminal conviction of the owner (or anyone else) as a prerequisite for forfeiture”: Gaumer, C. (2007). A prosecutor’s secret weapon: Federal civil forfeiture law. *United States Attorneys’ Bulletin*, 55, 59-73. Stephan Cassella has also argued that civil forfeiture is superior, from a law enforcement perspective, to criminal forfeiture: Cassella, S. D. (2013). Civil asset recovery: The American experience. *Eucrim: The European Criminal Law Associations’ Forum*, 3, 98-103.
- 7** *United States v. 434 Main St., Tewksbury, Mass.*, 961 F. Supp. 2d 298 (D. Mass. 2013).
- 8** *United States v. \$671,160.00 in U.S. Currency*, 730 F.3d 1051 (9th Cir. 2013).
- 9** Williams, Holcomb, Kovandzic, and Bullock, 2010.
- 10** Williams, Holcomb, Kovandzic, and Bullock, 2010.
- 11** State and local law enforcement, however, can circumvent these limits and obtain forfeiture proceeds by working in conjunction with the federal government through equitable sharing, and there is evidence that they do: Holcomb, J. E., Kovandzic, T. V., & Williams, M. R. (2011). Civil asset forfeiture, equitable sharing, and policing for profit in the United States. *Journal of Criminal Justice*, 39, 273-285.
- 12** http://www.acjc.gov/ACJC.Web/pubs/Finance/RICO_Training.pdf; Tex. Code Crim. Proc. Ann. art. 59.06(c)(2)-(4) (2014); Bullock, S., & Carpenter, D. M. (2010). Forfeiting justice: How Texas police and prosecutors cash in on seized property. Arlington, VA: Institute for Justice.
- 13** *United States v. 434 Main St.*, 961 F. Supp. 2d at 303-05, 321, 323, 326; Will, G. F. (2012, May 18). When government is the looter. *The Washington Post*. Retrieved from http://www.washingtonpost.com/opinions/when-government-is-the-looter/2012/05/18/gIQAUl-KVZU_story.html
- 14** *United States v. 434 Main St.*, 961 F. Supp. 2d at 310.
- 15** *United States v. 434 Main St.*, 961 F. Supp. 2d at 302, 329; Boeri, D. (2013, January 24). Judge dismisses government seizure attempt of Tewksbury motel. *WBUR*. Retrieved from <http://www.wbur.org/2013/01/24/tewksbury-motel-foreclosure>
- 16** Balko, R. (2010, February). The forfeiture racket.

- et. Reason. Retrieved from <http://reason.com/archives/2010/01/26/the-forfeiture-racket>; Stillman, S. (2013, August 12). Taken. *The New Yorker*. Retrieved from http://www.newyorker.com/reporting/2013/08/12/130812fa_fact_stillman?currentPage=all; Witt, H. (2009, March 10). Highway robbery? Texas police seize black motorists' cash, cars. *The Chicago Tribune*. Retrieved from http://www.chicagotribune.com/news/nationworld/chi-texas-profiling_wittmar10,0,6051682.story; Skolnik, S. (2006, September 26). Their loss is our gain as police claim the tools of the criminal trade. *Las Vegas Sun*. Retrieved from <http://www.lasvegassun.com/news/2006/sep/26/their-loss-is-our-gain-as-police-claim-the-tools-o/>
- 17** Sibilla, N. (2014, March 12). Cops use traffic stops to seize millions from drivers never charged with a crime. *Forbes*. Retrieved from <http://www.forbes.com/sites/instituteforjustice/2014/03/12/cops-use-traffic-stops-to-seize-millions-from-drivers-never-charged-with-a-crime/>; Elinson, Z. (2012, March 6). Asset forfeiture gets a close look in Nevada: Official review follows allegations of unlawful seizure of thousands of dollars. *The Wall Street Journal*. Retrieved from <http://online.wsj.com/news/articles/SB10001424052702304017604579443662954464596>
- 18** Sonner, S. (2014, March 14). Humboldt County settles claims that deputy improperly took motorist's cash. *Las Vegas Review Journal*. Retrieved from <http://www.reviewjournal.com/news/humboldt-county-settles-claims-deputy-improperly-took-motorist-s-cash>
- 19** Stillman, 2013.
- 20** Williams, P. (2011, May 18). Middle Tennessee police profiting off drug trade? *News Channel 5*. Retrieved from <http://www.newschannel5.com/story/14643085/police-profiting-off-drug-trade>; Balko, R. (2013, March 22). Tennessee forfeiture bill seeks to abolish abusive police practice. *Huffington Post*. Retrieved from http://www.huffingtonpost.com/2013/03/22/tennessee-asset-forfeiture_n_2933246.html
- 21** Balko, 2013.
- 22** Miller, M., & Selva, L. (1994). Drug enforcement's double-edged sword: An assessment of asset forfeiture programs. *Justice Quarterly*, 11, 313-335.
- 23** Miller and Selva, 1994, p. 325.
- 24** Miller and Selva, 1994.
- 25** Williams, H. (2002). *Asset forfeiture: A law enforcement perspective*. Springfield, IL: Charles C. Thomas. The head of Philadelphia's Public Nuisance Task Force, the unit responsible for seizures of properties such as Rochelle Bing's home, argues that civil forfeiture can help turn drug-ridden communities around: Stillman, 2013. Others have argued that civil forfeiture creates a deterrent effect: "Taking the criminals' toys away... not only ensures that the criminal enterprise is deprived of its economic resources and makes funds available for restitution to the victims, but it also sends a signal to the community that the benefits of a life of crime are illusory and temporary at best": Cassella, S. (2007). Overview of asset forfeiture law in the United States. *United States Attorneys' Bulletin*, 55, 8-21, pp. 8-9.
- 26** Williams, H., 2002.
- 27** Stillman, 2013; U. S. Department of Justice. (2013, April 26). Justice Department returned \$1.5 billion to victims of crime since January 2012. Retrieved June 9, 2014, from <http://www.justice.gov/opa/pr/2013/April/13-crm-480.html>
- 28** Balko, R. (2014, January 15). Gothamist on asset forfeiture abuse at NYPD. *The Washington Post*. Retrieved from <http://www.washingtonpost.com/news/opinions/wp/2014/01/15/gawker-on-asset-forfeiture-abuse-at-nypd/>; Schultze, S. (2012, September 28). Clarke spent asset forfeitures on workout equipment, horse patrol. *The Journal Sentinel*. Retrieved from <http://www.jsonline.com/news/milwaukee/clarke-spent-asset-forfeitures-on-workout-equipment-horse-patrol-5j71hn1-171816481.html>; Sibilla, N. (n.d.). DA's office in Georgia used asset forfeiture funds on booze, steak, galas, and to see Ceelo Green. *The Institute for Justice*. Retrieved from <http://ij.org/da-s-office-in-georgia-used-asset-forfeiture-funds-on-booze-steak-galas-and-to-see-ceelo-green>
- 29** "Drug use was on the decline, however, when the 'war on drugs' began, and since that time the 'war' has not contributed significantly to a decline in drug use. In fact, drug use has remained stable or has declined for most drugs (excluding heroin) (Bureau of Justice Statistics, 2000). Thus, there must be some reason besides inertia for the continuation of an unsuccessful war": Williams, M. R. (2002). Civil asset forfeiture: Where

does the money go? *Criminal Justice Review*, 21(2), 321-327. "By more meaningful measures, however, the Drug War has been an extraordinary failure. Drugs are more available—at higher purity and lower prices—than they were at the start of the decade": Blumenson, E., & Nilsen, E. (1998). Policing for profit: The drug war's hidden economic agenda. *University of Chicago Law Review*, 65(35), 36-112.

30 One Texas police chief told NPR, "Law enforcement has become a business, and where best to hit these narcotics organizations other than in the pocketbook? That's where it's going to hurt the most. And then to be able to turn around and use those same assets to benefit our department, that's a win-win situation as far as we're concerned": Burnett, J. (2008, June 16). Seized drug assets pad police budgets. *NPR*. Retrieved from <http://www.npr.org/templates/story/story.php?storyId=91490480>

31 Rassenti, S. J., Smith, V. L., & Wilson, B. J. (2003). Controlling market power and price spikes in electricity networks: Demand-side bidding. *Proceedings of the National Academy of Sciences*, 100(5), 2998-3003; Banks, J., Olson, M., Porter, D., Rassenti, S., & Smith, V. (2003). Theory, experiment, and the federal communications commission spectrum auctions. *Journal of Economic Behavior & Organization*, 51(3), 303–350; Porter, D., Rassenti, S., Shobe, W., Smith, V., & Winn, A. (2009). The design, testing, and implementation of Virginia's NOx allowance auction. *Journal of Economic Behavior & Organization*, 69(2), 190–200.

32 Holcomb, Kovandzic, and Williams, 2011.

33 Baicker, K., & Jacobson, M. (2007). Finders keepers: Forfeiture laws, policing incentives, and local budgets. *Journal of Public Economics*, 91, 2113-2136; Benson, B. L., Rasmussen, D. W., & Sollars, D. L. (1995). Police bureaucrats, their incentives, and the new war on drugs. *Public Choice*, 83, 21-45; Gabbidon, S. L., Higgins, G. E., Martin, F., Nelson, M., & Brown, J. (2011). An exploratory analysis of federal litigation in the United States challenging asset forfeiture. *Criminal Justice Policy Review*, 22(1), 50-64; Mast, B. D., Benson, B. L., & Rasmussen, D. W. (2000). Entrepreneurial police and drug enforcement policy. *Public Choice*, 104, 285–308; Worrall, J. L. (2001). Addicted to the drug war: The role of civil asset forfeiture as a budgetary necessity in contemporary law enforcement. *Journal of Criminal Justice*, 29, 171-187; Worrall, J. L., & Kovandzic, T. V.

(2008). Is policing for profit? Answers from asset forfeiture. *Criminology and Public Policy*, 7(2), 219–244.

34 Video-game style experiments like ours using undergraduates have been published in a broad range of journals: DeScioli, P., & Wilson, B. J. (2011). The territorial foundations of human property. *Evolution & Human Behavior*, 32(5), 297-304; Kaplan, H., Schniter, E., Smith, V. L., & Wilson, B. J. (2012). Risk and the evolution of human exchange. *Proceedings of the Royal Society B: Biological Sciences*, 270(1740), 2930-2935; Kimbrough, E. O., Smith, V. L., & Wilson, B. J. (2008). Historical property rights, sociality, and the emergence of impersonal exchange in long-distance trade. *American Economic Review*, 98(3), 1009-1039; Kimbrough, E. O., & Wilson, B. J. (2013). Insiders, outsiders, and the adaptability of informal rules to ecological shocks. *Ecological Economics*, 90, 29-40; Rogers, D. B., Smith, A. C., & Wilson, B. J. (2013). Violence, access, and competition in the market for protection. *European Journal of Political Economy*, 29, 1-17; Wilson, B. J., Jaworski, T., Schurter, K., & Smyth, A. (2012). The ecological and civil mainsprings of property: An experimental economic history of whalers' rules of capture. *Journal of Law, Economics, and Organization*, 28(4), 617-656.

35 This is one common objection to laboratory experiments in social science. Another is that the stakes are too low to motivate participants: Taking a few bucks away from other players in a computer game is a far cry from forfeiting money—thousands of dollars or more—from people. But the argument cuts both ways. Since it's only a few bucks, why not be generous? Moreover, if people are inclined to take from others when only a few dollars are on the line, wouldn't they be more inclined to do so when the potential payoff is much higher? Another common objection is that the participants are not "sophisticated enough." Actual law enforcement officers are more civic-minded than the typical undergraduate and submit to a higher ideal of conduct. But this argument also cuts both ways. Forfeiture opponents could make the same claim—the undergraduates are not sophisticated enough to take advantage of each other as would happen in the world outside the laboratory. Both objections are red herrings. For similar arguments, see Smith, V. L. (2002). Method in experiment: Rhetoric and reality. *Experimental Economics*, 5, 91-110.

36 Keeping participants from knowing that the experiment is motivated by law enforcement and civil forfeiture

attempts to avoid any predispositions, positive or negative, about either law enforcement or civil forfeiture laws from influencing their decisions.

37 To give red participants time to explore the walls and tokens available in each period, they had to wait 15 seconds before taking any action. Additionally, during the first 40 seconds of every period, five tokens of each pastel color randomly appeared on the “east” side of the dividing wall, guaranteeing blue participants minimum earnings of 15 cents each per period and giving them something to do before reds take action.

38 This “switchover” design reduces the error attributable to differences in particular groups, and paired comparisons increase the power of statistical tests.

39 Because results of the variation do not differ substantively from one of the main scenarios, Scenario 2, we omit them from the presentation below and include them in Appendix A. Within each group of nine, we initially randomized the order of the scenarios without replacement in each group and then used the same order of scenarios for all replications.

40 Within each session, half of participants experienced civil forfeiture in the first group of nine periods, while the other half experienced no civil forfeiture in the first group of nine periods. We randomly recruited participants from a pool of approximately 2,000 undergraduate students at Chapman University who have previously indicated an interest in participating in experiments. The first 30 students are confirmed on first-come, first-reserved basis. Approximately 90 to 100 percent of confirmed participants show up for their one-hour appointment. Each participant is guaranteed seven dollars for showing up on time. If more than 24 people show up, the monitor asks for volunteers to be bumped and paid seven dollars for showing up on time. If there are not enough volunteers, students are randomly bumped. Prior to the experiment, the students give their informed consent to participate with procedures approved by Chapman University’s Internal Review Board.

41 Excluding the show-up payment, mean earnings for red avatars was \$19.09 ($\sigma = 3.10$) and for blue avatars \$9.52 ($\sigma = 1.91$).

42 Half of participants experienced Scenario 1 first with civil forfeiture, then without, and then with again (the first set of bars), while the other half experienced the opposite (the second set of bars).

43 Half of participants experienced Scenario 2 first with civil forfeiture, then without, and then with again (the first set of bars), while the other half experienced the opposite (the second set of bars).

44 Half of participants experienced Scenario 3 first with civil forfeiture, then without, and then with again (the first set of bars), while the other half experienced the opposite (the second set of bars).

45 In the experiment, bright and pastel tokens have the same value to citizens and so are interchangeable. But for real citizens, it is an open question whether gaining the possibility of safer neighborhoods (pastels) while risking the loss of property through forfeiture (bright tokens) would be a worthwhile trade-off.

46 Smith, V. L., & Wilson, B. J. (2014). Sentiments, conduct, and trust in the laboratory. Economic Science Institute, Chapman University. Retrieved from http://www.economics.uci.edu/files/socsci/news_events/2013/smith_wilson.pdf; Osborn, J., Wilson, B. J., & Sherwood, B. (In press). Conduct in narrativized trust games. *Southern Economic Journal*; Kaplan, Schniter, Smith, and Wilson, 2012.

47 Holcomb, Kovandzic, and Williams, 2011.

48 For additional details, see Preciado, M., & Wilson, B.J. (2014). The social welfare of civil forfeiture. Retrieved from <http://ssrn.com/abstract=2477098>

Acknowledgments

We thank Megan Luetje for recruiting our experiment participants and Jeffrey Kirchner for his professional software programming.

About the Authors

Bart J. Wilson is the Donald P. Kennedy Endowed Chair in Economics and Law at Chapman University's Economic Science Institute. He is currently using experimental economics in his research to examine the foundations of exchange and specialization and the jurisprudential foundations of property that undergird it. Another of his research programs compares decision making in humans, apes and monkeys. Wilson has published papers in the *American Economic Review*, the *Proceedings of the National Academy of Sciences* and the *Journal of Law, Economics and Organization*. His research has been supported with grants from the National Science Foundation, the Federal Trade Commission and the International Foundation for Research in Experimental Economics. Prior to joining the faculty at Chapman, he was an Associate Professor of Economics at George Mason University and before that a Research Scientist at the Economic Science Laboratory at the University of Arizona and an Economist at the Federal Trade Commission. Wilson received his Ph.D. in Economics from the University of Arizona.

Michael Preciado is an associate in the Orange County office of Snell & Wilmer L.L.P. His practice is concentrated in products liability litigation, with a focus on defending car manufacturers. Michael Preciado received his J.D. from the Chapman University School of Law.

The Institute for Justice

The Institute for Justice is a nonprofit, public interest law firm that litigates to secure economic liberty, school choice, private property rights, freedom of speech and other vital individual liberties and to restore constitutional limits on the power of government. Founded in 1991, IJ is the nation's only libertarian public interest law firm, pursuing cutting-edge litigation in the courts of law and in the court of public opinion on behalf of individuals whose most basic rights are denied by the government. The Institute's strategic research program produces social science and policy research to inform public policy debates on issues central to IJ's mission.



The National Law Firm
for LIBERTY

Institute for Justice
901 N. Glebe Road
Suite 900
Arlington, VA 22203

www.ij.org
p 703.682.9320
f 703.682.9321