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UNITED STATES COURT OF APPEALS

FOR THE SIXTH CIRCUIT

UNITED STATES OF AMERICA,	Plaintiff-Appellee,	}	No. 22-5931
<i>v</i> .			
Jyoti Agrawal,			
	Defendant-Appellant.		

Appeal from the United States District Court for the Eastern District of Kentucky at Lexington. No. 5:21-cr-00047-1—Danny C. Reeves, Chief District Judge.

Argued: October 26, 2023

Decided and Filed: April 1, 2024

Before: MOORE, READLER, and MURPHY, Circuit Judges.

COUNSEL

ARGUED: Kevin M. Schad, OFFICE OF THE FEDERAL PUBLIC DEFENDER, Cincinnati, Ohio, for Appellant. James T. Chapman, UNITED STATES ATTORNEY'S OFFICE, Lexington, Kentucky, for Appellee. **ON BRIEF:** Kevin M. Schad, OFFICE OF THE FEDERAL PUBLIC DEFENDER, Cincinnati, Ohio, for Appellant. James T. Chapman, Charles P. Wisdom, Jr., UNITED STATES ATTORNEY'S OFFICE, Lexington, Kentucky, for Appellee.

OPINION

MURPHY, Circuit Judge. Jyoti Agrawal successfully obtained over \$1.5 million in federal and state grants to research and develop a scanning electron microscope. But fraud tainted these grants. Agrawal received the largest grant by forging a letter in her company's

application to the Department of Energy. She later lied to the Department about how her company had spent the funds, failing to disclose (among other things) that she had used a portion to pay for her MBA. A jury convicted Agrawal of three financial crimes. The district court found that her conduct had caused \$1,548,255 in "loss" when calculating her guidelines range. It also ordered Agrawal to pay that amount back in restitution and authorized the United States to confiscate her house and personal financial accounts as part of a separate forfeiture judgment.

On appeal, Agrawal challenges the district court's evidentiary and instructional rulings at trial. She challenges the court's estimate of the amount of the "loss" from her fraud, claiming that the court should have reduced its estimate by the sums she legitimately spent on the research-and-development project. She lastly challenges the court's decision to find her personal property forfeitable due to the fraud. But the alleged evidentiary and instructional errors were all harmless. The district court also properly refused to offset its "loss" amount by her project expenses because it reasonably found that the Department would not have awarded her most of the grant funds if it had known of the fraud. And the court properly subjected her personal property to forfeiture because she commingled that property with grant funds. We thus affirm.

I

Congress has enacted many policies to help small businesses. *See* 15 U.S.C. ch. 14A. This case concerns two programs that fund small-business research and development: the "Small Business Innovation Research Program" and the "Small Business Technology Transfer Program" (what Congress has dubbed the "SBIR" and "STTR" programs). *Id.* § 638(e)(4), (6). Under these programs, federal agencies may contract out research-and-development efforts to small businesses. *See id.* Both programs follow a "uniform process" with three phases. *See id.* The first two phases matter here. At Phase I, a small business receives initial funding to research the scientific and commercial "feasibility" of an idea. *Id.* § 638(e)(4)(A), (e)(6)(A). If an agency finds the idea worthwhile after Phase I, the small business can receive more funding to "further develop" it at Phase II. *Id.* § 638(e)(4)(B), (e)(6)(B).

Agrawal and her ex-husband, Subhadarshi Nayak, applied for many grants under these programs through their small research-and-development business, ScienceTomorrow LLC.

Immigrants from India, Agrawal and Nayak both obtained doctorates in science fields and took jobs with Intel in Arizona. Around 2008 or 2009, they began to operate ScienceTomorrow out of their garage. ScienceTomorrow lost money in its early years while Nayak continued to work at Intel. When the couple both began to work for their small business full-time, they relocated to Virginia to be closer to potential government customers. While there, they started to see some success in obtaining defense grants.

In late 2012, the Department of Energy solicited small businesses to apply for Phase I grants on a range of topics under the SBIR and STTR programs. One topic concerned microscopes. Applying for either an SBIR grant or an STTR grant, ScienceTomorrow proposed a project that would research a better and cheaper scanning electron microscope. When obtaining his doctorate at the University of Tennessee, Nayak had studied under a professor who was "one of the leading figures" on these microscopes. Nayak Tr., R.141, PageID 2582. As part of ScienceTomorrow's application, therefore, it proposed subcontracting with this university to perform about \$49,000 worth of research. In February 2013, the Department of Energy awarded ScienceTomorrow an SBIR grant of \$153,696. The Phase I grant lasted from February to December 2013.

During this phase, Nayak ran the microscope project's "science" side while Agrawal ran its "business" side. *Id.*, PageID 2482, 2495, 2578. Just as ScienceTomorrow proposed in its application, the company contracted with the University of Tennessee to obtain the professor's help with the research. But the university never invoiced ScienceTomorrow for any work, and the company never paid any Phase I funds to the university.

In October 2013, the Department of Energy solicited ScienceTomorrow to apply for Phase II funding of up to a million dollars. The Department imposed a strict December 10 application deadline. Again seeking an SBIR grant or an STTR grant, the couple submitted their application online minutes before the deadline expired.

The Department required ScienceTomorrow to include in its application a "letter of commitment" from any university that it planned to work with during Phase II. Before applying, Nayak had asked the University of Tennessee to commit to a Phase II subcontract of \$300,000.

But the relevant university office did not learn of ScienceTomorrow's proposal in time to finish its review by the deadline. Late on December 10, the university sent ScienceTomorrow a "provisional letter" committing only to a \$221,576 budget. Rather than attach this letter to the application, Nayak and Agrawal sent the Department a forged university letter committing to \$300,006. According to Nayak, Agrawal engaged in this fraud on her own while he scrambled to complete the application's technical provisions. According to Agrawal, she forged the letter at Nayak's request.

Either way, the Department awarded ScienceTomorrow a Phase II SBIR grant in early 2014. That spring, the Department and ScienceTomorrow negotiated the final budget. The Department ultimately approved a Phase II budget of \$999,266. This budget allocated \$300,006 for the University of Tennessee's services. The Department agreed to distribute these funds to ScienceTomorrow over a two-year period from April 2014 to April 2016.

Soon after the couple submitted the Phase II application, they moved to Kentucky. Agrawal had learned that Kentucky ran a grant-matching program that offered additional money to companies awarded SBIR grants. The couple took advantage of this program. Kentucky gave ScienceTomorrow another \$500,000 to match part of its Phase II award.

In the summer of 2014, Nayak began the Phase II work with other engineers that the company hired. That August, however, Nayak and Agrawal had a falling out over a personnel issue. According to Nayak, Agrawal fired him. According to Agrawal, Nayak quit. They separated immediately and formally divorced two years later.

Agrawal described Nayak's departure as a "disaster" because he had all the technical expertise. Agrawal Tr., R.147, PageID 3851. But she decided to keep the project alive without him and alerted the Department of Energy of the change. That said, she departed from the approved budget without the Department's permission. For example, ScienceTomorrow never entered a Phase II subcontract with the University of Tennessee and never paid the university any of the budgeted \$300,006. Agrawal also used the Phase II funds on the \$146,000 that it cost her to obtain an MBA from the University of Chicago. Apart from her MBA, a government

accountant estimated that Agrawal kept \$444,080.66 of the grant—well above the amount allocated to her as salary.

Ultimately, ScienceTomorrow created a prototype device and obtained U.S. patents on it. Agrawal later certified to the Department that ScienceTomorrow spent all the Phase I and Phase II funds. Federal records showed that the Department disbursed \$1,152,962 to ScienceTomorrow. State records showed that Kentucky gave the company \$500,000 in grant-matching funds. But a government audit of ScienceTomorrow's financial records suggested that the company did not spend (or return to the Department of Energy) some \$319,000 of the grant funds. Agrawal also conceded that the amounts in her final certification reports were "inconsistent" with the company's actual spending. Agrawal Tr., R.148, PageID 3979.

ScienceTomorrow's grants came to the attention of law enforcement when the Environmental Protection Agency began to investigate Nayak for other grant fraud. Investigators soon uncovered the forged letter in ScienceTomorrow's Phase II application. Agrawal admitted to an investigator that she and Nayak had "quickly modified" this letter just before the application deadline. Hinderer Tr., R.145, PageID 3468.

The federal government criminally charged Agrawal and Nayak. Nayak pleaded guilty to wire-fraud offenses. *See United States v. Nayak*, 2023 WL 2911659, at *1 (6th Cir. Apr. 12, 2023). Agrawal stood trial on three counts: conspiring with Nayak to commit wire fraud, in violation of 18 U.S.C. § 1349; committing wire fraud, in violation of 18 U.S.C. § 1343; and laundering the ill-gotten money, in violation of 18 U.S.C. § 1957. At trial, the government alleged that Agrawal had committed wire fraud (and conspired to do so) by fraudulently obtaining the Phase II grant and by fraudulently certifying how ScienceTomorrow had spent the grants from both phases. The government also alleged that she had committed money laundering by spending the fraud's proceeds on her MBA. A jury convicted her of all three crimes.

At sentencing, the district court identified Agrawal's guidelines range as 51 to 63 months' imprisonment. The court varied downward by imposing a 42-month sentence. It also ordered Agrawal to pay \$1,048,255 in restitution to the Department of Energy and \$500,000 in restitution to Kentucky. The court entered a separate forfeiture judgment against Agrawal for

\$1,548,000. It allowed the United States to satisfy this judgment by seizing Agrawal's house and the funds in several financial accounts.

Agrawal appealed. She now raises challenges to both her convictions and her sentence.

II. Challenges to Convictions

Agrawal seeks to overturn her three convictions on the ground that the district court committed evidentiary and instructional errors at trial. We need not consider the merits of any of her claims because the government has shown that the alleged errors did not harm her.

A. Evidentiary Challenges

Agrawal challenges five of the district court's evidentiary rulings. She alleges that the court wrongly *excluded* four pieces of evidence: her expert's testimony about ScienceTomorrow's financial records; ScienceTomorrow's Arizona tax records; her testimony about Nayak's statements on the night they applied for the Phase II grant; and her emails with an employee at Penn State University about a different grant. She also alleges that the court wrongly *admitted* one piece of evidence: an email from a Kentucky official suggesting that an error in one of Agrawal's invoices could qualify as grant fraud. We would normally review these evidentiary rulings for an abuse of discretion. *See United States v. Kettles*, 970 F.3d 637, 643 (6th Cir. 2020). But we opt to bypass the merits because the alleged errors did not matter to the outcome.

The Federal Rules of Criminal Procedure instruct courts to "disregard[]" "[a]ny error, defect, irregularity, or variance" at a criminal trial "that does not affect substantial rights[.]" Fed. R. Crim. P. 52(b). This harmless-error rule applies to a district court's error in admitting or excluding evidence. *See Kettles*, 970 F.3d at 643. We have used different standards to describe our harmless-error test in this evidentiary context. *See id.* Some cases ask whether the government has shown "by a preponderance" of the evidence that the claimed error did not affect the verdict. *Id.* Other cases ask whether the trial record provides a "fair assurance" that the alleged error did not "substantially sway[]" the verdict. *Id.* (citation omitted). As in the past, we need not decide whether any daylight exists between these two formulations because the

government has shown that Agrawal's alleged errors were harmless under either test. *See id.* at 645; *see also United States v. Dotson*, 2022 WL 6973397, at *6 (6th Cir. Oct. 12, 2022).

To explain why, we begin with a big-picture point. The jury convicted Agrawal of wire fraud, conspiracy to commit wire fraud, and money laundering. *See* 18 U.S.C. §§ 1343, 1349, 1957. Each statute required the government to prove that Agrawal acted with a certain state of mind. The wire-fraud offenses required proof that Agrawal *intended* to deprive the Department of Energy of its money through false representations or that she *knowingly* and willfully joined an agreement designed to accomplish that result. *See United States v. Cunningham*, 679 F.3d 355, 371, 373 (6th Cir. 2012); *United States v. Faulkenberry*, 614 F.3d 573, 581 (6th Cir. 2010). And the money-laundering offense required her to *know* that she had "criminally derived" the funds she used to pay for her Chicago MBA. *United States v. Persaud*, 866 F.3d 371, 385 (6th Cir. 2017).

Agrawal's alleged evidentiary errors all implicate these scienter elements. As a general matter, however, the government presented "overwhelming" evidence that Agrawal acted with the required state of mind. United States v. Smith, 749 F.3d 465, 495 (6th Cir. 2014). On the front end, the evidence left no doubt that Agrawal lied to obtain the Phase II grant. When Agrawal and Nayak applied for the grant, Agrawal confessed at trial, she "[r]eluctantly" agreed to Nayak's request that she forge the commitment letter from the University of Tennessee by changing the amount from \$221,576 to \$300,006. Agrawal Tr., R.148, PageID 3971. The government even introduced an email from Agrawal to Nayak at 10:26 p.m. on December 10, 2013, with the forged letter attached and a subject line stating that it was the "letter" from the university. Hinderer Tr., R.145, PageID 3492. The couple also had a clear motive to increase this number. In their Phase II application, they applied for either an SBIR grant or an STTR grant. And while they received an SBIR grant, the Department's STTR program required as a condition of eligibility that the couple devote at least 30% of their budget (about \$300,000) to a research institution. So the university's actual commitment would have automatically disqualified the project from the STTR program.

On the back end, Agrawal confessed that "[i]t was known to" her that her final certification reports for the Phase I and Phase II grants were "inconsistent" with how

ScienceTomorrow spent the grant funds. Agrawal Tr., R.148, PageID 3979. As one example, she certified that she spent \$48,989 on the Phase I subcontract with the University of Tennessee even though ScienceTomorrow paid the university no money. As another example, her Phase II certification omitted the spending on her MBA. This intentional decision to "conceal" the company's actual expenditures confirmed her knowledge of the fraud. *Cunningham*, 679 F.3d at 371.

When measured against this undisputed evidence suggesting that she acted with the required mental state, the five alleged errors would not have made a difference. *See Kettles*, 970 F.3d at 643. Indeed, the excluded evidence (which Agrawal claims would have helped her defense) either duplicated other evidence or concerned collateral issues. And the admitted evidence (which Agrawal claims prejudiced her defense) concerned an unrelated claim of fraud and merely corroborated other evidence proving her knowledge. We will consider each alleged error in turn.

1. Expert Testimony. Agrawal first challenges the district court's restrictions on her expert's testimony. Defense counsel hoped this testimony would show that Agrawal did not act with an "intent" to defraud the government because her expert would opine that ScienceTomorrow was operating "at a loss" when she was using grant funds. Tr., R.147, PageID 3747. At the outset of her expert's testimony, he explained that he had reviewed ScienceTomorrow's records, including data that Agrawal recorded in a QuickBooks accounting program. Using the QuickBooks records, the expert created a "summary chart" of the company's finances. The chart suggested that ScienceTomorrow's expenses exceeded its income during most of the relevant time.

Eventually, the government objected to the expert's use of this chart. The district court sustained the objection. The court reasoned that Agrawal could not admit the chart into evidence under Federal Rule of Evidence 1006 because she had not shown that the underlying data was too "voluminous" to "be conveniently examined in court." Fed. R. Evid. 1006. It next noted that Agrawal could not use the chart as a "pedagogical device" under Federal Rule of Evidence 601(a) because Agrawal had not admitted the underlying data on which the expert had based the chart. *United States v. Bray*, 139 F.3d 1104, 1111 (6th Cir. 1998). The court thus struck the

chart "from the record" and told the jury to "disregard" the "chart" and the expert's "testimony based on" it. Tr., R.147, PageID 3767. Nevertheless, the court still permitted defense counsel to ask the expert "if he has reached opinions and the basis for those opinions[.]" *Id.*, PageID 3766.

On appeal, Agrawal disavows any claim that the district court wrongly refused to admit the chart or allow her expert to use it. Instead, she argues that the court should have allowed her expert to testify about ScienceTomorrow's underlying financial records—whether or not Agrawal admitted them into evidence. She reasons that Federal Rule of Evidence 703 permits an expert to give an opinion based on hearsay and to alert the jury of the otherwise inadmissible hearsay on which the opinion rests. *See Williams v. Illinois*, 567 U.S. 50, 77–78 (2012) (plurality opinion); *United States v. Jaffal*, 79 F.4th 582, 599 (6th Cir. 2023).

Even if we assume this claim, Agrawal has not shown how this error harmed her. For starters, Agrawal does not identify a single financial record that the expert wanted to (but could not) discuss. To the contrary, the expert testified extensively about ScienceTomorrow's finances after the court sustained the government's objection. For example, the expert opined that, based on his records review, the company overspent on the Phase II grant by about \$200,000. He opined that regulations permitted Agrawal to spend grant funds on her \$146,000 in tuition but that the cost overruns meant that she arguably did not use any of the funds on it. He opined that Agrawal paid herself \$133,793 less than she should have. He opined that laypeople have a difficult time understanding complex accounting concepts and that Agrawal's accounting records contained many mistakes. And he opined that Agrawal had not spent any grant funds on unnecessary or personal expenses.

In addition, Agrawal's theory of error would have allowed the jury to consider the financial records for a narrow purpose. Under Rule 703, Agrawal could not have asked her expert about the records to prove *their truth*; rather, she could have asked about the records only to show the *basis of the expert's opinion*. *See Williams*, 567 U.S. at 77–78 (plurality opinion). That inherent limit on the use to which Agrawal could have put this evidence further eliminates any harmful effects from the district court's ruling. *Cf. United States v. Isiwele*, 635 F.3d 196, 201 (5th Cir. 2011); *Cook v. Navistar Int'l Transp. Corp.*, 940 F.2d 207, 213 (7th Cir. 1991).

For both reasons, Agrawal has not shown a harmful error merely with her conclusory claim that her expert could not talk about "the underlying data." Reply Br. 10.

- 2. Arizona Tax Records. Agrawal next challenges the district court's decision to exclude ScienceTomorrow's 2014 Arizona tax returns as irrelevant. These returns allegedly showed that the company paid \$76,000 in "wages" to Arizona employees. Agrawal sought to introduce the tax records to rebut a government accountant's claim that she wrongly kept hundreds of thousands of dollars in unused grant funds. But Agrawal ignores the government's response that any error in excluding the records did not harm her. We agree with the government. For one thing, the government accountant conceded that she examined only Kentucky tax information when calculating the wages that the company paid. For another thing, Agrawal's expert criticized the accountant for relying on Kentucky records alone and ignoring Arizona records showing "about \$70,000" in payroll. Bonuccelli Tr., R.147, PageID 3783. Rightly or wrongly, the district court did not restrict how the jury could use this expert testimony even though Agrawal did not introduce the underlying records. And bank records confirmed that the company was paying the Arizona Department of Revenue. So the inclusion of the Arizona tax returns would have merely duplicated other evidence supporting the same defense. See United States v. Blackwell, 459 F.3d 739, 755 (6th Cir. 2006); see also United States v. Funzie, 543 F. App'x 545, 551–52 (6th Cir. 2013).
- 3. Nayak's Statements. Agrawal also argues that the district court wrongly stopped her from revealing what Nayak had told her on the night they forged the University of Tennessee letter. Nayak alleged that Agrawal created this counterfeit letter on her own. To rebut this charge, Agrawal initially testified that the couple got into a fight over the letter. According to Agrawal, she then would have said that Nayak "instruct[ed] her to create" it. Appellant's Br. 34. But the court held that the hearsay rules barred her from disclosing Nayak's request. Agrawal now asserts that the court should have admitted the statement as impeachment evidence against Nayak under Federal Rule of Evidence 613(b). Here again, however, the jury heard evidence "of substantially the same nature" as the excluded testimony, so the exclusion did not affect this defense theory. Funzie, 543 F. App'x at 552 (quoting United States v. Holloway, 740 F.2d 1373, 1379 (6th Cir. 1984)). During cross-examination, a prosecutor asked Agrawal point-blank: "And

[Nayak] asked you to modify the letter to \$300,000; correct?" Agrawal Tr., R.148, PageID 3971. She answered "Yes," adding that she "[r]eluctantly" agreed. *Id.* Agrawal also does not claim that Nayak said anything else that she sought to (but could not) introduce.

4. Penn State Emails. Agrawal further asserts that the district court mistakenly excluded emails she exchanged with a government witness who worked at Penn State University. This Penn State employee and Agrawal had gotten into a debate over an invoice that Penn State belatedly sent to ScienceTomorrow for work on a different grant. During cross-examination, defense counsel sought to admit emails showing Penn State's concession that it had breached its contract with ScienceTomorrow. But the district court did not admit these emails because the Penn State employee could not recall them or how Penn State had resolved the dispute.

This ruling was harmless because the emails concerned a "collateral" issue. *See United States v. Quintana*, 763 F. App'x 422, 424 (6th Cir. 2019); *see also United States v. Adams*, 996 F.3d 514, 522 (8th Cir. 2021). The government introduced the Penn State employee's testimony for a narrow purpose: to show that Agrawal knew she must return unused grant funds to the Department of Energy. In a different email, Agrawal told the employee that ScienceTomorrow no longer had the (unrelated) grant money to pay Penn State's invoice because the "remaining funds needed to be returned to the federal agency" upon the project's completion. Hinderer Tr., R.146, PageID 3511. The question whether Penn State breached the contract had little to do with Agrawal's knowledge of this requirement to return unused grant funds. And nothing about Penn State's breach would have helped Agrawal prove that she did not commit grant fraud or would have otherwise "affect[ed] the outcome" of this case. *Kettles*, 970 F.3d at 643.

5. Fraud Accusation. Agrawal lastly challenges the district court's admission of an email from a state employee who managed Kentucky's grant-matching program. This employee reviewed Agrawal's invoices requesting reimbursement for ScienceTomorrow's expenses on the Phase II project. At one point, the employee identified a duplicate rent receipt in one of Agrawal's invoices. Because Kentucky had already reimbursed ScienceTomorrow for this rent, the employee emailed Agrawal asking her to remove the double-billed receipt and to recheck the invoice for other errors. He added: "Your current invoice if paid as submitted would be considered grant fraud possibly punishable by prison and fines." Gov't Ex. 4J, at 1.

Agrawal objected to the admission of this statement on the ground that the employee had asserted both a "wildly prejudicial" statement and a "legal conclusion." Tr., R.145, PageID 3386–87. The district court overruled the objection, reasoning that the email was relevant to Agrawal's "knowledge" of the propriety of her conduct and was not overly prejudicial. *Id.*, PageID 3387. On appeal, Agrawal renews her argument that the statement qualified as an impermissible legal conclusion that "embraced the ultimate question" whether Agrawal committed fraud. Appellant's Br. 37.

For a final time, however, Agrawal does not respond to the government's claim that this purported error caused her no harm. To begin with, the employee's fraud allegation did not concern the fraud at issue in Agrawal's trial. The email showed that Agrawal resubmitted a corrected invoice eliminating the alleged double billing. The employee thus conceded that Agrawal had corrected this oversight. Her efforts to fix the invoice could bolster her defense that she committed only accidental billing errors. In addition, plenty of other evidence showed that Agrawal knew that the government might treat the improper use of grant funds as fraudulent. Among other things, she had to certify in her grant applications and final reports that she knew false statements could lead to criminal or civil penalties.

All told, none of these evidentiary issues—even considered collectively—would have affected the outcome of Agrawal's trial. The government presented a seemingly undisputed case that Agrawal knowingly made false statements to obtain and misuse government money. And the district court's alleged errors concerned cumulative evidence or collateral issues.

B. Instructional Challenge

Agrawal next argues that the district court wrongly gave a "deliberate ignorance" or "ostrich" instruction to the jury. *See United States v. Matthews*, 31 F.4th 436, 449 (6th Cir. 2022). This type of instruction prevents a defendant from avoiding liability for a crime by intentionally refusing to learn information about it. *See id.*; *see also Global-Tech Appliances*, *Inc. v. SEB S.A.*, 563 U.S. 754, 766–68 (2011). As a classic example, a drug courier who transports a suitcase full of drugs can knowingly distribute the drugs even if the courier

intentionally refuses to open the suitcase to confirm that drugs are inside. *Cf. Matthews*, 31 F.4th at 445; *United States v. Wilson*, 134 F.3d 855, 868–69 (7th Cir. 1998).

The district court believed that Agrawal's case justified a deliberate-ignorance instruction. The court told the jury it could find that Agrawal knowingly made a false statement to the Department of Energy if she deliberately ignored a high probability that the statement was false:

No one can avoid responsibility for a crime by deliberately ignoring the obvious. If you are convinced that the defendant deliberately ignored a high probability that the application documents and/or subsequent funding documentation submitted to the Department of Energy were false, misleading, or omitted material facts, then you may find that she knew that the application documents and/or subsequent funding documentation were false, misleading, or omitted material facts.

But to find this, you must be convinced beyond a reasonable doubt that the defendant was aware of a high probability that the application documents and/or subsequent funding documentation submitted to the Department of Energy were false, misleading, or omitted material facts, and that the defendant deliberately closed her eyes to what was obvious. Carelessness, or negligence, or foolishness on her part is not the same as knowledge and is not enough to convict. This, of course, is all for you to decide.

Instructions, R.73, PageID 409.

According to Agrawal, the record did not provide a reasonable basis to give this instruction. She has a point. We have held that a district court should "sparingly" give this instruction only when the defendant claims to lack "guilty knowledge" and the evidence would "support an inference of deliberate ignorance." *United States v. Mitchell*, 681 F.3d 867, 876 (6th Cir. 2012) (citation omitted). Here, however, the government identifies nothing to suggest that Agrawal deliberately avoided learning whether she made false statements to the Department. Quite the opposite. Agrawal admitted that she *knew* that the documents she submitted to the Department contained falsehoods.

Ultimately, however, we need not resolve this issue. Even if the court wrongly gave the instruction, the error was harmless. We have long followed a distinct harmless-error test when defendants have argued that a deliberate-ignorance theory lacked a sufficient evidentiary

foundation. *See Matthews*, 31 F.4th at 452; *United States v. Geisen*, 612 F.3d 471, 486–87 (6th Cir. 2010); *United States v. Rayborn*, 491 F.3d 513, 520–21 (6th Cir. 2007); *United States v. Mari*, 47 F.3d 782, 785–87 (6th Cir. 1995). We do not ask whether a "preponderance" of the evidence shows (or a "fair assurance" exists) that the error "did not affect the outcome." *Kettles*, 970 F.3d at 643 (emphasis and citation omitted). Instead, as long as the deliberate-ignorance instruction correctly stated the law, we ask whether the government presented enough evidence to support a conviction based on "the defendant's actual knowledge" (as opposed to the defendant's deliberate ignorance). *Matthews*, 31 F.4th at 452 (quoting *United States v. Ross*, 502 F.3d 521, 528 (6th Cir. 2007)).

This test follows from the Supreme Court's holding that a court should uphold a conviction that could have rested on two alternative theories of liability when sufficient evidence supported one (but not the other) theory. *See Griffin v. United States*, 502 U.S. 46, 56–57 (1991); *Turner v. United States*, 396 U.S. 398, 420 (1970). In that scenario, courts presume that the jury found the defendant guilty based on the valid evidence-backed theory. *See Griffin*, 502 U.S. at 59–60; *Mari*, 47 F.3d at 785–86. So when a court tells a jury that it may convict a defendant based on either the defendant's actual knowledge or the defendant's deliberate ignorance, courts will find any sufficiency-of-the-evidence problems with the deliberate-ignorance instruction harmless if sufficient evidence showed the defendant's actual knowledge. *See Mari*, 47 F.3d at 785–86.

Here, Agrawal cannot argue that the prosecution presented insufficient evidence of her knowledge. After all, her claim of error rests on the premise that she confessed to knowing of the false statements. Since Agrawal's confessions alone would allow a "rational jury" to find her knowledge, any error in giving the instruction "was harmless." *Matthews*, 31 F.4th at 452.

Agrawal responds that this relaxed harmless-error test does not apply to claims that a district court's deliberate-ignorance instruction "misstated the law on deliberate ignorance." *Rayborn*, 491 F.3d at 520. And she alleges that the instruction in her case misstated the law in two ways. She initially argues that this deliberate-ignorance theory can apply only to conspiracy offenses—not to her two substantive offenses (wire fraud and money laundering). She is mistaken. As a matter of logic, the idea undergirding the theory (that people "who know enough

to blind themselves to direct proof of critical facts in effect have actual knowledge of those facts") applies just as much to substantive offenses as it does to conspiracy offenses. *Global-Tech*, 563 U.S. at 766. As a matter of precedent, we have upheld deliberate-ignorance instructions outside the conspiracy context. *See United States v. Reichert*, 747 F.3d 445, 450–53 (6th Cir. 2014); *United States v. Holloway*, 731 F.2d 378, 380–81 (6th Cir. 1984) (per curiam).

Agrawal next argues that the district court's instruction did not accurately convey the elements for proving deliberate ignorance. Yet the court modeled its instruction on our pattern deliberate-ignorance instruction. *See Matthews*, 31 F.4th at 450 n.3. And we have "repeatedly" described that pattern instruction as "an accurate statement of the law." *United States v. Daneshvar*, 925 F.3d 766, 782 n.5 (6th Cir. 2019) (collecting cases).

That may be so, Agrawal says, but the Supreme Court changed things in Global-Tech. That case identified two elements to prove a defendant's "willful blindness" (what we call deliberate ignorance). 563 U.S. at 769. According to Global-Tech, a defendant must "subjectively believe that there is a high probability that a fact exists" and "must take deliberate actions to avoid learning of that fact." Id. Agrawal does not dispute that our pattern instruction covered the first element. It told the jury that she must have known "of a high probability" that the documents she submitted to the Department of Energy contained false statements. Instructions, R.73, PageID 409; see Matthews, 31 F.4th at 450 n.3. Agrawal instead says that the instruction did not articulate Global-Tech's second element: that the defendant took "deliberate actions to avoid learning" the critical fact. 563 U.S. at 769. We have twice rejected the same argument. See Reichert, 747 F.3d at 451; see also United States v. Allen, 712 F. App'x 527, 537 (6th Cir. 2017). As applied here, our pattern instruction required the jury to find that Agrawal "deliberately closed her eyes to" whether the statements were false. Instructions, R.73, PageID 409. This text adequately conveyed the requirement that she must have engaged in an intentional act to avoid the truth. Reichert, 747 F.3d at 451. And because the instruction accurately stated the law, the court at most committed a harmless error by giving it. See Matthews, 31 F.4th at 452.

III. Challenges to Sentence

Turning to her sentence, Agrawal argues that the district court identified an incorrect guidelines range, miscalculated the restitution amounts that she owed to her victims, and entered an illegal forfeiture judgment. All of these challenges also fall short.

A. Guidelines Challenge

Agrawal starts with the claim that the district court chose the wrong guidelines range and so imposed a "procedurally unreasonable sentence." *United States v. Riccardi*, 989 F.3d 476, 481 (6th Cir. 2021). The fraud guideline instructs a district court to increase a defendant's offense level based on the amount of the "loss" when determining the defendant's guidelines range. U.S.S.G. § 2B1.1(b)(1). For example, a defendant who caused "[m]ore than \$550,000" in loss receives a 14-level bump to the offense level, whereas a defendant who caused "[m]ore than \$1,500,000" in loss receives a 16-level bump. *Id.* § 2B1.1(b)(1)(H)–(I). While the fraud guideline makes the "loss" critical, it does not define that word. But the guideline's commentary fills in the gaps with "pages" of instructions on how to calculate the loss in different situations. *United States v. Kozerski*, 969 F.3d 310, 313 (6th Cir. 2020). Both parties accept that the commentary's instructions adequately interpret the guideline, so we may take their validity as a given. *Compare United States v. You*, 74 F.4th 378, 396–99 (6th Cir. 2023), *with Riccardi*, 989 F.3d at 483–89. The commentary generally defines loss as the "greater of actual loss or intended loss." U.S.S.G. § 2B1.1 cmt. n.3(A). It then defines "actual loss" as "the reasonably foreseeable pecuniary harm that resulted from the offense." *Id.* § 2B1.1 cmt. n.3(A) & (A)(i).

The district court here adopted the presentence report's conclusion that Agrawal's fraud caused \$1,548,255 in "actual loss." Sent. Tr., R.152, PageID 4186–87, 4338–40. The court included three amounts in this figure: (1) the \$48,989 of the Phase I grant that Agrawal falsely certified paying to the University of Tennessee; (2) the entire \$999,266 that her company received from the Phase II grant; and (3) the \$500,000 that the company received from Kentucky's grant-matching program. We treat the court's "methodology for calculating" this loss amount as a legal conclusion subject to de novo review. *Riccardi*, 989 F.3d at 481 (citation omitted). But we treat the district court's application of its chosen formula to this case's

evidentiary record as a finding about the historical facts reviewed for clear error. *See United States v. Washington*, 715 F.3d 975, 984 (6th Cir. 2013).

According to Agrawal, the district court's chosen number overestimates the amount of the loss. How? She claims that the court misread two of the commentary's rules in this grant context. *First*, she argues that the district court misapplied the commentary's "government-benefits" rule. *See* U.S.S.G § 2B1.1 cmt. n.3(F)(ii). *Second*, she argues that the court wrongly failed to give her credit for the services that ScienceTomorrow provided under the commentary's "credits-against-loss" rule. *See id.* § 2B1.1 cmt. n.3(E)(i). She is twice mistaken.

1. Government-Benefits Rule. Agrawal first alleges that the "special rule[]" for "government benefits" applies to her case. Id. § 2B1.1 cmt. n.3(F)(ii). The government does not dispute this point, so we may assume it on appeal. The government-benefits rule creates a loss framework for those who receive government "grants":

In a case involving government benefits (e.g., grants, loans, entitlement program payments), loss shall be considered to be not less than the value of the benefits obtained by unintended recipients or diverted to unintended uses, as the case may be. For example, if the defendant was the intended recipient of food stamps having a value of \$100 but fraudulently received food stamps having a value of \$150, loss is \$50.

Id. This text distinguishes "unintended recipients" from "unintended uses." Id.

Start with unintended *recipients*. The rule makes clear that a district court should calculate the loss as "not less than the value of" the *total* amount of grants that "unintended recipients" receive. *Id.* This result might occur if, for example, ineligible applicants fraudulently obtain grants or benefits. So if an ineligible disability-benefits applicant falsely claims to be unemployed (an eligibility requirement for some disability benefits), the loss will equal the full amount of benefits because the applicant should have "obtained" nothing. *Id.*; *cf. United States v. Whicker*, 628 F. App'x 361, 366–67 (6th Cir. 2015); *United States v. Killen*, 761 F.3d 945, 950 (8th Cir. 2014).

Turn to unintended *uses*. The rule makes clear that a district court should calculate the loss as "not less than the value of" the *portion* of grants that otherwise eligible grantees divert to

"unintended uses[.]" U.S.S.G. § 2B1.1 cmt. n.3(F)(ii). This result might occur if, for example, eligible recipients rely on fraud to obtain a grant or benefit amount larger than the law authorized them to receive. So if a welfare recipient lies about her income to obtain \$150 worth of food stamps (rather than the \$100 to which her income legally entitles her), the loss will equal the portion "diverted" to the unintended use (the \$50 worth of excess food stamps). *Id*.

In short, both the "unintended recipient" and the "unintended use" scenarios require a district court to engage in the same basic inquiry. The court should calculate the "net loss" by subtracting the amount that the recipient would have received from the government if it had known of the fraud from the amount the recipient actually received from the government. United States v. Slaton, 801 F.3d 1308, 1317–20 (11th Cir. 2015); see also United States v. Rivera-Ortiz, 14 F.4th 91, 103 (1st Cir. 2021). When an unqualified recipient would have received no grant at all if the government had known of the fraud, the "net loss" equals the total amount of the grant. See, e.g., United States v. Davis, 53 F.4th 833, 849–50, 851 (5th Cir. 2022); United States v. Aldissi, 758 F. App'x 694, 712–14 (11th Cir. 2018); cf. United States v. Nagle, 803 F.3d 167, 181 (3d Cir. 2015). But when a recipient was "lawfully entitled" to a smaller grant and relied on fraud to inflate the grant's size, the "net loss" equals only the portion of the grant tainted by the fraud. United States v. Harms, 442 F.3d 367, 380 (5th Cir. 2006); see, e.g., United States v. Catone, 769 F.3d 866, 876–77 (4th Cir. 2014); cf. United States v. Shulick, 18 F.4th 91, 114 (3d Cir. 2021).

We must apply this framework to each of the three components of the district court's loss amount: the entire Phase II grant, the entire Kentucky grant, and a portion of the Phase I grant.

Phase II Grant. Agrawal first challenges the district court's decision to treat the *entire* Phase II grant (\$999,266) as the "loss" from the fraud connected to this grant. To reach this result, the court adopted its reasoning in an "earlier memorandum opinion" that explained its restitution award in Nayak's companion case. Sent. Tr., R.152, PageID 4334, 4339–40 (discussing *United States v. Nayak*, 2022 WL 1433008 (E.D. Ky. May 5, 2022)). The court reasoned that Agrawal and Nayak made "false representations" in the Phase II grant application by forging the letter from the University of Tennessee to suggest that it had agreed to a \$300,006 budget rather than a \$221,576 budget. *Id.*, PageID 4335, 4340; *Nayak*, 2022 WL 1433008, at *1.

The court in Nayak's case also found that the Department "would not have awarded" Phase II funding to ScienceTomorrow if it had known of this misrepresentation. *Nayak*, 2022 WL 1433008, at *9. Effectively, then, the court treated ScienceTomorrow as an "unintended recipient[]" that was not entitled to *any* of the Phase II grant. U.S.S.G. § 2B1.1 cmt. n.3(F)(ii).

We see no reversible error in this conclusion. At the outset, this case falls in between existing precedent on the government-benefits rule. On the one hand, Agrawal lied about an issue (the amount that ScienceTomorrow would subgrant to a university) that did not concern the company's statutory or regulatory *eligibility* for the SBIR grant. *Cf. Killen*, 761 F.3d at 950. The Department makes no claim that any provision in the statute governing the SBIR program would have rendered ScienceTomorrow ineligible for a grant if the company had submitted the authentic letter with the smaller university budget. *See* 15 U.S.C. § 638. And although the authentic letter would not have met the Department's bright-line regulatory rule that grantees must devote 30% of grants to research institutions under the *STTR* program, the agency has not imposed the same "requirement" under the *SBIR* program. Oliver Tr., R.142, PageID 2748.

On the other hand, the SBIR statute and regulations would not have rendered ScienceTomorrow legally "entitled" to a smaller Phase II grant if it had submitted the authentic letter. *Harms*, 442 F.3d at 380. Congress instead delegated broad discretion to each agency to "unilaterally" "evaluate proposals" for SBIR grants and "unilaterally select awardees" whom the agency finds most deserving of awards. 15 U.S.C. § 638(g)(4)(A), (5). This program thus differs from, say, a public-assistance program that mechanically delineates the types of beneficiaries to which an agency *must* grant benefits. *See Harms*, 442 F.3d at 380. In that scenario, even if an applicant had lied to obtain a larger award, this lie would not change the fact that the law entitled the applicant to receive some benefits with or without the fraud. *See Catone*, 769 F.3d at 876–77.

So how should we decide whether ScienceTomorrow qualifies as an "unintended recipient" of this Phase II grant or an intended recipient that spent a part of the Phase II funds on "unintended uses"? For this type of discretionary grant program, our answer rests on a pure question of historical fact about the materiality of the false statement. *Cf. Universal Health Servs.*, *Inc. v. United States*, 579 U.S. 176, 192–96 (2016). We must ask whether the

Department would have still awarded ScienceTomorrow a Phase II grant if it had known that Agrawal had forged the letter by inflating the amount earmarked to the university. If the Department would have declined to award ScienceTomorrow a grant in light of Agrawal's fraud, it would not have "legitimately paid" *any* of the Phase II funds to the company. *Rivera-Ortiz*, 14 F.4th at 103. Put differently, because the "proper payments" would equal zero in that situation, the "improper payments" would equal the total grant. *Killen*, 761 F.3d at 950. And ScienceTomorrow would qualify as an "unintended recipient[]" of the grant funds. U.S.S.G. § 2B1.1 cmt. n.3(F)(ii).

Applying this methodology here, the district court did not commit a clear error by finding that the Department would not have awarded Agrawal a Phase II grant if it had known of the forged letter. *See Riccardi*, 989 F.3d at 481; *see also Aldissi*, 758 F. App'x at 713–14. Consider the testimony of Manny Oliver, the director of the Department's SBIR and STTR programs who oversaw grant selections. He stated unequivocally that the Department would have denied a grant to ScienceTomorrow if it had known of the false statement in the company's application. Oliver Tr., R.142, PageID 2738–39. Indeed, the forged letter concerned an important matter. ScienceTomorrow's application suggested that the university (and its "world-renowned scientist" on scanning electron microscopes) would work more on the microscope project than the university itself had committed to undertake. *Nayak*, 2022 WL 1433008, at *9.

Agrawal's responses do not change things. She first points to the testimony of Mark Sojka, a Department employee who administered these grants. He testified that the fraud "might not have impacted the award; it might have impacted the award amount." Sojka Tr., R.143, PageID 2870. But Sojka's office did not get "involved in the merit review process"; rather, it oversaw the administration of grant awards "once" the Department had selected recipients. Sojka Tr., R.142, PageID 2779. So Oliver had more knowledge on this topic, and he left no doubt that the Department would not have funded a project with a "false letter" like Agrawal's. Oliver Tr., R.142, PageID 2749. At most, Sojka's testimony creates two "plausible" views of the evidence on this factual question. *United States v. O'Lear*, 90 F.4th 519, 536 (6th Cir. 2024) (citation omitted). That type of evidentiary conflict was for the district court to resolve. *See id.*

Our deferential standard of review for this factual issue also rebuts Agrawal's reliance on *United States v. Near*, 708 F. App'x 590 (11th Cir. 2017) (per curiam). There, the defendants received SBIR grants but did not follow their proposed budgets. *Id.* at 594–95. While the defendants had diverted funds to nonbudgeted items, the district court found that they did not qualify as "unintended recipients" (that is, it found that they would have received the grants despite their later fraud in the use of the funds). *Id.* at 603. The Eleventh Circuit upheld this factual finding under clear-error review. *Id.* Here, by contrast, the district court reached the opposite finding: that ScienceTomorrow would *not* have received the Phase II award if the Department had known of the application fraud. Like *Near*, we see no basis to second-guess this finding given our deferential standard of review. Indeed, the district court's finding makes this case more like the Eleventh Circuit's subsequent decision in *Aldissi*. There, the district court found that defendants who received SBIR grants were "unintended recipients," and the Eleventh Circuit again upheld this finding under clear-error review. 758 F. App'x at 713 & n.13. We reach the same result.

Kentucky Grant. Agrawal next argues that the district court wrongly included the full \$500,000 that she received under Kentucky's grant-matching program as part of the "loss." This argument fails for the same reason: the district court did not commit clear error by finding that Kentucky would not have awarded this grant if the Department had known of her fraud and denied her Phase II application. A Kentucky administrator explained that only companies that had received federal SBIR funding even became "eligible" for state-matching funds. Ronald Tr., R.145, PageID 3365–66. Another Kentucky administrator called the federal grant a "foundational requirement" and "eligibility component" to any receipt of the state funds. Quarterman Tr., R.152, PageID 4252, 4255. She added that Kentucky sought restitution from Agrawal here because her "misrepresentations" in the federal application rendered her ineligible "for a state-matching funds award." *Id.*, PageID 4259. So the district court's finding that ScienceTomorrow would not have received a Phase II grant if the Department had known of the fraud plausibly allowed the court to treat the company as an ineligible "unintended recipient[]" of the state-matching funds too. U.S.S.G. § 2B1.1 cmt. n.3(F)(ii); see O'Lear, 90 F.4th at 536.

In response, Agrawal notes that she did not make any "fraudulent statements to Kentucky" when applying for those state funds. Appellant's Br. 22. She fails to explain why this fact matters. Because her false statements to the Department would have led it to deny her Phase II application, those same statements rendered her "categorically ineligible" for the state funds under the Kentucky administrators' view of the state program. *Davis*, 53 F.4th at 848, 851. And nothing in the language of the government-benefits rule (which sets a *floor* for the loss by stating that the loss shall be "not less than" certain amounts) requires a court to look at only the loss of the most immediate victim. U.S.S.G. § 2B1.1 cmt. n.3(F)(ii). More generally, the commentary's generic definition of "actual loss" likewise encompasses *all* "reasonably foreseeable pecuniary harm" from the fraud—not just the harm tied to a direct victim. *Id*. § 2B1.1 cmt. n.3(A) & (A)(i).

Phase I Grant. Agrawal lastly argues that the district court wrongly found that her fraud caused the Department to lose \$48,989 in Phase I funds. Unlike the court's analysis concerning the Phase II grant, the court did not treat ScienceTomorrow as an "unintended recipient[]" of the Phase I grant. *Id.* § 2B1.1 cmt. n.3(F)(ii). It instead treated the company as a grant-eligible intended recipient that had "diverted" the specified portion of the full \$153,696 grant to "unintended uses." *Id.*

Agrawal does not challenge this "methodology" for calculating the Phase I loss. *Riccardi*, 989 F.3d at 481 (citation omitted). And we again see no see no clear error in the factual finding that Agrawal spent \$48,989 in unintended ways. *See id.* The undisputed record shows that Agrawal certified to the Department that her company spent this amount on the Phase I subcontract with the University of Tennessee. And the undisputed record shows that she did not pay this money to the university. Lastly, the district court plausibly concluded that these funds "had not been" spent and so should have been returned. Sent. Tr., R.152, PageID 4338. Among other evidence, the government accountant suggested that ScienceTomorrow had hundreds of thousands of dollars of unused funds that Agrawal kept. Agrawal even admitted to an investigator that she "lived off" these leftover funds. Hinderer Tr., R.151, PageID 4114.

Agrawal responds that her emails show she tried to get university employees to bill ScienceTomorrow, but they failed to do so. Agrawal also claims that, unlike an STTR grant, this

SBIR grant did not require ScienceTomorrow to work with a university as a condition of eligibility. Both points are true but irrelevant. Just because she tried to get the university to bill for its work did not give her the right to lie to the Department that she actually paid it or to keep the unused funds instead of returning them to the Department. And just because she did not need to dedicate a portion of the budget to the university does not mean that she could lie about having done so.

2. Credit-Against-Loss Rule. Agrawal alternatively contends that the district court should have credited ScienceTomorrow's "legitimate expenses" and the "value" that its research created against the court's aggregate loss amount. Appellant's Br. 19. The commentary's credit-against-loss rule tells district courts to reduce the loss amount by, among other things, "the fair market value of . . . the services rendered, by the defendant or other persons acting jointly with the defendant, to the victim before the offense was detected." U.S.S.G. § 2B1.1 cmt. n.3(E)(i).

On appeal, the parties debate whether this credit-against-loss rule can apply in a government-benefits case like this one. As Agrawal notes, the Third Circuit invoked the credit-against-loss rule in *Nagle*, which assumed that the government-benefits rule also applied. *See* 803 F.3d at 180–82. Yet, as the government retorts, most cases applying this credit-against-loss rule involve fraud in set-aside programs awarding procurement contracts to disadvantaged groups (such as disabled veterans). *See Kozerski*, 969 F.3d at 313–16; *see also United States v. Harris*, 821 F.3d 589, 602–08 (5th Cir. 2016); *United States v. Martin*, 796 F.3d 1101, 1108–10 (9th Cir. 2015). These cases relied on the credit-against-loss rule in part because the government-benefits rule did *not* apply as the government had contracted to receive tangible goods or services. *See Kozerski*, 969 F.3d at 313. Indeed, the Third Circuit's *Nagle* decision also involved procurement fraud, *see* 803 F.3d at 180, and that court has since held that this type of fraud falls outside the government-benefits rule, *see United States v. Kousisis*, 82 F.4th 230, 248 (3d Cir. 2023).

Ultimately, we can save this debate for another case. Even if the credit-against-loss rule can extend to this government-benefits context, the district court did not err in refusing to credit any amounts against the identified losses. Agrawal proposes two types of offsets on appeal. But one of these offsets has a factual problem and the other has a legal problem.

We begin with the factually problematic offset. Agrawal claims that her grant work led ScienceTomorrow to obtain "two patents" that her expert valued at \$480,000 to \$600,000. Appellant's Br. 19; Sent. Tr., R.152, PageID 4222. Yet Agrawal bore the burden of proving the value of these patents. *See United States v. Reid*, 764 F.3d 528, 534 (6th Cir. 2014); *Washington*, 715 F.3d at 984–85. And the district court found that they had a "de minimis value[.]" Sent. Tr., R.152, PageID 4339. It thus refused to rely on them when calculating the loss amount. Agrawal does not even attempt to show that the court committed a clear error by finding the patents worthless. *Cf. United States v. Kennert*, 2023 WL 4977456, at *3 (6th Cir. Aug. 3, 2023) (per curiam). Nor could she. We have already upheld the district court's identical finding about the value of these patents in Nayak's separate criminal case. *See Nayak*, 2023 WL 2911659, at *2–4. Agrawal points to no additional evidence in this case that might have justified a different result.

Agrawal's other proposed offset has a legal problem. She contends that the district court should have credited her legitimate expenses—such as the wages she paid her employees for work on the project—against the losses that the court found. But the credit-against-loss rule reduces the loss by "the fair market value of" the "services" that Agrawal "rendered" to her "victim," not by the amount of expenses incurred. U.S.S.G. § 2B1.1 cmt. n.3(E)(i). She does not explain how these expenses could qualify as "services" to the Department of Energy or Kentucky. And she does not attempt to place any value on her project's output: the research that these employees conducted. Here again, we have already upheld the district court's finding that this research had no value in Nayak's case. *See Nayak*, 2023 WL 2911659, at *2–4. Agrawal offers us no grounds to depart from *Nayak*'s conclusion.

B. Restitution Challenge

Agrawal next challenges the district court's restitution award. As relevant here, the Mandatory Victims Restitution Act requires district courts to order criminal defendants to "make restitution to" any "identifiable victim or victims" who have "suffered a . . . pecuniary loss." 18 U.S.C. § 3663A(a)(1), (c)(1)(B). The district court's restitution order simply duplicated its "loss" calculation under the fraud guideline. It ordered Agrawal to pay \$1,048,255 to the

Department of Energy (\$48,989 for the Phase I loss and \$999,266 for the Phase II loss) and \$500,000 to Kentucky.

Yet a court's calculation of "loss" under this restitution law need not match its calculation of "loss" under the guideline. The restitution law contains its own text that may (or may not) establish rules different from the guideline. *Cf. United States v. Hills*, 27 F.4th 1155, 1202 (6th Cir. 2022); *United States v. Simpson*, 538 F.3d 459, 465–66 (6th Cir. 2008). The law, for example, does not contain the "pages" of instructions on how to calculate the loss in the guideline's commentary. *Kozerski*, 969 F.3d at 313. And the law defines the word "victim" to cover only individuals who were "directly and proximately harmed" by the defendant's crime. 18 U.S.C. § 3663A(a)(2). Would Kentucky qualify as a direct victim under this definition?

At day's end, we need not decide whether the restitution law's provisions called for a different loss calculation. Agrawal made no independent arguments for reducing the restitution award distinct from her arguments for reducing the "loss" amount under the guidelines. Because she tied the two together, her request for a reduced restitution award fails for all the same reasons that we have already given. *See United States v. Ellis*, 938 F.3d 757, 763 (6th Cir. 2019).

C. Forfeiture Challenge

Agrawal lastly challenges the district court's forfeiture decision. The federal forfeiture laws allow the United States to seize property "derived from or used to facilitate criminal activity." *Honeycutt v. United States*, 581 U.S. 443, 447 (2017). Here, the court entered a "forfeiture money judgment" against Agrawal for \$1,548,000. Prelim. J., R.113, PageID 2099. This number consisted of the approximate amounts that ScienceTomorrow had received from the Department of Energy (\$1,048,000) and from Kentucky (\$500,000) due to Agrawal's fraud. As part of the judgment, the court also authorized the United States to seize Agrawal's home and the funds in ten of her (or ScienceTomorrow's) bank and retirement accounts.

On appeal, Agrawal does not dispute many aspects of the court's forfeiture analysis. She does not dispute that a civil-forfeiture law—18 U.S.C. § 981—applied in this criminal case. 28 U.S.C. § 2461(c). She does not dispute that this law covered her wire-fraud offenses through a series of cross-references. 18 U.S.C. §§ 981(a)(1)(C), 1956(c)(7)(A), 1961(1)(B); see United

States v. Hampton, 732 F.3d 687, 691 n.4 (6th Cir. 2013). And she does not dispute that the district court could issue a "money judgment forfeiture" for the "proceeds" that this fraud generated even if Agrawal did not possess that amount at the time of sentencing. *Hampton*, 732 F.3d at 691–92.

Agrawal instead raises (and we consider) only three narrow challenges. She argues that the court chose an excessive forfeiture amount, allowed the government to seize personal assets lacking a sufficient connection to the fraud, and wrongly treated as "proceeds" money that ScienceTomorrow (not Agrawal) obtained. We will consider each challenge in turn, reviewing the district court's factual findings for clear error and its interpretation of the forfeiture laws de novo. *See United States v. Warshak*, 631 F.3d 266, 331 (6th Cir. 2010).

Forfeiture Amount. Agrawal first contends that the district court wrongly failed to reduce the amount of its forfeiture judgment by her company's costs. The civil-forfeiture law allowed the court to "subject to forfeiture" "[a]ny" "real or personal" "property" that "constitute[d] or [was] derived from proceeds traceable to" Agrawal's fraud. 18 U.S.C. § 981(a)(1)(C) (emphasis added). As relevant here, the district court treated the full amount of the Phase II and Kentucky grants as the fraud "proceeds."

The parties disagree over whether the district court picked the right definition of "proceeds" to reach this result. The civil-forfeiture law contains three different definitions of this word. See 18 U.S.C. § 981(a)(2)(A)–(C). According to Agrawal, the district court should have relied on the "proceeds" definition that applies "[i]n cases involving lawful goods or lawful services that are sold or provided in an illegal manner[.]" Id. § 981(a)(2)(B). This definition excludes from the measure of "proceeds" "the direct costs incurred in providing the goods or services." Id. (emphasis added). The government responds that Agrawal did not provide any "goods" or "services." So it says that her fraud triggers a separate definition covering "unlawful activities," which does not limit the proceeds to a defendant's "net gain or profit[.]" Id. § 981(a)(2)(A).

We need not decide which "proceeds" definition applies to Agrawal's fraud. Even if she could rely on her preferred definition, she still had "the burden of proof with respect to the issue

of direct costs." *Id.* § 981(a)(2)(B). At the court's forfeiture hearing, however, Agrawal did not attempt to prove that any of her company's expenses qualified as lawfully incurred "direct costs" within the meaning of § 981(a)(2)(B). Indeed, her counsel never even used the phrase "direct costs." So we can reject this argument solely on the ground that Agrawal failed to satisfy her burden of proof. *See Whicker*, 628 F. App'x at 369.

Seized Assets. Agrawal next argues that the United States could not seize her home or financial accounts because it failed to show that she "tried to intentionally commingle" the grant funds with this property. Appellant's Br. 28. Her argument overlooks the legal basis for the district court's forfeiture order. When identifying the forfeitable assets in this wire-fraud case, the court followed the "procedures" in the forfeiture law for drug crimes. 28 U.S.C. § 2461(c) (citing 21 U.S.C. § 853). Under those procedures, if Agrawal "commingled" the forfeitable proceeds "with other property which cannot be divided without difficulty," the court could order the forfeiture of "any" of Agrawal's "other property"—that is, the United States could take "[s]ubstitute property" up to the value of the forfeitable proceeds. 21 U.S.C. § 853(p)(1)(E), (2); see United States v. Erpenbeck, 682 F.3d 472, 477 (6th Cir. 2012). The district court found that the United States had met this provision's requirements. Agrawal had commingled the grant funds with other money in the financial accounts (and used a portion of the funds to pay for her home). The court also found it "impossible to distinguish" the grant funds from other money in the financial accounts or other equity in the home. Prelim. J., R.113, PageID 2095–96.

Agrawal disputes none of this. She argues only that the United States *also* needed to prove that she "intentionally" commingled the assets to conceal the "illegal nature" of the grant funds. Appellant's Br. 28 (citing *United States v. Coffman*, 574 F. App'x 541, 561 (6th Cir. 2014)). But the portion of *Coffman* that she cites addressed a different path to the forfeiture of commingled assets in money-laundering cases. 574 F. App'x at 561 (citing 18 U.S.C. § 1956(a)(1)(B)(i)). Another forfeiture provision permits the United States to confiscate any property "involved in" a money-laundering crime. 18 U.S.C. § 982(a)(1). *Coffman* suggests that untainted assets are "involved in" such a crime if the defendant used them to conceal illegally obtained money. 574 F. App'x at 561. This case, by contrast, concerns a different forfeiture

statute (21 U.S.C. § 853(p)) for a different crime (wire fraud). So the part of *Coffman* on which Agrawal relies is irrelevant to her case.

Receipt of Funds. Agrawal lastly invokes Honeycutt to suggest that the United States could not lawfully seize any grant funds that she did not personally possess. In Honeycutt, the Supreme Court interpreted the separate forfeiture law for drug crimes. 581 U.S. at 445. This law permits the United States to seize only the "proceeds" that a defendant "obtained" as a result of a drug crime. 21 U.S.C. § 853(a)(1). The Court held that this text did not allow the United States to seize a defendant's unrelated property if the drug proceeds had been "acquired"—that is, obtained—"by someone else." Honeycutt, 581 U.S. at 450. As Agrawal sees things, Honeycutt barred the district court from confiscating her money because ScienceTomorrow obtained most of the grant funds. But Agrawal forfeited this argument by failing to raise it in the district court, so we must review it only for plain error. See O'Lear, 90 F.4th at 534–35. And we have already held that Honeycutt's logic does not extend to the differently worded civil-forfeiture provision at issue here: 18 U.S.C. § 981(a)(1)(C). See United States v. Sexton, 894 F.3d 787, 798–99 (6th Cir. 2018). Because Sexton binds us, Agrawal has not shown a plain error.

We affirm.