Loss Calculation
Under §2B1.1
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I. INTRODUCTION

This primer discusses common issues regarding loss calculation under §2B1.1(b)(1), which provides for offense level increases based on the amount of loss involved in the offense. Although the primer identifies some of the key cases and concepts relating to loss calculation, it is not a comprehensive compilation of authority nor intended to be a substitute for independent research and analysis of primary sources.

II. OVERVIEW OF LOSS CALCULATION

As a general rule, the guidelines define “loss” as “the greater of actual loss or intended loss.” This loss amount may be reduced by certain credits. For certain offense types, “special rules” for loss calculation apply, and credits against the loss amount may not be available. In all cases, certain items are excluded from the calculation of loss, including interest of any kind.

The court “need only make a reasonable estimate of the loss.” The estimate should be based on available information, and the court may consider a variety of different factors. Notably, loss calculation is distinct from restitution, and there need not be “symmetry” between the two.

Loss is calculated based on all relevant conduct, including charged, uncharged, and acquitted conduct, and is not limited to losses directly attributable to the instant offense.

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2 USSG §2B1.1, comment. (n.3(A)).
3 USSG §2B1.1, comment. (n.3(E)).
4 USSG §2B1.1, comment. (n.3(F)); see also USSG §2B1.1, comment. (n.3(A)(v)) (outlining “Rules of Construction in Certain Cases”).
5 See, e.g., USSG §2B1.1, comment. (n.3(F)(v)) (“no credit provided for the value of [] items or services” provided in certain unlawful misrepresentation schemes).
6 USSG §2B1.1, comment. (n.3(D)).
7 USSG §2B1.1, comment. (n.3(C)); see also United States v. Sullivan, 765 F.3d 712, 716 (7th Cir. 2014) (absolute accuracy is not required as long as the calculation is not “outside the realm of permissible computations (quoting United States v. Jackson, 25 F.3d 327, 330 (6th Cir. 1994))).
8 USSG §2B1.1, comment. (n.3(C))
9 See, e.g., United States v. Kuhrt, 788 F.3d 403, 423 (5th Cir. 2015) (rejecting defendant’s argument that the government’s inability to calculate restitution demonstrates that total loss also cannot be determined because they are “wholly distinct questions”); United States v. Patterson, 595 F.3d 1324, 1327–28 (11th Cir. 2010) (discussing the different definitions of intended loss, actual loss, and restitution); see also United States v. Certified Env’t Serv., 753 F.3d 72, 103 (2d Cir. 2014) (reversing, inter alia, because district court conflated loss and restitution; emphasizing distinctions between these concepts).
10 See USSG §1B1.3 (Relevant Conduct (Factors that Determine the Guideline Range)); United States
For example, where a defendant was convicted of defrauding Medicare but also had defrauded private insurers and patients under the same fraud scheme, the sentencing court properly included the losses not only to the Medicare program but also to private insurers and patients in its loss calculation.\footnote{United States v. Hoffman-Vaile, 568 F.3d 1335, 1343–44 (11th Cir. 2009).}

Under relevant conduct rules, certain losses caused by the acts of others also should be included in the loss calculation.\footnote{See USSG §1B1.3(a)(1)(B) (defining relevant conduct for jointly undertaken activity). Numerous cases have examined when losses caused by other people’s acts qualify as relevant conduct that may be included in the loss calculation. See, e.g., United States v. Igboha, 964 F.3d 501, 510 (6th Cir. 2020); United States v. Moran, 778 F.3d 942, 973–75 (11th Cir. 2015); United States v. Robinson, 603 F.3d 230, 234 (3d Cir. 2010); United States v. Treadwell, 593 F.3d 990, 1002–05 (9th Cir. 2010), overruled on other grounds by United States v. Miller, 953 F.3d 1095 (9th Cir. 2020), cert. denied, 141 S. Ct. 1085 (2021); United States v. Jenkins-Watts, 574 F.3d 950, 961 (8th Cir. 2009); United States v. Mauskar, 557 F.3d 219, 233 (5th Cir. 2009); United States v. Codarcea, 505 F.3d 68, 72 (1st Cir. 2007); United States v. Catalfo, 64 F.3d 1070, 1082–83 (7th Cir. 1995); see also United States v. Offill, 666 F.3d 168, 180 (4th Cir. 2011) (applying same principle to financial gain imputed to defendant in conspiracy).} The court should, however, limit the defendant’s liability to acts of others that were reasonably foreseeable and within the scope of the criminal activity that the defendant “agreed to jointly undertake.”\footnote{See, e.g., United States v. Lloyd, 807 F.3d 1128, 1142, 1145 (9th Cir. 2015) (in securities fraud case, reversing judgment attributing loss from California telemarketing boiler room to defendant managing Florida boiler room because defendant did not design overall scheme, did not pool resources, and was compensated from commissions from only his operation); United States v. Rodriguez, 751 F.3d 1244, 1256–57 (11th Cir. 2014) (defendant in mortgage scheme was properly attributed with losses associated with fraudulent use of her post office box because she “participated in the conspiracy and did not withdraw from it” and moreover because “rerouting the mail was essential to the success of the fraudulent scheme”); United States v. Arojojoye, 753 F.3d 729, 737–39 (7th Cir. 2014) (defendant was properly attributed with losses caused by co-defendants when he created fraudulent documents and false address used in scheme; emphasizing that the district court properly considered supporting evidence “in context and in cumulation”); see also United States v. Sykes, 774 F.3d 1145, 1150–52 (7th Cir. 2014) (analyzing concept of foreseeability in detail).} A court may be reversed if there are insufficient findings on this point.\footnote{See United States v. McClatchey, 316 F.3d 1122, 1128 (10th Cir. 2003) (emphasizing distinction between involvement in conspiracy and scope of jointly undertaken activity); Treadwell, 593 F.3d at 1002 ("[A] district court may not automatically hold an individual defendant responsible for losses attributable to the entire conspiracy, but rather must identify the loss that fell within the scope of the defendant’s agreement with his co-conspirators and was reasonably foreseeable to the defendant.").} Given the focus on foreseeability, a medical biller who processes each bill in a healthcare fraud scheme, for example, may be held accountable for more losses than a physician in the conspiracy who was unable to foresee the full extent of the conspiracy.\footnote{See United States v. Barnes, 979 F.3d 283, 317 (5th Cir. 2020), cert. denied, 142 S. Ct. 94, 142 S. Ct. 96, 142 S. Ct. 95, and 142 S. Ct. 349 (2021); see also United States v. Grady, 18 F.4th 1275, 1292 (11th Cir. 2021) (the district court did not err in holding defendant accountable for entire loss amount arising from co-defendants’ action in vandalizing naval base where evidence showed the defendant helped plan the group’s}
A. Actual Loss

Actual loss, which is often referred to as “but for” loss, is defined as “the reasonably foreseeable pecuniary harm that resulted from the offense.” A loss enhancement may apply even where a defendant personally received no pecuniary gain. Pecuniary harm is reasonably foreseeable if it is “harm that the defendant knew or, under the circumstances, reasonably should have known, was a potential result of the offense.” All reasonably foreseeable losses that flow directly, or indirectly, from a defendant’s conduct should be included in the loss calculation. For example, where a defendant committed mortgage fraud scheme by fraudulently misrepresenting information about her job and income to lenders who she knew were likely to sell the loans to secondary lenders, the court held the defendant caused the banks at issue to assume a risk of default and the loss of unpaid principal on each loan was reasonably foreseeable.

One of the most commonly litigated issues concerning actual loss is whether the harm was, in fact, “reasonably foreseeable.” In determining whether loss is reasonably foreseeable, courts have found that the actual loss must have a causal link to the defendant’s conduct. In one case, a defendant was convicted of converting funds from employees’ paychecks that were intended for medical benefits and of making false statements related to those employees’ health benefits. The “actual loss” was calculated using the total amount of unpaid medical claims made by the employees. However, the Seventh Circuit reversed because the trial court stated on the record that there was no “causal link” between the defendant’s misstatements about benefits and the losses caused actions for over two years and the defendant went to the naval base with the group knowing they were armed with various tools), petition for cert. filed, No. 21-1297 (U.S. Mar. 25, 2022).

16 USSG §2B1.1, comment. (n.3(A)(i)); see also United States v. Stein, 964 F.3d 1313, 1319–22 (11th Cir.) (affirming district court’s loss calculation based on government expert’s testimony establishing investor reliance on defendant's fraudulent information, which satisfied “but for” causation requirement), cert. denied, 141 S. Ct. 952 (2020).

17 See, e.g., United States v. Ledee, 772 F.3d 21, 38 (1st Cir. 2014) (explaining that there is no requirement of personal gain as a condition of enhancement under §2B1.1(b)(1)).

18 USSG §2B1.1, comment. (n.3(A)(iv)); see also, e.g., United States v. Domnenko, 763 F.3d 768, 775–76 (7th Cir. 2014) (rejecting enhancement for loss that lender sustained on sale of home because district court had found that it was a "reasonably foreseeable" consequence of defendants' fraud, as sellers were not aware that the purchaser was "fictional").

19 United States v. Crowe, 735 F.3d 1229, 1240 (10th Cir. 2013). A district court’s determination of a loss (and sentence) higher than what a defendant proposed does not render a plea unknowing. United States v. Agarwal, 24 F.4th 886, 893 (3d Cir. 2022) (rejecting defendant’s argument that his plea was unknowing because he could not have foreseen the losses that would be attributed to his computer fraud violations).

20 See, e.g., United States v. Whiting, 471 F.3d 792, 802 (7th Cir. 2006); United States v. Rothwell, 387 F.3d 579, 584 (6th Cir. 2004).

21 Whiting, 471 F.3d at 793.

22 Id. at 802.
by the medical claims in the case.\textsuperscript{23} Similarly, the Sixth Circuit found that loan losses could not properly be attributed to the defendant where there was no reasonable link between the fraud committed by the defendant during the construction of a building and the subsequent default on a construction loan.\textsuperscript{24} The Ninth Circuit requires causation to be shown by clear and convincing evidence.\textsuperscript{25}

The reasonable foreseeability issue has received particular attention in the context of mortgage fraud. For example, the Eighth Circuit has rejected arguments that defendants could not have “reasonably foreseen” the downturn in the housing market.\textsuperscript{26} In one frequently cited case, the defendant obtained numerous mortgage loans through applications overstating the named purchaser’s net worth and income, leading to default and subsequent foreclosure.\textsuperscript{27} The district court calculated the actual loss as the difference between the unpaid principal balance of the twelve mortgages and the subsequent sale price of the properties.\textsuperscript{28} Although the defendant argued that the government failed to prove that the loss amount was fully attributable to him, as opposed to normal market conditions, the Eighth Circuit held that the appropriate test is not whether market factors affected the loss amount but whether “the market factors and the resulting loss were reasonably foreseeable.”\textsuperscript{29} Several other circuits also have rejected arguments that a defendant’s loss amount should be reduced because the downturn in the housing market was unforeseeable, holding instead that the foreseeability analysis applies only to the calculation of loss of the unpaid principal and not to the future value of collateral.\textsuperscript{30}

\textsuperscript{23} \textit{Id.}

\textsuperscript{24} \textit{Rothwell}, 387 F.3d at 584; see also \textit{United States v. Isaacson}, 752 F.3d 1291, 1305–06 (11th Cir. 2014) (remanding because government failed to establish that fraudulent valuations caused losing investment); \textit{United States v. Stein}, 846 F.3d 1135, 1154 (11th Cir. 2017) (remanding because government failed to prove that investors relied upon fraudulent information). \textit{But see} \textit{United States v. Curran}, 525 F.3d 74, 81 (1st Cir. 2008) (the government need not prove “client by client” the loss amount attributable to a specific misrepresentation, when it was established that all of the defendant’s actions were part of a fraudulent scheme in which he pretended to be a medical doctor).

\textsuperscript{25} \textit{United States v. Lonich}, 23 F.4th 881, 918 (9th Cir. 2022) (vacating and remanding for resentencing where the “clear and convincing” standard applied to the defendants’ 20-level loss enhancement and the government did not show that the defendants caused the bank to fail).

\textsuperscript{26} \textit{See} \textit{United States v. Mshihiri}, 816 F.3d 997, 1011 (8th Cir. 2016) (“[W]e have recognized that it was reasonably foreseeable that a scheme premised on false loan applications and inflated real estate prices would unravel, and that market conditions could exacerbate the losses.” (quotation and citation omitted)).

\textsuperscript{27} \textit{United States v. McKanry}, 628 F.3d 1010, 1014–15 (8th Cir. 2011).

\textsuperscript{28} \textit{Id.} at 1019.

\textsuperscript{29} \textit{Id.}

\textsuperscript{30} \textit{See, e.g.}, \textit{United States v. Cavallo}, 790 F.3d 1202, 1235–36 (11th Cir. 2015) (“The sentencing guidelines, therefore, require foreseeability of the loss of the unpaid principal, but do not require foreseeability with respect to the future value of the collateral.” (quoting \textit{United States v. Wendlandt}, 714 F.3d 388, 394 (6th Cir. 2013) (quotation marks omitted))); \textit{United States v. Morris}, 744 F.3d 1373, 1375 & n.1 (9th Cir. 2014) (same); \textit{United States v. Wendlandt}, 714 F.3d 388, 394 (6th Cir. 2013) (same); \textit{United States v. Crowe}, 735 F.3d 1229, 1237 (10th Cir. 2013) (under the plain language of Application Note 3 to §2B1.1, the concept of reasonable foreseeability applies only to the calculation of actual loss and not “credits against loss” in a
In a case involving investment losses, the Eighth Circuit similarly has refused to reduce actual losses by “legitimate market factors and business expenses,” explaining that the net-loss analysis required by §2B1.1 involves whether the defendant transferred something of value to the victim, not whether the victim’s total losses were affected by market forces. The Eighth Circuit held that the district court did not commit clear error in estimating the losses resulting from defendant’s fraud offenses by calculating the total amounts lost by all investors who submitted Victim Impact Statements.

B. INTENDED LOSS

1. Generally

The guidelines define intended loss as “pecuniary harm that the defendant purposely sought to inflict.” The defendant’s subjective intent is relevant to the intended loss inquiry.

Intended loss includes “pecuniary harm that would have been impossible or unlikely to occur.” For example, intended loss would include pecuniary harm that a defendant intended, but could not have actually caused, in a case involving a government sting operation or where the offense involved insurance fraud in which the claim exceeded the insured value. There is no requirement that the court calculate actual loss before relying on intended loss; indeed, in some cases, it may be easier “as a matter of proof” to calculate intended loss. However, actual losses, or losses actually completed before

32 Id. at 423; see also United States v. Davis, 767 F. App’x 714, 731–32 (11th Cir. 2019) (per curiam). (district court did not clearly err in holding defendant accountable for full estimate of investor loss).
33 USSG §2B1.1, comment. (n.3(A)(i)).
34 USSG App. C, amend. 792 (effective Nov. 1, 2015). Prior to the amendment, courts had differed as to whether the intended loss amount is based on the defendant’s subjective intent or on an objective standard. Id.
35 USSG §2B1.1, comment. (n.3(A)(ii)).
36 Id.; see also United States v. Alphas, 785 F.3d 775, 780–84 (1st Cir. 2015) (discussing intended loss in context of inflated insurance claims).
37 United States v. Thurston, 358 F.3d 51, 68 (1st Cir. 2004), vacated on other grounds, 543 U.S. 1097 (2005).
discovery, are to be included in any calculation of intended loss. That is, the categories are not mutually exclusive and may be combined to calculate an overall intended loss.

“When calculating intended loss, the appropriate inquiry is what the loss would have been if the defendant had not been caught.”

For example, in a case related to government disability benefits, the Eighth Circuit held that the district court’s calculation of loss based on finding that the defendant intended to collect disability benefits through the age of 62, the age she would qualify for retirement, was not clearly erroneous. The Eighth Circuit first noted that loss is the greater of actual or intended loss and held that “a district court may reasonably conclude that the defendant intended continued receipt of illegal benefits until retirement without additional mens rea evidence.”

2. Specific Factual Circumstances

Determining intended loss is often a fact-specific inquiry. A court’s determination of whether to calculate intended loss at the full face value of the property at issue or some lesser amount often turns on whether the defendant intended to jeopardize, or in fact recklessly jeopardized, the full amount of the property. Thus, for example, the Eleventh Circuit agreed that intended loss amounts varied in health care fraud cases depending on whether specific defendants were aware of reimbursement details: for those defendants with such awareness, the intended loss was the lower reimbursable amount; for the defendant without such knowledge, the intended loss was a higher, billed rate. While the

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38 See United States v. Sesay, 937 F.3d 1146, 1153 (8th Cir. 2019) (“Intended loss . . . includes actual losses suffered.”); United States v. Carboni, 204 F.3d 39, 47 (2d Cir. 2000) (district court correctly combined the actual loss from defendant’s misrepresentations with potential loss stemming from a particular misrepresentation).

39 Sesay, 937 F.3d at 1153.

40 United States v. Frisch, 704 F.3d 541, 544 (8th Cir. 2013).

41 United States v. Lemons, 792 F.3d 941, 950 (8th Cir. 2015) (also rejecting defendant’s argument that court should use actual loss incurred).

42 Id. at 950 (finding, however, that there was additional evidence to support the court’s finding that the defendant intended to continue receiving benefits through retirement, including statements in reports filed with the Social Security Administration and three appeals of cessation of benefits); see also United States v. Rettenberger, 344 F.3d 702, 708 (7th Cir. 2003) (finding that the district judge properly assumed the defendant would have continued faking his disability until the age at which most insurance policies’ would end, without any evidence beyond the terms of the policies and the general facts of the case). But see United States v. Peel, 595 F.3d 763, 772 (7th Cir. 2010) (noting that if a defendant “present[ed] credible evidence for discounting a stream of future payments to [a lower future] value, the district court must consider [that evidence]”).

43 See, e.g., United States v. Ainabe, 938 F.3d 685, 692 (5th Cir. 2019) (“[T]he appropriate method of calculating the amount of intended loss is determined by the facts of the case.”).

44 See, e.g., United States v. Harris, 597 F.3d 242, 256–59 (5th Cir. 2010) (district court properly sentenced defendant based on the aggregate credit limit of the credit cards that she recklessly jeopardized by selling to third parties).

45 United States v. Moran, 778 F.3d 942, 974–75 (11th Cir. 2015).
analysis is fact-specific, certain schemes and claims are particularly common, and some of these situations are discussed below.

a. Credit card theft

In a case in which a defendant sold stolen credit cards to others, the sentencing judge fixed the intended loss at the total credit limits of all of the credit cards. In upholding the sentencing court’s decision, the First Circuit concluded that the defendant reasonably could expect such a loss as “the natural and probable consequences of his or her actions.” In another case, the defendant fraudulently opened credit accounts at local businesses in the names of victims. The court calculated intended loss by totaling the credit limits of all open accounts even though the defendant had not used all of the available credit. Similarly, in a case where the defendant unsuccessfully attempted to obtain cash advances from stolen credit cards, the court held that the total amount the defendant attempted to withdraw was the appropriate intended loss figure, even where it exceeded the cash advance limits.

In fact, some circuits have concluded that simply obtaining information regarding a credit account creates a presumption that the entire credit limit was targeted, which must be rebutted by the defendant. Conversely, at least one circuit has held that where the defendant did not know the credit limit, the burden remains with the government to demonstrate what portion of the credit limit the defendant intended to use.

b. Fraudulent checks

In cases involving fraudulent or forged checks, the face value of the instruments often are used to calculate the intended loss figure. In such cases, courts may treat the face amount of the checks as prima facie evidence of the defendant’s intent but still must allow

46 United States v. Alli, 444 F.3d 34, 38–39 (1st Cir. 2006); see also Harris, 597 F.3d at 252–53 (looking to whether the defendant “recklessly jeopardized” the full credit card limits by selling the card numbers to a third party).

47 Alli, 444 F.3d at 38.

48 United States v. Wilfong, 475 F.3d 1214, 1217 (10th Cir. 2007).

49 Id.

50 United States v. Ravelo, 370 F.3d 266, 273 (2d Cir. 2004).

51 United States v. John, 597 F.3d 263, 281 (5th Cir. 2010).

52 See United States v. Diallo, 710 F.3d 147, 153–54 (3d Cir. 2013); see also United States v. Manatau, 647 F.3d 1048 (10th Cir. 2011) (construing loss and intended loss in this context).

53 See, e.g., United States v. Grant, 431 F.3d 760, 762 (11th Cir. 2005) (“The other circuits to address this issue have held a district court does not clearly err when it uses the full face value of a check to calculate intended loss.”); cf. United States v. Chappell, 6 F.3d 1095, 1101 (5th Cir. 1993) (district court did not err in calculating loss by assigning each seized counterfeit blank check the average value of checks actually forged and cashed).
the defendant to offer evidence to rebut that figure.\textsuperscript{54} If the defendant does not provide “persuasive evidence” to rebut intent, courts are “free to accept the loss figure” taken from the face value of the instruments.\textsuperscript{55} Further, some courts have held that the “intended loss” in a fraudulent check scheme can include the value of counterfeit checks turned over by the defendant at the time of his or her voluntary surrender even if those checks were never used.\textsuperscript{56}

c. Government programs and benefits

Full value also has been used to measure loss in fraud cases involving government benefits and programs. For example, the Eleventh Circuit held that the sentencing judge did not clearly err by considering the full value of all fraudulent applications for FEMA relief filed by the defendant even though she had not attempted to obtain all available funds from each application.\textsuperscript{57} Similarly, the Seventh Circuit held that the intended loss was the full amount of loan commitments a defendant secured from the Small Business Administration because, although the defendant did not receive the full amount, that sum was diverted from the intended recipients.\textsuperscript{58}

d. Insurance

In the context of insurance, the Fifth Circuit concluded that the trial court erred in calculating intended loss based on the face value of fraudulently obtained life insurance policies.\textsuperscript{59} The court compared life insurance policies to loans, explaining that in the

\textsuperscript{54} See United States v. Dullum, 560 F.3d 133, 138 (3d Cir. 2009); see also United States v. Santos, 527 F.3d 1003, 1008 (9th Cir. 2008) (agreeing with the Third and Eleventh Circuits that the face value of the stolen checks is “probative” of the defendants’ intended loss but holding that court must also consider any evidence tending to show that defendant did not intend to produce counterfeit checks up to the full face value of the stolen checks).

\textsuperscript{55} United States v. Khorozian, 333 F.3d 498, 509 (3d Cir. 2003) (quoting United States v. Geevers, 226 F.3d 186, 194 (3d Cir. 2000)); see also United States v. Adejumo, 772 F.3d 513, 527 (8th Cir. 2014) (basing intended loss on face value of stolen checks, even though many were photocopies that could not be negotiated, when defendant “presented no contrary evidence that he did not intend to use the full face value of the checks”).

\textsuperscript{56} See United States v. Kushner, 305 F.3d 194, 198 (3d Cir. 2002).

\textsuperscript{57} United States v. Willis, 560 F.3d 1246, 1250–51 (11th Cir. 2009) (per curiam) (reasoning that because the defendant exhibited a pattern of applying for funds beyond FEMA’s automatic disbursement on some applications, it was reasonable to infer intent to pursue additional funds on the remaining applications).

\textsuperscript{58} United States v. Kosth, 257 F.3d 712, 722 (7th Cir. 2001); see also United States v. Conroy, 567 F.3d 174, 179–80 (5th Cir. 2009) (per curiam) (where the defendant only asked for $70,000 in a fraudulent grant application, but was approved for $100,000, the appropriate intended loss was the higher value); infra Section IV.C.2.

\textsuperscript{59} United States v. Bazemore, 608 F. App’x 207, 213–16 (5th Cir. 2015) (remanding to determine loss because there was no dispute that defendant accurately represented age and health status of applicants and government had burden of establishing that misrepresentations regarding applicants’ financial status and financing arrangement “posed a risk of financial harm to the insurers that would not have existed if the information provided in the insurance applications were true”).
context of insurance, the amount put at risk by the defendant is not the full amount of the life insurance policy because, if the insurance policy lapses, the insurer can retain the premiums and withhold benefits. In contrast, the risk to a lender with respect to a loan is non-payment of the full amount.\(^60\)

\[\text{e. Real property}\]

With respect to real property, unless the defendant was “so ‘consciously indifferent or reckless’ about the repayment of the loans as to impute to him the intention that the lenders should not recoup their loans,” intended loss will not likely be the appropriate measure of loss since the real property serves as collateral and will be recoverable should the owner default.\(^61\)

\[\text{3. “Impossible or Unlikely” Loss}\]

The definition of intended loss instructs courts to include harm that would have been “impossible or unlikely to occur.”\(^62\) The sentencing judge nonetheless might consider the impossibility of the loss as a basis for a downward departure or in considering the reasonableness of the sentence. For example, the Sixth Circuit held that impossible losses are to be included in the loss figure but remanded a case for the sentencing judge to consider a departure based on “economic reality.”\(^63\)

\[\text{C. LOSS CALCULATIONS AND THE 18 U.S.C. § 3553(a) FACTORS}\]

At least one circuit has explored the application of the 18 U.S.C. § 3553(a) factors to the calculation of loss.\(^64\) The sentencing judge concluded that the calculation of loss in the presentence report was “too speculative” and found a guideline loss of zero, but then “set the guidelines aside because we are outside the heartland” and sentenced the defendant to five years—an upward variance of over three years above the applicable guideline range.\(^65\) On appeal, the Ninth Circuit emphasized that “the district court’s consideration of the large potential loss that could result [] was not unreasonable” and that “the potential loss to the

\(^{60}\) \text{id. at 214.}\n
\(^{61}\) \text{United States v. Goss, 549 F.3d 1013, 1018 (5th Cir. 2008) (quoting United States v. Morrow, 177 F.3d 272, 301 (5th Cir. 1999)); see also infra Section VI.B.}\n
\(^{62}\) \text{USSG §2B1.1, comment. (n.3(A)(ii)).}\n
\(^{63}\) \text{United States v. McBride, 362 F.3d 360, 374, 376 (6th Cir. 2004) (“[T]here is surely some point at which a perpetrator’s misperception of the facts may become so irrational that the words ‘intended loss’ can no longer reasonably apply.”); see also United States v. Johnston, 620 F. App’x 839, 857 (11th Cir. 2015) (per curiam) (affirming district court’s use of higher intended loss, rather than actual loss, but noting that where intended loss amount is impossible or unlikely to occur, it may impact the substantive reasonableness of a sentence).}\n
\(^{64}\) \text{United States v. Hilgers, 560 F.3d 944, 947–48 (9th Cir. 2009).}\n
\(^{65}\) \text{id. at 946–47.}\n
victims” was an important section 3553(a) factor. Other courts also have suggested that a proper review of the section 3553(a) factors includes consideration of the loss caused by the defendant.

### III. GAIN AS ALTERNATIVE MEASURE

The guidelines instruct the court to “use the gain that resulted from the offense as an alternative measure of loss only if there is a loss but it reasonably cannot be determined.” Courts cannot use gain “as a proxy for each defendant’s culpability” and must properly calculate loss when possible but consider gain as an option if loss cannot be determined. That said, a court cannot sentence based on gain if there is “no loss” as opposed to an incalculable loss.

### IV. ESTIMATING LOSS

#### A. Generally

As discussed above, the court “need only make a reasonable estimate of the loss.” This estimate is made using available information and the sentencing judge is “entitled to

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66 Id. at 947–48.

67 See, e.g., United States v. Corsey, 723 F.3d 366, 377 (2d Cir. 2013) (per curiam) (remanding case with a very large intended loss amount but “low risk that any actual loss would result”; commenting that the district court may have been overly influenced by the guidelines range in imposing lengthy sentence); United States v. Edwards, 595 F.3d 1004, 1010, 1018 (9th Cir. 2010) (upholding a probationary sentence far below the guideline range as substantively reasonable in a fraud case where the sentencing judge stated that the guideline range calculated using intended loss “overstated the circumstances” of the defendant’s case); United States v. Livesay, 587 F.3d 1274, 1278–79 (11th Cir. 2009) (“A sentence of probation for a high-ranking officer in a corporation where over a billion dollars of fraud was perpetrated . . . is not reasonable” under the factors listed in § 3553(a) (emphasis omitted)).

68 USSG §2B1.1, comment. (n.3(B)); see also, e.g., United States v. Jimenez, 946 F.3d 8, 14 (1st Cir. 2019) (“[H]ere the gain to the homeowners serves as a good economic proxy for loss: what the owners did not pay, the banks did not receive.”).

69 United States v. Gallant, 537 F.3d 1202, 1240 (10th Cir. 2008); see also United States v. Vrdolyak, 593 F.3d 676, 681 (7th Cir. 2010) (a sentencing judge’s refusal to consider gain as an alternative measure in a case where a “probable” but difficult to calculate loss exists is reversible error); United States v. Armstead, 552 F.3d 769, 778 (9th Cir. 2008) (gain can be used as a “proxy for a portion of the total loss where some, but not all, of the loss can be determined”).

70 USSG §2B1.1, comment. (n.3(B)); see also United States v. Bazantes, 978 F.3d 1227, 1250–51 (11th Cir. 2020) (vacating sentences because the §2B1.1(b)(1) loss enhancement was erroneously applied based on gain even though there was no loss).

71 USSG §2B1.1, comment. (n.3(C)); see also, e.g., United States v. Melgen, 967 F.3d 1250, 1265 (11th Cir. 2020) (“[T]he district court need only reach a reasonable estimate of loss.”); United States v. Moran, 778 F.3d 942, 973 (11th Cir. 2015) (“District courts are in a unique position to evaluate the evidence relevant to a loss determination, and thus, their determinations are entitled to appropriate deference.”).
appropriate deference” because of the court’s unique position to assess the evidence. The government must prove the loss attributable to the defendant by a preponderance of the evidence and the factual findings supporting a sentencing judge’s loss calculation are reviewed by the appellate courts under a clear error standard. The loss calculation method, however, is reviewed de novo. Some circuits have held that a sentencing court does not commit “clear error” when a loss calculation is supported by the presumptively reasonable facts from the presentence report, and the defendant fails to rebut those facts. The Ninth Circuit, however, requires the government to establish facts that have a “disproportionate effect on the sentence relative to the offense of conviction” by clear and convincing evidence.

Although the guidelines are advisory, a sentencing judge still must make factual findings as to the amount of loss and a “reasonable estimate” of loss to satisfy evidentiary requirements. A court’s failure to do so will render a loss calculation invalid. Similarly, at least one circuit has held that simply rejecting the government’s loss evidence without a sufficient explanation constitutes reversible procedural error, where a sentencing court stated that the government’s loss expert was knowledgeable and credible but rejected the expert’s calculations and found zero loss without explanation. However, courts have held

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72 USSG §2B1.1, comment. (n.3(C)); Moran, 778 F.3d at 973–74; United States v. Brooks, 681 F.3d 678, 713–14 (5th Cir. 2012); United States v. Parish, 565 F.3d 528, 534 (8th Cir. 2009).

73 See, e.g., United States v. Cavallo, 790 F.3d 1202, 1232 (11th Cir. 2015); United States v. Mckanry, 628 F.3d 1010, 1019 (8th Cir. 2011).

74 United States v. Iwuala, 789 F.3d 1, 12 (1st Cir. 2015); United States v. Harris, 597 F.3d 242, 250 (5th Cir. 2010).

75 See, e.g., United States v. Villa, 589 F. App’x 532, 532–33 (11th Cir. 2015) (per curiam) (“When a defendant challenges the loss amount provided in his PSI, the government bears the burden of establishing the loss by a preponderance of the evidence, and the district court must make factual findings sufficient to support the attributed amount. However, when a defendant does not object, a court may properly rely on undisputed statements of loss in the PSI, even when those statements are conclusory.” (internal citations omitted)); United States v. Ross, 502 F.3d 521, 531 (6th Cir. 2007) (“[I]f the defendant raises a dispute to the presentence report, the ‘court may not merely summarily adopt the factual findings in the presentence report or simply declare that the facts are supported by a preponderance of the evidence.’” (quotations and citation omitted)).

76 United States v. Hymas, 780 F.3d 1285, 1289–90 (9th Cir. 2015) (quoting United States v. Mezas de Jesus, 217 F.3d 638, 642 (9th Cir. 2000)) (clarifying six-factor test for “disproportionate effect” analysis); see also United States v. Robertson, 946 F.3d 1168, 1171 (10th Cir.) (rejecting a heightened standard, noting that only the Ninth Circuit has adopted this standard and five other circuits have rejected it), cert. denied, 141 S. Ct. 398 (2020).

77 See United States v. Burns, 843 F.3d 679, 688–89 (7th Cir. 2016) (the district court committed reversible plain error when enhancing sentence based on a loss amount without making specific factual findings); United States v. Medina, 485 F.3d 1291, 1304–05 (11th Cir. 2007) (the district court erred when it did not make specific factual findings upon which to base the loss amounts); United States v. Ali, 508 F.3d 136, 144–45 (3d Cir. 2007) (district court erred in failing to specify a reasonable estimate of the loss amount).

78 United States v. Wilkinson, 590 F.3d 259, 269–70 (4th Cir. 2010).
that when procedural errors in loss calculation do not affect the sentence, there is no clear error.  

In keeping with these principles, a wide range of approaches have been applied to estimate loss. For example, the Eighth Circuit held that a district court properly considered the value of assets concealed in a bankruptcy fraud as relevant evidence in determining intended loss.\textsuperscript{80} In another case in which defendants induced homeowners to refinance their homes to pay for renovations that the defendants did not perform, the loss was appropriately estimated by totaling the gross income from the refinance jobs above a certain price level and deducting labor and material costs.\textsuperscript{81} Similarly, in a health care fraud case, the loss was properly based on the amounts billed to Medicare even though “some beneficial therapy” may have taken place.\textsuperscript{82} In a case where the defendant fraudulently registered vehicles to avoid state tax, the combined lost sales tax for each of the vehicles—charged and uncharged—was a reasonable estimate of loss to the state.\textsuperscript{83}

The sentencing judge may consider a wider variety of evidence to calculate loss. For example, courts have relied on:

- The hearsay testimony of a defrauded insurance company’s attorney;\textsuperscript{84}
- The defendants’ personal journal, which detailed the names of their victims and amounts collected in a loan fraud scheme;\textsuperscript{85}
- The cash deposits made into the defendant’s account in a case involving multiple cash thefts;\textsuperscript{86}
- The defendant’s own trial testimony;\textsuperscript{87}

\textsuperscript{79} See, e.g., United States v. Belfrey, 928 F.3d 746, 751 (8th Cir. 2019) (any error in calculating loss was harmless where district court stated that whether loss was $18 million or $4 million, it would not affect the sentence because the guideline range was higher than the sentence the court deemed appropriate); United States v. Hussein, 664 F.3d 155, 160–61 (7th Cir. 2011) (finding incomplete loss calculation to be harmless error where it would not have changed the applicable offense level enhancement); United States v. Griffith, 584 F.3d 1004, 1017 (10th Cir. 2009) (finding the inclusion of $28,130 in extra loss to be harmless despite its effect of increasing the offense level enhancement because the district court stated on the record it would have sentenced defendant to same term of imprisonment notwithstanding a lower loss amount).

\textsuperscript{80} United States v. Holthaus, 486 F.3d 451, 456–57 (8th Cir. 2007). Courts have variously used the amount sought to be discharged in bankruptcy and the amount concealed from the bankruptcy court. See United States v. Yurek, 925 F.3d 423, 442–43 (10th Cir. 2019) (affirming use of the amount defendant was trying to discharge in bankruptcy and collecting circuit cases discussing approaches in bankruptcy fraud cases).

\textsuperscript{81} United States v. Sullivan, 486 F.3d 712, 716 (7th Cir. 2014).

\textsuperscript{82} United States v. Rojo, 610 F. App’x 878, 881 (11th Cir. 2015) (per curiam).

\textsuperscript{83} United States v. Harmon, 944 F.3d 734, 736–38 (8th Cir. 2019).

\textsuperscript{84} United States v. Flores-Seda, 423 F.3d 17, 21 (1st Cir. 2005).

\textsuperscript{85} United States v. Humphrey, 104 F.3d 65, 71 (5th Cir. 1997).

\textsuperscript{86} United States v. Hahn, 551 F.3d 977, 980–81 (10th Cir. 2008).

\textsuperscript{87} United States v. Norman, 776 F.3d 67, 79–80 (2d Cir. 2015).
• Testimony from an FBI agent who sampled ten percent of the bank accounts affected by an identity theft scheme.88

A defendant who challenges a district court’s loss calculation carries a heavy burden and must show that the calculation was not just inaccurate, but “outside the realm of permissible computations.”89 The sentencing judge also may choose the method to calculate loss that he or she prefers, even if there is a viable competing method.90

The sentencing judge, however, cannot assign a loss figure “arbitrarily” or with no findings, and the court must develop some evidence to support the loss figure.91 For example, in one case, the sentencing judge’s adoption of a loss figure taken from a co-defendant’s plea (without fact-finding in the defendant’s case) was held to be unreasonable.92 Neither can a sentencing judge ignore a defendant’s offer of proof to rebut the court’s loss calculation.93 However, it is not the defendant’s burden to disprove loss amounts; the government must prove loss, generally by a preponderance of the evidence.94

88 United States v. Kushimo, 795 F. App’x 137, 140–41 (3d Cir. 2019); see also United States v. Annamalai, 939 F.3d 1216, 1235–37 (11th Cir. 2019) (affirming loss figure that assumed all credit card disputes were related to fraudulent activity based on evidence that related to a portion of those disputes, and collecting cases “approv[ing] of statistical extrapolation or sampling to determine a reasonable estimate of loss”).

89 United States v. Sullivan, 765 F.3d 712, 716 (7th Cir. 2014) (“To succeed on appeal, a defendant must show that the court’s loss calculation was not only inaccurate but outside the realm of permissible computations.” (citations and internal punctuation omitted)); see also United States v. Lewis, 594 F.3d 1270, 1289 (10th Cir. 2010) (a defendant must provide “substantial ground for rejecting the district court’s determination that the evidence used by the government was reliable”); United States v. Ameri, 412 F.3d 893, 901 (8th Cir. 2005) (a district court is entitled to particular deference on the issue of loss calculations).

90 United States v. King, 257 F.3d 1013, 1025 (9th Cir. 2001); see also United States v. Campbell, 765 F.3d 1291, 1304 (11th Cir. 2014) (rejecting defendant’s argument that court was required to examine itemized proof of individualized fraudulent transactions; emphasizing fact-specific nature of proof); United States v. McMillan, 600 F.3d 434, 458–59 (5th Cir. 2010) (when the sentencing court has contradictory and “hotly contested” testimony and evidence regarding loss, the appellate court cannot conclude that the sentencing court committed clear error in selecting one or the other theory).

91 See, e.g., United States v. Warshak, 631 F.3d 266, 329–30 (6th Cir. 2010) (remanding where the district court’s explanation of its loss determination was inadequate); United States v. Hall, 610 F.3d 727, 745 (D.C. Cir. 2010) (remanding for resentencing where the district court provided no reason for finding loss in excess of one million dollars); United States v. Gupta, 572 F.3d 878, 889 (11th Cir. 2009) (reversing loss calculation where the sentencing judge “pick[ed] a figure . . . about half way in between” two competing estimates without giving any non-arbitrary reason therefor); United States v. Higgins, 270 F.3d 1070, 1075–76 (7th Cir. 2001) (trial court made insufficient findings regarding loss); United States v. Oseby, 148 F.3d 1016, 1025–27 (8th Cir. 1998) (same).

92 United States v. Liveoak, 377 F.3d 859, 866–67 (8th Cir. 2004); see also United States v. Pierce, 409 F.3d 228, 234–35 (4th Cir. 2005) (the court is not bound by the loss figure in co-defendant’s sentencing).

93 See United States v. Grusd, 787 F. App’x 922, 925 (9th Cir. 2019) (district court erred by failing to consider whether any deduction was appropriate for procedures performed); United States v. Newson, 351 F. App’x 986, 988–89 (6th Cir. 2009) (it was clear error for the sentencing judge to ignore the defendant’s offer of proof that she had refused to accept an automobile after she filled out a fraudulent loan application).

94 United States v. Markert, 774 F.3d 922, 927–28 (8th Cir. 2014) (reversing sentence where government failed to prove that nominee loans used to conceal customer overdraft resulted in pecuniary loss; finding that
Courts have taken different approaches with respect to stipulated loss amounts. For example, the Second Circuit allows a sentencing judge to consider the stipulated loss figure so long as the court also considers loss evidence that is presented by the parties, and “the record clearly demonstrates that the defendant fully understood the potential consequences of his [stipulation].”\textsuperscript{95} The Seventh and Tenth Circuits, however, have determined that stipulated facts waive any challenge by the defendant at sentencing.\textsuperscript{96} In another case, the defendant reserved his right to argue that there was “no loss” while contemporaneously stipulating in the plea agreement to a specific loss figure should a loss be found.\textsuperscript{97} Despite the defendant’s reservation of the argument, the Fifth Circuit determined that, if the sentencing judge found that there was a loss, the defendant had no further grounds to challenge the stipulated figure even if there was “no evidence” to support that amount.\textsuperscript{98}

\section*{B. Relevant Factors}

As noted above, the loss estimate must be based on available information, considering various factors that are “appropriate and practicable under the circumstances.”\textsuperscript{99} The sentencing judge can consider general factors in estimating loss, “such as the scope and duration of the offense” and the revenues that have been generated by similar operations.\textsuperscript{100} Specific factors to consider also are set forth in the application notes, some of which are discussed below.

\subsection*{1. Fair Market Value}

The first factor that courts may consider is “[t]he fair market value of the property unlawfully taken, copied, or destroyed; or, if the fair market value is impracticable to determine or inadequately measures the harm, the cost to the victim of replacing that property.”\textsuperscript{101}

Several cases have discussed how fair market value is determined. Fair market value of certain services, such as insurance coverage, can be determined by their cost or premium value.\textsuperscript{102} Fair market value of items that have a wholesale or retail value are

\begin{itemize}
  \item \textsuperscript{95} United States v. Granik, 386 F.3d 404, 413 (2d Cir. 2004).
  \item \textsuperscript{96} United States v. Sloan, 492 F.3d 884, 893 (7th Cir. 2007); United States v. Jackson, 459 F. App’x 747, 753–54 (10th Cir. 2012); see also United States v. Mahbub, 818 F.3d 213, 232 (6th Cir. 2016) (district court’s reliance on stipulated loss amounts not clear error).
  \item \textsuperscript{97} United States v. Elashyi, 554 F.3d 480, 509 (5th Cir. 2008).
  \item \textsuperscript{98} Id. at 509–10.
  \item \textsuperscript{99} USSG §2B1.1, comment. (n.3(C)).
  \item \textsuperscript{100} USSG §2B1.1, comment. (n.3(C)(vi)).
  \item \textsuperscript{101} USSG §2B1.1, comment. (n.3(C)(i)).
  \item \textsuperscript{102} United States v. Simpson, 538 F.3d 459, 463 (6th Cir. 2008).
\end{itemize}
typically determined on a case-by-case basis. For example, the Ninth Circuit has found that
the loss should be the wholesale value of the stolen items where the true owner intended to
sell the items at such prices.\(^{103}\) In contrast, when the items in question were taken from
retailers, courts have reasoned that “the price at which the retailers would have sold that
merchandise serves as a reasonable estimate of the loss.”\(^{104}\) Courts must determine the
intended victims and the market in which the goods would be sold to determine whether it
is appropriate to measure loss using wholesale value or retail value.\(^{105}\)

The court can assess a fair market value that is higher than the replacement cost or
production costs. For instance, where a lottery retailer generated $525,586 in fraudulent
lottery tickets with a winning redemption value of $296,153, the D.C. Circuit held that the
“reasonable estimate” of loss caused by his fraud was the fair market value of the tickets at
the time they were purchased (their sale value of $525,586).\(^{106}\)

When loss may fluctuate, the sentencing judge should determine “fair market value”
on the date the fraud ceased.\(^{107}\) There is “no error in selecting the end of the conspiracy as
an appropriate date from which to calculate loss.”\(^{108}\) When a current market value for real
property is not available, the court need not use the most recent valuation if more than one
prior valuation exists.\(^{109}\)

As noted above, replacement costs also can be used to make a loss estimate where
“fair market value is impracticable to determine or inadequately measures the harm.”\(^{110}\)
For example, the Eleventh Circuit determined that actual cash value was inadequate to

\(^{103}\) United States v. Hardy, 289 F.3d 608, 613–14 (9th Cir. 2002).

\(^{104}\) United States v. Wasz, 450 F.3d 720, 727 (7th Cir. 2006) (collecting cases from different circuits).

\(^{105}\) United States v. Qazah, 810 F.3d 879, 888–90 (4th Cir. 2015) (vacating and remanding sentence based
on loss amount calculated at retail value because district court did not adequately gather facts to determine,
for example, whether intended victim was only a large cigarette wholesaler or also included retailers); United
States v. Lige, 635 F.3d 668, 671–72 (5th Cir. 2011) (affirming district court’s use of retail prices of stolen
phones rather than wholesale prices because the providers offered the phones for sale in the retail market).

\(^{106}\) United States v. Bae, 250 F.3d 774, 776–78 (D.C. Cir. 2001); see also United States v. Onyiego, 286 F.3d
249, 253, 256 (5th Cir. 2002) (face value accurately determined “loss” with respect to stolen airline tickets).

\(^{107}\) United States v. Hart, 273 F.3d 363, 374 (3d Cir. 2001) (upholding decision to calculate loss at the time
fraud ceased and rejecting defendant’s argument that victim could have mitigated losses by selling at a later
date).

\(^{108}\) Id.

\(^{109}\) See United States v. Nathan, 318 F. App’x 273, 275–76 (5th Cir. 2009) (district court’s decision to rely
on a 1998 purchase price rather than a 2000 bank appraisal was not plain error); see also United States v.
Plato, 593 F. App’x 364, 381 (5th Cir. 2015) (per curiam) (district court did not abuse its discretion in
crediting production-value report as evidence of loss rather than tax appraisal valuation; though defendant
objected that appraisal is a more credible measure because production had dropped as a result of his arrest
and conviction, defendant did not provide sufficient evidence).

\(^{110}\) Lige, 635 F.3d at 672 (5th Cir. 2011) (quoting USSG §2B1.1, comment. (n.3(C)(i)); see also United
States v. Howard, 887 F.3d 1072, 1077 & n.1 (10th Cir. 2018) (collecting cases using replacement value as
proper measure in the context of determining loss for purposes of the Mandatory Victims Restitution Act).
measure the harm caused by burning down a church; instead, it relied on replacement cost as the “only effective way to return to the victims the fair equivalent of what they lost.”

2. Development Costs

In the case of theft of trade secrets or other proprietary information, it is often difficult to estimate fair market value, in which case “the cost of developing that information or the reduction in the value of that information” may be used. However, the government still must prove that the development costs are either an appropriate measure of actual loss or that the defendant intended that amount of loss.

3. Cost of Repairs

The cost of repairing damaged property also can be used to estimate loss. Improvements of property can be included in loss if they are necessary to repair the damage caused by a defendant. For example, the Fifth Circuit concluded that improvements made to a victim company’s computer system after a hacker broke in could be included in the loss figure as necessary repair costs.

Some estimated repair costs are specific to certain offenses. For example, the Tenth Circuit applied special provisions relating to the Archaeological Resources Protection Act to determine “repair costs” to damaged Native American sites on federal lands.

4. Number of Victims Multiplied by Loss

It is appropriate for the sentencing judge to take an average loss per victim and multiply it across an approximate number of victims to generate a total loss figure in cases

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111 United States v. Shugart, 176 F.3d 1373, 1375 (11th Cir. 1999).

112 USSG §2B1.1, comment. (n.3(C)(ii)); cf. United States v. Howley, 707 F.3d 575, 582–83 (6th Cir. 2013) (clear error for the sentencing court to find the value of stolen trade secrets was zero, when it cost $520,000 to develop those secrets).

113 See United States v. Snowden, 806 F.3d 1030, 1033–34 (10th Cir. 2015) (explaining that it is inappropriate to use costs of development as actual loss where evidence in the record indicated that the company suffered no business losses, but affirming as harmless error).

114 United States v. Pu, 814 F.3d 818, 824–27 (7th Cir. 2016) (clear error to base loss amount on development costs where there was no evidence in record of whether defendant intended any loss).

115 USSG §2B1.1, comment. (n.3(C)(iii)).

116 United States v. Lindsley, No. 99-11164, 2001 WL 502832, at *3–4 (5th Cir. May 3, 2001) (per curiam) (the security improvements “were the only means available to prevent continued intrusion into [the victim’s] computer systems caused by the defendants’ activities”).

117 United States v. Shumway, 112 F.3d 1413, 1424–26 (10th Cir. 1997); see also United States v. Christianson, 586 F.3d 532, 535–37 (7th Cir. 2009) (loss was properly calculated as the cost of replacing a government experiment that defendants destroyed by cutting down trees that were experiments’ subjects).
where specific losses for individual victims are not easily calculated.\textsuperscript{118} For example, in a credit card fraud case, the sentencing judge estimated intended loss based on the average credit card limit multiplied by the number of cards used.\textsuperscript{119} Further, such an estimation can include victims who are not aware they have been defrauded or even those who “\text{relay[] their satisfaction with [the] fraudulent treatment.}”\textsuperscript{120}

5. \textit{Reduction in Value of Securities}

The reduction in “\text{value of equity securities or other corporate assets}” due to the offense may be considered in the estimate of loss.\textsuperscript{121} “\text{Determining the extent to which a defendant’s fraud, as distinguished from market or other forces, caused shareholders’ losses inevitably cannot be an exact science. The guidelines’ allowance of a ‘reasonable estimate’ of loss remains pertinent.”}\textsuperscript{122} Such determinations still must be made on the evidence when available.\textsuperscript{123}

The guidelines provide for use of a “\text{modified rescissory method}”\textsuperscript{124} as one possible method to calculate actual loss in securities and commodities fraud cases, though courts may use “\text{any method that is appropriate and practicable under the circumstances.”}\textsuperscript{125} Under this method, courts calculate the difference between the average price of the security or commodity during the period that the fraud occurred and the average price of the security or commodity during the 90-day period after the fraud was disclosed to market, then to multiply that difference by the number of shares outstanding.\textsuperscript{126} “\text{In determining whether the amount [] is a reasonable estimate of the actual loss[]}, the court may consider, among other factors, the extent to which the [calculation] includes

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\item \textsuperscript{118} USSG \textsection 2B1.1, comment. (n.3(C)(iv)); see, \textit{e.g.}, United States v. Showalter, 569 F.3d 1150, 1161 (9th Cir. 2009) (noting that Application Note 3 to \textsection 2B1.1 allows the court to estimate loss based on multiplying the average loss by the approximate number of victims); United States v. Abiodun, 536 F.3d 162, 167–68 (2d Cir. 2008) (same).
\item \textsuperscript{119} United States v. Mei, 315 F.3d 788, 792 (7th Cir. 2003).
\item \textsuperscript{120} United States v. Curran, 525 F.3d 74, 80 (1st Cir. 2008).
\item \textsuperscript{121} USSG \textsection 2B1.1, comment. (n.3(C)(v)).
\item \textsuperscript{122} United States v. Rutkoske, 506 F.3d 170, 179 (2d Cir. 2007) (citation omitted).
\item \textsuperscript{123} United States v. Zolp, 479 F.3d 715, 720–21 (9th Cir. 2007) (the sentencing court’s determination that the stock was “worthless” was erroneous when the stock continued to have residual value, even if the value is close to zero; “close to zero is not zero”).
\item \textsuperscript{124} See USSG App. C, amend. 761 (effective Nov. 1, 2012). The modified rescissory method looks at the difference between the average price of the stock during the period that the fraud occurred and the average stock price during a set period after the fraud was disclosed; the difference between these two average prices is the loss. By averaging the stock price during these periods, the modified rescissory method takes into account factors other than the fraud, such as overall growth or decline in the price of the stock. \textit{See, e.g.}, United States v. Brown, 595 F.3d 498, 523–27 (3d Cir. 2010).
\item \textsuperscript{125} USSG \textsection 2B1.1, comment. (n.3(F)(ix)).
\item \textsuperscript{126} \textit{Id.}
\end{itemize}
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significant changes in value not resulting from the offense . . . .” Examples of changes that might affect share prices include “changed economic circumstances, changed investor expectations, and new industry-specific or firm-specific facts, conditions, or events.”

C. SPECIAL RULES

1. Stolen or Counterfeit Credit Cards and Access Devices

“In a case involving any counterfeit access device or unauthorized access device, loss includes any unauthorized charges made with the counterfeit access device or unauthorized access device and shall be not less than $500 per access device.” If, however, the unauthorized access device is a means of telecommunications access identifying a specific instrument or account and was only possessed (not used), the loss assessed shall not be less than $100. A defendant in possession of credit card numbers, whether they are actually on cards or simply on a list, having been used or not, will be responsible for each one as a separate “access device.”

Courts generally agree that the $500 minimum per access device applies even if the device was not used. They disagree, however, on whether the device must be usable—that is, currently or potential functional. The Ninth Circuit requires usability; other circuits do not.

127 Id.

128 Id.

129 USSG §2B1.1, comment. (n.3(F)(i)). However, the Sixth Circuit has held that where the special rule in Application Note 3(F)(i) provides that loss cannot be less than $500 per access device, it impermissibly expands the word “loss” as used in the guideline text at §2B1.1(b)(1) and is not entitled to deference. United States v. Riccardi, 989 F.3d 476, 483 (6th Cir. 2021). The Ninth Circuit has reached a similar result. United States v. Kirilyuk, 29 F.4th 1128, 1137 (9th Cir. 2022) (“The question here is simple: Is Note 3(F)(i)’s ‘special rule’ for calculating loss by using a minimum $500-per-card multiplier consistent with the plain meaning of ‘loss’? We hold that it is not.”).

130 USSG §2B1.1, comment. (n.3(F)(i)) (“[I]f the unauthorized access device is a means of telecommunications access that identifies a specific telecommunications instrument or telecommunications account (including an electronic serial number/mobile identification number (ESN/MIN) pair), and that means was only possessed, and not used, during the commission of the offense, loss shall not be less than $100 per unused means.”).

131 United States v. Jones, 332 F. App’x 801, 807 (3d Cir. 2009).

132 See, e.g., United States v. Rueda, 933 F.3d 6, 10 (1st Cir. 2019) (provisions of special rule apply “regardless of whether each access device was actually charged”); United States v. Thomas, 841 F.3d 760, 764 (8th Cir. 2016) (special rule “may be applied to fraudulent cards which have been merely possessed rather than used”); United States v. Moore, 788 F.3d 693, 695 (7th Cir. 2015) (stolen cards need not have been used for special rule to apply).

133 United States v. Onyesoh, 674 F.3d 1157, 1159 (9th Cir. 2012) (the $500 minimum applies only to unauthorized devices that are “usable”).

134 See United States v. Rueda, 933 F.3d 6, 9–10 (1st Cir. 2019) (Application Note 3(F)(i) applied to each counterfeit or unauthorized access device, without additional proof that the device “can be used”); United
The Ninth Circuit has held that when skimming devices are used to obtain account numbers used at a particular location like an ATM, the sentencing court must make a reasonable estimate of the specific number of account numbers obtained based on evidence, rather than hold the defendant accountable for every access device used at that location.\footnote{United States v. Gainza, 982 F.3d 762, 765–66 (9th Cir. 2020).}

2. Government Benefits

In cases “involving government benefits (e.g., grants, loans, entitlement program payments),” loss should not be less than “the value of the benefits obtained by unintended recipients or diverted to unintended uses.”\footnote{USSG §2B1.1, comment. (n.3(F)(ii)).} A sentencing judge may use the face value of the claims for government benefits as the starting point in calculating loss, and the burden of production then shifts to the defendant to offer evidence showing which claims were for legitimate amounts.\footnote{United States v. Rivera-Ortiz, 14 F.4th 91, 103 (1st Cir. 2021) (affirming the district court’s use of the face value of the defendant’s total benefits as the starting and end point for the loss calculation, where the government had produced payment history and beneficiary list evidence and the defendant had not put forth any additional evidence).} The final amount of loss should be determined based on the amount the government, which continues to hold the ultimate burden of proof, is able to establish.\footnote{Id.}

A sentencing judge should not calculate loss based on the total amount of benefits received if a portion of those benefits would have been received absent the fraud.\footnote{United States v. Harms, 442 F.3d 367, 379 (5th Cir. 2006).} For example, the Third Circuit reasoned that the loss derived by a defendant’s fraudulent receipt of worker’s compensation benefits was “the difference between the amount of benefits actually obtained . . . and the amount the government intended him to receive during the relevant period.”\footnote{United States v. Tupone, 442 F.3d 145, 154 (3d Cir. 2006); see also United States v. Catone, 769 F.3d 866, 876–77 (4th Cir. 2014) (construing Application Note 3(F)(i) to require courts to distinguish between legitimate and illegitimate benefits in calculating loss; remanding because trial court failed to identify what, if any, portion of unemployment benefits could have been legitimately obtained). But see United States v. Palmquist, 712 F.3d 640, 648 & n.7 (1st Cir. 2013) (refusing to provide such a credit when the defendant had never actually claimed the legitimate benefits until after being caught for the “obvious” reason that doing so would have revealed his larger fraudulent scheme).} However, where the government shows the fraud to be “so

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\footnotesize{States v. Carver, 916 F.3d 398, 403 (4th Cir. 2019) (rejecting a usability standard); United States v. Popovski, 872 F.3d 552, 554 (7th Cir. 2017) (“The district judge therefore was entitled to rely on the rule in Application Note 3(F)(i) without requiring card-by-card proof of functionality while the scheme was in operation.”); United States v. Moon, 808 F.3d 1085, 1091–92 (6th Cir. 2015) (the $500 minimum applies to each device regardless of whether the device was in fact useable, and collecting cases); see also United States v. Thomas, 841 F.3d 760, 764–65 (8th Cir. 2016) (in light of circuit split, district court did not commit plain error by not requiring proof of usability).}
extensive and pervasive that separating legitimate benefits from fraudulent ones is not reasonably practicable, the burden shifts to the defendant” to identify which benefits were legitimate.141 Absent such a showing by the defendant, the district court may reasonably treat the entire claim as intended loss.142

Courts have disagreed about whether to apply this special rule where defendants have improperly received benefits pursuant to a set-aside or similar program that awards a certain percentage of government procurement contracts to socially or economically disadvantaged businesses. A number of courts have held that because the purpose of the programs is to benefit minority-owned or small businesses, they are effectively “benefits” and loss cannot be reduced by the value of services actually rendered.143 More recently, the Fifth, Sixth, and Ninth Circuits have disagreed, concluding that procurement fraud involving set-aside programs should be treated under the general rules for loss calculation like any other procurement fraud.144

For example, the Fifth Circuit explained that “[t]he mere fact that a government contract furthers some public policy objective apart from the government’s procurement needs is not enough to transform the contract into a ‘government benefit’ akin to a grant or an entitlement program payment.”145 Similarly, the Ninth Circuit contrasted fraudulent procurement of set-aside contracts with benefits that unilaterally benefit the recipient, like food stamps, explaining that loss to the government should not be the full value of the contracts where those contracts were fully or partially performed.146 Recently, the Sixth Circuit cited to both the Fifth and Ninth Circuits in holding that the government benefits

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141 United States v. Hebron, 684 F.3d 554, 563 (5th Cir. 2012).
142 Id.
143 See, e.g., United States v. Maxwell, 579 F.3d 1282, 1306 (11th Cir. 2009) (appropriate amount of loss is entire value of contracts that were diverted from the intended recipient); United States v. Leahy, 464 F.3d 773, 790 (7th Cir. 2006) (a municipal minority contracting program was a “government benefits” program under §2F1.1, §2B1.1’s predecessor); United States v. Bros. Constr. Co. of Ohio, 219 F.3d 300, 317–18 (4th Cir. 2000) (fraudulent receipt of Disadvantaged Business Enterprise funds involved the diversion of “government benefits”). But see United States v. Near, 708 F. App’x 590, 603–04 (11th Cir. 2017) (per curiam) (no error in district court’s decision not to apply government benefits rule where contracts were properly awarded to small business but some of the funds were diverted to unintended uses; “Maxwell does not speak to whether the value of services provided by an intended recipient can be credited against losses caused by that recipient’s unintended use of funds. We are persuaded that such losses can be offset by the value of service provided.”)
144 United States v. Kozerski, 969 F.3d 310, 313–14 (6th Cir. 2020); United States v. Harris, 821 F.3d 589, 602–04 (5th Cir. 2016); United States v. Martin, 796 F.3d 1101, 1110–11 (9th Cir. 2015).
145 Harris, 821 F.3d at 604.
146 Martin, 796 F.3d at 1109–12 (remanding and suggesting possible methods to consider loss, including potential premium paid by the government above what it would have paid in competitive bidding process, non-pecuniary harm to the integrity of the program, and harm to legitimate contractors that might otherwise have been awarded the contract).
rule does not apply to the loss associated with a defendant’s fraudulent procurement of set-aside contracts for veterans.\textsuperscript{147}

The Third Circuit has held that regardless of whether loss is calculated under typical loss rules or under the government benefit rules, the appropriate measure of loss is the value of the contracts less the fair market value of the services rendered under those contracts.\textsuperscript{148} In explaining its ruling, the court determined that where the government benefits rule applied, it was not inconsistent to also apply Application Note 3(E)(i), which requires that the fair market value of the property returned and services rendered be credited against the loss.\textsuperscript{149}

3. \textit{Davis-Bacon Act Violations}

The loss involving a violation of the Davis-Bacon Act,\textsuperscript{150} concerning the payment structure under employment contracts for government-funded projects, will be “not less than the difference between the legally required wages and the actual wages paid.”\textsuperscript{151}

4. \textit{Ponzi and Other Fraudulent Schemes}

In a case involving a fraudulent investment scheme, “loss shall not be reduced by the money or the value of the property transferred to any individual investor in the scheme in excess of that investor’s principal investment.”\textsuperscript{152} For example, in Ponzi scheme cases, where payments routinely are made to some or all of the victims, the defendant will receive no credit for payments that exceeded the investor’s principal investment.\textsuperscript{153}

\textsuperscript{147} \textit{Kozerski}, 969 F.3d at 313–14.

\textsuperscript{148} United States v. Nagle, 803 F.3d 167, 179–183 (3d Cir. 2015) (loss calculation “is the face value of the contracts [the company] received minus the fair market value of the services they provided under the contracts” because the special rule only supplants Application Note 3(A)’s definition of “loss” and, therefore, under Application Note 3(E)(i), a loss reduction for services rendered is nonetheless required); \textit{see also} United States v. Shulick, 18 F.4th 91, 114 (3d Cir. 2021) (holding that regardless of whether the defendant’s management of school district budgeting was a “fee-for-service business deal” or a case involving government benefits, the proper loss amount was the difference between the face value of the contracts and the value of services the defendant actually provided).

\textsuperscript{149} \textit{Nagle}, 803 F.3d at 179–83. The Seventh Circuit is the only circuit to apply Application Note 3(F)(v) (relating to, among other things, cases where regulatory approval by a government agency is obtained by fraud) in this context. \textit{See infra} Section IV.C.5 (citing United States v. Giovenco, 773 F.3d 866, 870–71 (7th Cir. 2014)).


\textsuperscript{151} USSG §2B1.1, comment. (n.3(F)(iii)); \textit{see also}, e.g., United States v. Clark, 787 F.3d 451, 464–65 (7th Cir. 2015) (district court properly applied loss enhancement because defendant “caused” actual loss to employees by false statements regarding wages; government’s ability to stop payments to subcontractors meant that defendant’s lies caused “loss” within the meaning of the guidelines).

\textsuperscript{152} USSG §2B1.1, comment. (n.3(F)(iv)).

\textsuperscript{153} \textit{See id.}; \textit{see also} United States v. Snelling, 768 F.3d 509, 512–13 (6th Cir. 2014) (remanding case where district court failed to credit against loss amounts repaid that were not in excess of amounts invested); United
As discussed in Section V.A, losses, whether actual or intended, “shall not include . . . interest of any kind, finance charges, late fees, penalties, amounts based on an agreed-upon return or rate of return, or other similar costs.” In the context of a Ponzi scheme, however, courts have recognized a distinction between the general prohibition on interest and the earnings reinvested by victims of a Ponzi scheme. The Second Circuit joined the Eighth Circuit in holding that “a federal sentencing court can include as part of its ‘intended loss’ determination those earnings that victims reinvested in a Ponzi scheme, even though those ‘earnings’ were invented as part of the scheme itself.” The court noted that “[w]hen an investor in a Ponzi scheme faces the choice either to withdraw or to reinvest, the choice to reinvest—an act frequently necessary to maintain the scheme itself—transforms promised interest into realized gain that can be used in the computation of loss for the purposes of federal sentencing.” The court further stated, that, “[i]n such a case, only the most recent promised or reported interest gains are excluded from sentencing consideration as per the [g]uidelines’ exclusion of interest or rates of return from the loss calculation.”

5. Certain Other Unlawful Misrepresentation Schemes

When defendants falsely pose as licensed professionals, represent that products are approved by the government when they are not, fail to properly obtain approval for regulated goods, or fraudulently obtain approval for goods from the government, the loss shall include “the amount paid for the property, services or goods transferred, rendered, or misrepresented, with no credit provided for the value of those items or services.” For example, a defendant received no credit for the value of the misbranded prescription drugs he sold to victims even where there was no evidence that the drugs that were delivered did not perform as promised. Nor will a defendant receive credit for legal services rendered where he or she falsely claimed to be a licensed attorney. Similarly, the Seventh Circuit

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154 USSG §2B1.1, comment. (n.3(D)).
155 United States v. Hsu, 669 F.3d 112, 120, 121 n.4 (2d Cir. 2012) (citing United States v. Alfonso, 479 F.3d 570 (8th Cir. 2007) and Hartstein, 500 F.3d at 800).
156 Id. at 121.
157 Id.
158 USSG §2B1.1, comment. (n.3(F)(v)).
159 United States v. Milstein, 401 F.3d 53, 74 (2d Cir. 2005) (per curiam).
160 See, e.g., United States v. Kieffer, 621 F.3d 825, 834 (8th Cir. 2010).
has held that Application Note 3(F)(v) applies to some circumstances in which defendants falsely claim qualifications to participate in set-aside programs.\textsuperscript{161}

6. \textbf{Value of Controlled Substances}

The loss in a case involving controlled substances is the estimated street value of the substances involved.\textsuperscript{162}

7. \textbf{Value of Cultural Heritage Resources or Paleontological Resources}

The value of a “cultural heritage resource” or “paleontological resource” shall include the archaeological value, the commercial value, or the cost of restoration.\textsuperscript{163} The court “need only make a reasonable estimate of the value of the resource based on available information.”\textsuperscript{164}

8. \textbf{Federal Health Care Offenses Involving Government Health Care Programs}

In federal health care fraud offenses involving a government health care program, “the aggregate dollar amount of fraudulent bills submitted to the Government health care program shall constitute prima facie evidence of the amount of the intended loss, \textit{i.e.,} evidence sufficient to establish the amount of the intended loss, if not rebutted.”\textsuperscript{165} However, objections to the loss amount alone do not constitute competent rebuttal evidence.\textsuperscript{166}

\begin{footnotesize}
\begin{enumerate}
\item\textsuperscript{161} See United States v. Giovenco, 773 F.3d 866, 870–71 (7th Cir. 2014) (relying on Application Note 3(F)(v); counting as loss entire amount improperly paid under contract without credit for services provided when defendants obtained contract based on false claims that they were a minority-owned business).
\item\textsuperscript{162} USSG §2B1.1, comment. (n.3(F)(vi)).
\item\textsuperscript{163} USSG §2B1.1, comment. (n.3(F)(vii)); USSG §2B1.5, comment. (n.2(A)); see also United States v. Shumway, 112 F.3d 1413, 1424–26 (10th Cir. 1997) (affirming the district court’s calculation of loss based on testimony regarding the archeological value and cost of repair of archeological sites that the defendant unlawfully excavated).
\item\textsuperscript{164} USSG §2B1.5, comment. (n.2(B)); see also United States v. McCarty, 628 F.3d 284, 290–91 (6th Cir. 2010) (discussing commentary regarding the value of a cultural heritage resource in the context of stolen antique books).
\item\textsuperscript{165} USSG §2B1.1, comment. (n.3(F)(viii)).
\item\textsuperscript{166} See, e.g., United States v. Iwuala, 789 F.3d 1, 14–15 (1st Cir. 2015) (“[T]here is no evidence in this record that would have compelled the district court to find that the defendant knew that the amount billed was more than the scheduled amounts that Medicare routinely paid.”); United States v. Ohia, 618 F. App’x 225, 226 (5th Cir. 2015) (per curiam) (defendant’s objections to the loss amount did not constitute competent rebuttal evidence).
\end{enumerate}
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defendant instead must put forth evidence of legitimate services rendered\textsuperscript{167} or other specific evidence that a lower loss amount was intended.\textsuperscript{168}

**V. EXCLUSIONS FROM LOSS**

**A. INTEREST, FINANCE CHARGES, LATE FEES, PENALTIES AND SIMILAR COSTS**

The loss calculation excludes any interest, “finance charges, late fees, penalties, amounts based on an agreed-upon return or rate of return, or other similar costs.”\textsuperscript{169}

**B. COSTS TO THE GOVERNMENT AND COSTS INCURRED BY VICTIMS**

In addition, the costs to the government and the costs incurred by victims to aid in the investigation and prosecution of a defendant are not included in any loss calculation.\textsuperscript{170} By contrast, costs incurred by a bank for investigating its own employee (the defendant) may be considered because the investigation was an “immediate response” to the defendant’s conduct and was not conducted primarily to aid the government in prosecution.\textsuperscript{171}

**VI. CREDITS AGAINST LOSS**

**A. MONEY AND PROPERTY RETURNED/SERVICES RENDERED**

Loss shall be reduced by money returned, as well as the fair market value of property returned and services rendered, by the defendant (or those acting jointly with the

\textsuperscript{167} See United States v. Karie, 976 F.3d 800, 804 (8th Cir. 2020) (affirming loss calculation where defendant did not present evidence of legitimate daycare services); United States v. Bikundi, 926 F.3d 761, 797–98 (D.C. Cir. 2019) (per curiam) (affirming $80 million loss calculation because defendants “did not produce evidence of [legitimate] services with any specificity”); cf. United States v. Adebimpe, 649 F. App’x. 449, 452 (9th Cir. 2016) (“In calculating the amount of the intended loss, the district court was not required to discount the value of any wheelchairs that happened to be medically necessary, because the medical examinations mandated to determine medical necessity were not performed.”).

\textsuperscript{168} Compare United States v. Valdez, 726 F.3d 684, 696 (5th Cir. 2013) (district court committed error in failing to consider audiotape demonstrating that defendant anticipated being paid far less than what he billed to Medicaid), with United States v. Elliot, 600 F. App’x 225, 228–30 (5th Cir. 2015) (per curiam) (district court did not err in calculating loss at full amount billed where it considered, but did not find credible, defendant’s evidence that he intended a lower loss amount).

\textsuperscript{169} USSG §2B1.1, comment. (n.3(D)(i)).

\textsuperscript{170} USSG §2B1.1, comment. (n.3(D)(ii)); see also United States v. Schuster, 467 F.3d 614, 618–20 (7th Cir. 2006) (reversing loss figure that included such costs).

\textsuperscript{171} United States v. DeRosier, 501 F.3d 888, 895 (8th Cir. 2007); see also United States v. Levy, 18 F.4th 1019, 1022 (8th Cir. 2021) (district court did not err in including cost of hospital’s “lookback” review of defendant’s pathology cases in loss amount because it was conducted for the benefit of the business, not the criminal investigation, and would have been done regardless of whether there was a criminal investigation).
defendant) to the victim before the offense was detected.172 For example, the Sixth Circuit determined that, although a construction contractor committed fraud in the bidding process to secure a contract, the contractor was to be credited the value of services rendered before the customer cancelled the contract.173 Failure to credit such value may constitute reversible error.174 However, where the fraud is so pervasive that it is not reasonably practicable to separate legitimate from fraudulent conduct, the burden shifts to the defendant to prove the legitimate amount.175

The time of detection of the offense is the earliest of: “(I) the time the offense was discovered by a victim or government agency; or (II) the time the defendant knew or reasonably should have known that the offense was detected or about to be detected by a victim or government agency.”176 Property returned after detection will not be credited against the loss figure. For example, a sentencing judge declined to subtract the value of money returned after discovery of the offense, reasoning that “the fact that a victim has recovered part of its loss after discovery of a fraud does not diminish a defendant’s culpability for purposes of sentencing.”177 In addition, restitution paid before sentencing but subsequent to detection, whether voluntarily or not, will not be subtracted from the loss amount.178 Similarly, property that is forfeited by the defendant in the same or related proceeding will not be credited to the defendant’s loss figure.179

The value of any property returned before discovery is set as of the time the property is returned, not as of the time of sentencing. For example, one defendant sold non-existent accounts to another entity.180 The purchaser eventually learned of the scheme and acquired all defendant’s corporate assets, including a software company.181 At the time of

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172 USSG §2B1.1, comment. (n.3(E)(i)).

173 United States v. Anders, 333 F. App’x 950, 954–55 (6th Cir. 2009); see also United States v. Campbell, 765 F.3d 1291, 1305 (11th Cir. 2014) (although court may be justified in treating all money transfers as loss when conduct is “permeated” with fraud, “value may be rendered even amid fraudulent conduct” and defendant appropriately received credit for such value (internal citation and punctuation omitted)); United States v. Klein, 543 F.3d 206, 214–15 (5th Cir. 2008) (district court erred by failing to offset loss to insurers by value of drugs that patients actually needed).

174 See, e.g., United States v. Alphas, 785 F.3d 775, 784 (1st Cir. 2015) (remanding case to allow determination as to amounts, if any, that would have legitimately been paid for insurance claims that were artificially inflated but may have contained genuine claims; “void-for-fraud” clauses in insurance policy did not change analysis and “intended loss”).

175 See, e.g., United States v. Mazkouri, 945 F.3d 293, 304 (5th Cir. 2019) (rejecting defendant’s argument that some of the billings to Medicare were not based on fraud without specific evidence); Alphas, 785 F.3d at 784.

176 USSG §2B1.1, comment. (n.3(E)(i)).

177 United States v. Swanson, 360 F.3d 1155, 1168–69 (10th Cir. 2004).

178 See United States v. Akin, 62 F.3d 700, 702 (5th Cir. 1995).

179 See United States v. Cacho-Bonilla, 404 F.3d 84, 92 (1st Cir. 2005).

180 United States v. Holbrook, 499 F.3d 466, 467–68 (5th Cir. 2007).

181 Id.
transfer, the software company was not profitable, but the purchaser invested $10 million in the entity. Although the defendant agreed that the value of the software company was “either entirely or almost entirely” due to the purchaser’s post-acquisition investment, he argued that a “literal interpretation” of Application Note 3(E)(ii) required that the court reduce loss amounts attributable to him by the $10 million valuation placed on the company at the time of sentencing. The court rejected this argument and valued the software company at the time of the transfer, stating that allowing the victim’s investment in property to count as a reduction in the victim’s loss would “create an absurd result.”

Timing is not the only consideration when determining whether a credit applies against the loss figure. For example, a personal injury lawyer received kickbacks from a chiropractor to whom he referred clients and argued at sentencing that the loss figure should be reduced by the “valuable free services” and legal fee reductions he provided the victim clients. The court declined to adopt this approach because the lawyer routinely provided these services to all of his clients, not just those defrauded, and the “net detriment” to those victims was not lessened relative to the other clients.

Courts also have found that a defendant is not entitled to a credit when the defendant’s objective in repaying a victim is to perpetuate ongoing fraud. For example, the Eighth Circuit held that a defendant should receive no credit for amounts he had returned to a victim only to prevent discovery of his fraud. The defendant had encouraged his cousin to allow him to invest his money in an organization that would supposedly provide substantial yields with little risks but instead appropriated the funds for his own use. Over several years, he returned about one-third of the money, but “only when repeatedly confronted with [the victim’s] desperate medical needs or threats of legal action by third parties, either of which could have foreseeably led to discovery of the scheme.” Under the circumstances, the court concluded that the defendant should receive no credit because he had effectively intended to defraud his relatives of the entire amount invested.

Additionally, even if property is returned or services are rendered before discovery, it may not qualify the defendant for a credit against loss if the beneficiaries of the property

182 Id. at 468.
183 Id. at 469.
184 Id. at 469 n.2.
185 United States v. Hausmann, 345 F.3d 952, 959–60 (7th Cir. 2003).
186 Id. at 960.
187 United States v. Callaway, 762 F.3d 754, 759–60 (8th Cir. 2014).
188 Id. (payments to victim were “necessary to give [defendant’s] scheme a veneer of legitimacy”); see also United States v. Stochel, 901 F.3d 883, 890–91 (7th Cir. 2018) (defendant not entitled to offset where he paid some funds towards genuine receivership expenses because they were made to conceal and “were essentially the cost of perpetuating the scheme”).
189 Callaway, 762 F.3d at 760.
or service were not eligible to receive them.\textsuperscript{190} For example, where a defendant was convicted of defrauding Medicare, the Fifth Circuit found that “[m]edicare is not a patient; as such, it never receives ‘value’ as does a patient.”\textsuperscript{191} Where the evidence indicated that Medicare beneficiaries at the defendant’s hospitals received legitimate services, the services only became illegitimate when the defendant fraudulently billed them to Medicare, and the defendant was entitled to a credit against loss.\textsuperscript{192}

In a Fifth Circuit case, the sentencing judge had determined that the intended loss constituted the defendant’s salary and pension for a five-year period when the defendant committed fraud to obtain the position of union president.\textsuperscript{193} The defendant had argued that any loss figure should be reduced by the amount of “legitimate services” he provided the union, but the sentencing judge determined that no “legitimate services” were provided because he procured the position by fraud.\textsuperscript{194} On appeal, the Fifth Circuit concluded that the sentencing judge’s reasonable estimate of the intended loss was not “clearly erroneous.”\textsuperscript{195}

Additionally, a defendant’s loss calculation is not reduced by costs incurred in defrauding victims. Thus, when a defendant engages in fraud to raise money for his business operation, the portion of those funds used for business expenses cannot be credited against any loss because nothing of value is conferred on the victims.\textsuperscript{196} For example, one defendant marketed and sold internet kiosks by deliberately and fraudulently fabricating the value of these items and their profit potential to investors.\textsuperscript{197} The court refused to reduce the loss amount by the value of the kiosks because that value was a cost incurred in defrauding victims.\textsuperscript{198}

\textsuperscript{190} See United States v. Emordi, 959 F.3d 644, 652–53 (5th Cir. 2020) (defendant was not entitled to a credit against loss in Medicare fraud case because Medicare would not have paid for services rendered by defendant’s hospitals to patients had defendant’s fraud been known); see also United States v. Phipps, 595 F.3d 243, 248 (5th Cir. 2010) (without evidence provided by the defendant as to the value of property provided, the court “ha[s] no reason to consider such a reduction” in loss).

\textsuperscript{191} United States v. Mahmood, 820 F.3d 177, 195 (5th Cir. 2016).

\textsuperscript{192} Id.

\textsuperscript{193} United States v. Crawley, 533 F.3d 349, 355–56 (5th Cir. 2008) (although the defendant was arrested midway through his term as union president, he intended to continue serving and thus, continue the criminal scheme).

\textsuperscript{194} Id. at 356–58.

\textsuperscript{195} Id. at 356–57.

\textsuperscript{196} See United States v. Byors, 586 F.3d 222, 225–26 (2d Cir. 2009); see also United States v. Spalding, 894 F.3d 173, 191–92 (5th Cir. 2018) (applying Byors); United States v. Evans, 744 F.3d 1192, 1198 (10th Cir. 2014) (same).

\textsuperscript{197} United States v. Pelle, 263 F. App’x 833, 835 (11th Cir. 2008) (per curiam).

\textsuperscript{198} Id. at 840; see also United States v. Craiglow, 432 F.3d 816, 820–21 (8th Cir. 2005) (rejecting the claim “that one who commits a fraud is entitled to his business expenses” incurred in perpetrating that fraud).
B. COLLATERAL

In a case involving collateral pledged or otherwise provided by the defendant, loss will be reduced by “the amount the victim has recovered at the time of sentencing from disposition of the collateral, or if the collateral has not been disposed of by that time, the fair market value of the collateral at the time of sentencing.” In cases involving a mortgage loan where the property has not been disposed of by the time of sentencing, there is a “rebutable presumption that the most recent tax assessment value of the collateral is a reasonable estimate of the fair market value.” However, where the property has been disposed, the loss amount remains the difference between the unpaid principal balance and the subsequent sale price of the property.

In determining whether to issue a credit against loss, a sentencing judge should examine whether a defendant intended for the collateral to go back to the victim. For example, the Ninth Circuit stated that a sentencing judge “must also consider whether a defendant planned to return the collateral or anticipated that such collateral would be repossessed or foreclosed on by the lending institution.” The Seventh Circuit reduced the intended loss in a bank fraud case by the value of real property used to collateralize the fraudulently obtained loan. It is important to note, however, that in the case of an asset with a value “either entirely or almost entirely” due to the victim’s investment subsequent to seizure by the victim, the defendant shall not receive credit for the value of the asset at the time of sentencing.

At least one circuit has construed Application Note 3(E)(ii) to mean that the “pledge” of such collateral must, like money and property returned, be done before discovery of the offense. There, the Fifth Circuit reasoned that allowing collateral to be

199 USSG §2B1.1, comment. (n.3(E)(ii)); see also United States v. Cavallo, 790 F.3d 1202, 1232–40 (11th Cir. 2015) (district court correctly used property value at the time of sentencing, rather than value of property years earlier, the time at which the defendant claimed, without substantiation, that he withdrew from mortgage fraud conspiracy).

200 USSG §2B1.1, comment. (n.3(E)(iii)).

201 See United States v. Alexander, 679 F.3d 721, 729–30 (8th Cir. 2012) (affirming the sentencing court’s use of the foreclosure sale amount of $50,000 rather than the alleged fair market value of at least $143,460); see also United States v. Foley, 783 F.3d 7, 23 (1st Cir. 2015) (in mortgage fraud cases, the actual loss is “always the difference between the original loan amount and the final foreclosure price (less any principal repayments)”); accordingly, “actual loss usually can be calculated by subtracting the value of the collateral—or, if the lender has foreclosed on and sold the collateral, the amount of the sales price—from the amount of the outstanding balance on the loan” (quoting United States v. Appolon, 695 F.3d 44, 67 (1st Cir. 2012))).

202 United States v. McCormac, 309 F.3d 623, 629 (9th Cir. 2002); see also United States v. Lacey, 699 F.3d 710, 720 (2d Cir. 2012) (allowing the sentencing court to draw an inference, where supported by appropriate evidence, that the intended loss in case of a loan secured by real property should include an offset for the value of the property).

203 United States v. Lane, 323 F.3d 568, 590 (7th Cir. 2003).

204 United States v. Holbrook, 499 F.3d 466, 469 (5th Cir. 2007).

205 United States v. Austin, 479 F.3d 363, 369 (5th Cir. 2007).
“pledged” as late as sentencing “would be totally at odds with the principles embodied in subsection (i) and would alter the long-standing, well-recognized rule that post-detection repayments or pledges of collateral do not reduce the loss.”

In mortgage fraud cases, courts often are met with the question of how to calculate actual loss where the defendant fraudulently obtained a loan from one lender who then sold the mortgage to a second lender. The key consideration in such cases is whether the transfer from the original lender to the successor lender was foreseeable to the defendant at the time he or she fraudulently obtained a loan. Courts have found that mortgage reselling was reasonably foreseeable, and thus, the composite loss is the proper measure of actual loss.

Several circuits have held that Application Note 3 applies the concept of reasonable foreseeability only to its calculation of “actual loss,” and not to the calculation of “credits against loss.” These courts therefore have rejected arguments that mortgage fraud defendants should receive credits against loss because they could not have reasonably foreseen the economic downturn that led properties to be worth less than they expected. Instead, defendants only could receive credit for the actual value of the collateral to the lenders. These courts are explicitly at odds with the Eighth Circuit, which has held that the concept of reasonable foreseeability applies to credits against loss as well as to actual loss.

Additionally, at least one circuit has adopted a rule where an intentional loss figure cannot be reduced by the return of property, even before discovery, if no property was

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206 Id.
207 Compare United States v. James, 592 F.3d 1109, 1115 (10th Cir. 2010) (where district court determined that successor lender victims were not foreseeable to the defendant, the proper loss amount was initial loan minus transfer price between initial lender and successor lender), with United States v. Smith, 705 F.3d 1268, 1276 (10th Cir. 2013) (because successor lender victims were foreseeable victims to the defendant, the proper measure of loss was initial loan minus foreclosure sale price). See also United States v. Howard, 784 F.3d 745, 748 (10th Cir. 2015) (reiterating that total loss may include both original and downstream loans); United States v. Crowe, 735 F.3d 1229, 1242 (10th Cir. 2013) (“Where losses to both original and successor lenders is foreseeable,” a district court can calculate loss simply by subtracting the foreclosure sales price from the amount of the outstanding balance on the loan.”).

208 “Composite loss” means the foreclosure proceeds subtracted from original loan amount, adjusted for principal repayments and foreclosure expenses.
209 See, e.g., Howard, 784 F.3d at 748–49; United States v. Hymas, 780 F.3d 1285, 1293 (9th Cir. 2015); Smith, 705 F.3d at 1276; United States v. Appolon, 695 F.3d 44, 67–68 (1st Cir. 2012); see also United States v. Washington, 634 F.3d 1180, 1184–85 (10th Cir. 2011) (finding resale foreseeable because of the defendant’s experience in the real estate industry).
210 United States v. Cavallo, 790 F.3d 1202, 1235 (11th Cir. 2015); United States v. Morris, 744 F.3d 1373, 1375 & n.1 (9th Cir. 2014); United States v. Wendlandt, 714 F.3d 388, 393–94 (6th Cir. 2013); Crowe, 735 F.3d at 1236–37; United States v. Turk, 626 F.3d 743, 748–51 (2d Cir. 2010); accord United States v. Mallory, 461 F. App’x 352, 361 (4th Cir. 2012) (per curiam).
211 United States v. Parish, 565 F.3d 528, 535 (8th Cir. 2009); see also Morris, 744 F.3d at 1375 n.1 (“[W]e join the Second Circuit in rejecting” Parish); Crowe, 735 F.3d at 1241 & n.5 (same).
pledged before or during the actual fraud. In a Seventh Circuit case, the defendant secured a fraudulent loan with collateral four months after originally receiving the loan proceeds but before discovery of the fraud.\textsuperscript{212} The court declined to credit the defendant for the value of the collateral when calculating intended loss, because at the time he received the loan, the defendant had no intention of repaying any part of it.\textsuperscript{213}

\textsuperscript{212} United States v. Severson, 569 F.3d 683, 687–90 (7th Cir. 2009).

\textsuperscript{213} Id. at 690.