Good Math to Fight the Bad Math: Avoiding Unwarranted Disparity by Applying the Commission's Lowest Accepted Ratios to All Offense Levels[1]

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When the Sentencing Commission amended the guidelines on November 1, 2007, it lowered the penalties for most crack cocaine offenses.[2] Prior to this amendment, the guidelines penalized crack cocaine 100 times more harshly than powder cocaine, or at a ratio of 100:1.[3] In amending the guidelines, the Commission softened the disparity between the treatment of crack and powder by eliminating this 100:1 ratio. However, the Commission failed to set a new uniform ratio between crack and powder cocaine. Instead, the Commission simply took the

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[1] This article was published in the April 2008 edition of *The Champion*.

[2] Penalties at the highest and lowest base offense levels (38 and 12) were lowered in some, but not all, cases. *See* discussion and table on pages 1–2 of *Applying the Crack Amendments 101* at http://www.fd.org/pdf_lib/crack.pdf. The Commission voted to make this amendment retroactive on December 11, 2007.

[3] The inequities of this disparate treatment of defendants convicted of crack cocaine and powder cocaine, which are chemically the same substance, have been well-documented by the criminal defense community, the United States Sentencing Commission, and others. *See*, *e.g.*, Carmen Hernandez, *Sentencing Commission Should Propose Changes to Crack Cocaine Guidelines*, 31-APR Champion 14 (2007) (discussing lack of any scientific evidence to support setting ratio of powder to crack at 100:1); *Report to Congress: Cocaine and Federal Sentencing Policy* (May 2007) at http://www.ussc.gov/r_congress/cocaine2007.pdf ("Current data and information continue to support the core findings contained in the 2002 Commission Report, among them: (1) The current quantity-based penalties overstate the relative harmfulness of crack cocaine compared to powder cocaine[;] (2) The current quantity-based penalties sweep too broadly and apply most often to lower level offenders[;] (3) The current quantity-based penalties overstate the seriousness of most crack cocaine offenses and fail to provide adequate proportionality[; and] (4) The current severity of crack cocaine penalties mostly impacts minorities. Based on these findings, the Commission maintains its consistently held position that the 100-to-1 drug quantity ratio significantly undermines the various congressional objectives set forth in the Sentencing Reform Act."); *Report to Congress: Cocaine and Federal Sentencing Policy* (May 2002) at http://www.ussc.gov/r_congress/02crack/2002crackrpt.htm ("After carefully considering all of the information currently available – some 16 years after the 100-to-1 drug quantity ratio was enacted – the Commission firmly and unanimously believes that the current federal cocaine sentencing policy is unjustified and fails to meet the sentencing objectives set forth by Congress in both the Sentencing Reform Act and the 1986 Act. The 100-to-1 drug quantity ratio was established based on a number of beliefs about the relative harmfulness of the two drugs and the relative prevalence of certain harmful conduct associated with their use and distribution that more recent research and data no longer support."); *Special Report to Congress: Cocaine and Federal Sentencing Policy* (February 1995) at http://www.ussc.gov/crack/exec.htm; The Sentencing Project (website at http://www.sentencingproject.org/crackreform.aspx).

existing ranges of crack quantities and lowered each range to the next lowest base offense level.[4] The Commission also adjusted the conversion table that is used to determine the "marijuana equivalency" of crack cocaine, which is consulted when a case involves crack and at least one more type of drug.[5]

Unfortunately, simply lowering the ranges of crack cocaine quantities to the next lowest base offense level created varying ratios between crack and powder cocaine and between crack and marijuana. The table below compares the current ratios of powder to crack and marijuana to crack at each base offense level.[6]

Table 1

Base Offense Level	**Ratio of Powder to Crack**[7]	**Ratio of Marijuana to Crack**[8]
38	33:1	6,700:1
36	33:1	6,700:1
34	30:1	6,000:1
32	33:1	6,700:1
30	70:1	14,000:1
28	57:1	11,400:1
26	25:1	5,000:1
24	80:1	16,000:1
22	75:1	15,000:1

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[4] This approach resulted in the creation of widely-varying ratios between powder and crack cocaine. The highest ratio is 80:1; the lowest is 25:1. *See* Table 1, *infra*; page 2 of *Applying the Crack Amendments 101* at http://www.fd.org/pdf_lib/crack.pdf.

[5] U.S.S.G. §2D1.1, application note 10.D; see a reprint of this conversion table, and an in-depth discussion about its anomalies, starting at page 4 of *Faulty Math in New Cocaine Base Equivalency Table* at http://www.fd.org/pdf_lib/Egan%20faulty%20math.pdf.

[6] These ratios work at the bottom end of each range but fail to do so when the quantities within each range increase. For an examination of this phenomenon, *see* Egan, *supra* note 4.

[7] Calculated ratios taken from *Applying the Crack Amendments 101, supra*, note 3.

[8] Ratios taken directly from U.S.S.G. §2D1.1, application note 10.D.

20	67:1	13,300:1
Lower	50:1	10,000:1

The wide ranges of ratios used by the Commission—both between crack and powder cocaine, and between crack cocaine and marijuana on the conversion table—result in anomalies that negatively impact clients, often those who are less culpable or whose conviction involved lesser amounts of drugs.[9]

The problems created by anomalies in the conversion table can be illustrated by example. Suppose your client is accountable for 75 grams of crack and 10 grams of powder cocaine. Under the existing conversion method, the guidelines direct the court to find the base offense level for 75 grams of crack, which is level 30. The guidelines, in application note 10.D to §2D1.1, then advise the court to multiply each gram of crack by 14 kilograms of marijuana. This converts the 75 grams of crack to 1,050 kilograms of marijuana. So, even before considering the 10 grams of powder cocaine, your client has been moved from a base offense level 30 to a level 32. Moreover, if your client were accountable for crack alone, she would need an additional 85 grams of crack to move into level 32. This means, then, that your client is penalized at a higher rate for a lesser amount of crack, simply because the conversion table does not apply a consistent ratio between crack and marijuana.[10]

If you are defending a client who is negatively impacted either by the anomalies in the conversion table or variance in the new ratios between crack and powder cocaine, consider making the following arguments to the court:

1) the guidelines are advisory;[11]

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[9] The anomalies can be found by comparing the ratios of powder to crack and marijuana to crack both between base offense levels and within base offense levels. For an examination of the anomalies that occur within base offense levels and a proposal for a more equitable method to account for these anomalies, *see* Egan, *supra*, note 4. The anomalies produced by the new conversion table have been recognized by at least three courts. *See United States v. Watkins*, 2008 WL 152901 (E.D. Tenn. Jan. 14, 2008); *United States v. Horta*, 2008 WL 445893 (D.Me. Feb. 19, 2008); *United States v. Molina*, 2008 WL 544703 (E.D.N.Y. Feb. 28, 2008).

[10] The anomaly present in base offense level 30, is also present in base offense levels 24, 32, and 36. In fact, defendants who possess 6.25 grams or more at level 24, 71.43 grams or more at level 30, 447.76 grams or more at level 32, and 4.48 kilograms or more at level 36 will be propelled to the next highest base offense level prior accounting for the remaining drugs. *See Watkins*, 2008 WL 152901 at *1 n. 1; *see also Horta*, 2008 WL 445893 at *2.

[11] *See United States v. Booker*, 543 U.S. 220, 245 (2005) ("So modified, the federal sentencing statute, see Sentencing Reform Act of 1984, (Sentencing Act), as amended, makes the Guidelines effectively advisory.") (citations omitted); *United States v. Rita*, __ U.S. __ , 127

2) the advisory guidelines should not be applied in your client's particular case, because they call for a sentence that is greater than necessary and does not meet the purposes of sentencing required by 18 U.S.C. § 3553(a);

3) the court need not and should not follow guidelines, such as U.S.S.G. §2D1.1, that were promulgated without full study, without a basis in empirical data, or that reflect unsound judgment;[12] and

4) if the court prefers to sentence within the advisory guideline scheme, it should use the minimum ratio approved by the Commission in its November 1, 2007 amendments when

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S.Ct. 2456, 2467 (2007) ("Even the Government concedes that appellate courts may not presume that every variance from the advisory Guidelines is unreasonable."); *Kimbrough v. United States*, __ U.S. __ , 128 S.Ct. 558, 564 (2007) ("We hold that, under *Booker*, the cocaine Guidelines, like all other Guidelines, are advisory only, and that the Court of Appeals erred in holding the crack/powder disparity effectively mandatory."); *Gall v. United States*, __ U.S. __ , 128 S.Ct. 586, 594 (2007) ("As a result of our decision, the Guidelines are now advisory, and appellate review of sentencing decisions is limited to determining whether they are 'reasonable.'").

[12] The Court in *Kimbrough* acknowledged that under the pre-November 1, 2007 guidelines, the sentence for a given quantity of crack is three to six times longer than a sentence for an equal quantity of powder. *See Kimbrough*, 128 S.Ct. at 566; *see also id*. at 575 ("The crack cocaine Guidelines, however, present no occasion for elaborative discussion of this matter because those Guidelines do not exemplify the Commission's exercise of its characteristic institutional role. In formulating Guidelines ranges for crack cocaine offenses, as we earlier noted, the Commission looked to the mandatory minimum sentences set in the 1986 Act, and did not take account of 'empirical data and national experience.' Indeed, the Commission itself has reported that the crack/powder disparity produces disproportionately harsh sanctions, *i.e.,* sentences for crack cocaine offenses 'greater than necessary' in light of the purposes of sentencing set forth in § 3553(a). Given all this, it would not be an abuse of discretion for a district court to conclude when sentencing a particular defendant that the crack/powder disparity yields a sentence 'greater than necessary' to achieve § 3553(a)'s purposes, even in a mine-run case.").

District Judge John A. Woodcock, Jr., relied upon *Kimbrough* in imposing a sentence below the guidelines in *United States v. Horta*, 2008 WL 445893 at *4 (D. Me. Feb. 19, 2008). He sentenced below the guidelines because "to impose a sentence based on the guideline calculations would be contrary to the dictates of the statute[,]"specifically the parsimony clause and the mandate to avoid unwarranted disparity found in 18 U.S.C. § 3553(a). *Id*. Judge Woodcock noted the random inequity of the new conversion table, saying, "The Court is at a loss. There does not appear to be any rational basis for this differential treatment of similarly situated defendants. Imposing harsher sentences for those who sell other illegal drugs with crack cocaine is a legitimate goal, but sporadically including only a smattering of such defendants for harsher treatment is not." *Id*. at *3.

determining the appropriate guideline range under §2D1.1,and grant a downward departure.[13]

The minimum ratio of crack to powder cocaine accepted by the Commission in its November 1, 2007 amendments is 1 gram of crack to 25 grams of powder.[14] The lowest ratio of crack cocaine to marijuana accepted by the Commission for purposes of conversion is 1 gram of crack to 5 kilograms (5,000 grams) of marijuana.[15] These ratios are the ones the Commission set for base offense level 26. Applying the 25:1 powder to crack and the 5,000:1 marijuana to crack ratios uniformly at every base offense level necessitates altering the ranges of crack quantities. *See* Table 3. Fortunately, ranges of crack quantities that satisfy both the 25:1 and 5,000:1 ratios at each base offense level can be easily determined.[16] The following table compares the current crack cocaine amounts and their corresponding base offense levels to the way the amounts would correspond to base offense levels if the 25:1 and 5,000:1 ratios were applied across the board.

Table 2

Base Offense Level	**Post-Amendment Cocaine Base Amount Range**	**Cocaine Base Amount Range Reflecting a 25:1 Ratio Between Crack and Powder Cocaine**
38	≥ 4.5 KG	≥ 6.0 KG
36	≥ 1.5 KG - < 4.5 KG	≥ 2.0 KG - < 6 KG
34	≥ 500 G - < 1.5 KG	≥ 600 G - < 2.0 KG

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[13] *See* discussion page 2 of *Applying the Crack Amendments 101* at http://www.fd.org/pdf_lib/crack.pdf; *see also* discussion pages 2–7 of *Sentencing Reductions Under the Retroactive Crack Amendment* http://www.fd.org/pdf_lib/retroactivity%20memo.pdf.

A within-the-guidelines-framework approach to this problem was taken by Chief Judge Curtis L. Collier in *United States v. Watkins*, 2008 WL 152901 (E.D. Tenn. Jan. 14, 2008). In granting a two-level downward departure, he held that the anomaly in the conversion table led to a result that neither "this Court nor the Sentencing Commission would countenance," and violated the guidelines' proportionality principle. *Id*. at *3, *4.

[14] *See* Table 1, *supra*, at 2–3.

[15] *See id*. For a comparison of the current ratios and ranges to the Commission's lowest accepted ratios and corresponding ranges, see Table 3 at page 7.

[16] The reason why applying the 25:1 and the 5,000:1 ratios result in an identifiable range of crack quantities is because both the original 100:1 powder to crack and the 20,000:1 marijuana to crack ratios are divisible by 4, resulting in the Commission's lowest accepted ratios: 25:1 and 5,000:1.

32	≥ 150 G - < 500 G	≥ 200 G - < 600 G
30	≥ 50 G - < 150 G	≥ 140 G - < 200 G
28	≥ 35 G - < 50 G	≥ 80 G - < 140 G
26	≥ 20 G - < 35 G	≥ 20 G - < 80 G
24	≥ 5 G - < 20 G	≥ 16 G - < 20 G
22	≥ 4 G - < 5 G	≥ 12 G - < 16 G
20	≥ 3 G - < 4 G	≥ 8 G - < 12 G
18	≥ 2 G - < 3 G	≥ 4 G - < 8 G
16	≥ 1 G - < 2 G	≥ 2 G - < 4 G
14	≥ 500 MG - < 1 G	≥ 1 G - < 2 G
12	< 500 MG	< 1 G

Applying the lowest ratio approved by the Commission to all crack cases would mean that some clients would benefit by an additional two-level reduction from the post-amendment guidelines (from level 36 to level 34, for example), some clients would benefit from a four-level reduction (from level 30 to 26), and some from a six-level reduction (from level 24 to 18). For some clients, there would be no benefit, but no client would be adversely affected. In other words, applying a 25:1 ratio between powder and crack and a 5,000:1 ratio between marijuana and crack ensures that all clients reap the full benefits of, and that no defendants are adversely affected by, the Commission's November 1, 2007 amendments. Moreover, keeping the ratios uniform eliminates the anomalies found between and within base offense levels.

However, many clients exposed to mandatory minimum penalties set forth in 21 U.S.C. §§ 841(b)(1)(A), (b)(1)(B) and 21 U.S.C. § 844(a) will not receive the benefit of a uniform 25:1 ratio, unless they are exempt from these mandatory minimums through provisions such as safety-valve eligibility or substantial assistance motions under 18 U.S.C. § 3553(e) and U.S.S.G. §5K1.1. Under the current guidelines, the lowest amounts of crack that trigger mandatory minimum penalties (5 grams trigger the 5-year mandatory minimum, 50 grams the 10-year) fall within base offense levels 30 and 24. As shown in Table 2, these same minimum amounts would fall at lower offense levels (26 and 18, respectively), so the corresponding guideline ranges fall below the mandatory minimum penalties required by the statute. If your client is affected by the mandatory minimums, you should consider arguing against the applicability of these penalties.[17]

[17] For a discussion of the interplay between the guidelines and mandatory minimum sentences, as well as arguments against mandatory minimum penalties, see Amy Baron-Evans, *The Continuing Struggle for Just, Effective, and Constitutional Sentencing after* United States v.

Application of the 25:1 and 5,000:1 ratios is the simplest fix of the anomalies that result from the Commission's November 1, 2007 amendments as written, and, in some case, reduce their harsher consequences.[18] The only truly equitable fix would be for Congress to establish a 1:1 ratio between crack and powder cocaine.[19] Although Congress declined to do this, many continue to advocate for it,[20] and you should continue to raise it to courts in seeking relief for your client. Meanwhile, argue that your client should receive the benefit of the ranges applicable when the lowest ratios are applied to all offense levels. By applying these ratios, a court would give full effect to the Commission's amendments by affording all clients convicted of the same offense the greatest benefit approved by the Commission on November 1. There is no rational basis for denying such a benefit, especially in light of the Commission's numerous statements criticizing unwarranted disparity between crack and powder.[21]

Booker, pages 16–18 and 26–32, at http://www.fd.org/pdf_lib/EvansStruggle.pdf.

[18] District Judge John Gleeson noted the harsher consequences wrought by the new conversion table. "Results such as that produced here are not only bizarre, they are unjust." *United States v. Molina*, 2008 WL 544703 at *4 (E.D.N.Y. 2008). Judge Gleeson offers a step-by-step method to resolve the anomalies produced by application note 10.D, and exhorts judges to be "vigilant for false equivalencies produced by the Drug Equivalency Tables." *Id.*

[19] *See* Jon Sands, *Letter from Federal Defenders to the United States Sentencing Commission About Federal Sentencing Since United States v. Booker*, 18 Fed. Sent. R. 106 (2005); *supra*, note 2.

[20] Families Against Mandatory Minimums (FAMM) tracks legislation affecting mandatory minimum penalties. *See* FAMM's website for a list of pending bills seeking to abolish certain mandatory minimums and alter the crack-to-powder ratio. http://www.famm.org/ExploreSentencing/FederalSentencing/BillsinCongress.aspx.

[21] *See supra*, note 2. Additionally, at its November 13, 2007 public hearing on retroactivity, the Commission made it clear that the November 1 amendments were a first step in rectifying the problems engendered by the disparate treatment of crack and powder cocaine. The Honorable Ricardo H. Hinojosa, Chair of the Commission, said "With regards to crack cocaine, that is an issue -- federal cocaine sentencing policy has been an issue that the Commission has worked on for a long time, promulgated amendments before that have not gone into effect, as well as sent either statements in or reports to Congress at least four times on the issue, the latest being in the year 2007, after we promulgated the amendment, which the Commission felt was a very small step with regards to correction of a problem which the Commission identifies with regards to the 100 to one ratio between crack and powder cocaine sentencing. Along with the promulgation of the amendment, the Commission sent a report to Congress urging Congressional action because in the end, Congress is the one that can have the solution with regards to the problem concerning the mandatory minimum ratios." Commissioner Beryl Howell added, "We fixed the guidelines with the crack amendment and Congress allowed us to do that by not acting

and allowing our amendment to go into effect. But I want to make clear that we are under no false illusion that this crack amendment is a cure-all, as you said, it's only a partial remedy to the crack powder disparity and only on a going-forward basis for those crack offenders sentenced under the guidelines after November 1, 2007." For a full transcript of the November 13 hearing, visit the USSC's website at http://www.ussc.gov/hearings/11_13_07/Transcript111307.pdf.

Table 3: Comparison of Current Ratios and Ranges to Commission's Lowest Accepted Ratios and Corresponding Ranges at Each Base Offense Level

Base Offense Level	**Current Powder to Crack Ratio**	**Current Marijuana to Crack Ratio**	**Current Crack Range**	**Commission's Lowest Accepted Powder to Crack Ratio**	**Commission's Lowest Accepted Marijuana to Crack Ratio**	**Corresponding Crack Range**
38	33:1	6,700:1	≥ 4.5 KG	25:1	5,000:1	≥ 6.0 KG
36	33:1	6,700:1	≥ 1.5 KG - < 4.5 KG	25:1	5,000:1	≥ 2.0 KG - < 6 KG
34	30:1	6,000:1	≥ 500 G - < 1.5 KG	25:1	5,000:1	≥ 600 G - < 2.0 KG
32	33:1	6,700:1	≥ 150 G - < 500 G	25:1	5,000:1	≥ 200 G - < 600 G
30	70:1	14,000:1	≥ 50 G - < 150 G	25:1	5,000:1	≥ 140 G - < 200 G
28	57:1	11,400:1	≥ 35 G - < 50 G	25:1	5,000:1	≥ 80 G - < 140 G
26	25:1	5,000:1	≥ 20 G - < 35 G	25:1	5,000:1	≥ 20 G - < 80 G
24	80:1	16,000:1	≥ 5 G - < 20 G	25:1	5,000:1	≥ 16 G - < 20 G
22	75:1	15,000:1	≥ 4 G - < 5 G	25:1	5,000:1	≥ 12 G - < 16 G
20	67:1	13,300:1	≥ 3 G - < 4 G	25:1	5,000:1	≥ 8 G - < 12 G
18	50:1	10,000:1	≥ 2 G - < 3 G	25:1	5,000:1	≥ 4 G - < 8 G
16	50:1	10,000:1	≥ 1 G - < 2 G	25:1	5,000:1	≥ 2 G - < 4 G
14	50:1	10,000:1	≥ 500 MG - < 1 G	25:1	5,000:1	≥ 1 G - < 2 G
12	50:1	10,000:1	< 500 MG	25:1	5,000:1	< 1 G