BakerHostetler

Recent Securities Class Actions Targeting ICOs Raise Variety of Complex Legal Issues

Marc D. Powers, Robert A. Musiala Jr. and Matthew Friedman*

On April 3, 2020, exactly one year after the Securities and Exchange Commission (SEC) issued its "Framework for 'Investment Contracts' Analysis of Digital Assets" (Framework), 11 class action lawsuits were filed in the Southern District of New York by two law firms representing various combinations of four proposed lead plaintiffs.[1] The lawsuits all name as defendants companies and affiliated individuals involved in creating blockchain networks and platforms for various business activities that either distributed blockchain-based cryptographic assets (tokens) in initial coin offerings (ICOs) or operated trading platforms (exchanges) for the purchase and exchange of such tokens. The 11 complaints rely on the same essential legal theories — that the original token sales were unregistered securities offerings and the exchanges that facilitated secondary token sales were unlicensed securities dealers. In this article, we analyze these claims and discuss some of the potential defenses to them.[2]

Summary of the Claims and Key Defenses

The actions filed are mostly against foreign entities and their founders living abroad that raised funds in 2017 through ICOs or that listed these ICO tokens on foreign cryptocurrency exchanges. The ICOs were sold internationally and purportedly specifically not to U.S. persons, but the complaints allege some sales activity occurred in the U.S. The actions allege that these ICOs were unregistered securities offerings under the federal securities laws, and some of the actions allege that the exchanges that supported the tokens were unregistered broker-dealers and/or exchanges. All the actions make federal claims under Section 12(a)(1) of the Securities Act of 1933 (Securities Act) for violations of the registration provisions of Section 5 of the Securities Act. Section 5 makes it unlawful to make a nonexempt offer and sale of securities without filing a registration statement with the SEC. The actions also allege violations of related state blue sky laws.

The plaintiffs also allege control person liability claims under Section 15(a) of the Securities Act against the founders and/or managers of the defendant companies. The class periods and members in all the lawsuits are not limited to the time period when the funds were initially raised in ICOs. Rather, the complaints allege that the tokens offered in the ICOs were thereafter traded on exchanges, and they rely on this ongoing activity to seek class certification for the entire periods from the ICOs through the present.

The complaints are likely to be contested on a number of alternative grounds. First, the defendants may argue that the claims should fail for missing the one-year statute of limitations applicable to Section 12(a)(1) claims. The defendants will likely argue that the plaintiffs' allegations that investors did not know until the issuance of the Framework that the tokens at issue in the various actions were securities is inconsistent with the considerable record of prior pronouncements and enforcement actions by the SEC.

1 *Eric Lee and Chase Williams v. Binance Changpeng Zhao, Yi He, and Roger Wang* (Case 1:20-cv-02803); *Alexander Clifford and Chase Williams v. Tron Foundation, Justin Sun and Zhiqiang (Lucien) Chen* (Case 1:20-cv-02804); *Chase Williams and William Zhang v. HDR Global Trading Limited, ABS Global Trading, Arthur Hayes, Ben Delo and Samuel Reed* (Case 1:20-cv-02805); *Chase Williams v. Kucoin, Michael Gan, Johnny Lyu, and Eric Don* (Case 1:20-cv-02806); *Alexander Clifford v. Bibox Group Holdings Limited, Bibox Technology Ltd., Bibox Technology Ou, Wanlin "Aries" Wang, Ji "Kevin" Ma, Jeffrey Lei* (Case 1:20-cv-02807); *Chase Williams and William Zhang v. Block.One, Brendan Blumer, and Dan Larimer* (Case 1:20-cv-02809-LAK); *William Zhang v. BProtocol Foundation, Eyal Hertzog, Yehuda Levi, Guy Benartzi, and Galia Benartzi* (Case 1:20-cv-02810); *William Zhang v. Civic Technologies, Inc., Vinny Lingham, and Jonathan Smith* (Case 1:20-cv-02811); *Alexander Clifford v. Kaydex Pte. Ltd., Loi Luu, Victor Tran, and Yaron Velner* (Case 1:20-cv-02812); *Chase Williams v. Quantstamp, Inc., Richard Ma, and Steven Stewart* (Case 1:20-cv-02813); *Alexander Clifford v. Status Research & Development GMBH, Jarrad Hope, and Carl Bennetts* (Case 1:20-cv-02815).

2 While the cases discussed here involve private actions, we believe it is important to note for our audience that the SEC has cautioned that most (if not all) fundraising events commonly known as "ICOs" are securities offerings that need to be registered with the SEC or fall under an exemption from registration. For example, in a speech on April 26, 2018, SEC Chairman Jay Clayton commented that with regard to "tokens which are used to finance projects … [t]here are none that I've seen that are not securities."

This article first appeared in the BlockTribune on August 5, 2020.

The defendants may also challenge the allegation that the public offering through token sales on exchanges is still continuing almost three years after the initial ICO.

Second, the defendants will likely raise the question of whether the Southern District of New York has proper personal jurisdiction over either the companies that sold the tokens or the founders, many of whom never visited the United States for the ICO and never used domestic intermediaries to facilitate the sales. The Supreme Court decision in *Morrison v. Australia National Bank*, which addressed the extraterritorial reach of Section 10(b) of the Securities Exchange Act of 1934 (Exchange Act), may also be raised as a defense to several of these actions. In addition, the defendants may argue lack of subject matter jurisdiction by asserting that the tokens sold should not be deemed "investment contracts," and therefore are not "securities," under the federal securities laws. If the tokens are not securities, there is no jurisdiction for the federal court, and no basis for it to retain supplemental jurisdiction for the state blue sky law claims.

Third, the defendants may challenge the proposed class plaintiffs, and allegations for class certification, as inadequate. Certifications for complaints required by the Public Securities Litigation Reform Act often lack the ordinary detail of when the proposed lead plaintiff purchased the token/security, where it was purchased and for how much. They often rely on the conclusory allegation that the purchases were made by the plaintiffs during the class period. It should matter whether the purchases were made during the ICO or on a cryptocurrency exchange, as there is a "seller" requirement for liability under Section 12(a)(1). If the purchases were made after the ICO period, the defendants may argue that the plaintiff is not an adequate class representative. The defendants may also argue that there is a lack of adequate Article III standing, or injury, for the proposed lead plaintiff to invoke the jurisdiction of a federal court to hear the case. Finally, the defendants may raise questions as to whether the class is ascertainable.

Statute of Limitations Defense

Section 13 of the Securities Act provides, "No action shall be maintained … to enforce a liability created under section [12(a)(1)], unless brought within one year after the violation upon which it is based." 15 U.S.C. § 77m. In the context of these 11 litigations brought exactly one year from the issuance of the Framework, the question is whether the "violation upon which" the claim is based occurred before April 3, 2019. Case law interpreting the one-year limitation period for Section 12(a)(1) claims requires cases to be filed in federal court within one year after a reasonable investor would have been aware of the violation.[3]

The defendants will likely argue that there were events after the ICOs and before the April 3, 2019 publication of the Framework that would have put any reasonable purchaser on notice that the tokens would likely constitute "securities." For example, the SEC issued the DAO Report in July 2017, the SEC brought enforcement actions against multiple ICOs, and key SEC commissioners and officials gave public speeches throughout 2017 and 2018 expressing their views that most ICOs were unregistered securities offerings. Based on these events, the defendants might argue that if a purchaser participated in an ICO shortly after the creation of the Ethereum network, he or she was likely sophisticated enough in this area to be aware of the SEC's stance on ERC20 tokens articulated in the DAO Report and in the multiple enforcement actions that were underway and well publicized before the Framework was issued.

The plaintiffs have at least two potential answers to the statute of limitations defense. First, courts in some federal jurisdictions have extended the one-year limitations period on the basis of equitable tolling or equitable estoppel. While these doctrines are disfavored in securities cases, plaintiffs who allege a form of "misleading" conduct may gain the benefit of a toll.

Second, plaintiffs may argue that the unregistered securities offering continued while tokens traded on foreign exchanges. This argument has found some support in the Northern District of California, in *Zakinov v. Ripple Labs, Inc*.[4] In that case, there was no ICO and, as the court explicitly noted, the plaintiff "d[id] not specify whether he made such purchase directly from defendants or incidentally on a cryptocurrency exchange."[5] Still, the court rejected defendants' argument that the plaintiff's claim was barred for failure to allege purchase of the token as part of an "initial distribution … as opposed to on the 'secondary open market.'"[6] The court explained that Section 12(a)(1) "provides a broader basis for assigning liability than its subsection (a)(2) counterpart," and therefore a purchase outside the initial distribution could suffice.[7] The *Zakinov* court also was unconvinced by the defense argument that liability for a Section 12(a)(1) claim may be imposed on only the buyer's immediate seller under *Pinter v. Dahl*.[8] The *Zakinov* court reasoned that "defendant[s] failed to explain how this statement (tucked away in a footnote to a section discussing which sellers may be held liable for passing title to a security) limits its recognition that a person may separately be found liable under a solicitation theory."[9]

Zakinov will provide some support for plaintiffs to argue that the offerings continued beyond the ICO, but *Zakinov* may ultimately be distinguishable because of the differing circumstances in that case. Several courts have rejected the notion of a "continued solicitation" or "continued offering" based upon the statutory language of Section 5.[10]

3 *See Jackson Nat. Life Ins. v. Merrill Lynch* (2d Cir. 1994); *Finkel v. Stratton Corp.* (2d Cir. 1992).

4 *Zakinov v. Ripple Labs, Inc.*, 2020 WL 922815 (N.D. Cal. Feb. 26, 2020).

5 *Id.* at *3.

6 *Id.* at *11.

7 *Id.* at *12.

8 *Pinter v. Dahl*, 486 U.S. 622 (1988).

9 *Zakinov*, 2020 WL 922815, at *12 n.6.

10 *See Beranger v. Harris*, 2019 WL 5485128, at *5 (N.D. Ga. Apr. 24, 2019) (dismissing without prejudice where plaintiffs did not allege purchase dates). In the District of Minnesota, the federal court rejected the argument "that the limitations period continues beyond one year for the completed purchase of an unregistered security when a defendant later offers to sell the same individual a separate unregistered security." *Cummings v. Paramount Partners, LP*, 715 F. Supp. 2d 880, 895 (D. Minn. 2010).

For example, the Northern District of Ohio found that barring a continuing limitations period "is in harmony with the most natural reading of the phrase 'violation upon which it is based' in the statute of limitations."[11] In *Biozoom*, the plaintiffs argued that there was a continuing violation for statute of limitations purposes, because the defendants (market makers) continued offering to sell unregistered Biozoom securities until the SEC halted trading.[12] The court rejected that argument, concluding instead that:

> Defendants have the better of this argument. The governing statute of limitations is explicit that claims must be brought within one year of "the violation upon which it is based." And in *Pinter v. Dahl*, the Supreme Court construed Section 12(a)(1) as requiring some nexus with an actual sale. … It follows that the violation occurs when a prospective buyer actually purchases the securities. Where, as here, plaintiffs allege that defendants sold securities to them, and then continued to promote or offer afterwards, the violation occurs at the time of the sale.[13]

Similarly, *Akbar v. Bangash*, a case from the Eastern District of Michigan, followed both the District of Minnesota decision in *Cummings* and *Biozoom*.[14] There, the plaintiffs, who filed the complaint in July 2015, argued that under the discovery rule, the earliest they could have suspected their investment was a fake security was in August 2014. The court rejected that argument, explaining that the one-year limitations period focuses "on the last conduct constituting the alleged violation."[15] The *Akbar* court cited both *Cummings and Biozoom* in support. Because there was no dispute that the last investment activity occurred in September 2012, the court concluded that the plaintiffs failed to initiate the case within the one-year limitations period.[16]

Lack of Personal Jurisdiction

Courts in the United States may exercise either "general" or "specific" personal jurisdiction over a defendant. The former applies where the defendant has "certain minimum contacts with [the forum state] such that the maintenance of the suit does not offend 'traditional notions of fair play and substantial justice.'"[17] Minimum contacts exist where the defendant has substantial or systematic and continuous contacts with the forum state — even if those contacts are not related to the underlying dispute.[18]

An example of general jurisdiction is where a defendant maintains a residence in the state or engages in a broad array of business activities in the state such that he or she may fairly be said to be generally "present" there. A finding of general jurisdiction over foreign individuals would be unlikely unless they maintain a residence (such as an apartment or summer home) in the state. However, use of the state's banking system, especially regular use, may provide sufficient jurisdictional contacts.[19] Also, under the securities statutes, courts can sometimes consider a defendant's contacts throughout the United States, not just the contacts in the forum state.[20]

The far more common basis for exercising personal jurisdiction over a defendant is the doctrine of specific jurisdiction, which is a more narrow inquiry. A specific jurisdictional analysis assesses whether the claim arises out of or is related to the defendant's contacts with the forum and whether the defendant has purposefully availed himself of the jurisdiction.[21] The first half of that test requires a nexus between the defendant's actions and the allegations in the complaint. The second half requires that the contacts with the state, even if tied to the complaint, be more than mere happenstance. The inquiry in the Second Circuit is whether the acts of the foreign defendant "caused effects" here in the U.S. and whether the effects were foreseeable.[22]

In the current class actions, to the extent the individual defendants have neither personally visited the United States in connection with the ICO, nor purposely directed marketing efforts or other communications connected to the ICO into the jurisdiction, it may be difficult for a court to exercise jurisdiction over them. The court's analysis will focus on specific contacts with the jurisdiction that are specifically related to the claims and can include physical travel within the jurisdiction, marketing efforts directed to it or from within it, and other communications of a similar nature. The court's analysis may also include online marketing activities set up by U.S. service providers and directed at U.S. investors.

For the corporate defendants in particular, there are numerous other facts and circumstances relevant to specific jurisdiction. Did the company or its representatives visit the U.S. in organizing or promoting the ICO? Did the company use U.S.-based agents or service providers for the ICO? U.S.-registered websites? What efforts were undertaken to block U.S. purchasers? Were they effective? Did the token have built-in restrictions? Was there social media marketing to U.S. persons during the ICO? Were there, in fact, U.S. buyers in the ICO? If so, how many?[23]

Lack of Subject Matter Jurisdiction

Lack of Extraterritoriality

The factors applicable to personal jurisdiction are also relevant to the issues of subject matter jurisdiction and extraterritoriality

11 *In re Biozoom, Inc. Sec. Litig.,* 93 F. Supp. 3d 801, 811 (N.D. Ohio 2015).
12 *Id.* at 809-10.
13 *Id.* at 810.
14 *Akbar v. Bangash*, 2017 WL 4334912 (E.D. Mich. July 11, 2017).
15 *Id.* at *3.
16 *Id.*
17 *International Shoe Co. v. Washington*, 326 U.S. 310, 316 (1945).
18 *Tuazon v. R.J. Reynolds Tobacco Co.,* 433 F.3d 1163, 1171 (9th Cir. 2006).
19 *Licci ex rel. Licci v. Lebanese Canadian Bank, SAL,* 732 F.3d 161, 171 (2d Cir. 2013).
20 *U.S. Titan, Inc. v. Guangzhan Zhen Hua Shipping Co.,* 241 F.3d 135, 152 n.12 (2d Cir. 2001) ("In determining whether personal jurisdiction exists over a foreign defendant who, like Zhen Hua, has been served under a federal service of process provision … a court should consider the defendant's contacts throughout the United States and not just those contacts with the forum.").
21 *See*, e.g., *Burger King v. Rudzewicz*, 471 U.S. 462 (1985).
22 *See, e.g., SEC v. PlexCorps*, 2018 WL 4299983, at *9 (E.D.N.Y. Aug. 9, 2018); *In re Parmalat Sec. Litig.*, 376 F. Supp. 2d 449, 455 (S.D.N.Y. 2005).
23 *See* Marc D. Powers and Jonathan A. Forman, "Hard for ICOs to Avoid U.S. Courts: Personal Jurisdiction Found In Two Recent Securities Cases Over Foreign ICO Defendants" (September 21, 2018), Securities Regulation Daily.

based on the Supreme Court's decision in *Morrison v. National Australia Bank, Ltd.* In *Morrison*, the Supreme Court addressed the extraterritorial reach of Section 10(b) of the Exchange Act. The Supreme Court held that Section 10(b) applies only to "transactions in securities listed on domestic exchanges," and "domestic transactions in other securities."[24] Since *Morrison*, courts in the Second Circuit have held that under the first *Morrison* prong, registering and listing a security on a U.S. exchange cannot by itself justify extraterritorial reach.[25] Rather, the transaction — meaning, the purchase or sale — must have been executed on a U.S. exchange. This is the case regardless of whether the issuer and investor are U.S. residents.[26]

With regard to *Morrison*'s second prong, the Second Circuit established the following test for determining whether the purchase and sale of a security is a "domestic transaction": A plaintiff must plead sufficient facts "suggesting that irrevocable liability was incurred or title was transferred within the United States."[27] "Irrevocable liability" for a purchase or sale occurs, as with a contract, "when the parties become bound to effectuate the transaction."[28] Examples of potentially sufficient factual allegations include formation of contracts, placement of purchase orders, passing of title and exchange of money in the United States. Even so, the *Morrison* extraterritoriality analysis is necessarily fact-specific, and the Second Circuit has explicitly rejected any bright-line test. Indeed, the Second Circuit has held that although a transaction at issue may qualify as a "domestic transaction," a domestic transaction is not necessarily sufficient to warrant the court's jurisdiction over the matter, particularly where transactions are "so predominantly foreign as to be impermissibly extraterritorial."[29] Given *Morrison* and its subsequent following in the Second Circuit, in the current class actions, the foreign-based defendants in these 11 actions might argue that the federal courts lack subject matter jurisdiction. A subject matter defense cannot be waived and may be asserted at any time during the course of the litigation.

Investment Contract Analysis — Are the Tokens Securities?

In the current class action cases, it is the plaintiffs' burden to establish that they purchased "securities," as that term is defined in the Securities Act. In this context, that means the plaintiffs must establish that purchasers of a token were making an investment of money in a common enterprise with an expectation of profits to be derived from the managerial efforts of others.[30] U.S. courts will perform a fact-intensive analysis to determine whether a token is a security. Under the *Howey* test, the definition of a security includes an investment contract, which is (1) an investment of money (2) in a common enterprise (3) with a reasonable expectation of profits (4) based on the entrepreneurial or managerial efforts of others. In most circumstances, the value paid to receive a token sold in an ICO will be considered an investment of money under the first prong of the *Howey* test. Accordingly, the legal arguments used to convince a court that a token is not a security will rely on the latter three prongs.

To succeed here, the defendants in the current class actions will endeavor to craft arguments that are well developed in multiple complex areas, including *Howey* and its progeny, the SEC Framework and perhaps most important, the technical nuances of the specific networks and tokens. While the analysis is complex, a thorough technical and legal analysis may in some instances yield persuasive arguments that the defendants' technical platforms and networks have attributes indicating that their tokens should not be deemed "investment contracts" under *Howey*.

Should the tokens not be deemed "securities" under the *Howey* test, plaintiffs will not be able to rely on federal securities laws to gain subject matter jurisdiction in federal court, and the case will likely be dismissed. This is because the absence of a claim under the federal securities laws would force the plaintiffs to rely on the concept of supplemental jurisdiction, based upon their state law claims, to sustain federal subject matter jurisdiction. Supplemental jurisdiction alone is likely to fail as a jurisdictional basis, as federal courts are usually reluctant to retain cases that have solely state law claims for adjudication. Because an objection to subject matter jurisdiction can be raised at any time during the course of litigation, the defendants will have the option to raise a defense arguing that the tokens are not "investment contracts" under *Howey* at any point in time. The defendants may use this to their advantage as part of a well-planned litigation strategy.

Standing and Class Certification Defenses

Standing and class certification issues can be roadblocks to the success of any class action. As to standing, Article III of the U.S. Constitution implicates three elements: (i) an injury in fact (ii) that is fairly traceable to the challenged conduct of the defendant and (iii) that is likely to be redressed by a favorable judicial decision.[31] Accordingly, a strategic decision is whether to raise standing in opposition to the class certification motion by the lead plaintiff or as part of a motion to dismiss.

Where the complaint indicates only a purchase made sometime in the class period, the purchaser may not have purchased in the ICO (which may have excluded U.S. individuals). Therefore, defendants might seek limited discovery on the lead plaintiff's standing and

24 *Morrison v. National Australia Bank, Ltd.,* 561 U.S. 247, 267 (2010).

25 *See, e.g., City of Pontiac Policemen's & Fireman's Ret. Sys. v. UBS AG,* 752 F.3d 173 (2d Cir. 2014); *In re Vivendi Universal, S.A. Sec. Litig.,* 765 F. Supp. 2d 512 (S.D.N.Y. 2011), *aff'd*, 838 F.3d 223 (2d Cir. 2016).

26 *See Absolute Activist Value Master Fund Ltd. v. Ficeto,* 677 F.3d 60, 69 (2d Cir. 2012) ("While it may be more likely for domestic transactions to involve parties residing in the United States, '[a] purchaser's citizenship or residency does not affect where a transaction occurs; a foreign resident can make a purchase within the United States, and a United States resident can make a purchase outside the United States.'"); *accord id.* at 70 ("a party's residency or citizenship is irrelevant to the location of a given transaction").

27 *Id.* at 68.

28 *Id.* at 67.

29 *Parkcentral Glob. Hub Ltd. v. Porsche Auto. Holdings SE*, 763 F.3d 198, 216 (2d Cir. 2014).

30 *See, e.g., SEC v. W.J. Howey Co.,* 328 U.S. 293 (1946); *SEC v. Aqua-Sonic Products Corp.,* 687 F.2d 577 (2d Cir. 1982); *SEC v. Telegram Grp. Inc.,* 2020 WL 61528 (S.D.N.Y. Jan. 3, 2020).

31 *Lujan v. Defenders of Wildlife,* 504 U.S. 555, 560-61 (1992).

other class issues before any motion for class certification is considered, and before any substantive motion to dismiss on the other grounds noted above. Indeed, several courts in the Southern District of New York have cited a "growing consensus" among lower courts "that class certification is 'logically antecedent,' where its outcome will affect the Article III standing determination, and the weight of authority holds that in general class certification should come first [before a motion to dismiss]."[32] "In other words, when 'class certification is the source of the potential standing problems, class certification should precede the standing inquiry.'"[33]

Discovery could be pivotal not only to prove or disprove a lead plaintiff's participation in the ICO but also to show the lead plaintiff's sophistication. If discovery reveals the lead plaintiff's Ethereum public key, for example, analytics may show his or her blockchain activity reflects a certain sophistication with ICOs, tokens and blockchain. That sophistication could then be used to demonstrate reasonable knowledge that the token was a "security" in advance of the issuance of the Framework on April 3, 2019. Blockchain analytics may also reveal information about the lead plaintiff's relationships with cryptocurrency exchanges and other ICOs (including with respect to other class action suits filed in April 2020) that may be useful in challenging his or her standing or adequacy as a class representative.

Finally, when a motion for class certification is made, the plaintiff has the burden to establish he or she has met the requirements of numerosity, commonality, typicality and adequacy of representation. He or she also must show that common questions of law and fact prevail among the class and that a class action is a superior method for redress for the class.[34] However, the Second Circuit has recognized that Rule 23 also has an implied requirement of "ascertainability," which demands that a class be "sufficiently definite."[35] In other words, the court must determine whether it is "administratively feasible … to determine whether a particular individual is a [class] member. A class is ascertainable when defined by objective criteria that are administratively feasible and when identifying its members would not require a mini-hearing on the merits of each case."[36]

Blockchain by its very nature is pseudonymous with respect to the parties to a particular transaction. But there must be some way to identify the class in order for a class to be certified. This may support a separate basis for defendants opposing the certification of the class. However, ascertainability is a "modest threshold" of proof for the lead plaintiff to meet.[37] And in the Second Circuit, 40 or more members are sufficient to satisfy the numerosity requirement.[38] Accordingly, the other factors for establishing class certification will require individual analysis, as the courts of the Second Circuit have undertaken.[39]

Conclusion

The 11 ICO lawsuits filed on April 3, 2020, raise a variety of complex legal issues involving the statute of limitations, personal jurisdiction, subject matter jurisdiction and class action requirements. It will be interesting to see how the various assigned judges in the Southern District of New York grapple with these cases. In any event, the cases will be important to watch because the outcomes may affect the extent and viability of future class actions claims against both U.S.- and foreign-based blockchain market participants.

32 *Blessing v. Sirius XM Radio Inc.,* 756 F. Supp. 2d 445, 451 (S.D.N.Y. 2010).
33 *Kaatz v. Hyland's Inc.,* 2016 WL 3676697, at *4 (S.D.N.Y. July 6, 2016).
34 *See* Fed. R. Civ. P. 23.
35 *In re Petrobras Sec.,* 862 F.3d 250, 260 (2d Cir. 2017).
36 *Brecher v. Republic of Argentina,* 806 F.3d 22, 24-25 (2d Cir. 2015).
37 *Petrobras*, 862 F.3d at 269.
38 *See Pennsylvania Pub. Sch. Emps.' Ret. Sys. v. Morgan Stanley & Co.*, 772 F.3d 111, 120 (2d Cir. 2014).
39 *See, e.g., Audet v. Fraser*, 332 F.R.D. 53 (D. Conn. 2019) (analyzing Rule 23 class certification factors in the context of verifying or identifying putative class members for blockchain litigation).