



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

June 10, 2021

Michael Sonnenshein
Chief Executive Officer
Grayscale Digital Large Cap Fund LLC
290 Harbor Drive, 4th Floor
Stamford, CT 06902

Re: Grayscale Digital Large Cap Fund LLC
Registration Statement on Form 10-12G
Filed May 13, 2021
File No. 000-56284

Dear Mr. Sonnenshein:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Registration Statement on Form 10-12G

General

1. Please discuss the analysis or process, if any, you conduct to determine whether the digital assets that you hold are securities for purposes of the federal securities laws, including the determinations you have made under any such analysis or process. In addition, discuss whether any such determination is considered as part of your fund construction criteria and whether you will continue to hold a digital asset if you or any other relevant party determines that it is or may be a security.
2. In your next amendment, please update all non-financial disclosure that is tied to your financial statements to reflect the most recently completed interim period. Update other non-financial disclosure to reflect the most recent practicable date.
3. We note the reference in the Fund's fact sheet to the CoinDesk Large Cap Index as the Fund's benchmark index, which is not discussed in the information statement. Please

reconcile the inconsistency.

Key Operating Metrics, page 2

4. Include here a table showing the fund composition and Digital Asset Reference Rates as of the most recent practicable date, so that shareholders can understand the recent composition of the fund.
5. Please reconcile the statement on page 4 that the amount of your "Digital Asset Holdings" at any time includes "the aggregate U.S. dollar value of any Forked Assets the Fund holds" with the statement on that page that the fund does not currently expect to take any Forked Assets it may hold into account for purposes of determining the Fund's Digital Asset Holdings, Digital Asset Holdings per Share, the NAV or the NAV per Share.

Summary, page 5

6. Please revise your Summary section to address the following:
 - Provide a clear discussion of the process for determining the composition of your fund, including the criteria for selecting digital assets, how you determine their relative weights within the fund, the criteria you use for removing existing assets or including additional assets, and how you maintain the 70% Target Coverage Ratio; and
 - Explain under what circumstances you could have fewer or more than five different digital assets in the fund.
7. Please identify and provide a discussion here explaining how you select the Constituent Exchanges used to calculate Digital Asset Holdings, and as necessary also include cross-references to more detailed discussions found elsewhere.

Fund Construction Criteria, page 7

8. Please address the risk that as a result of changes in digital asset market capitalization or the implementation of your fund construction criteria, you may not be able to achieve the Target Coverage Ratio, and what actions the Manager might take in such a circumstance.
9. We note your disclosure in the last paragraph on page 7 and the second full paragraph on page 8 in which you discuss criteria that would disqualify a digital asset from inclusion or result in removal as a fund component. For each of the applicable criterion, please identify those digital assets that would be a component of the fund based on their total market capitalization but for the particular criterion.

Risk Factors, page 14

10. Please add a separately captioned risk factor addressing risks attendant to having a substantial majority of the Fund's assets concentrated between two digital assets, Bitcoin and Ether. Revise to further discuss the specific risks associated with those two digital assets that are material risks to the Fund's shareholders.

11. Please add a separately captioned risk factor that discloses the risk that the number of Fund Components represented by a share is generally expected to gradually decrease over time as the Fund Components are used to pay the Fund's expenses.

The trading prices of many digital assets, including the Fund Components, have experienced extreme volatility, page 14

12. Please revise to quantify the volatility of the digital assets in your portfolio and how that volatility has impacted an investment in the fund. Please also update your disclosure to account for the recent declines in digital asset trading prices.

Due to the unregulated nature and lack of transparency, page 24

13. You state here that Digital Asset Exchanges are relatively new and, in some cases, unregulated. Please revise to discuss in greater detail the extent to which the material aspects of the business and operations of Digital Asset Exchanges are not regulated. For example, please address the fact that trading platforms for digital assets do not appear to be subject to regulation in a similar manner as other regulated trading platforms, such as national securities exchanges or designated contract markets.

The lack of full insurance and shareholders' limited rights, page 34

14. Please disclose whether and to what extent a cold storage address for the Fund's Digital Asset Account has held digital assets with a value in excess of the Cold Storage Threshold and any specific risks related thereto.

The LLC Agreement includes provisions that limit shareholders' voting rights and restrict shareholders' right to bring a derivative action, page 35

15. Please discuss any uncertainty as to enforceability of the Derivative Actions provision of your LLC Agreement under the laws of the Cayman Islands. In addition, please tell us whether you have revised or intend to revise your LLC Agreement to state that this provision does not apply to federal securities law claims, or tell us how you will make shareholders aware that it does not apply to federal securities law claims in future filings.

Regulatory changes or actions may affect the value of the Shares, page 37

16. We note that this risk factor includes disclosure regarding a number of different regulatory uncertainties, each of which poses its own distinct set of risks to the business and operations of the Fund. Please revise to address each of the material regulatory risks in separately captioned risk factors, in each case clearly identifying the risk or uncertainty and the impact on the Fund.

Regulatory changes or interpretations, page 39

17. We note the statement that "the Manager is not aware of any rules that have been proposed to regulate any digital assets as a commodity interest or a security." Please

explain why you believe that no digital assets are regulated as securities or revise your disclosure accordingly.

Risk Factors Related to Potential Conflicts of Interest, page 43

18. Please include separately captioned risk factors explaining risks that are specific to each of the following:
 - The minority interests of the Manager's parent company in two Digital Asset Exchanges used in calculating the Digital Asset Reference Rate for certain of the digital assets held by the Fund;
 - Because the Manager and Genesis, the sole authorized participant, have the same parent company, baskets will not be exchanged for fund components in arms length transactions; and
 - Risks related to the parent company of the Manager owning a minority interest in the parent company of the Custodian.
19. Please confirm that you have specifically identified all products or investments that the Manager, its parent, or any affiliates have that could create a potential conflict of interest with the fund or revise accordingly.

Composition of the Digital Asset Market, page 47

20. Please include a brief discussion of how CoinMarketCap.com identifies the particular digital assets to track and display market capitalization information and how market capitalization is measured. Please also clarify whether you utilize that information for purposes of calculating compliance with your Target Coverage Ratio. In addition, please quantify the total digital asset market capitalization, your coverage ratio and the portfolio weighting of each of the digital assets you hold as of the most recent practicable date.

Digital Asset Exchange Public Market Data, page 53

21. We note your disclosure that the domicile, regulation and legal compliance of the Digital Asset Exchanges included in the Reference Rates varies. As such, please revise to provide more detailed descriptions of each of the Constituent Exchanges. Please also revise your disclosure on page 56 to identify any instances in which a Digital Asset Exchange has been removed from a Digital Asset Reference Rate and the reasons for removal.

TradeBlock Digital Asset Reference Rates, page 55

22. Please revise to explain the methodology whereby the Reference Rate Provider chooses whether to use a Spot Price or an Index Price. To the extent that the Manager also has any choice between using a Spot Price or an Index Price please explain that methodology as well.
23. Please disclose here how you will inform shareholders of changes to the Constituent Exchanges used to determine the Digital Asset Reference Rates. Explain to what extent

the Reference Rate Provider or the fund have any discretion during the process of determining the Digital Asset Reference Rates. Explain whether the fund or Reference Rate Provider could change the methodology for determining the Digital Asset Reference Rates in the future, under what circumstances the fund or Reference Rate Provider might change the methodology, and how you would communicate this to shareholders.

Weighting & Adjustments, page 56

24. Please discuss in greater detail how the Digital Asset Reference Rate is algorithmically determined using the 24-hour volume-weighted average price of the applicable digital asset on the Constituent Exchanges calculated on a per second basis. To the extent useful to understanding how the price is determined on a particular day, please consider including an illustrative example.

Activities of the Fund, page 77

25. Please include a discussion regarding whether you may stake, lend, or engage in other activities with the digital assets that you hold. Explain whether the proceeds from such activities will be included in the NAV or Digital Asset Holdings calculations, and if not, explain how shareholders will evaluate the value being created.

Rebalancing, page 82

26. Discuss here the principal market through which the Manager will transact during the rebalancing period for buying or selling assets. In addition, revise the "Forked Assets" discussion on page 81 to disclose the principal market through which the Manager will sell any forked assets.

Fund Expenses, page 86

27. Please disclose whether or not there is a ceiling to the amount of fund expenses that the Manager will pay.

Description of Limited Rights, page 99

28. Please revise to specifically state whether shareholders have the power to remove the Manager.

Recent Sales of Unregistered Shares, page 99

29. Please disclose recent sales as of the most recent practicable date.

Description of Creation of Shares, page 106

30. Please include a brief discussion of the process through which the cash subscriptions from investors are converted into digital assets and any risk related to price volatility of the digital asset components of the fund borne by investors or the authorized participant

during the subscription and creation process.

Governing Law; Consent to New York Jurisdiction, page 117

31. We note the statement that each shareholder consents to the jurisdiction of the courts of the State of New York and any federal courts located in the borough of Manhattan in New York City. Please identify the source of this provision in your governing documents. Please also provide a complete description of the provision, including the relevant forum for litigation and any subject matter jurisdiction carve out. Provide risk factor disclosure describing any risks or other impacts on shareholders, including increased costs to bring a claim and that these provisions can discourage claims or limit shareholders' ability to bring a claim in a judicial forum that they find favorable. Please disclose whether this provision applies to actions arising under the Securities Act or Exchange Act. In that regard, we note that Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder, and Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. If this provision does not apply to actions arising under the Securities Act or Exchange Act, please also ensure that the exclusive forum provision in the governing documents states this clearly, or tell us how you will inform investors in future filings that the provision does not apply to any actions arising under the Securities Act or Exchange Act.

Insurance, page 118

32. Please revise to discuss what insurance, if any, the Custodian is required to have pursuant to the Custodian Agreement.
33. In the event that private keys are lost, damaged, stolen or otherwise become unavailable and the Fund or shareholders wish to recover damages from the Custodian, explain what sources of funds are available, other than the Custodian's insurance proceeds. Update the risk factor "The lack of full insurance" on page 34 in this regard as well.

Record Keeping; Inspection and Auditing, page 120

34. Please provide greater detail regarding audit, inspection, and verification procedures. In this regard:
- Discuss to what extent and in what manner the Fund or other parties will inspect or audit the Custodian's records. Explain in greater detail how you intend to validate existence, exclusive ownership and software functionality of private keys and other ownership records; and
 - You state on page 104 that no party other than the Custodian has access to the private key shards of the Fund. Explain how inspection and auditing will occur given that only the Custodian has access to the private key shards.

We remind you that the company and its management are responsible for the accuracy

Michael Sonnenshein
Grayscale Digital Large Cap Fund LLC
June 10, 2021
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and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

You may contact Becky Chow at 202-551-6524 or John Spitz at 202-551-3484 if you have questions regarding comments on the financial statements and related matters. Please contact Dana Brown at 202-551-3859 or Justin Dobbie at 202-551-3469 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Finance