

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

November 12, 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 Amendment No. 2 to Registration Statement on Form 10-12G Filed August 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 and any amendment you may file in response to these comments, we may have additional comments.

Amendment No. 2 to Registration Statement on Form 10-12G

Determination of NAV, page 2

1. We note your response to our prior comment 2. Please revise the disclosure at the bottom of page 4 to explain whether you will take any Forked Assets you may hold into account for purposes of determining the Digital Asset Holdings, Digital Asset Holdings per Share, the NAV or the NAV per Share, in the event that, as discussed on page 9, you determine "that a Forked Asset has a high probability of qualifying for inclusion in the Fund's portfolio after meeting the trading history requirement of at least three months and [you] may decide to retain the Forked Asset despite the fact that it does not currently meet the Inclusion Criteria."

Risk Factors, page 16

2. We note the disclosure on page 87 that in the future the Fund may engage in staking

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activities. To the extent material, please revise to include a risk factor addressing the risk that any future regulatory developments related to staking activities may impact your ability or decision to participate in such an activity.

The lack of full insurance and shareholders' limited rights of legal recourse, page 36

3. We note your response to our prior comment 6. Please revise this risk factor to additionally state, if true, that you do not know the amount of the Custodian's capital reserves and the Fund and the Sponsor do not have access to that information.

Constituent Exchange Selection, page 63

4. We note your response to our prior comment 11 and your disclosure on page 64 that the Reference Rate Provider is not required to publicize or explain the addition or removal of Constituent Exchanges or to alert the Manager to such changes. Please tell us why, if true, you will not inform investors of a material change to the Constituent Exchanges by filing a current report, or disclose here that you will do so.

Determination of Digital Asset Reference Rates, page 64

5. Please include a discussion clarifying how the methodology for calculating the indicative price differs from the methodology for calculating the index price. As a separate matter, provide a discussion of the procedures the Reference Rate Provider uses when determining whether to use an indicative price as the reference rate, including when the discretion of the Reference Rate Provider comes into play.

Illustrative Example, page 65

- 6. We note your response to our prior comment 12. Please address the following:
 - In the discussion of the inactivity adjustment, revise to explain in sufficient detail what is meant by "influence on the trading price." If this is the same as the trading volume share, so state;
 - In the discussion of the inactivity adjustment, explain over what period "influence on the trading price" is calculated;
 - In the discussion of price-variance weighting, provide the actual percentage threshold used, or confirm that 7% is the threshold used for all digital assets; and
 - In the discussion of price-variance weighting, explain whether there is a minimum amount of time over which price variance is measured for purposes of this step.

Fund Construction Criteria, page 90

7. Please refer to the first full paragraph on page 91. Revise to clarify what you mean by "not enough digital assets that meet the Inclusion Criteria and are otherwise appropriate to be included in the Fund despite otherwise satisfying the Inclusion Criteria."

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Inclusion of New Fund Components, page 90

- 8. We note your response to our prior comment 13. Explain in further detail why the Authorized Participant did not have the ability to trade Cardano during the rebalancing period and why Binance Coin and Polkadot were not accessible for trading and custody prior to delivery to the Fund by the Authorized Participant.
- 9. We note that Bitcoin Cash, currently the 19th largest digital asset by market capitalization according to CoinMarketCap.com, appears to be the digital asset with the smallest market capitalization held by the Fund. Please include a table identifying all of the digital assets with larger market capitalizations than Bitcoin Cash along with a brief explanation for the reason they are not included as a Fund component.

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