



DIVISION OF
CORPORATION FINANCE

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

January 7, 2022

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. 3 to Registration Statement on Form 10-12G
November 29, 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.

Amendment No. 3 to Registration Statement on Form 10-12G

Investment Objective, page 6

1. Revise here to state, if true and as disclosed on page 106, that the Manager may, in its sole discretion, select a different reference rate provider. Please also clarify, here and on page 106, that the exercise of such discretion is subject to the Manager's obligations under the Index License Agreement.

The Manager is solely responsible for determining the value of the Digital Asset Holdings, page 38

2. We note the disclosure here and on page 50 that "[t]here are no predefined criteria to make a good faith assessment as to which of the rules the Manager will apply" and that the Manager may make this determination in its sole discretion. This disclosure may suggest that there are no criteria for determining which rule will apply. Please revise this statement in light of your disclosure on page 67 that the Manager will employ the

cascading rules sequentially and in the order as presented.

Determination of Digital Asset Reference Rates, page 65

3. We note your response to our prior comment 6. Please revise the statement near the top of page 66 that "[e]ach Digital Asset Reference Rate algorithm penalizes activity from any given Constituent Exchange" to state instead, if true, that the algorithm penalizes inactivity.

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