October 2018

REGULATORY RELIEF AND INCREMENTAL USE OF LEVERAGE AND SHAREHOLDER VALUE CREATION

Financing the Growth of Tomorrow's Companies Today™





IMPORTANT NOTICE: DISCLAIMER AND FORWARD LOOKING STATEMENTS

This presentation may contain "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. You should understand that under Section 27A(b)(2)(B) of the Securities Act of 1933, as amended, and Section 21E(b)(2)(B) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995 do not apply to forward-looking statements made in periodic reports we file under the Exchange Act.

The information disclosed in this presentation is made as of the date hereof and reflects Hercules' current assessment of its financial performance for the period reported. Actual financial results filed with the Securities and Exchange Commission in the future may differ from those contained herein in the event of additional adjustments recorded prior to the filing of its financial statements.

This presentation may contain "forward-looking statements." These forward-looking statements include comments with respect to our financial objectives, loan portfolio growth, strategies and results of our operations.

However, by their nature, these forward-looking statements involve numerous assumptions, uncertainties and risks, both general and specific. The risk exists that these statements may not be fulfilled. We caution readers of this presentation not to place undue reliance on these forward-looking statements as a number of factors could cause future Company results to differ materially from these statements.

Forward-looking statements may be influenced in particular by factors such as fluctuations in interest rates and stock indices, the effects of competition in the areas in which we operate, and changes in economic, political and regulatory conditions. We caution that the foregoing list is not exhaustive.

When relying on forward-looking statements to make decisions, investors should carefully consider the aforementioned factors as well as other uncertainties and events. Historical results discussed in this presentation are not indicative of future results. This presentation should be read in conjunction with our recent SEC filings.



KEY PRESENTATION TOPIC OVERVIEW

- Letter to Stockholders and The Small Business Credit Availability Act (the "SBCAA")
- Key Attributes that Enhance Hercules Capital's use of Modest Increased Leverage
- HTGC's Guidance for Asset Coverage Ratio "ACR"
- HTGC's Plan for Reduced Asset Coverage Requirement
- Building off of HTGC's Strong Historical Stockholder Returns
- Portfolio Highlights and Strong Track Record

LETTER TO STOCKHOLDERS



SPECIAL MEETING OF HERCULES CAPITAL (HTGC) STOCKHOLDERS

To Our Stockholders:

We will be holding a Special Meeting of Stockholders of Hercules Capital, Inc. on December 6, 2018 at 9:00 AM, Pacific Time, at our headquarters, 400 Hamilton Avenue, Suite 310, Palo Alto, CA 94301 (the "Special Meeting").

At the Special Meeting, you will be asked to (i) approve the application of the reduced asset coverage requirements in Section 61(a)(2) of the Investment Company Act of 1940, as amended (the "1940 Act"), to the Company, which would permit the Company to double the maximum amount of leverage that it is currently permitted to incur by reducing the asset coverage requirements applicable to the Company from 200% to 150% to become effective the day after the Special Meeting (without giving effect to any exemptive relief with respect to Small Business Administration ("SBA") debentures) and (ii) transact such other business as may properly come before the Special Meeting or any adjournment thereof. The proxy statement for the Special Meeting was filed and notices were sent to stockholders on or about October 5, 2018.

The Board believes that authorizing the Company to increase its leverage limitation under the 1940 Act earlier than September 4, 2019, which is one year after the date the Board approved the 150% minimum asset coverage ratio and the date the 150% minimum asset coverage ratio would otherwise be effective, is in the best interests of the Company and it stockholders.



SPECIAL MEETING OF HERCULES CAPITAL (HTGC) STOCKHOLDERS

To Our Stockholders, continued:

We urge stockholders to vote "FOR" this proposal:

- Increasing the regulatory cushion through a lower minimum asset coverage requirement gives the Company additional flexibility to manage capital to take advantage of attractive investment opportunities and better optimize the timing of potential equity capital raises.
- The relative benefits of increasing the fundamental earnings power of the business is expected to outweigh the potential risks associated with greater leverage.
- Provides additional flexibility to make required regulated investment company distributions without violating the 1940 Act.
- Maintain investment grade ratings under our initial revised near term financial leverage guidelines of 0.95x-1.25x target debt-to-equity range; continued access to diversified debt investment portfolio.

Thank you for your vote and consideration.

Sincerely,

Manuel A. Henriquez
Chairman and CFO



HTGC BOARD APPROVED REDUCING ASSET COVERAGE REQUIREMENT UNDER THE SMALL BUSINESS CREDIT AVAILABILITY ACT

SBCAA Overview

- The Small Business Credit Availability Act (the "SBCAA") was included in the Omnibus Spending Bill and was signed into law on March 23, 2018
- The SBCAA, among other things, modifies the applicable provisions of the Investment Company Act to reduce the required asset coverage ratio from 200% to 150%, subject to certain approval, timing and disclosure requirements
 - Upon approval and implementation, this effectively raises the regulatory debt-to-equity ceiling from 1.0x to 2.0x Debt-to-Equity

Comprehensive Process for Evaluating and Approving the SBCAA

- **Solicited Broad Input:** In addition to significant internal resources focused on evaluating the opportunity, we have considered input from a broad array of constituencies, which included:
 - Lenders
 - Rating agencies
 - Fixed income investors
 - Stockholders
- **Deep Board Engagement:** Our majority-independent Board of Directors has convened multiple times since passage of the SBCAA to consider many factors in evaluating our approach
- Approval of Increased Leverage Flexibility Under the SBCAA: On September 4, 2018, our Board of Directors approved reducing our regulatory asset coverage ratio to 150% under the SBCAA. This change will go into effect on September 4, 2019, following the required 12 month cooling off period under the SBCAA
 - If the Proposal is approved by stockholders a the Special Meeting, the Company would become subject to an asset coverage ratio of at least 150% the day after the Special Meeting instead of September 4, 2019



KEY ATTRIBUTES THAT ENHANCE HERCULES CAPITAL'S USE OF INCREMENTAL LEVERAGE



KEY ATTRIBUTES THAT ENHANCE HERCULES CAPITAL'S USE OF MODEST INCREASED LEVERAGE

Internally Managed BDC

- **INTERNALLY MANAGED BDC** No incentive to grow assets under management "AUM" for fees
- Our compensation is based on earnings and credit performance
- · Incentivized to maintain disciplined credit underwriting policies
- · Incentivized to drive higher future dividend distributions
- Incentivized to drive higher ROAEs

Our First Lien Debt Investment Portfolio is Better Aligned for Additional Leverage

- Short duration amortizing loans (18 months average duration)
- Normal amortization and early pay-offs average over \$400M annually
- Natural built-in modulator of overall loan portfolio growth
- We <u>DON'T</u> invest in 5 or 7 year bullet loans as typical lower middle market lender offer; <u>we invest in short term amortizing loans</u> with typically 36 to 42 month contractual terms/maturities

Increases our Operational Flexibility and Enhances Shareholder Returns

- Increases flexibility to better optimize the timing of potential equity capital raises
- Increases cushion to regulatory limit and therefore reduces default risk
- Increases flexibility to manage HTGC through credit cycles

Enhances Growth, Scale & Diversification Opportunities

- Allows up to better compete with competitors that have greater resources and scale
- · Adds to our potential investment opportunities
- Increases opportunities for diversification and scale



HTGC's GUIDANCE FOR ASSET COVERAGE RATIO "ACR"



HTGC GUIDANCE FOR ASSET COVERAGE RATIO "ACR"

- We expect to continue our prudent and controlled use of leverage and remain well below the 150% asset coverage limit. We do not anticipate going below 167% asset coverage/1.5x leverage for the foreseeable future.
- Upon shareholder approval to increase leverage, we ONLY intend to modestly increase our leverage operating range to a target leverage ratio range of 0.95x to 1.25x (or ACR of 205.0% to 180.0%) during the initial 12-15 month period following shareholder approval as compared to our current target leverage ratio range of 0.75x to 0.95x (or ACR of 233.0% to 205.0%).
- Our primary goal in using modest increases in balance sheet leverage is to continue to grow our debt investment portfolio using our same historical investment focus and stringent criteria while providing us the greater flexibility intra-quarter or year on leverage within our targeted range, and access the equity capital markets when we believe conditions are optimal for such an equity raise.
- We expect to prudently manage our targeted leverage range by using the proceeds from scheduled principal loan amortization and/or early loan prepayments, as well as through our just-in-time ATM (At-The-Market) equity program proceeds from equity capital raises, to further maintain or reduce our leverage outstanding.
- We do not anticipate, for the foreseeable future, reaching 2 to 1 leverage (or 150.0% ACR). We believe our long-term natural self-imposed ceiling is 1.5x debt-to-equity maximum.



HTGC's PLAN FOR REDUCED ASSET COVERAGE REQUIREMENT



HTGC PLAN FOR REDUCED ASSET COVERAGE REQUIREMENT

KEY ELEMENTS

- **No Change** to our "first position" senior secured investment focus and historical loan portfolio orientation with attractive risk-adjusted yields
- <u>No Change</u> to our direct origination venture-lending focus or thematic investment underwriting
- Expect to maintain investment grade credit ratings by pursuing modest levels of incremental increased leverage of 0.95x to 1.25x debt-to-equity
- Incremental increased leverage will enhance greater portfolio diversification and investment capabilities
- Potential to generate incremental annual increases in ROAAs and ROAEs for stockholders



Obtaining regulatory relief in conjunction with a revised financial operating leverage guidelines of 0.95x to 1.25x debt to equity ratio will allow HTGC to drive incremental ROAEs while maintaining an investment grade rating profile



HTGC's PLAN FOR REDUCED ASSET COVERAGE REQUIREMENT

PRUDENT APPROACH TO LEVERAGE SINCE INCEPTION

- HTGC has demonstrated and maintained a cautious and prudent approach to leverage since inception December 2003
 - Regulatory leverage currently 65.2%⁽¹⁾; Since inception, typically below 73.0%
 - Net Regulatory leverage currently 59.0%⁽¹⁾; Since inception, typically below 62.0%
 - Net GAAP leverage currently 78.7%⁽¹⁾; Since inception, typically below 85.7%

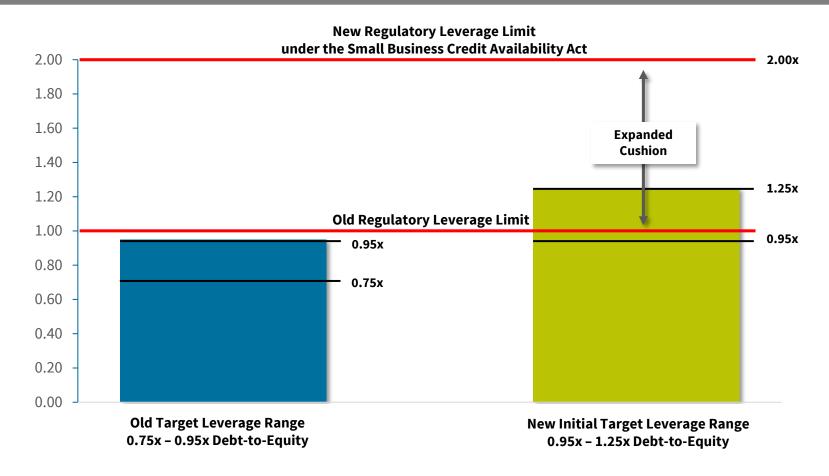
Leverage	Current Approach With 1:1 Cap
Regulatory	Typically Below .73
Net Regulatory	Typically Below .62
Net GAAP	Typically Below .86

• Our proposed initial target leverage range post 2:1 increase of 0.95x to 1.25x is more conservative than our historical behavior



RELAXED ASSET COVERAGE CEILING IMPROVES RISK PROFILE

WE INTEND TO OPERATE WITH A GREATER CUSHION WHICH WILL HELP OUR FLEXIBILITY AND SEEK TO REDUCE RISK FOR DEBT AND EQUITY HOLDERS

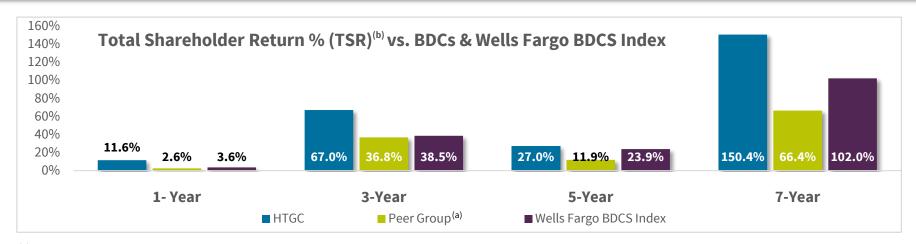




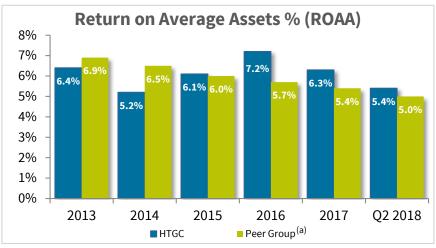
KEY PERFORMANCE HIGHLIGHTS



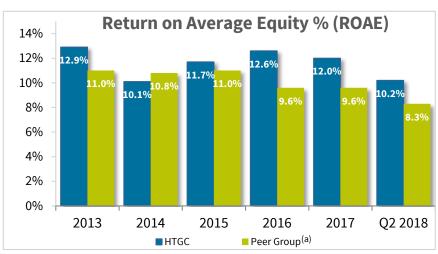
BUILDING OFF OF HTGC'S STRONG HISTORICAL STOCKHOLDER RETURNS



- (a) BDC Peer Group: AINV, ARCC, BKCC, OCSL, FSIC, GBDC, GSBD, KCAP, MAIN, MCC, NMFC, OXSQ, PNNT, PSEC, SLRC, BBDC, TCPC, TCRD, TSLX
- (b) TSR is defined as stock appreciation plus distributed dividend distributions Source: S&P Capital IQ as of September 30, 2018



Source: S&P Capital IQ as of 6/30/18. Return on Average Assets excluding cash. NII divided by average of beginning of period total assets excluding cash and end of period total assets excluding cash.



Source: S&P Capital IQ as of 6/30/18. Return on Average Equity based on NII. NII divided by average of beginning of period equity and end of period equity.

(a) BDC Peer Group: AINV, ARCC, BKCC, OCSL, FSIC, GBDC, GSBD, KCAP, MAIN, MCC, NMFC, OXSQ, PNNT, PSEC, SLRC, TCAP, TCPC, TCRD, TSLX



PORTFOLIO HIGHLIGHTS AND STRONG TRACK RECORD



STRONG HIGH QUALITY PORTFOLIO AND TRACK RECORD

First Lien Senior Secured, Floating Rate- focused Portfolio	 85.9% "true" first lien senior secured and generally only lender 97.2% floating rate loans with interest rate floors
Broadly Diversified, Rapidly Amortizing Debt Investment Portfolio	 Debt investments in 88 companies Average duration of 18 months Short term maturities of 36-42 months contractual Average investment size: \$5M to \$100M
High-Yield Portfolio of Earning Assets	Total Debt Investments (at cost): \$1.55BEffective Yield: 13.5%
Industry-Leading Originations Platform	 \$8.0B in total debt commitments since inception Cumulative Total Net Realized (Loss) since inception of (\$42.8M) Annualized loss rate of 4 bps or 0.04%
Strong Track Record	 1YR/3YR/7YR Total Shareholder Returns: 11.6%/67.0%/150.4% (as of 9/30/2018) ROAE^(1,2): 10.2%
Investment Grade Credit Ratings	KBRA KROLL BOND BBB+
Strong Capital Raising Position	 Price-to-NAV: 1.30x⁽³⁾ "ATM" Equity and Debt Distribution Agreements

⁽¹⁾ Source: S&P CapIQ as of 6/30/18

Note: All figures represented herein are as of June 30, 2018 unless otherwise noted.

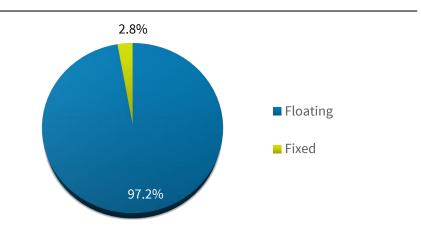


⁽²⁾ Based on NII, excludes realized and unrealized gains/losses

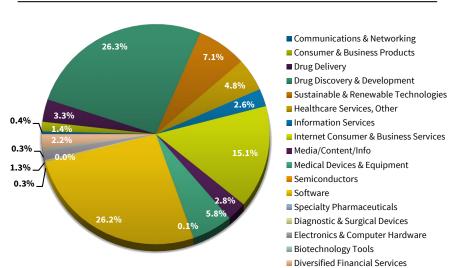
⁽³⁾ As of October 2, 2018

HERCULES' INVESTMENT PORTFOLIO: Q2 2018

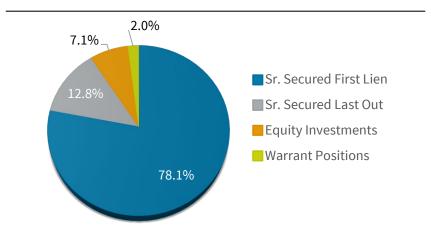
Floating vs. Fixed Rate



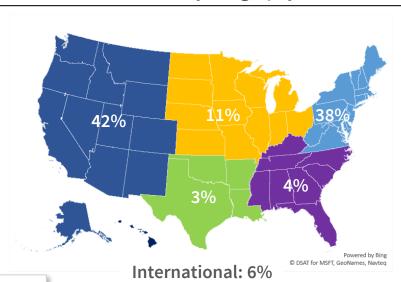
Industry Breakout



Investment Type Breakout



Hercules Investments by Geography



TO VOTE

The proxy statement is now available. You may use one of the following methods to provide your voting instructions:

Vote by Internet:

Online at <u>www.proxyvote.com</u>. Have your 16-digit control number listed on the proxy card or voter instruction card and follow the instructions; or

Vote by Telephone:

• With Your Ballot:

Call 1-800-690-6903 or the number on your proxy card or voter instruction form. Have your 16-digit control number listed on the proxy card or voter instruction card and follow the instructions; or

Without Your Ballot:

Call 1-833-795-8429 to speak to a live representative. Specialists are available Monday through Friday, 9AM to 10PM Eastern Time to take your vote; or

Vote by QR Code:

You can scan the QR code on your proxy card to vote with your mobile phone. We recommend that you use "QR Code Reader" for Android, and "QR Code Reader by Scan" for Apple; or

Vote by Mail:

Mark, sign and date your proxy card and return it in the postage-paid return envelope provided; or

Vote in Person:

A shareholder of record can attend the Special Meeting and submit a vote in person.

