

AMERICA'S BURGEONING DEBT CRISIS

**With rising debt levels and signals of a
downturn, investors should show caution.**



EXECUTIVE SUMMARY

Credit is cyclical by nature and it's important to use that cyclicity to build a risk protected portfolio. The United States credit market is currently in an Expansion phase which is characterized by plentiful capital availability, rising LBO and M&A and balance sheet releveraging at the corporate and consumer level--what part of the Expansion phase is difficult to pinpoint. Analyzing several factors can bring some clarity.

This paper examines rising trends in consumer and corporate debt investing and the impact of an economy that is still recovering from the Great Recession--providing actionable advice for building a smart loan portfolio.

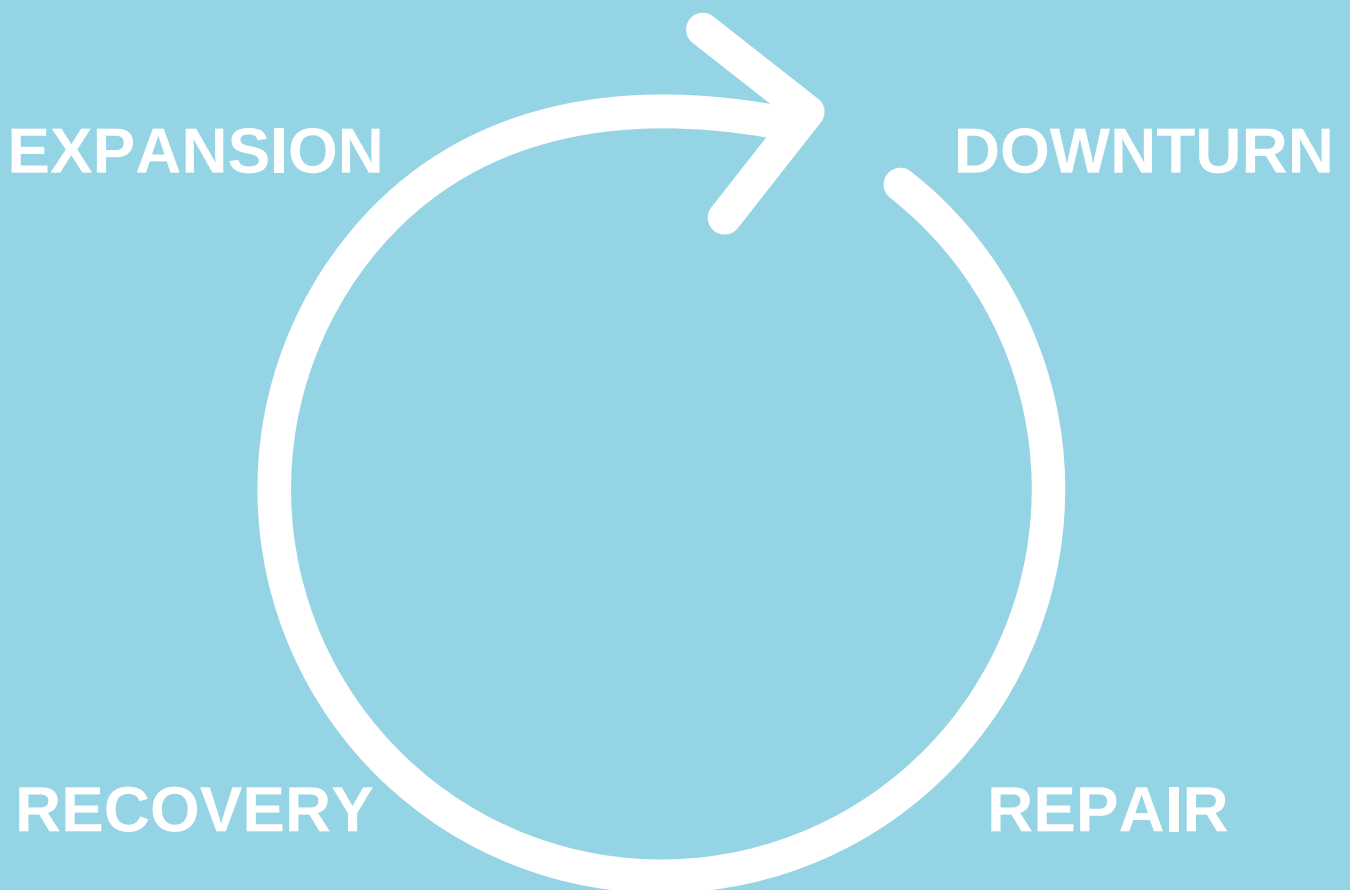


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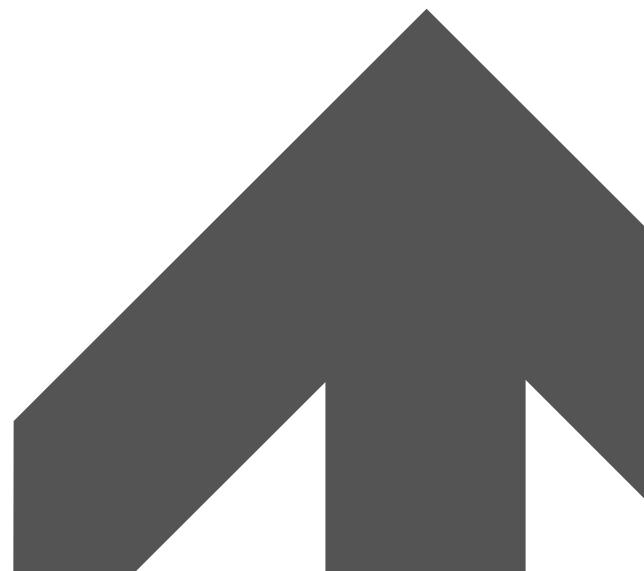
I. FINTECH AND THE RISE IN CONSUMER LENDING

Over the past ten years a rapid rise in online consumer lending platforms like Lending Club and Prosper have made access to loans easier than ever. With early success and high returns, investors wanted in, creating a surging demand for increased consumer funding. Investment firms launched dedicated strategies focused on providing debt and equity investments to FinTech loan providers. The inflow of fresh capital and aggressive lending and underwriting practices, led to the rapid rise in lending platforms. The consequence of the easy access to capital has pushed household debt to record highs. Data from the New York Fed and Equifax shows total household debt reached \$13.54 trillion as of 2018. Q4 of 2018 was the 18th consecutive quarter that household debt has grown.

Personal loans are the fastest growing lending category in the United States according to data from TransUnion. **Balances stand at about \$125 billion with over 33% of personal loan origination coming from FinTech providers compared to 1 percent in 2010.** This rapid growth doesn't account for "Shadow Lenders". Shadow Lenders are platforms that only report defaults to credit agencies. Given the prominence of shadow lenders in the FinTech sector, the outstanding balances for consumers is even higher than reported. This trend also makes it difficult to access the true credit-worthiness of a borrower.

With increasing options, American consumers are becoming significantly overleveraged and demand continues to grow without regulation. With soaring housing prices in many major cities and an economy still recovering--startups like Santa Monica based, Domuso are popping up. Domuso allows borrowers to take on high interest short term loans to pay for rent. Reminiscent of 2007, lax mortgage lenders are offering loans to non-verified borrowers.

**Total household debt reached
\$13.54 trillion in 2018**



This innovation trend is emblematic of the consumers it serves. A survey of 2000 consumers by PYMTS.com and Unifund provided insight into this borrower, which they coined “Second Chance Borrowers”. These borrowers are in their 30’s and 40s, work full time, have college degrees and maybe own a home and have a family. **Surprisingly, 79 percent report living paycheck to paycheck.** This generation of consumers unlike their parents don’t have the guarantee of a steady job, pensions, guaranteed annual raises and bonuses, savings and a home with equity. This group is far more likely to utilize FinTech lending platforms.

Research by the Georgia Institute of Technology showed marketplace borrowers fail to change their underlying financial behavior, using debt to pay off debt, leading them to become more indebted and have a higher rate of default. Given the financial burden on this group of borrowers, the long term health of the economy should be questioned.

Banks are doubling down on the consumer lending boom with the help of startups like Silicon Valley based Blend, which offers technology to ease the online HELOC lending process for the consumer and lender. Goldman’s consumer lending arm, Marcus, took on \$35 billion in assets in 2018. Marcus has quickly taken market share in the US and UK offering higher interest rates for savings account clients, increasing their consumer lending ability.

With signs of a downturn, Goldman announced in January 2019 they would be decreasing Marcus lending due to credit concerns. Keep an eye on the moves of larger banks playing in the FinTech space. With a largely overexposed market, a wave of defaults is imminent. As large banks decrease lending and the fear of rising defaults builds, some regulators are looking to curb unchecked consumer lending activities.

In February 2019, Norway announced increased regulation to decrease the growth of high interest rate consumer loans. This regulation shows fear of a global consumer credit crisis spurred by increased access to lending for borrowers and an economy that remains damaged from the Great Recession.

II. JUNK BONDS: OOPS THEY DID IT AGAIN

Less than ten years post crisis, banks are playing dangerous games with leverage. United States **loans to companies with low credit ratings swelled by 15% in 2018 to a record \$1.3 trillion** according to credit agency, Fitch.

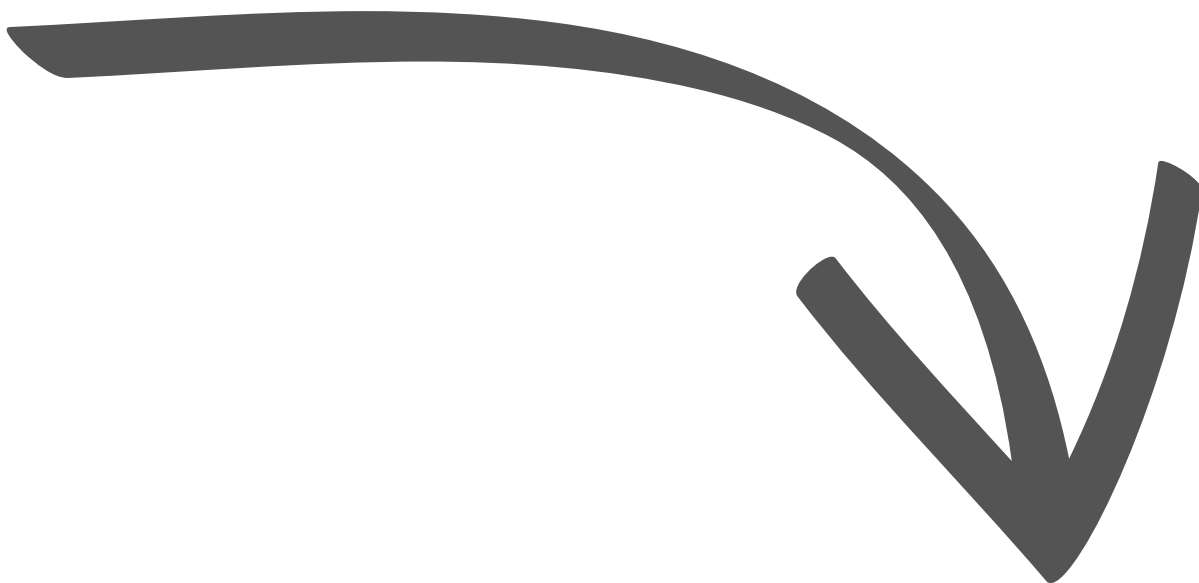
A February 2019 report from the Fed expressed concern over “weakened transaction structure and increased reliance upon revenue growth or anticipated cost savings” for leveraged loan lending. Similar to the consumer market, companies are taking on high-interest debt obligations. The concern comes from a possible wave of defaults in the wake of a downturn and banks being overleveraged.

Despite the warning signs, banks aren’t ready to leave the party and cite low leveraged loan default rates as a reason to increase allocation to high yield offerings. **It’s important to note that the default rate for leveraged loans stood at 0.2% in 2007, just before the financial crisis. Within two years it grew to 10.5%.**

Similarities to the market trends pre-2008 should be noted as caution. Keep an eye on the more bearish credit forecasters like Morgan Stanley. The financial firm showed short-term optimism in their high-yield total return forecast for 2019 shifting projections to 4.5 percent from 0.5 percent previously. Analysts maintain that “credit is in a long-term bear market, which can still have strong tactical rallies in between”.

III. THE AFTERSHOCK OF THE GREAT RECESSION

To determine the threat of a downturn, it's important to assess the overall health of the economy. Underlying factors point to a global economy that is still feeling the aftershocks of 2008. The announcement that the Fed won't raise interest rates will only serve as a band-aid on a bleeding economy.



UNDEREMPLOYMENT

Unemployment numbers have been strong but do not provide a full picture of the working economy. Although there is no metric for tracking underemployment, it is clear that levels are above pre-recession. Underemployment indicates slowed wage growth, people working multiple jobs and possibly without benefits. Data from the Federal Reserve shows wage growth lags behind pre-recession levels. The “Gig Economy” is the result of this issue with many citizens working multiple roles to make ends meet without the security of insurance or a pension.

AUTO LOANS DELINQUENCY

Analysis from the New York Fed and Equifax shows auto loan delinquency on the rise. Although rising overall rates remain below 2010 peak levels, there were over 7 million Americans with delinquent auto loans at the end of 2018, that's 1 million more than the peak in 2010. The growing number of distressed borrowers suggests a suffering labor market, despite the positive unemployment numbers.

STUDENT LOAN DELINQUENCY

Data from the New York Fed and Equifax shows record growth in student debt delinquencies. Student-loan delinquencies hit records of \$166.3 billion in Q3 2018 and \$166.4 billion in Q4 2018. This demonstrates low unemployment numbers are not tied to wage growth.

HOUSING GROWTH

Although mortgage rates have remained low, housing development has not recovered. As Bloomberg reported, the rate of starts on building single family residences remains below the level of the early 1960s when the U.S. population was less than 60 percent of what it is today. This indicates an economy still on the rebound.

FARM DEFAULTS

With low commodity prices and a tariff war with China, agriculture is taking a hit. Data from the Federal Reserve Bank of Minneapolis shows that from June 2017-June 2018, 84 farm operations in Ninth District states filed for chapter 12 bankruptcy. This is more than twice the level seen at the peak in 2014. A bad indicator for an already struggling sector.

IV. CYCLICALITY TO AVOID CRISIS

It's important to diversify market exposure in different parts of the credit cycle to avoid crisis. All data points to the US economy being at the tail end of the Expansion phase of the credit cycle. Given the cyclicality of credit, how can investors prepare for a downturn?



LOOK INTERNATIONALLY

Crisis hits different places at different times. For example, Brazil's downturn hit in 2007--a year prior to the crisis in the United States. From July to August 2007, the Brazilian stock market declined 15% peak to trough. In 2008, when US investment opportunities were scarce, factoring or short duration receivables discounting from Brazil performed well. Providers of capital adjusted their short duration portfolios to lend to higher quality survivors from the 2007 Brazilian economic downturn.

Latin American countries suffered another downturn between 2014-2017. The majority of these countries are beginning to enter the Repair phase where the companies likely to fail have gone bankrupt, leaving only tested companies for lending. Given the long term aftershocks of the 2008 crisis in the United States, expect to see a delay in downturn--likely around 2020.

AVOID TRENDS

Currently, there is a herd like mentality for investments into the consumer lending space. Allocators with no knowledge of the space are flocking-- a signal that it may be time to move on. As demand increases, yields come down and customer acquisition costs generally go up, causing ever shrinking net interest margins. With decreasing margins, small changes in defaults or recovery rates can quickly lead to negative returns.

As a rule of thumb, it's important to avoid consumer lending pre downturn and 6-12 months after defaults. In the current market, the desire for "scale" is driving the herd to increase allocation to consumer lending. The rapid growth in FinTech offerings like Affirm's financing of online purchases in installments, shows the extent of consumer lending expansion in the US.

LOOK FOR SECURE BORROWER

For Institutional money, it's important to stay senior secured if possible. For smaller--more nimble--investors, look for opportunities where the underlying borrower is secure.

For example, medical lien lending at first blush appears to be a standard consumer loan. Under the hood, the investor is financing the doctor and getting paid by the responsible party's insurance company, not the individual. In these cases, doctors essentially give their auto accident patients treatment on credit and wait for a settlement to be reached and the at fault party's insurance company to pay. Selling these medical accounts receivable at a discount, allows doctors to avoid the incident monitoring process and provide a normalized cash flow. In an investment portfolio, this is a scalable asset correlated to auto accidents and not the consumer credit cycle. The investment is secured by payouts from high rated insurance companies, thereby reducing the risk significantly.

TECHNOLOGY ADVANTAGE

As technology becomes increasingly sophisticated, informed lending will be easier. Consumer FinTech platforms have moved the industry significantly in terms of loan ease, but there is much more that can be improved upon.

Countries across the globe struggle to collect taxes and have businesses with high interest debt. To tackle both problems, many countries are adopting e-invoicing and centralized invoice registries with mandatory reporting. For example, Mexico now requires companies to not only report invoices but also report payment on those invoices. Other countries created publicly available credit databases where supplier and customer credit history will be readily available and reliable for small and medium sized businesses. This provides lenders with a more accurate view of a company's financial status. Technology is leading to reduced acquisition, underwriting, servicing and collections costs.

REGIONAL KNOWLEDGE

Regional knowledge is crucial to lending. For example, decreasing short-term small business lending close to military bases during the shutdown mitigates possible risk. Investors need to know the area they are investing in before moving forward. All markets are not equal. Even in the US, state laws in regards to lending are not uniform. Something as simple as the max rate a borrower can be charged, varies state to state.

CALCULATE CASH ON CASH

Especially when platforms are small, growth in the loan book can hide underlying problems. In most cases, borrowers don't default immediately and the portfolio continues to grow. The growth hides the default and makes returns appear higher.

Measuring a portfolio in vintages or IRR instead of a time weighted basis solves this issue creating a true picture of the portfolio's performance.

V: CONCLUSION



The rise of FinTech consumer lending altered the debt landscape forever. As the opportunity grows, so does the risk. In the coming years, the burden of an over-leveraged populace, will force governments to regulate this sector with long-term implications in mind.

The impact of the Great Recession on the long-term health of the United States economy is difficult to measure. It's fair to conclude, the economy will be forever changed from this major crisis.

Given the significance of 2008, standard credit cycle analysis will be less predictive. Technology and the search for yield have changed the underlying micro-structure of many credit markets. Risk analysis based on historical data may not be accurate due to these underlying changes in how the market operates. In order to build a risk protected loan portfolio, investors must utilize less standard tools for measurement digging into the underlying metrics of an investment.

TERRA INCOGNITA CAPITAL

Terra Incognita provides flexible lender finance to specialty finance platforms and FinTech companies in the US and Latin America. Our objective is to generate risk adjusted returns and current income by opportunistically structuring and participating in a portfolio of debt investments.

Members of the team have been providing capital to lenders across the globe for over 15 years. In the early 2000s this was primarily in the US and South East Asia and China. As more capital rushed into lending strategies in these markets the principals began to focus on less trafficked markets and specialty lenders. This included Latin America and US small business non-bank lending platforms lending against contractually owed cash flows.

SOURCES

Bloomberg, America's Housing Market Isn't Building Enough New Homes

<https://www.bloomberg.com/news/articles/2019-02-11/america-s-housing-market-isn-t-building-enough-new-homes>

Bloomberg, Junk Bond Market Forecasts Are Quickly Going from Good to Great

<https://www.bloomberg.com/news/articles/2019-01-15/junk-bond-market-forecasts-are-quickly-going-from-good-to-great>

Federal Reserve, Press Release 1/25/2019

<https://www.federalreserve.gov/newsevents/pressreleases/bcreg20190125a.htm#aboutMenu>

Georgia Institute of Technology, Winners and Losers of Marketplace Lending: Evidence from Borrower Credit Dynamic

https://www.jbs.cam.ac.uk/fileadmin/user_upload/research/centres/alternative-finance/downloads/2018-af-conference/paper-paradkar.pdf

New York Fed, Household Credit and Debt Report, Q4 2018

https://www.newyorkfed.org/medialibrary/interactives/householdcredit/data/pdf/HHDC_2018Q4.pdf

Minneapolis Fed, Chapter 12 Bankruptcies on the Rise in the Ninth District

https://www.minneapolisfed.org/publications/fedgazette/chapter-12-bankruptcies-on-the-rise-in-the-ninth-district?sc_device=Default

Pymts.com, 79 Percent of Millennial Gen X Live Paycheck to Paycheck

<https://www.pymnts.com/news/payments-innovation/2018/79-percent-of-millennials-gen-x-live-paycheck-to-paycheck-are-late-paying-bills-rising-consumer-debt/>

The Street, Wall Street Sees No Evil As Junky Loans Spread

<https://www.thestreet.com/markets/wall-street-sees-no-evil-as-junky-loans-spread-14862195>

Western Asset, Where Are We in the Cycle?

<http://www.westernasset.com/SG/qe/research/whitepapers//where-are-we-in-the-credit-cycle-2018-01.cfm>

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