OPPORTUNITY IN OUR FINANCIAL LANDSCAPE

AND THE RESULTS IN SECURITIES-BASED LENDING

rockall tech

Unlocking asset value to release and safeguard credit

INTRODUCTION

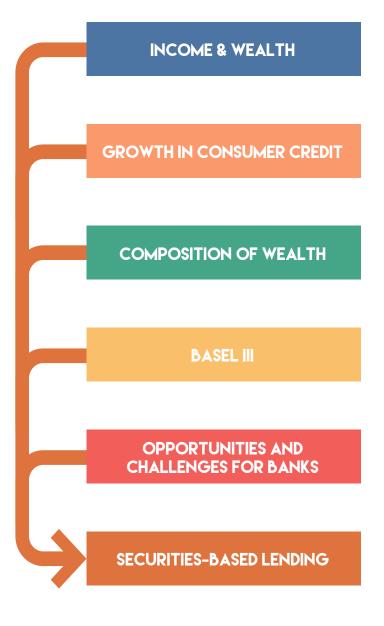


The financial landscape has changed considerably in recent years, bringing with it new challenges for banks and other lenders. However, these changes have also brought about considerable opportunity.

Securities-based lending (SBL) is a strategic financial services area experiencing exponential growth. It has been adopted by several of the world's largest financial institutions to rapidly grow their deposits, lending portfolios and investment services. SBL unifies Bank and Investment services into a compelling client offering. There are numerous reasons why growth is taking place within banks, brokerage and wealth management organizations, and this paper provides some of the well known statistics that drives those reasons. SBL has become a mainstream solution for banks and investment service firms who wish to service high net worth, mass affluent clients, entrepreneurs, and businesses offering hybrid lending solutions without increasing risk.

Amidst very low interest rates that look set to continue for some time, clients see great value in using their portfolios as collateral to loans rather than selling securities and being subject to taxation. Wealth management firms are selling more and more credit products to generate revenue. More clients are moving to managed accounts which cannot be used as collateral to non-purpose margin loans, which could be called the "old" SBL.

This paper will examine the following key trends behind the rapid growth in securities-based lending.



IN SHORT

Due to recent economic shifts and banking trends, financial institutions find themselves under greater pressure to seek new growth opportunities in order to remain competitive.

Securities-based lending represents a highly profitable, organic growth opportunity.

INCOME & WEALTH



Income and wealth in the United States is moving in two directions today – increasing for families in the top 10% of income, while remaining flat or decreasing for the other 90%.

According to the U.S. Federal Reserve's Survey of Consumer Finances, despite lower unemployment, low inflation, and growth in the US economy since the great recession, not all families in the U.S. have experienced the same economic benefit.

For example, the Gini Coefficient, a statistic used to measure the degree of income inequality in the United States, rose by 23% from 1968 to 2013*.



During the 2007 – 2010 period, inclusive of the 2008 financial crisis, the median value of real (inflation-adjusted) family income before taxes fell by 7.7%. Real mean income fell even further – by a staggering 11.1% across all families.

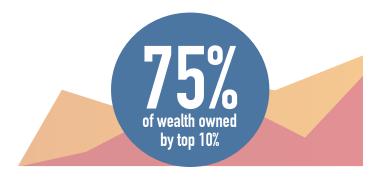
Compounding matters, when measured again in 2013, overall average family income had risen by 4% in real terms since 2010, but median income had fallen by another 5%. A rising mean and falling median family income is consistent with increasing concentration in incomes over the past decade.

"What the financial crisis did was lay bare the ugliness of a growing income gap by removing the layer of debt accumulation that had been masking its presence..."

September, 2014 – Morgan Stanley Report – "US Economics: Inequality and Consumption"

Families in the middle to upper-middle income levels (between the 40th and 90th percentiles) of the income distribution saw little change in average real incomes between 2010 and 2013 and thus have failed to recover the losses experienced between 2007 and 2010. Only families at the very top of the income distribution saw widespread income gains between 2010 and 2013.

The top 10% of families now claim 47.5% of all income in the United States and over 75% of total wealth.



* September, 2014 – Morgan Stanley Report – "US Economics: Inequality and Consumption"

- Median incomes have declined over the past six years, while mean incomes have risen again. This is consistent with income concentration at the top of the income distribution
- Two groups: households with strong incomes and growing wealth (top 10%), and those without (bottom 90%)
- Lenders that have relied on the average American household for organic loan growth may find reduced loan demand for their traditional products

GROWTH IN CONSUMER DEBT



Next we look at the growth in consumer debt using sources from the Federal Reserve. Here too a pattern is emerging: lower and middle income American households are accumulating debt - but, unlike with higher income families, the purpose of this debt is to maintain living standards.

The 2013 Survey of Consumer Finances asks two questions intended to capture whether or not families are likely credit constrained: first, whether or not the family has been turned down for credit, and second, whether the family declined to apply for credit for fear of being turned down.

"As income inequality grew, the average American household took on more and more debt to supplement the lack of income growth... by late 2007, debt as a share of disposable income peaked at an eye-popping 135%..."

September, 2014 – Morgan Stanley Report – "US Economics: Inequality and Consumption"

In 2013, 27.6% of respondents said "yes" to one or both of these questions. Furthermore, 14.9% of families reported being late on payments, and the proportion of families who reported being late on payments by 60 days or more sat at 6.9%. Finally, debt-to-income for families, while down from 2010 levels, had reached 107.4%.

In short, income inequality continues to rise and has already reached higher levels than in 2007 - and as stated above, for lower to middle income families, debt is growing in order to simply maintain living standards.

On the other hand, higher income families are borrowing for a very different reason. The top 10% of U.S. households have access to inexpensive credit with which to finance everything from luxury purchases to real- estate. Therefore, it is this demographic that currently represents significant opportunity for growth.



- Consumer debt is on the rise again, but the debt of lower-to-middle income earners is not healthy
- Banks that mostly target lower-to-middle income earners cannot expect to grow at desirable levels
- Banks need to cater to more affluent households to do this, they need products such as SBL

COMPOSITION OF WEALTH



Families in the lowest income group experienced further declines in stock ownership from 2010 to 2013, while the ownership rate for the upper-middle income group remained about the same over the most recent period*.

For the top income group, the rate of ownership in 2013 reached 92.1%, slightly above the 91.7% found in the 2007 survey*.



The average value of stock holdings for those families in the top income percentile is nearly 18 times that of the average value those in the 50th percentile, and over 7 times that of those in the 89th percentile.

Across usual income groups, the mean net value of housing tends to increase as income rises. In 2013, the mean net value of housing wealth among homeowners in the bottom half of the income distribution was \$92,400. For the top income group, the mean net value of housing was roughly five times larger at \$446,500*.

In 2007, among home-owning families, the average net housing wealth (value of the home minus outstanding mortgages) was \$221,000. In 2013,

"...but the final straw that broke the back of America's average household was the housing market boom that added trillions of dollars in debt to balance sheets, and when it burst, stripped homeowners of equity..."

September, 2014 – Morgan Stanley Report – "US Economics: Inequality and Consumption"

that number had fallen to \$159,400*, a decline of a staggering 27.8%. The impact on households in the lower 90% of the population has destroyed a large percentage of this group's household wealth.



* FRB 2013 Survey of Consumer Finances

- Average US household wealth has fallen dramatically since the credit crisis. The impact of the pronounced reduction
 in residential real-estate prices has impacted the average consumer's ability to qualify for traditional loan products
- Households in the top income group have seen large gains in corporate equity values, leading to recovery in wealth
 and income. Organic loan growth can be found by catering for this market with suitable products

BASEL III



The Basel Committee is comprised of bank supervisory authorities and was established by the central bank governors of the G-10 countries in 1975*. Membership now includes representatives from more than 20 countries. Committee actions do not have the immediate force of law within the member countries but, as a condition of continued membership, each member state has agreed to apply the Basel accords to their internationally active banks*.

"Basel III has incorporated capital standards for banks. The fear is that an increase in capital requirements will hamper community banks' ability to leverage equity and therefore risk diminishing shareholder returns..."

American Banker, September 2012

The Basel accords impose minimum bank solvency standards across countries and is designed to shore up weaknesses in the bank regulatory framework that became apparent in the aftermath of the 2008 financial crisis.

In broad terms, The Basel III framework addresses capital adequacy requirements which limit the amount of loan (and total) assets that a bank may have relative to its capital and the use of leverage relative to total assets, requiring banks to hold more liquidity.

CAPITAL RATIO: At the heart of the minimum capital requirements are ratios determined by dividing different categories of capital by the amount of a bank's risk weighted assets (RWA).

"Banks will need to re-examine the returns that they are achieving through their various business lines and reallocate resources towards business opportunities that can achieve better rates of return and lower credit risk"

ABF Journal - January/February 2013

CAPITAL BUFFERS: In addition to strengthening Tier 1 capital, two new capital buffers have been added. The first is a capital conservation buffer equal to 2.5% of RWA, the second is a countercyclical buffer of between 0 and 2.5% of RWA. Both buffers must be raised through common equity.

- Basel III has changed the rules of the game for banks, bringing about increased capital requirements, reduced leverage ratios, reduced profit margins and increased regulatory costs
- Risk Weighted Assets (RWA) relative to total capital is key. All loan assets are not created equal
- Basel III rules may afford a general risk weight floor of 20% to loan assets that meet certain conditions. SBL products have the potential to meet all of these conditions

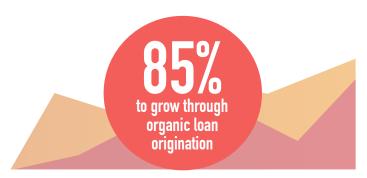
^{* 2013} Davis Polk & Wardwell LLP, 450 Lexington Avenue, New York, NY 1001. http://www.usbasel3.com

OPPORTUNITIES AND CHALLENGES FOR BANKS



Our final area of research focuses on some of the concerns and challenges facing banks in the wake of the financial crisis. Below we look at a survey conducted in June and July of 2014 of over 100 directors and senior executives of banks nationwide. Not surprisingly, organic loan growth, regulatory compliance and competition rank high in respondent feedback.

When asked "how does your bank plan to grow within the next 12 months?", 85% of respondents indicated "through organic loan origination" - this is close to twice the number who indicated "through bank acquisition or merger", and more than four times the rate of response for "through branch acquisition" (20%).



When asked "what are the greatest concerns about your bank?", "regulatory compliance" generated the single highest response (68%), more than double that for "loan growth" (33%) and "providing a competitive return to owners/investors" (27%). The competitive landscape is also acute. 84% of respondents cited the highly competitive environment as being one of the top 3 challenges to organic growth, followed by weak loan demand (59%)*.



Relatively new products such as securities-based lending are on the rise, led by the major wealth firms. Outstanding SBL loan balances are increasing quarter-on-quarter while financial advisors (FAs) are increasingly engaging with new products such as SBL. 69% of Morgan Stanley FAs engaged with at least one new lending product in 2014, while 27% engaged with four or more new lending products in 2014**.

Securities-based lending products are highly attractive, providing flexible loans, quick credit approvals, competitive pricing and efficient access to liquidity.

- Banks want to grow loan originations organically but they face headwinds from a changing competitive landscape, increasing compliance costs and capital requirements, plus a greater need for profitable extensions of credit to borrowers
- Securities-based lending affords banks the opportunity to grow organically by offering highly secure, and liquid, collateralized loans to existing and new customers using technically efficient and low-cost platforms

^{*} bankdirector.com - Bank Director, August 2014 - 2014 Growth Strategy

^{**}Morgan Stanley at the Credit Suisse 2015 Financials Conference, 2015

THE OPPORTUNITY

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SECURITIES-BASED LENDING



With securities-based lending, individuals pledge their taxable financial assets to secure a line of credit. Funds may be used for any purpose, except for the purchase of marginable securities. This affords lenders higher returns (on both assets and equity) and higher risk based capital ratios, while at the same time securing lower overall credit risk.

We recently conducted a survey of a number of organizations, to assess the year-on-year growth of loan portfolios resulting from SBL. Below is some of the resulting data, showing growth of between 25% and 100% on a year-on-year basis.

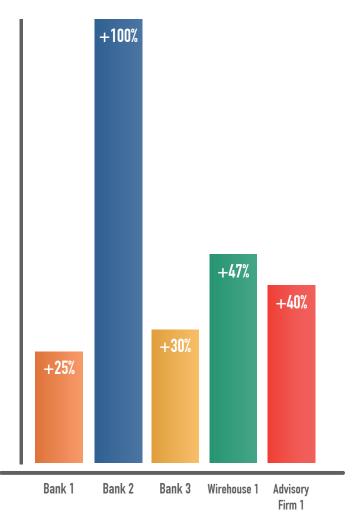
KEY ACTIVITIES

- Advance and maintenance weighting of securities
- Marking security positions to market (typically daily)
- Loan draw authorizations relative to borrowing limits
- Substitution & release of collateral

SBL borrowers tend to have higher average credit scores relative to borrowers nationwide - as of October 2014, the average FICO score in the United States is approximately 640 (according to research conducted by Experian). By contrast, SBL consumers have average FICO scores in the 725 - 750+ range.

Loan facilities are collateralized by liquid, taxable, investable assets that are immediately saleable.

Weighted average spreads on SBL loan portfolios at the largest banks are approximately 200bps, and pre-tax margins range from 40% - 70%+ at these institutions.



WHAT THIS MEANS

 Securities-based lending represents a highly profitable, organic growth opportunity for banks and wealth firms, as well as a tool to attract assets under management on behalf of high-net-worth clients



This increased opportunity is indeed compelling for banks. However, as with any banking credit product, it is critical to ensure that the bank manages the associated risk. Underlying processes and systems must be fit for purpose in order to avoid credit, operational and even reputational damage.

Booking system add-ons

Ticker systems

Offline applications

Multiple data sources

Spreadsheets

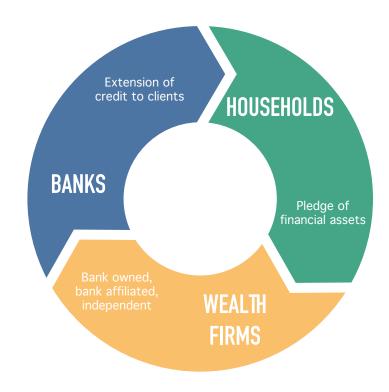
Before entering this market, credit providers must first invest in the capability to:

- Effectively evaluate proposed collateral portfolios
- Consistently mark-to-market collateral values
- Efficiently manage releases, substitutions and draw downs
- Be ready to deal with stock market dips or even tanks
- Be in a position to stress test the overall book

Once credit providers have made the necessary measures to combat associated risk, SBL is a category that can be of significant benefit to all parties.

STAKEHOLDER APPEAL

- Banks have credit that they wish to lend
- Wealth management firms want to create products for their sales forces to sell
- The end customer has assets they want to leverage



- In order for banks and wealth firms to maximize the SBL opportunity prudently, they must invest in appropriate systems and people to safeguard credit and operational processes
- However, with those components in place, SBL represents a particularly rich and appealing product offering for all stakeholders

ABOUT ROCKALL



Rockall Technologies has been helping financial services organizations manage and grow their SBL business for ten years.

- Some of the world's largest banks leverage our product
- Our product links seamlessly with our customers' existing workflow systems

Using our product, financial services organizations can monitor the changing status of their collateral, responding quickly to alerts, generating reports automatically and complying at all times with stringent regulatory requirements.

Over the past ten years, more than twenty banks around the world have worked with us. As a result:

- We are a retail banking and SBL business expert, from regulation to credit policy to best practice
- We have integrated with multiple loan systems, brokerage and trust systems, custodians, pricing, and ratings vendors
- We are dedicated to keeping our offering in line with market needs, including regulations
- We provide a purpose-built product to meet the full spectrum of SBL collateral requirements

If you would like to find out more about Rockall Technologies, please visit our website:

http://www.rockalltech.com

ABOUT THE AUTHOR



Luke Nestor
Executive President, Business Development

Luke Nestor has been in the Financial Services technology business for 30 years. He has designed and built multiple retail banking systems including loan origination, loan documentation and collateral management systems across multiple banking divisions. His knowledge of retail banking is immense and he is considered a true expert in collateral management. Luke is passionate about the relatively new securities-based lending business and believes it is destined to become a mainstream banking product in the years to come. He compares it to asset-backed lending - loans secured by inventory and receivables. Many years ago, this product was offered by few financial institutions to large corporates only. Asset-backed lending is now a mainstream retail banking product offered by many financial services organizations to many businesses, large and small.

If you are interested in securities-based lending, please feel free to contact Luke:

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Unlocking asset value to release and safeguard credit

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