

Top 10 Considerations for International Investors Investing in the U.S. Marketplace Lending Industry

INTRODUCTION / Over the past several years, non-U.S. based capital has become very interested in the U.S. marketplace lending (MPL) industry given the large loan volume, high net returns, and low duration. We are now starting to see large inflows and investments into the leading U.S. based marketplace lenders. This growth has been driven primarily by investors from Asia, Europe, and Middle East (primarily Israel) who have started to provide their clients with more options to invest in MPL assets outside their home countries.

I have consulted with over a dozen international firms to help make a U.S. MPL investment successful for them and their clients. Many of these companies include the largest and most prominent asset management firms in their respective countries. They all have the same question: What are best practices for investing in the MPL asset class in the U.S.?

I have compiled my answers into this report, with the hope that international investors considering investing in the U.S. MPL industry will find it useful. Below, you will find best practices and key considerations when it comes to investing in the U.S. MPL space from overseas. (I will also be presenting on this topic at LendIt China 2017).

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1. INVESTING DIRECTLY AND/OR THROUGH THIRD-PARTY INVESTMENT MANAGERS / International investors can gain exposure to the U.S. marketplace

lending asset class two different ways. They can either invest directly by establishing their own fund to purchase loans or bonds from lending platforms, or they can allocate capital to third-party investment managers to invest for them. Some investors choose to invest both ways. The main considerations for comparison are the following:

Consideration	Third-Party Manager	Non-U.S. Firm Direct
Operational Setup Effort	Less (third-party manager establishes fund)	More (non-U.S. firm establishes fund)
Setup Fees	Lower (third-party manager incurs fees)	Higher (non-U.S. firm incurs fees)
Recurring Fees	Higher (between 2% to 3% in fund fees)	Lower (do not pay management fees)
Access to Leverage	Easier (for U.S. based managers)	More difficult (for non-U.S. managers)
Portfolio Customization	Less Likely (U.S. manager chooses platforms)	Likely (non-U.S. manager chooses platforms)

Investing in Third-Party Investment Managers: Several factors affect how non-U.S. investors approach their investment and due diligence process. These factors include:

- a. Quality Managers
- b. Offshore Fund Structure
- c. Costs
- d. Portfolio Analysis
- e. Benchmarking
- f. Redemption Terms

Quality Managers: There are approximately 40 dedicated marketplace lending investment managers in the U.S. Additionally, there are approximately 100 fixed income asset managers that invest in a variety of credit strategies, including MPL. It can be challenging for international investors to identify managers that have investment strategies that meet the investors’ investment objectives. Working with someone who is able to help you identify the managers that best fulfill your investment criteria is key.

Offshore Fund Structure: International investors who have invested in U.S. based investment managers have found it most beneficial to invest through offshore fund structures. Investors must consider the tax implications of their MPL investments and choose the appropriate fund structure for their entity type. Investing into a U.S. onshore fund may give rise to adverse tax consequences such as the application of U.S. income taxes. Investors must carefully consider the tax implications of their MPL investments when choosing fund structures.

Costs: It is important to understand all the fees and expenses associated with investing through third-party investment managers. These can include:

- a. Management Fees: Fees range from 0.75% up to 2% on assets
- b. Performance Fees: Fees range from 10% to 20% of profits
- c. Operating Fund Expenses: Expenses range from 0% to 0.75% on assets
- d. Total Fees: Total fees range from 1.75% to 4.75% ,with average fees generally around 3% to 3.5%

Portfolio Analysis: Investors need to understand a number of factors used to analyze MPL portfolios, including, most importantly:

- a. Total number of lending platforms
- b. Total number of sub-asset classes (e.g. consumer, auto, real estate, etc.)
- c. Credit grades invested in per platform and overall portfolio
- d. Leverage
- e. Average maturity of the loans in the portfolio

Benchmarking: In order to determine how well a third-party investment manager is performing, investors must benchmark the fund and use the appropriate index for comparison. A more detailed review of how to properly benchmark a MPL portfolio is provided in this Section 9 of this report.

Redemption Terms: International investors must ensure redemption terms fit their investment and liquidity objectives. The redemption terms specify how quickly investors can receive their investment proceeds from the investment manager. Generally, investment managers have terms that can take a year or longer to receive all proceeds.

2. RESEARCH CAPABILITIES / Investing in MPL assets requires proper analysis of the underlying credit quality of the loans that are originated by the platforms. Many investors use market data resources like Bloomberg to research and analyze securities. Unfortunately, these traditional tools do not have the data or capabilities required to properly research MPL loans. Therefore, investors should utilize one of two following methods for analyzing MPL loans.

The first method is to use loan tape outputs from the lending platforms. The information on the loan tapes is generally provided in an Excel spreadsheet, which brings about many challenges. For example, the datasets are extremely large and not standardized across lending platforms, making it difficult to perform the proper comparisons and credit analysis across multiple platforms.

Most investors today prefer to utilize an alternative method, which is to use technology built by marketplace lending reporting and analytics platforms, such as dv01, to more easily perform appropriate analysis. When you think about selecting a

reporting and analytics platform, make sure it has integrated with key originators, standardized loan tapes across platforms, and aggregated data into user-friendly interfaces. The best platforms make it extremely easy and efficient to analyze credit risk profiles across all available data points, vintages, and sub-asset classes for both whole loans and bonds.

Sophisticated investment managers require a holistic view on an asset class to make informed investment decisions, so modern research capabilities are needed for both MPL whole loan data and MPL securitization data. International investors should ensure they have a way to analyze both types of assets as part of their research capabilities.

3. WHOLE LOANS AND SECURITIZED BOND INVESTING / Today, there are two common methods of investing in marketplace lending. The first is the purchase of the underlying whole loans that lending platforms underwrite and originate. The second is the purchase of securitized bonds, which comprises a pool of whole loans that have been packaged into a security with different tranches. A third, less common method that some investment managers use is to provide equity funding to the lending platforms to originate additional loans. Under this method the investor is not actually purchasing the loans.

Most traditional fixed income asset managers and larger multi-strategy hedge funds invest in the MPL asset class by purchasing bonds, whereas, most dedicated MPL hedge funds purchase whole loans. Recently, an increasing number of dedicated MPL hedge funds are starting to purchase MPL bonds as a way to diversify their investments in the asset class and increase returns.

There are advantages and disadvantages to investing in both whole loans and MPL bonds. Investors should consider the following as they review the two types of investments:

Consideration	Whole Loans	Securitized Bonds
Portfolio Customization	More	Less
Yields	Higher	Lower
Ratings	None	Yes
Volatility	Minimal/None	Higher
Liquidity	Minimal	Higher
Leverage Costs	Higher	Lower
Transparency	High	High

It is noteworthy that, up until a couple years ago, investors had a high level of transparency only into MPL originated whole loans because they were able to receive the details of the individual loans from the platforms. For bonds, investors would only

receive summary information on the pool of loans through a trustee loan issuance report.

This transparency gap was eliminated about a year ago when dv01 became a loan data agent on many of the largest MPL securitizations. Now investors are able to receive full transparency and loan level detail of the loans making up a MPL bond before making a purchase, further increasing demand for these bonds.

We expect continued strong growth of securitizations in the MPL industry—primarily because of ease of investment, available liquidity, much lower cost of leverage, increasingly similar yields, and now full transparency. International investors should consider investing in both whole loans and bonds as part of a well balanced U.S. MPL investment strategy.

4. PORTFOLIO COMPOSITION / Constructing the right portfolio composition is critical in order to achieve investment objectives. Here are the five main portfolio construction considerations for international investors:

1) Number of Lending Platforms: How many lending platforms should you invest in? Typically, an investor with assets up to \$50mm will initially invest in two platforms, and then possibly up to four platforms as they reach \$100mm in assets. Then, as assets increase, they will add more platforms. There are no definitive rules around the best number of platforms at specific asset levels, but from a practical manner, most larger lending platforms want a commitment to purchase at least \$25mm of their loans over a one year period. These lending platform requirements will impact the number of platforms an international invest can invest in at any one time.

2) Number of MPL Sub-Asset Classes: In terms of investing in sub-asset classes, most investors start with one or two, such as a consumer platform and maybe a small business platform. As assets increase, they will add a third sub-asset class such as real estate. Again, there are no definitive rules but most international investors will have two sub-asset classes with assets up to \$100mm, and then add a third sub-asset class as assets increase over \$100mm.

3) Net Return of Lending Platform: Each investor sets their own performance targets for their fund. As a point of reference, international investors generally target a 7% to 8% return net of fees for un-leveraged funds. For leveraged funds, the targeted return is generally between 10% to 11% net of fees.

4) Platform Brand Name Recognition: For international investors, a lending platform's brand recognition is an important factor when deciding whether or not to invest. Investing in platforms that have widespread brand recognition in their home country helps international investors sell the funds to their clients. As a result, most

international investors only invest in the top 20 lending platforms by volume.

5) Leverage: Most international investors do not typically use leverage when they initially launch their fund. Some add leverage several months after their fund launches or plan to create a second fund that utilizes leverage to offer to their clients.

There is not one correct way to create a fund to invest in the U.S. MPL industry. However, understanding how other funds have been successful can be valuable when building your framework and investment thesis. As international investors create more funds, it will likely become even more important to create a differentiated product to successfully raise assets from clients.

5. SUPPLY ACCESS / International investors investing in whole loans need to have access to supply in order to construct their investment portfolio. On the other hand, there is typically not a supply problem with bonds because, even if the investor cannot purchase a bond when it's first issued, the investor can likely purchase a bond in the secondary market.

There are three main steps for generating supply access for whole loans:

1) Find Lending Platforms that Meet Investment Objectives: International investors first have to identify platforms that meet their investment criteria. The investment criteria should be determined using a combination of the other considerations discussed in this paper. There is a small risk that a lending platform is not able to accept an international investor; however, most larger platforms today are able to facilitate international investment.

2) Finalize Investment Terms with Lending Platforms: After identifying the lending platforms from which you want to purchase loans, the second step is to finalize the terms of investment in order to start the purchase. An international investor must sign a "Loan Purchase Agreement" (LPA) to be able to purchase loans from the lending platform. The LPA agreement will outline the terms in which the investor will purchase loans—such as the amount of loans to purchase over a period of time, the credit grades of loans that they agree to purchase, etc. There is a risk that the investor and lending platform may not agree on the loan purchase terms. Reasons can include not agreeing on the total purchase amount of loans, the monthly purchase amount, the credit grade allocation of loans to be purchased, etc. It is imperative that consensus is reached and this step be completed before investing.

3) Portfolio Diversification: The third step, or goal, is to purchase loans from multiple lending platforms in order to have a more diversified fund. If an international investor has not raised enough capital to purchase loans from more than one or two platforms, they run the risk of insufficient portfolio diversification. This risk can

sometimes be avoided by purchasing from platforms that are willing to accept smaller purchases until the fund size ramps up.

6. INVESTMENT TERMS / International investors need to ensure that the investment terms of their fund are appropriate based upon the portfolio composition of the fund and other factors. There are two types of funds investors can launch. The first is an open-ended fund and the second is a closed-end fund.

Here is the comparison between the two types of funds:

The type of fund an investor establishes will impact the investment terms the

Consideration	Open-ended Fund	Closed-end Fund
Accepts additional investors after fund is open	Yes	No
Fund has finite investment period	No	Yes
Pre-defined amount of capital raised	No	Yes
Valuation challenges	More	Less

manager should select for their clients. The three main investment term objectives to consider are as follows:

1) Match Cash Flows of Portfolio with Redemption Terms: This objective requires the ability to match the cash flows with the redemption terms of the portfolio. This requires properly analyzing the portfolio sub-asset classes, average term of the loans, expected prepayments, and leverage terms within the fund. A potential serious problem for the international manager exists if the fund does not have enough cash available when a client redeems their investment. This scenario may result in the fund having to potentially sell loans in their portfolio at distressed prices to raise cash, which adversely affects the value of all clients' investment in the fund.

2) Fair Valuation for All Investors: Fair valuation for all investors is especially important for open-ended funds. This is because of the continuous nature of receiving new investments and redeeming existing investments. If a proper value methodology is not implemented, it will likely result in several investors being unfairly impacted. (I highlight valuation considerations further in Section 8 of paper.) Note that closed-end funds do not typically have valuation risks because all clients invest at the same time and redeem at the same time.

3) Maximize Portfolio Returns: Proper investment terms will ensure the portfolio maximizes the performance returns for all investors by minimizing the amount of excess cash. Excess cash in the portfolio likely results in lower overall fund returns since excess cash is not generating income. This potential problem is otherwise known as "cash drag" and should be avoided if possible. Additionally, if the fund uses leverage, the correct investment terms will help implement the leverage in a manner

that will help maximize returns for all investors.

Typically, the best investment terms for open-ended funds result in redemption terms that provide the international manager considerable time to match cash flows with redemption terms. For example, requiring at least a one-year investment period for 100% of a client's investment and then allowing the fund to redeem up to 25% of the investment per quarter starting in the second year typically is an appropriate holding period for open-ended funds. Again, closed-end funds eliminate the issue of matching cash flows with redemption terms since all clients invest and redeem at the same time. The main disadvantage of closed-end funds is the additional expense of creating a new fund to raise new capital from clients.

7. LEVERAGE / The majority of U.S. investors and an increasing number of international investors now employ leverage in their MPL portfolios. The obvious reason for utilizing leverage is to attempt to increase the overall portfolio return. There are four considerations international investors need to deliberate before utilizing leverage.

1) Costs: The costs of using leverage are high. The all-in financing costs today are between 4% and 5%. The additional fees charged by financing providers can add up to another 1% . These costs need to be deducted from the additional anticipated return the leverage will add to the portfolio. Taking this into consideration, on a consumer loan portfolio averaging 6% to 7% returns, adding 100% leverage to the portfolio may only equate to an extra 1% or 2% return, which incrementally may not be worth the fees and resources required to establish leverage.

2) Difficult Approval Process: The approval process for international investors to obtain leverage in the U.S. can be difficult. U.S. banks are heavily regulated and have stringent credit, risk, and compliance processes in place to comply with regulatory requirements. These processes are even more strenuous for international investors as regulatory requirements such as anti-money laundering (AML) rules and additional know-your-customer (KYC) rules are required for approval. These processes require extensive time to complete, especially for international investors. Recently, some international investors have been successful at securing leverage from international banks, which generally have an easier approval process.

3) Higher Portfolio Risks: Utilizing leverage offers the opportunity to increase returns, but it also offers the possibility of magnifying potential losses if the loans have higher than expected charge-off rates. Investors need to fully analyze the risk/return benefits of utilizing leverage.

4) Additional Operational and Reporting Requirements: Leverage can be operationally intensive to manage. Leverage facilities have numerous covenants

about the portfolio composition needed for the bank to release capital to the investor. Properly monitoring the portfolio to stay within the covenants set by the banks is operationally challenging. Third-party data management and reporting platforms such as dv01 offer tools that automate the facility management process, greatly reducing the time needed to manage leverage facilities.

8. VALUATION / Valuation is the pricing methodology in which the loans in the fund are priced at certain time intervals. Valuation has many important factors that determine success for international investors investing in the U.S. MPL industry. As highlighted in Section 6, valuation issues impact the investment. Just as importantly, valuation decisions impact the likely volatility of the return streams in the fund. Lastly, valuation decisions also impact the due diligence conducted by third-party managers.

Valuation Considerations When Investing Directly: There are two main valuation methodology options for investing directly in whole loans. The first methodology is fair market value. This method uses a multitude of portfolio and other economic factors to determine the value of loans in the portfolio. For example, the current interest rates on other securities will impact the value placed on the international investor's MPL fund. The likely result of a fair market value valuation methodology is more volatile monthly returns for the fund.

The second valuation methodology option is a straight-line amortization method. This methodology mainly uses the anticipated default rates of the portfolio loans and does not generally use external fund factors when pricing the value of the loan portfolio. The likely result of the straight-line amortization methodology is less volatile monthly returns for the fund.

Valuation Considerations When Investing in a Third-Party Manager: A third-party investment manager charges fees based upon the assets in the fund and the performance of the fund. Since managers charge fees based on value and performance, the manager has an inherent conflict of interest if they self-value the fund. To avoid this potential risk, it is best practice for the third-party manager to utilize a reputable, independent third-party valuation agent to value the loan portfolio.

U.S. based third-party managers are typically required to use the fair market value methodology instead of the straight-line amortization method. This makes ensuring the third-party manager is using a highly reputable external valuation firm the main consideration for an international investor.

Considerations regarding valuation are complex and multifaceted depending upon the international investor's investment objectives. It is critical that a thorough examination of valuation decisions is made upfront to ensure informed decisions.

Changing the valuation methodology after the fund is established can be costly, time consuming, and disruptive to clients in the fund.

9. BENCHMARKING / To determine how well any type of investment is performing, it must be compared to an index and/or peer group. The process of comparing the performance of the investment is called benchmarking. Only through this process can you know whether the manager is outperforming an index (i.e. generating alpha), or performing in line with the index. International investors should benchmark fund performance regardless of whether they invest through a third-party manager or directly.

Proper benchmarking in the MPL asset class is calculated by portfolio weighting a fund's vintage, grade, and term for every lending platform in which an investor has invested. Portfolio weighting means comparing the investor's portfolio composition to the same portfolio composition for each originator's platform in which the fund invests.

The loan vintage is the loan origination date. The loan grade is the platform risk rating assigned to each loan. The loan term is the payback time length. The total performance variance between the two portfolio returns is the process of benchmarking.

Benchmarking can be done manually, but it is best to use technology to speed up the process and ensure there is no human error. Benchmarking tools built specifically for the MPL industry are now readily available through third-party data analytics and technology platforms such as dv01.

10. OPERATIONAL AND TECHNOLOGICAL INFRASTRUCTURE / It is important for international investors to have the right operational and technological infrastructure to support the MPL asset class. For traditional asset classes such as equities and fixed income securities, there are well-established tools that support the workflow required to make responsible investments. For example, almost every professional money manager uses 1) Bloomberg terminal for market data, 2) a portfolio management reporting tool such as Advent, and 3) a risk management tool such as Risk Metrics, etc. However, legacy tools for researching, tracking, and evaluating risk and performance do not support the MPL asset class.

Investors must assemble the appropriate tools to help them manage and support MPL investments. It is a best practice to have robust operational and technological infrastructure for any investment, but it is especially important for managers trying to raise institutional capital. Many institutional investors require that managers have satisfactory infrastructure as part of their due diligence process prior to investing.

Accordingly, marketplace lending data, reporting, and analytics platforms like dv01 offer international investors the necessary tools to manage a diverse pool of MPL loans across different lending platforms. These platforms are designed to make managing both whole loan and bond investments operationally and economically efficient. When you decide what platforms to invest in, look for solutions that were built specifically for the MPL space, and include research tools to analyze the market data, portfolio management tools to track all the loans in the portfolio, and analytics tools to understand portfolio attribution, performance, and risk characteristics.

SUMMARY / Successfully investing in the U.S. MPL industry is challenging for both international and U.S. based managers. However, international investors face many additional challenges, as outlined in this report. This makes it even more important that international investors are thorough in their considerations when establishing and managing their funds.

This report highlights the top 10 things international investors should consider prior to investing, but the overall checklist of considerations is much larger. Having a detailed plan and establishing relationships with the right partners is key to increasing the chance of success when investing in the U.S. MPL industry.

To discuss this paper in more detail or to view the complete checklist of items international investors should consider when investing in the U.S. MPL industry, please contact Jeremy Todd at jeremy@dv01.co.

ABOUT DV01 / dv01 is a reporting and analytics platform that brings transparency and insight to lending markets—making them more efficient for institutional investors and safer for the world. As a hub between lenders and capital markets, dv01 provides one source of transparent data for bonds and whole loans. To date, dv01’s reporting and analytics platform has provided institutional investors insight into \$9 billion of securitizations and more than \$55 billion of consumer, small business, real estate, auto, and student loans (>90% of total) from the largest online lenders, including LendingClub, Prosper, and SoFi.