AUGUST 2020

PART ONE

Exploring Non-Traditional Income

Are private markets the solution for modern income challenges?

SHORTCUT TO KEY TOPICS

We believe it is increasingly important to consider the benefits of private markets to provide non-traditional income sources and enhanced diversification. By exploring private markets through an economic lens, it becomes clearer where defensive income solutions may truly exist.

In our February 2019 white paper, "Alternative Facts: How Alternative Asset Classes Can Improve Portfolios," we provided an overview of the alternative investment landscape and what it could mean for investors and the future of asset allocation. Low yields and rising correlations have forced many investors to diversify away from the traditional 60/40 portfolio. Strategies such as agricultural land, infrastructure, and private debt are becoming more favorable options for their diversifying effects and ability to improve risk and reward dynamics.

In this two-part paper, we revisit some of these themes and their implications in a world with persistent low yields, where traditional asset classes are behaving untraditionally. These trends have developed over many years, and the COVID-19 crisis only exacerbated them – stifling economic activity and prompting record-level stimulus measures from fiscal and monetary authorities. Given the current environment and the potential long-term impacts of this crisis, it appears now, more than ever, investors should question traditional assumptions and examine the full investment spectrum to meet their investment goals.

1. Market Context
Why investors should consider non-traditional income

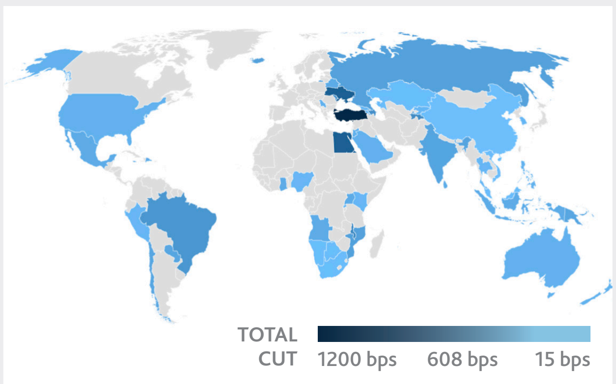
Historically, bonds have been the primary source of income and ballast within investor portfolios, but the yield environment since the Global Financial Crisis ("GFC") has made achieving traditional investment goals by way of traditional asset classes increasingly challenging.

Yield starved environment

Over the past year, we have seen between 10 and 30 percent of the global fixed income market trade at negative yields. The occurrence was primarily relegated to the Eurozone and Japan, but the coronavirus pandemic and corresponding volatility brought even short-dated U.S. Treasuries into negative territory.

Central banks have been the key driver of ultra-low interest rates. This was especially pronounced even in a period like 2019, where the global economy was experiencing relatively sustainable economic growth. Fifty-one central banks globally cut rates 132 times creating nearly 6500 bps of easing.

Global central bank rate cuts in 2019



Source: CB Rates as of December 31, 2019.

The monetary response to the coronavirus outbreak accelerated this trend and sent US interest rates hurtling toward zero. While there is great uncertainty to the timing and magnitude of the economic recovery (and development of a vaccine), there is an expectation that rates will not move materially higher anytime soon. Additionally, with US interest rates near zero, the Fed may lack ammunition to combat future bouts of volatility, especially compared to previous periods.

Putting fed policy in historical context

Cycle Dates	Reason	Beginning Fed Funds	Ending Fed Funds*	Total Cuts (basic points)	Cycle Length (Months)
1989-1992	Recession	9.75	3.00	-675	40
1995-1996	Mid-Cycle Adjustment	6.00	5.25	-75	7
1998	Mid-Cycle Adjustment	5.50	4.75	-75	2
2001-2002	Recession	6.50	1.00	-550	11
2007-2008	Recession	5.25	0.25	-550	15
2019	Mid-Cycle Adjustment	2.50	1.75	-75	3
2020	Coronavirus slowdown	1.75	0.25	-150	1

Source: Bloomberg as of 4/30/2020.
*High-end of the targeted range

Traditional asset allocation might not provide the diversification and downside protection investors need

Despite this yield environment, many investors still have an expected return on assets (or anchored expectations) of 6-8% for a diversified portfolio.[1] With most government and investment grade bonds yielding less than half that figure, many investors have made dedicated allocations to "fixed income plus" sectors such as high yield and emerging market debt. While these sectors may deliver a higher income, they may not deliver the same diversification benefits. Even though there is substantial variance across sectors and issuers, in general these categories exhibit high absolute correlation to risk assets (i.e. equities). This is driven by these asset classes' common primary macro risk driver, global economic growth.

1 https://us.milliman.com/en/insight/2020-corporate-pension-funding-study

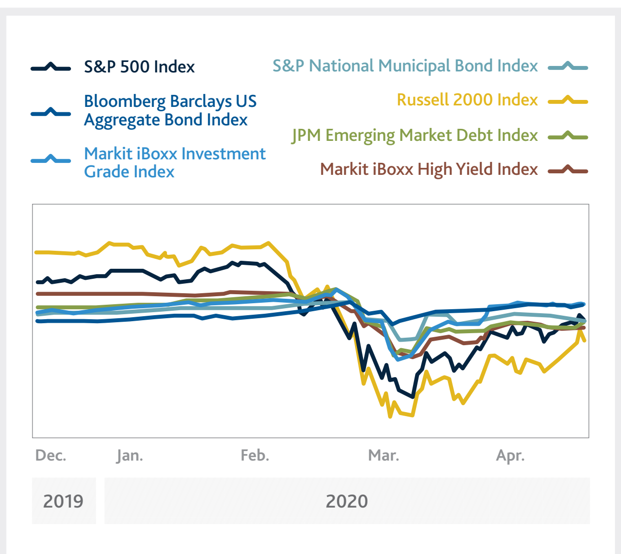
Correlations of traditional asset classes

	S&P 500	JPM Emerging Market Debt	Markit iBoxx Investment Grade	Markit iBoxx High Yield
S&P 500 Index				
JPM Emerging Market Debt Index	0.35			
Markit iBoxx Investment Grade Index	0.03	0.59		
Markit iBoxx High Yield Index	0.55	0.63	0.38	

Source: Bloomberg, calculated using % daily price change over the trailing 3 years as of April 30, 2020.

Even high quality corporate and municipal bonds and other income substitutes such as REITs, MLPs and preferred equity have become increasingly correlated with risk assets. This was illustrated during the recent COVID-19 correction. The rapid herd selling impacted nearly all liquid asset classes. While many of these exposures recovered to near pre-crisis levels, this period highlights the vulnerability of traditional investment approaches.

Normalized year-to-date performance across public markets



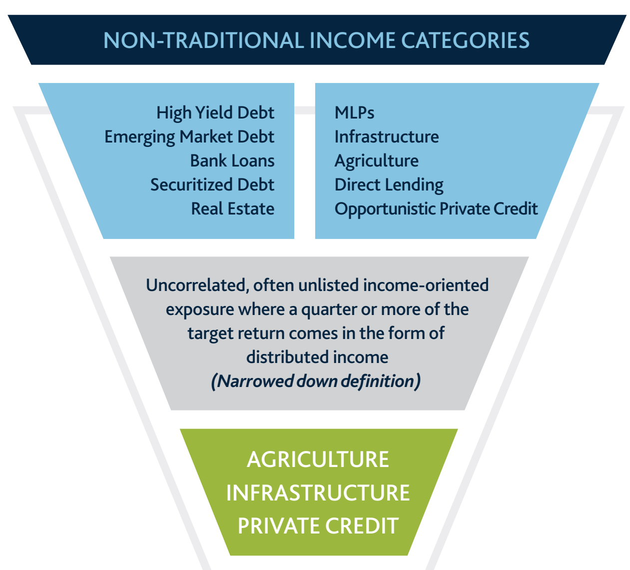
Source: Bloomberg as of April 30, 2020.

Fixed income still plays an important role in client portfolios – providing capital preservation, liquidity, duration-matching, and tax efficiency (among others). However, relying solely on traditional bond strategies as the defensive income source in a diversified portfolio may create challenges for investors to meet their objectives. Capital markets are changing rapidly amidst new sources of financing, innovation in fund structure and increased access to vital parts of the global economy. This presents an opportunity to re-think defensiveness.

2. What is Non-Traditional Income?

Truly diversifying assets exist in areas of the market that have historically been underutilized by investors.

Definitions of non-traditional income vary, but for the purpose of this paper we define Non-Traditional Income ("NTI") as uncorrelated, often unlisted income-oriented exposure where a quarter or more of the target return comes in the form of distributed income (i.e. >2.5% annual income for a 10% gross IRR target). Our view is that one of the most important characteristics is the exposure's low correlation to traditional assets, such as stocks and bonds.



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Reviewing income exposures collectively across various important categories provides a visual of the benefits and tradeoffs. The favorability scale below compares both traditional and non-traditional income-oriented asset classes:

More favorable — Less favorable

	Asset Class	Liquidity	Yield / Income	Growth Potential	Volatility	Correl. to Risk Assets	Inflation Hedge	Primary return drivers
TRADITIONAL INCOME	Dev'd Market Gov't Debt	dark green	red	red	light green	light green	red	Monetary policy, inflation, sentiment
	Corp. Invest. Grade Debt	light green	orange	orange	yellow	orange	red	Sentiment, credit cycle, issuer
NON-TRADITIONAL PUBLIC	High Yield Debt	yellow	light green	light green	red	red	yellow	Sentiment, credit cycle, issuer
	Emerging Market Debt	yellow	yellow	light green	red	red	yellow	Country regime, currency and policies
	Bank Loans	yellow	yellow	yellow	orange	yellow	sage	Monetary policy, rates, inflation
	Securitized Debt	orange	yellow	sage	orange	orange	yellow	Issuer / sector specific, sentiment
NON-TRADITIONAL PRIVATE	Real Estate*	orange	light green	light green	light green	yellow	sage	Economic cycle, location, property-type
	Infrastructure	red	light green	dark green	dark green	dark green	sage	Project/sector specific, output prices
	Agriculture	red	light green	light green	dark green	dark green	dark green	Land values, crop yield, operations
	Direct Lending*	orange	dark green	yellow	yellow	light green	light green	Borrower, covenants, credit cycle, regulatory, region
	Distressed/Opportunistic Private Credit*	red	light green	dark green	yellow	yellow	light green	Borrower, covenants, credit cycle, recovery/ workout capabilities

Source: Fiera Capital as of May 18, 2020.
Disclosure: please note these are subjective assessments of each asset class's favorability based on market data, capital market assumptions and representative strategy data. *varies across sub-sections of the respective asset class.

As you see, the glaring trade-off versus traditional income is liquidity. However, NTI asset classes exhibit other favorable characteristics such as downside protection, low correlation to risk assets, inflation hedging and more. For investors with a long-term time horizon or limited near-term liquidity needs, this trade-off may be worthwhile. In addition, innovation in fund structure can mitigate the liquidity challenge.

Non-traditional income assets can exhibit some bond-like characteristics:

- Contracted cash flows backed by a predictable and reliable revenue stream. Examples include long-term purchasing agreements for products and/or services such as food, shelter, energy, internet, waste processing, education, healthcare, etc.
- The long-term nature (i.e. 5, 10, 20 year purchasing agreements) and corresponding visibility into revenue streams makes NTI relatively defensive. This compares favorably to traditional income sources, which may be highly susceptible to market sentiment, consumer activity and an individual company's financial health (i.e. ability to service debt).

Established counterparties

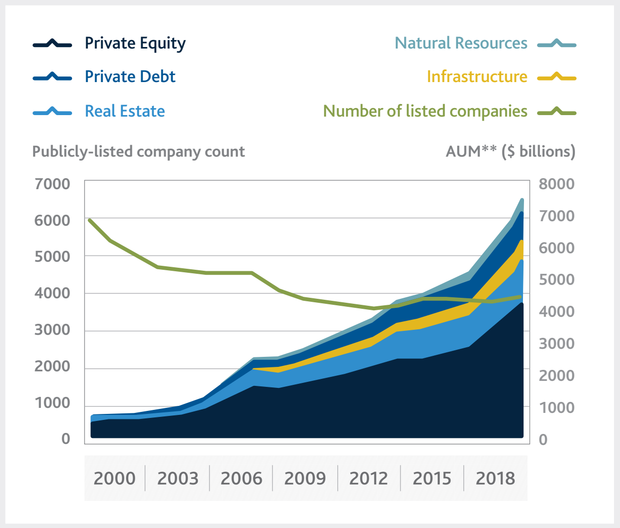
- Counterparties may include a grocery store chain, state or local municipality, real estate developer, school, foreign importer, government sponsored entity and others.
- Bilateral loans between asset managers and private businesses can also be a reliable source of income, however structure and downside protection are critical considerations. This category, otherwise known as private credit, has grown significantly creating significant dispersion across lending standards.

3. The Evolution of Private Markets and Changing Opportunity Set

Over the past twenty years private markets in general have grown in total size and the investor base has broadened. The success of private markets has been uneven, and the resulting imbalanced composition has created potential opportunities in long-standing segments of the market which offer a distinct degree of downside protection as well as current income.

As shown in the chart below, there are nearly half as many publicly listed US companies as there were 20 years ago . This has been driven by mergers and acquisitions, as well as companies remaining private to limit volatility based on their quarterly results or to avoid the administrative burdens of being a public company. Meanwhile, private markets have grown rapidly with an acceleration in fundraising, availability of funds, and market value appreciation. The category now represents over $7 trillion in assets. This compares to global public equity markets, which are roughly $70 trillion depending on market fluctuations. Trends in capital allocation suggest this substantial gap may narrow in the years ahead.

Growth of private markets relative to public



Source: Preqin, the World Bank, as of September 30, 2019.
**includes committed capital

Several leading investment entities have been at the forefront of private market investing. For example, five of the largest Canadian public pensions (which manage over $1 trillion in aggregate) allocate roughly 30-50% of their investment portfolios to alternatives.[2] This approach is widely known as the "Canadian Model" and is globally well regarded as a successful method of pension investing. These investors and many other entities (namely public pension plans, endowments and foundations, etc.) are true believers in the merits of non-traditional assets given the diversification benefits, potential for higher growth, yield, and absolute return potential with less volatility.

However other perceived characteristics of private markets – their relative illiquidity, opacity, and higher fees – have limited some organizations' willingness to make substantial allocations or even enter the space.

One category with several of these barriers is the main staple in alternatives, private equity, which comprises over 60% of the entire private universe. Challenges could emerge for pockets of the asset class, namely in the large cap leveraged buyout space given rising leverage levels, over $1.5 trillion in dry powder and substantial changes in consumer behavior due to the pandemic.[4] However, some PE providers can address these obstacles with a creative reassessment of their approach by selectively focusing on the mid-market and lower mid-market space as well as sourcing an expansive array of deals. Additionally, as mentioned earlier, innovative fund structures have the ability to improve the LP experience and limit blind pool risk.

Other areas of private markets have become more prevalent and may offer opportunities with more stability and current income (potentially preferable in today's environment). These include (but are not limited to) infrastructure, agriculture, and private credit. Since 2000 these subsections have grown from representing approximately 9% of private markets to 20% by the end of 2019.[3] In this environment of ultra-low rates and many questioning the rapid recovery in risk assets, these categories may offer an increasingly rare and critical source of ballast and income. The benefits become more evident as investors review these opportunities through a relatively simple economic lens.

2 Individual pension plans' annual reports as of December 12, 2018 Some of the allocations required manual calculation due to the manner in which they were presented. Allocations between pension plans are not necessarily comparable due to differences in calculations of real assets for each plan.
3 2020 Preqin Global Private Debt Report. https://www.preqin.com/insights/global-reports/2020-preqin-global-private-debt-report

4. Identifying Future Opportunities with Economic Intuition

Dynamics in the global economy have the potential to create compelling non-traditional income opportunities. The following themes are especially pronounced across the globe and importantly, they are long-term, structural trends that will likely persist regardless of the economic cycle.

Infrastructure

NEED FOR INFRASTRUCTURE SPENDING

Decreasing government spend on hard assets, the global transition to low carbon technologies, and aging global infrastructure have created spending deficits as high as nearly $49 trillion between 2016 and 2030.[4]

What are investable infrastructure assets?

Infrastructure assets include basic physical systems to support economic and social activity (e.g. regulated utilities, power generation, transportation, telecom, schools, hospitals, etc.). They typically operate in established markets with high barriers to entry. Unlisted infrastructure has historically been positively correlated with inflation and economic growth, though many infrastructure assets have long-term, predictable contracted cash flows or exposure to more idiosyncratic trends, such as increased data usage. The latter includes public-private partnerships, which typically have contract periods of 25 to 30 years or longer, as well as digital infrastructure, a growing sector that provides a critical service, acting as a fourth essential utility along with water, gas and electricity.

Example of Defensive Nature: An energy-from-waste facility with the majority of revenue contracted out 20+ years with major municipal, corporate and industrial partners. Regardless of the economic environment, society produces waste and people need energy.

Agriculture

SCARCITY OF FARMLAND

The most recent estimates by the Food and Agriculture Organization indicate there are 3.4 billion acres of arable land in the globe, less than 0.5 arable acres per person. The North American diet requires 1.5-2 acres per person, leading many to anticipate future supply/demand imbalance in this essential asset.[5]

Why is farmland so scarce and what does that mean?

These dynamics provide a natural tailwind and store of value for direct landowners. U.S. farmland prices have experienced only 1 negative year in the past 25 years (2009: -3.7%).[6] There are various return drivers (in addition to the supply-demand chart below) depending on the piece of land These include commodity prices, productivity of land, optionality of land usage, farm expenses, logistics, supply chain, weather and more. A diversified approach with experienced farming operators can help investors take advantage of this theme.

Supply		Demand	
Declining arable land	↓	Population growth	↑
Diminishing water supply	↓	Rising incomes	↑
		Urbanization	↑
		Westernization of diets	↑
		Shift to organic	↑

Example of Defensive Nature: Consider an almond farm or apple orchard. These businesses have long-term purchasing agreements with a variety of blue chip customers like major supermarkets or private labelers.

4 Mckinsey Bridging Global Infrastructure Gaps June 2016. https://www.un.org/pga/71/wp-content/uploads/sites/40/2017/06/Bridging-Global-Infrastructure-Gaps-Full-report-June-2016.pdf
5 Source: World Agriculture Towards 2030/2050; The 2012 Revision; Nikos Alexandratos and Jelle Bruinsma; http://www.fao.org/3/a-ap106e.pdf
6 USDA, National Agricultural Statistics Service, as of 12/31/2018. https://www.nass.usda.gov/Publications/Ag_Statistics/2018/index.php

Private Credit

BANK RETRENCHMENT

The total number of commercial banks has decreased by roughly 48% in the past 20 years. Leveraged loans are less than 10% of bank balance sheets (vs. well over 50% pre-2000).[7] This bank retrenchment has created a major void where private capital can step in.

Where is this theme still in its early stages?

Developed Asia: Non-bank lending makes up just 13% of Asia's leveraged loans vs. 27-58% across the US, Canada, UK, Switzerland and Netherland. The region still offers opportunities for quality, first lien, secured loans to many real estate developers who lack financing previously provided by banks.[8] Countries such as Australia, New Zealand and South Korea are in the midst of adapting to regulatory restrictions on traditional banks. Alternative lenders can step in and offer attractive income solutions for investors.

Example of Defensive Nature: Conservative loan-to-values of 70% or lower and the ability to step in and own and complete any projects provides significant downside protection.

It would be an understatement to say we are living through a historic time. COVID-19 and social conflict has pushed the world into unique circumstances and a great deal of uncertainty remains. As society adapts to the new environment with changing consumption and lifestyle habits, investors may be contemplating ways to combat future bouts of volatility.

The ultra-low yield environment shows no signs of dissipating, and traditional asset allocation may no longer offer the diversification benefits it used to. As private markets become more mainstream, select areas and approaches may have the potential to fulfill some of the same investment goals traditionally sought after with fixed income.

We believe investors need to challenge the status quo. With many still anchored to the flagship asset classes of previous decades, we believe non-traditional income may provide an integral defensive solution.

Reviewing the broader opportunity set with economic intuition can be very useful. **We believe thoughtful approaches to infrastructure, agriculture and private credit take advantage of natural structural tailwinds while also providing societal benefits such as education, food and shelter.** Now may be the time to make dedicated, strategic allocations.

5. Use Cases:
How different investors use non-traditional income

On the following page are examples of how non-traditional income is currently being utilized across a variety of investor types.

7 2020 Preqin Global Private Debt Report. https://www.preqin.com/insights/global-reports/2020-preqin-global-private-debt-report
8 Clearwater Capital Partners November 2018 analysis based on latest available data.

TAX-EXEMPT INVESTORS

Corporate Defined Benefit Plan

Low interest rates have increased liability values leaving most plans significantly underfunded. With significant growth (or plan contributions) required and strained corporate balance sheets, many investors are looking at alternative sources of income, diversification from investment grade credit and equities and innovative ways to de-risk.

Uses:

- De-risking their growth bucket
- Current income to pay benefits (immunize short-dated liabilities, i.e. hybrid LDI strategy)
- Allocations for a risk mitigation bucket

Healthcare Organizations

Many healthcare organizations are using alternatives to enhance the return profile of their strategic assets. Non-Traditional Income sources can offer diversification as well as downside protection vs. higher return seeking exposures such as private equity.

Uses:

- Income for operating expenses

Public Pension Plan

Funding deficits post-GFC made real assets a common bucket in public plans' strategic asset allocation. Given the intuitive nature of most non-traditional income exposures, many plans are using the exposures to de-risk while still meeting their 6-8% (net) return target, diversify or address a specific role in their portfolio.

Uses:

- Inflation hedge
- De-risking from equity exposure
- Diversification from real estate
- Familiarity (ex- states with agricultural economies investing in agriculture)

Foundation & Endowments

For many, ESG is an important priority and private market investments can deliver a more meaningful impact. Some examples enabled by directly controlled assets include:

- **E:** renewable energy projects, waste reduction
- **S:** directly controlled assets enable investors to actively manage material social issues (labor practices, accident control, gender pay, etc.)
- **G:** reporting emissions data, board involvement, etc.

Alignment of mission/values very dependent on investment strategy.

TAXABLE INVESTORS

Financial Advisors

Many financial advisors are looking to non-traditional investments to differentiate their offerings vs. competitors. Mass adoption of less recognized areas like infrastructure and agriculture has been limited, however some are beginning to appreciate the downside protection qualities of NTI.

Uses:

- Agriculture as a replacement for gold (with yield!)
- Strategic diversifier to municipal bonds
- Inflation hedge

Educating end-clients is key.

Family Offices

Family Offices are charged with managing multi-generational wealth with varying income needs and target returns. The low rate environment has challenged the income expectations from traditional fixed income and families seek to expand their sources for income.

Uses:

- Broadening mix of real asset investments and diversifying from real estate
- Inflation hedge
- Next generation interest in direct Impact and ESG investing

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