PINEBRIDGE INVESTMENTS

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Then and Now: Fundamentals Are Telling a Different Story a Decade After the Crisis

A decade since the global financial crisis, markets have been steeped in self-reflection. What's changed? What has stayed the same? Could the crisis happen again?

It's this last question that seems to be top of mind today. A decade is a long time for economies not to have experienced a recession. In market terms, it's almost enough to see two average-length business cycles come and go. But in the last 10 years, we've only seen one.

The passage of time appears to be the primary reason many people believe we must be late in the cycle. If so, valuations would then appear very high. We'd like to make the case that, unlike in 2007, fundamentals look decidedly mid-cycle. If this view proves to be correct, it would be a dangerous time to jump back into safety assets. We frame this case through our Capital Market Line (CML) process.

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What is the CML?

The CML represents our view of the attractiveness of today's asset classes. It's a five-year, forward-looking comparison of return per unit of risk across the capital markets. We examine the three to five key fundamentals that drive each asset class's performance on expected risk, return, and correlations over the next five years (on an annualized basis). To determine these forecasts, we combine top-down insights with bottom-up observations through rigorous debate across asset classes and geographies, assessing over 100 fundamental metrics on a quarterly basis.

The slope of the CML indicates the risk/return profile of the capital markets in total. In most instances, the CML slopes upward and to the right, indicating a positive expected relationship between return and risk; a steeper upward slope means investors are being paid well for taking risk. However, our CML has, at times, become inverted, sloping downward from the upper left to the lower right, indicating capital markets that were not adequately compensating investors for risk.

Asset classes that lie near the line are close to fair value over a five-year holding period. We view asset classes well above the line as attractive, and those well below the line as unattractive over the intermediate term. Wide dispersion among asset classes means there are more opportunities for investors to add more return at the same level of risk – or alpha – through asset allocation.

For example, let's look at equities. The key fundamentals for equities are price/earnings (P/E) ratios, earnings growth, the dividend payout multiple, and the return on equity. Once we've established our view of these fundamentals over the next five years, we input them into simple models that break down how

these fundamentals translate into current income today, the growth of income over next five years, and the likely repricing of current cash flows. That is how we arrive at our expected level of returns and risk for each asset class in the CML.

Also reflected in the CML are the correlations of the asset classes to each other (larger circles are more correlated) as well as the relative liquidity of each asset class (with green as the most liquid and red as the least).

The CML then

In June 2007, we noticed that many of the fundamentals we monitor were starting to deteriorate. P/E ratios, one of the fundamental drivers of equities, were on the high side. We also noted that earnings growth potential was running low amid stretched output gaps; loan underwriting had become lax; and leverage had been spiking for a number of years, signifying high and rising systemic risk. Longstanding US government policy aimed at increasing home ownership spurred banks into lending increasingly to the lower quality echelons of subprime mortgages, which were becoming very large in relation to bank capital. While P/E ratios didn't appear overly stretched if earnings were sustained, they looked dangerously high if forward-looking earnings fell. Our read was that this was increasingly likely.

These fundamental forecasts translated into an environment of low prospective returns for high risk asset classes like equity, private equity, and commodities and higher expected returns for lower risk cash, asset-backed securities, and Treasuries – and an inverted curve in our CML. This was a market where investors appeared to not only be paying for the privilege of taking risk, but also for the privilege of being liquid.

Capital markets were not adequately compensating investors for risk.

Capital Market Line as of 30 June 2007 (Local Currency)

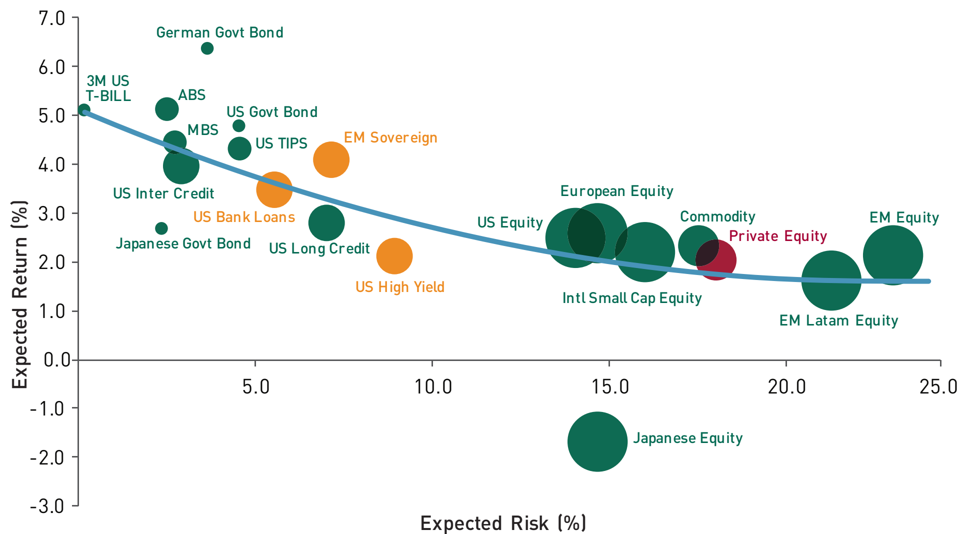


Chart Key

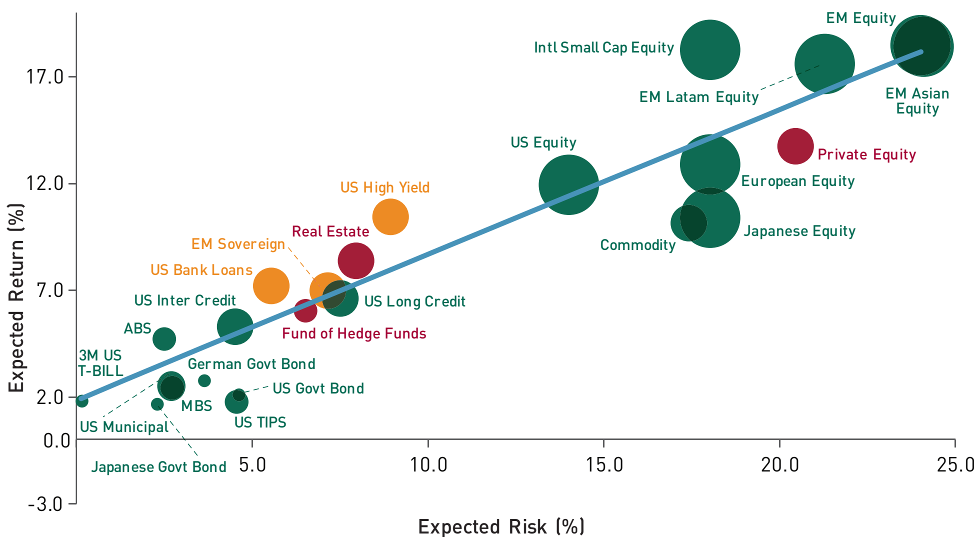
- Most Liquid
- Less Liquid
- Least Liquid

Less Correlated — More Correlated

Based on PineBridge Investments' estimates of forward-looking five-year returns and standard deviation. The Capital Market Line (CML) is not intended to represent the return prospects of any PineBridge products, only the attractiveness of asset class indexes compared across the capital markets. Please see Capital Market Line Endnotes. Note that the CML's shape and positioning were determined based on the larger categories and do not reflect the subset categories of select asset classes, which are shown relative to other asset classes only.

Given what looked to be a treacherous landscape, we were becoming more convinced that fundamentals were peaking. As a result, we flipped our portfolios from a risk/safety composition of approximately 70%/30% to 30%/70% in an effort to raise prospective return while lowering prospective risk. Our view turned out to be correct, and we were able to de-risk early, avoiding much of the carnage the crisis would inflict in 2007 and 2008.

By June 2009, the slope of the CML changed shape dramatically. Forward-looking valuations were boosted on a percentage basis off the low base of current valuations, creating a steep upward slope in the CML. This signaled to us that it was time begin wading back into risk assets. We moved out of the risk curve, selectively endorsing asset classes above the CML at all levels of risk. The dynamic nature of the CML allowed us to pivot and to capitalize on rising fundamentals.



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The changing upward slope signaled it was time to embrace risk assets.

The CML's shift in 2009 signified the start of a new market regime. Financial crises are often preceded by rapid increases in private sector leverage, which accelerate growth, and then are followed by the reverse. We were exiting a period of overheating markets and entering the "stall-speed" regime, characterized by persistently low global economic growth, high anxiety, higher correlations between most risk assets, and greater inverse relationships between risk and safety assets.

Some investors took this regime shift as a signal to attempt to flip from risk-on into risk-off to mitigate loss in their portfolios. We lowered our exposure to active strategies during this period, since high correlations rendered security selection more difficult. This remained the case for the next nine years, as stall-speed would remain in place until mid-2016. Interestingly, markets had fairly normal returns in aggregate during this period, as efforts by central banks to offset the slowness were more effective at elevating capitalization rates (and therefore markets) than reviving growth (and therefore cash flows).

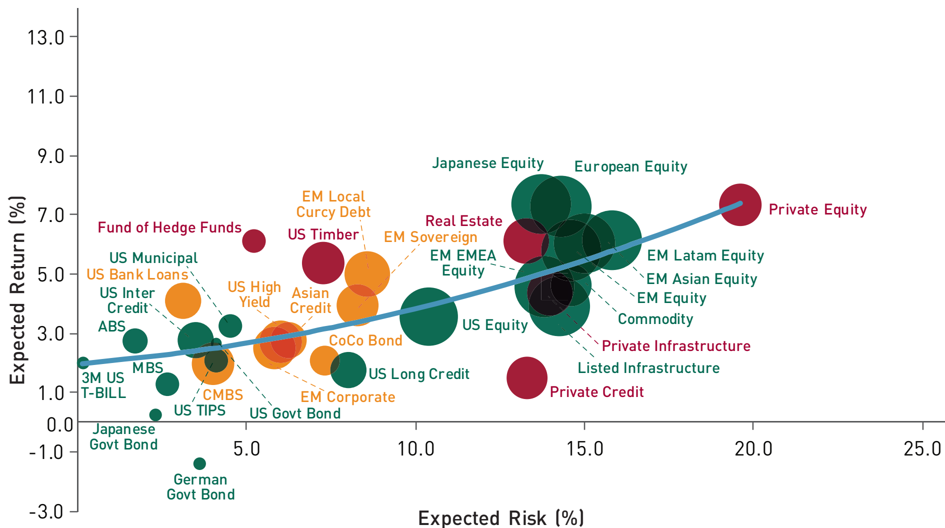
The CML today

Today, the CML again looks quite different. While it's not overly steep, it is upward sloping, indicating an environment where investors should be paid, on average, for the risks they take. The big difference from a decade ago is the degree of dispersion among asset classes. Back in 2007, dispersion was minimal. As dispersion has risen, opportunities for selectivity in asset classes have also increased. More dispersion provides more opportunities to be highly selective.

What is driving higher dispersion? The end of private sector deleveraging, which has increased cash flow growth for some, but not all, growth assets. For companies, the stall-speed environment promised safety in numbers in not investing in one's business. Ahead, we see more significant gaps between the trajectories of winners and losers, on both the micro and macro levels. Lingering extraordinary monetary policies have also increased the dispersion in our CML. During stall-speed, the preference was to play it safe, and classic lower risk assets attracted more than their fair share of this enhanced liquidity. We now see a slow unwinding of this ahead.

Correlations also have investment implications in today's CML. Longer term correlations between global stocks and global bonds, the classic risk and safety assets, have empirically been close to zero. During the stall-speed years, they persisted near -0.4, providing unusually strong diversification benefits. With the private sector deleveraging behind us, we see this relationship moving more toward balance; already these correlations are at -0.2. This means safety assets are no longer as diversifying as they once were. Correlations between risk assets, on the other hand, were high during the stall-speed years but are dropping to healthier conditions. This implies that risk assets are becoming more diversifying to each other – another sign encouraging investors to be more selective, and to seek growth assets.

Capital Market Line as of 31 December 2017 (Local Currency)



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Wide dispersion among asset classes means more alpha opportunities with the same level of risk.

Today's CML is signaling something very different from the consensus view: Markets are actually midway – not late – in the business cycle. Since mid-2016, we have observed a reflation of confidence and growth in markets, along with a slow rise in inflation and interest rates. This has come with a ratcheting down of anxiety and related risk premiums. Over the next five years, the CML indicates that asset classes with fixed cash flows – which are valued at a premium for their apparent safety – are overpriced versus today's inflation. And with inflation likely to strengthen for most of the next five years, we expect these assets will experience an unfavorable repricing ahead. In contrast, while many growth assets appear to have high valuations on today's cash flows, many of them should prove to be both the safest and the most rewarding due to the potential for their cash flows to grow into, and beyond, current prices.

After years of low inflation, a common current misperception is that any uptick will hurt asset values. Historically, inflation of 1%-3% hasn't caused P/Es to fall precipitously but the opposite. Using US data back to 1950, we've found that P/E ratios have generally risen as inflation moves from a 0%-1% range to a 2%-3% range. It's only subsequent increases in inflation and interest rates that lead to lower P/Es. We believe that as inflation and interest rates rise over the next five years, anxiety and equity risk premiums will increase to an extent that will offset (or even more than offset) any negative effect of rising rates and inflation on P/Es.

While 2018's uptick in inflation initially hurt both the rates curve and P/Es, equities recovered whereas the rates curve has not. This was no surprise to us. For capital conservation assets with fixed cash flows, this gentle rise in inflation is occurring while the duration of bond indexes is historically high. Instead of the risk premium falling during the reflation of confidence and growth, the impact on the rates curve is the opposite.

Rising inflation does not necessarily hurt P/E ratios.

Forward P/E Ratios Versus CPI Inflation (Ann. CPI Infl. 1 ~3%)

1950 to 2016: CPI Ranges (Trailing-18M + Forward-18M Annualized CPI Inflation) Schiller					
Ann. CPI Infl. >=	Ann. CPI Infl. <	Avg. Ann. CPI Infl.	Avg. 10Y Rate	Avg. Real 10Y Rate	Avg. Fwd. P/E
0%	0%	.06%	2.6%	2.0%	13.0
1%	**1%**	**1.4%**	**3.6%**	**2.1%**	**19.6**
2%	**2%**	**2.5%**	**5.0%**	**2.5%**	**24.4**
3%	3%	3.4%	6.8%	3.4%	14.4
4%	4%	4.4%	7.3%	2.9%	14.6
5%	5%	5.2%	7.9%	2.7%	15.6
6%	6%	6.9%	8.9%	2.0%	10.2
8%	10%	8.8%	8.4%	-0.4%	9.5
10%	12%	11.1%	10.2%	-0.9%	7.5

Source: Shiller as of 10 September 2017. Data run since January 1950. Inflation is annualized based on 36-month rolling data, with 18-month prior to the forecast date and 18-month subsequent, and P/E based on future one-year earnings starting from the forecast date.

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Overall, we believe investors should focus on what we expect will be the real driver of markets going forward: earnings growth. Companies are stepping up their business investment, but are focused very little on adding capacity. Instead, they are adding capability to protect and improve upon their business models. This mix of spending is much more likely to spawn macro productivity, while also increasing micro-instability – meaning the winners will advance further to the lead, and the laggards will go out of business. This reflationary environment is rife with opportunities to be selective in which betas, and which securities, to embrace.

Positioning for what's ahead

A decade ago, many investors were primarily interested in long-term investing that looked beyond peaks and valleys, looking out 20 years or more. Asset allocation was purely strategic, and portfolio positioning emphasized small tactical adjustments to these long-term targets, such as 60% risk assets/40% safety assets. Relative return dominated not only within asset classes via security selection, but also between asset classes. Yet strategic allocation appears, to us, to have failed during the crisis. We believe investors should consider changing their longer term targets – and many of them are. Instead of strategic relative return targets, investors can adopt objectives such as LIBOR plus 3% over rolling 12 months or CPI plus 5% over rolling five years. These, to us, are more suitable in any environment.

In 2017, many multi-asset investors suffered from low returns, while the S&P 500 grew 20%. Total return, or alternatives to growth asset strategies, may allow investors to hold onto most of the upside while maintaining a risk budget comparable with that of a 60/40 benchmark. They also provide an opportunity to rebalance portfolios (and shave off some of the equity risk budget) without compromising much of the upside that equities offer. In the reflationary environment ahead, we believe this will prove an attractive proposition.

CAPITAL MARKET LINE ENDNOTES

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