

### HARVARD IS EXPECTING TROUBLE

Harvard endowment returns suffer from large hedge-fund allocation

不作不死。 *Bù zuò bù sǐ* "Don't poke the bear" Chinese proverb

Investors don't like bears. Endowments don't suffer fools. Most endowments are considered smart investors, and smart investors don't poke the bear. Or do they? [Harvard Management Company](#) (HMC) offered some remarkable news this week: its endowment grew by 33.6% to a record \$53 bn, Harvard retains a AAA credit rating and healthy financial condition, it has been gliding through the pandemic and is leading on environmental and social issues. What is there not to like? Well, during the year through the end of June 2021, the S&P 500 as well as the global ACWI were up by 40% and MIT's endowment was up by 55%. Harvard was in the bottom quartile, well below the median and mean endowment returns, and it could have earned another \$9 bn under MIT standards, which is about as much as it raised in its last capital campaign.

How could an endowment like Harvard underperform MIT by 22% in one year? Harvard is expecting trouble and has taken half its chips off the table. HMC built a strong liquidity cushion and expanded to a 33% position in hedge-funds, mostly market-neutral, while cutting its public equity book in half to now 14%. But HMC also doubled its private equity book to 34%, mostly in growth and venture capital, while it slashed its real estate and real asset positions. Harvard's barbell strategy did not work, as big gains from private equity could not compensate for the lagging hedge-fund returns.

What is Harvard's management team anticipating in the markets? The HMC team is highly respected and has a strong track record, until recently. So what can we deduce from Harvard's asset allocation, what risk is Harvard trying to hedge against, and how does that compare to views from other endowments? (illustration in chart A)

Let us deduce whether Harvard could be concerned about three major risks:

<a> the Grantham fear that US equity markets are in a [“magnificent bubble”](#):

Unlikely, because Harvard expanded its private equity book in a hurry, from 16% in 2016 to now 34%, even after selling \$1 bn in secondaries. And that expansion was focused on growth and venture capital, and was over two-thirds in North America. Its private equity return of 77% was strong this year, but still lagging relative to MIT and other peers, given that Harvard is overly concentrated in recent vintage years.

<b> the Tudor fear that [inflation](#) is “the single biggest threat to financial markets”:

Unlikely, because Paul Tudor Jones, who predicted the 1987 stock market crash, is suggesting that if inflation is “much worse than we fear”, then it is time to double down on inflation hedges and invest into real assets and commodities. But Harvard not only recently outsourced real assets and commodity investments, it then also cut its allocations from 10% to 2%. Its asset allocation does not show any inflation hedge.

<c> the Rogoff fear that [real estate in China](#) has peaked, deflating its “epic boom”:

Most likely, because a collapse in Chinese real estate would become a major global risk-off scenario, if not lead to a geopolitical crisis. Ken Rogoff is estimating that the Chinese real estate sector accounts for 29% of GDP, and the bubble is larger than in Spain and Ireland prior to the global financial crisis. The Harvard economist states that “it is hard to see how a significant slowdown in the Chinese economy can be avoided even if banking problems were contained”. Harvard does not disclose its China investments, but it never had a dedication like Yale with Hillhouse Capital or a venture footprint like Stanford established in China. And a smart endowment manager who is scared about the China bear would likely heavily allocate into hedge funds.

HMC’s annual message is stating that Harvard “experienced the opportunity cost of taking lower risk”. In fact, Harvard has formed a [“risk tolerance group”](#), led by Jeremy Stein, a colleague of Ken Rogoff at Harvard’s economics department. Obviously, these discussions are confidential, but the final asset allocation and investment returns are public. And they illustrate a great risk aversion that could correspond to the Rogoff fear on China, which coincidentally would mitigate the Tudor and Grantham fears: a massive slowdown in China would reduce global growth, substantially lower commodity prices and inflation pressures, and extend the safe-haven trades from the pandemic, with a strong dollar and strong US equity markets.

Maybe HMC’s risk assessment is correct but early? Could it be realized during 2022? Let us review the three arguments of the Rogoff fear on China’s real estate bubble:

First, China’s growth model has emphasized public infrastructure investment with a focus on urbanization, which increased from 36% in 2000 to 50% in 2010 to about 64% in 2020, among the highest in East Asia. Local governments established local financing vehicles that sold land to developers and then leveraged funds to build infrastructure. Local developers then obtained bank loans for real estate and got leverage from pre-selling most properties, while they also heavily invested into relationships with local governments, suppliers, and consumers. Chinese growth targets depend to a large extent on local investments, which depend on revenues from land sales (about 60% of local revenues, accounting for about 8% of GDP), which generate loans for both infrastructure and real estate, often at subsidized rates from regional banks. It was expected that some investments would go sour, but they ended up as collateral on ever-greened bank balance sheets, with very little workouts over the past decade.

Second, China's debt levels have increased dramatically over the past decade, and its [official debt-to-GDP ratio](#) has soared by 45 percentage points in the past five years. Its domestic [non-financial sector debt](#) is exceeding 280% of GDP, half of which has been accrued by the corporate sector. Notably, property developers have increased their gearing of assets to equity from 600% in 2015 to over 900% currently. Chinese household debt is expected to cross 100% of disposable income this year, now exceeding the respective US ratio. Wealth management products sold by property developers to households, in addition to private debt, and complex joint-venture liabilities, are adding to substantial off-balance sheet debt.

Third, the size of China's real estate sector is estimated at around 29% of GDP, or excluding real estate services around 24% of GDP, as compared to peak levels of 28% of GDP in Spain and 22% of GDP in Ireland prior to their collapse in the financial crisis. By all measures, the size of the [Chinese property sector](#) is quite extended and likely has peaked. Home prices also appear to have peaked and recently recorded their first decline since 2015, and home price-to-income ratios in Beijing and Shanghai are estimated at twice of London's level and three times of New York's level (chart B), which is unsustainable. Vacancy rates have increased above 20%, including ghost city units that have not been written off. Demand has leveled off as prices have peaked and inventory is accumulating, while supply has dropped significantly this year as new lending and new mortgages have been constrained to limit additional leverage.

Several large Chinese property developers appear to be unable to service their debt and meanwhile have flouted the official "three red lines" by building additional off-balance sheet debt, including unauthorized retail wealth management products. Their extensive local political networks have made them untouchable, until now. Chinese policymakers are envisaging a gradual restructuring, where assets are sold off to local lenders, who would then pay off retail customers and suppliers and be responsible for completing ongoing projects. This part-nationalization would be combined with selective domestic defaults and more comprehensive defaults on foreign obligations. Policymakers are confident that they can cover aggregated losses at banks, avoid capital flight, and compress debts through financial repression. That would be the best-case scenario that Ken Rogoff described in his analysis.

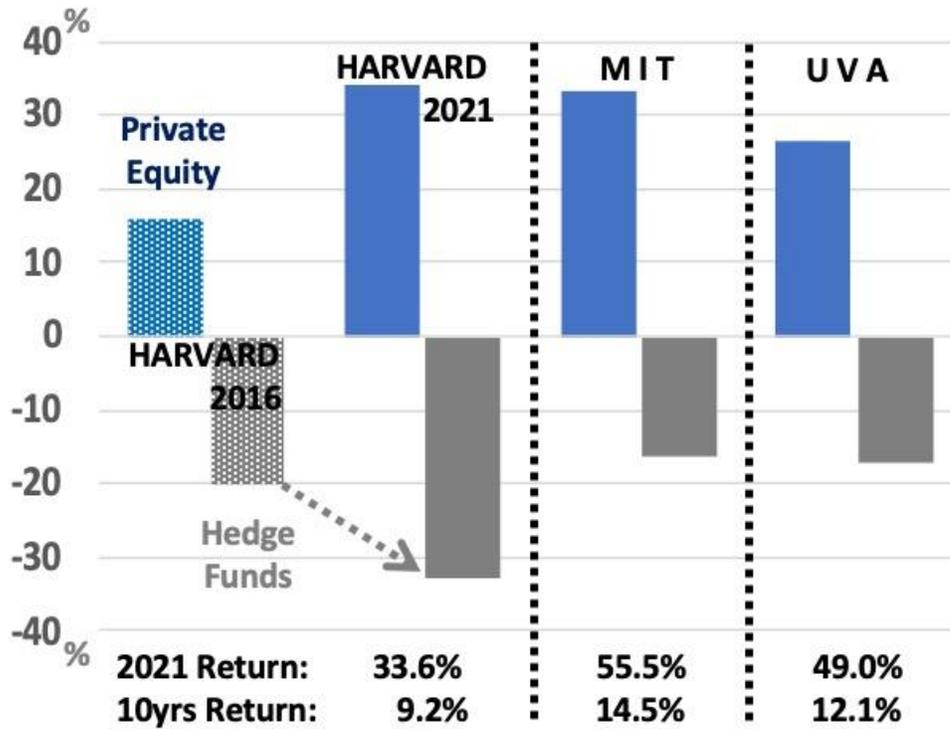
The Rogoff fear of a slowly deflating Chinese property bubble would require a strong monetary and fiscal stimulus in China to avoid a recession, even in the best-case scenario where banks remain intact. It would have deflationary effects as import demand for commodities and capital goods would decline substantially. It would likely lead to further declining Chinese equity valuations, especially in Hong Kong, where most hedging would take place. And this scenario might extend US dollar strength and support US equity markets as monetary and financial conditions remain expansionary.

However, the deflating Chinese property bubble would add significant tail-risk from geopolitical events that could be used to deflect from rising domestic tensions and could then be blamed on perceived aggression from Western nations. Conflict over Taiwan must be considered a significant tail-risk. So, Harvard may be right in pointing to the Chinese property bubble, HMC may be right in positioning its endowment for tail-risk events, but both do not want to be perceived to poke the Chinese bear.

<http://www.emleaders.com/pdf/eml-harvard-2021.pdf>

# Endowment Allocations & Returns

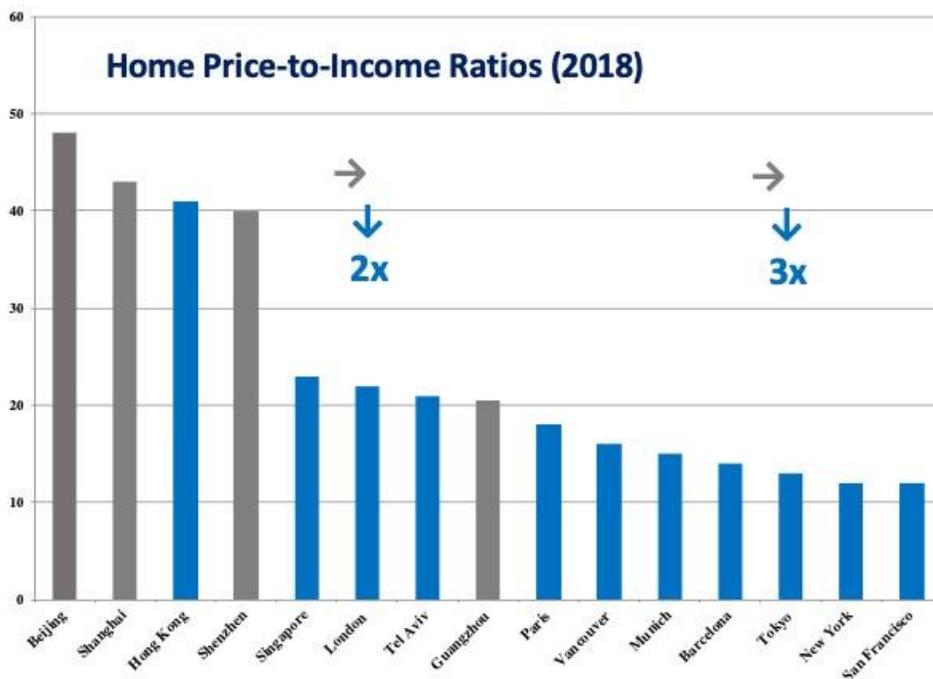
## Chart A



Sources: HMC, MITIMCO, UVIMCO Annual Reports (2021)

# China's Property Bubble

## Chart B



Source: Rogoff and Yang (2021)