

The Ratio That Drives Everything: Debt, Liquidity and the Financial Cycle

Understanding The Architecture of Modern Finance

It is never different this time, until it is.

In this report, we outline our framework for interpreting the financial cycle. It first explains the two-way dependence between debt and liquidity, then identifies the ratio's proposed equilibrium range, and finally considers the implications for crises, asset bubbles, policy and markets.

The global economy is burdened by an ever-growing stock of debt, much of which is increasingly unproductive. Because this debt does not generate sufficient future cash flows or economic returns, it compounds relentlessly. At the same time, politicians have proven unwilling or unable to impose fiscal restraint. Indeed, in a world increasingly shaped by geopolitics and 'Capital Wars', State spending tends to accelerate rather than contract.

The debt mountain therefore continues to expand, but growth is only part of the story. Existing debt must also be refinanced as it matures, turning capital markets into vast debt refinancing machines. By our estimate, some 70–80% of primary capital-market transactions involve debt rollovers. **Refinancing requires balance-sheet capacity, which is fundamentally a function of liquidity.** Stress therefore emerges when available liquidity falls short of the refinancing needs created by the outstanding debt stock.

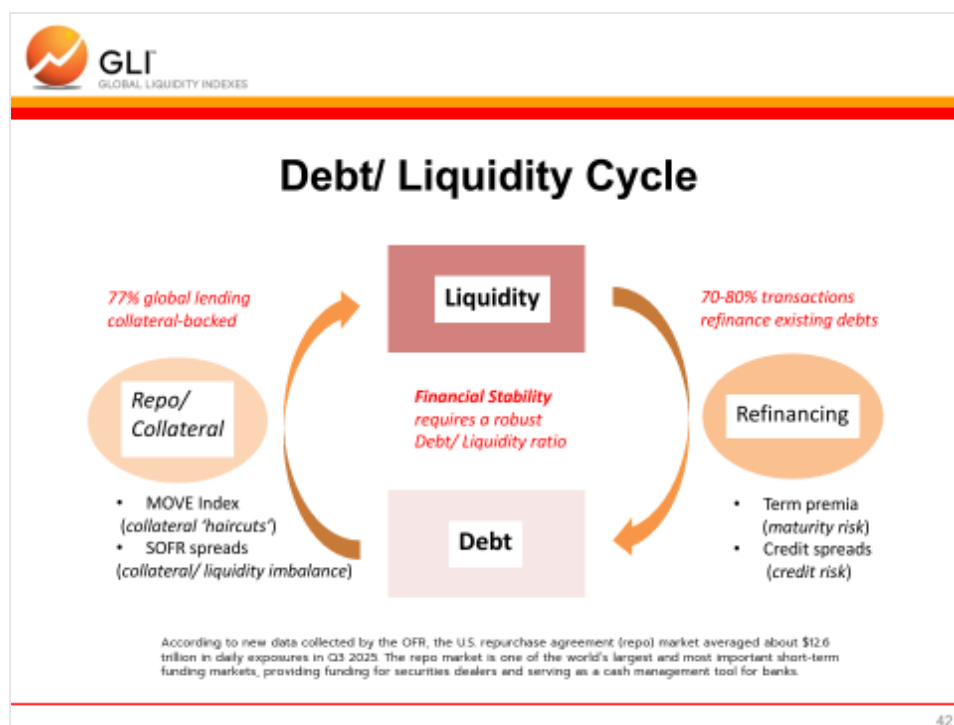
We face a structural problem because **debt can grow exponentially while liquidity remains strongly cyclical, producing recurring debt-liquidity imbalances.** The cyclical nature of liquidity reflects the fact that it circulates through two competing channels: the financial economy and the real economy. Funds that are committed to refinancing, collateral and asset markets are not also available for consumption or productive investment, and vice versa. Because all money that is anywhere must be somewhere, it cannot be in two places simultaneously. Shifts between these channels can therefore tighten financial conditions in one part of the system even when aggregate liquidity appears ample.

This simple reality helps explain both financial crises and speculative bubbles. When liquidity is insufficient to meet refinancing demands, stresses emerge within the financial system. Conversely, when liquidity exceeds the refinancing needs of the debt stock, excess capital seeks returns elsewhere, fuelling asset inflation and financial bubbles.

The cyclical and seemingly inevitable nature of financial crises is reinforced by a deeper interdependence. Debt requires liquidity to be refinanced, yet liquidity itself depends on the availability of high-quality debt instruments to serve as collateral. According to the World Bank, 77% of global lending is collateral-backed. The modern financial system therefore rests on a circular relationship: debt creates a demand for liquidity,

while liquidity relies on debt as its foundation. When either side of this relationship becomes constrained, financial instability follows.

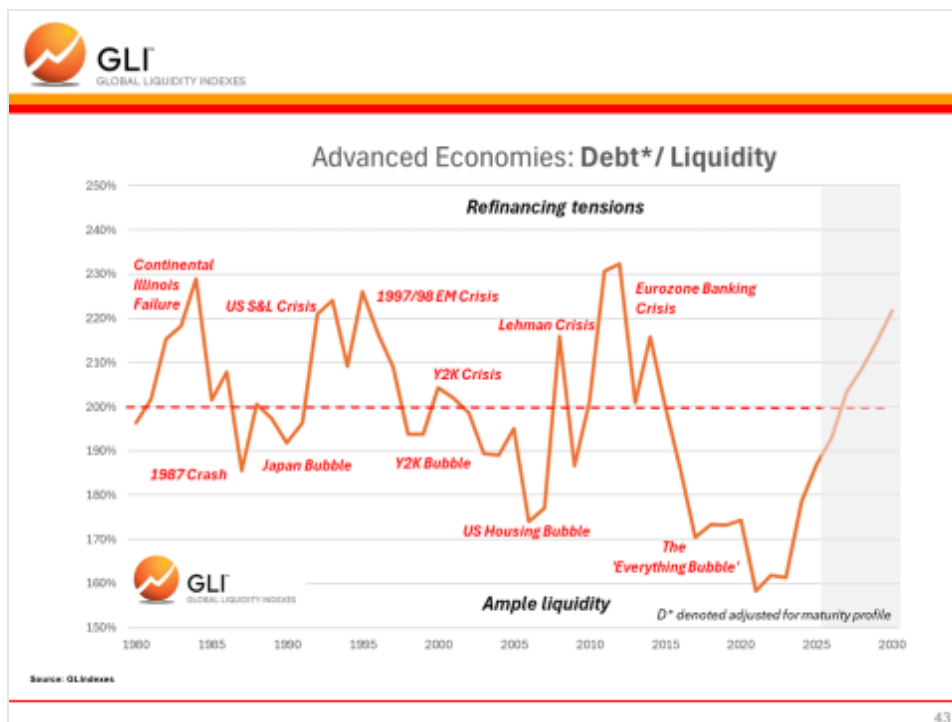
Consider the following flow diagram:



Debt is a stock of obligations that must be serviced or refinanced, while system liquidity comprises the reserves, deposits, collateral capacity and settlement balances available to support those obligations. The debt-to-liquidity ratio compares these two stocks at a given point in time.

The debt-liquidity nexus sits at the heart of the modern economic system. Across advanced economies, the stock of debt is estimated in the chart below to average around twice the level of system liquidity, although the relationship varies over time. The debt-to-liquidity ratio exhibits pronounced cyclical behaviour and a tendency towards mean reversion. In the historical sample reported, sustained moves above roughly 2.2x have often preceded periods of financial stress, while declines towards 1.8x have frequently coincided with excess-liquidity conditions and asset-price bubbles.

The latest trough in the ratio, the so-called 'Everything Bubble', is the result of abundant Global Liquidity forced into markets during the GFC and following COVID, with an additional twist from low interest rates. These ultra-low (even negative) yields compelled many borrowers to term out existing debts by refinancing at lower rates. However, this simply pushed out re-financing into the later years of this decade: changing the timing, but not lessening the amount. It is slated to soon return, but at the same time **Global Liquidity is under downward cyclical pressure** as a strong world real economy sucks in funds.



Looking ahead, financial stability will depend on keeping the debt-to-liquidity ratio reasonably close to its long-run equilibrium of around 2x. By implication, liquidity must broadly keep pace with debt growth over time. Because new credit depends on confidence in existing obligations, widespread defaults can damage the collateral values, reserves, deposits and settlement balances that support a credit-based financial system. **In short, new credits rely on the integrity of old debts.**

Warnings of impending crisis could come from rate spikes in the repo market and jumps in collateral volatility, e.g. the MOVE index. This should be later confirmed by sharp falls in bond term premia and blow outs in credit spreads. Inevitably, these crises trigger large-scale liquidity injections by policy makers in order to implicitly rebalance the debt/liquidity ratio.

Liquidity is a structural requirement of a credit-based economy, but it is also inherently fungible. Once created, it does not remain confined to supporting debt servicing and refinancing needs, but inevitably spills over into financial markets and the real economy, influencing asset prices, investment activity, and broader economic growth.

Thus, **sustained debt expansion makes periodic liquidity support a recurring feature of the system rather than solely an emergency response.** If the debt-to-liquidity ratio tends towards an equilibrium near 2x, an expanding debt stock will usually require some corresponding growth in liquidity. In practice, this means central banks and banking systems cannot remain neutral over long periods. They may need to accommodate that growth through some combination of balance-sheet expansion, reserve creation and broader financial intermediation, depending on prevailing economic and financial conditions.

Under this framework, debt is not necessarily the immediate trigger of a crisis; instability can begin when credit quality deteriorates, leverage rises, asset prices become unsustainable or profitability weakens. These developments can reduce available liquidity or increase refinancing demands, pushing the debt-to-liquidity ratio above its equilibrium range. High debt then acts as a constraint: the pool of liquid assets becomes

insufficient to support refinancing, settlement and collateral needs. The ratio may therefore serve as both a symptom of underlying deterioration and a measure of the system's vulnerability. Policymakers should monitor it alongside conventional leverage ratios and debt-to-GDP measures.

Asset bubbles are the mirror image of financial crises. If ratios above 2.2x create liquidity scarcity and financial stress, then ratios below 1.8x reflect excess liquidity chasing assets. Hence, financial crises and asset bubbles are not separate phenomena. They are opposite deviations from the same equilibrium relationship:

- Too little liquidity relative to debt → credit stress and crises
- Too much liquidity relative to debt → speculation and asset inflation

Consequently, central banks face an unavoidable trade-off. They must maintain sufficient liquidity for financial stability, but policymakers cannot perfectly match liquidity to the debt stock. They must provide enough liquidity to preserve financial stability, yet they cannot confine that liquidity to debt servicing and refinancing. Some will spill into equities, housing, credit, commodities and private assets, supporting valuations and encouraging leverage. **Asset inflation may therefore be part of the price of avoiding debt deflation.**

If liquidity must broadly track debt growth, policies such as quantitative easing, reserve expansion and collateral provision may become recurring instruments rather than purely crisis interventions. QE would then function as a structural tool, not merely a one-off response. Over time, central-bank balance sheets could follow a secular upward trend as policymakers seek to maintain system equilibrium. **This is not hyperinflation, but persistent, background monetary inflation.**

It follows that fiscal and monetary policy become increasingly intertwined. Government deficits create debt, while monetary authorities ultimately ensure sufficient liquidity exists within the system. The distinction between fiscal expansion and monetary accommodation becomes less clear. A highly indebted economy may require continuing monetary support regardless of conventional policy preferences.

Economic growth depends on managing the debt-to-liquidity ratio rather than minimising debt *per se*. The conventional view often treats debt reduction as inherently positive, but this framework suggests that the relevant issue is whether liquidity and debt adjust in a coordinated way. Aggressive deleveraging without offsetting liquidity support could therefore be destabilising if it disrupts refinancing, settlement or collateral conditions and pushes the system away from equilibrium.

The key market implications are that:

- Rising debt/liquidity ratios favour cash, safe assets, and eventually lead to policy easing
- Falling debt/liquidity ratios favour risk assets, leverage and result in asset inflation
- Mean reversion of the ratio becomes a powerful macro signal for turning points in both policy and markets

Viewed through this lens, financial crises and asset bubbles are not unrelated events but opposite manifestations of the same underlying imbalance. The central challenge for policymakers is therefore not the

management of debt or liquidity in isolation, but the preservation of a stable relationship between the two. Maintaining that equilibrium is essential for both financial stability and sustainable economic growth.

Financial systems appear to function most effectively within a relatively narrow range of debt-to-liquidity ratios. Persistent deviations from that range tend to be associated with either financial stress or speculative excess, suggesting that debt and liquidity must evolve together over the long run.