Allspring

Are There Unintended Risks in Your Capital Market Assumptions?

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Capital market assumptions (CMAs) are an integral part of the traditional approach to portfolio construction. The industry standard is a CMA building-block approach. For each risk premium (e.g., cash in excess of inflation, equities, duration, credit, illiquidity, etc.), return assumptions are added to an inflation assumption to determine total return expectations. For volatilities and correlations, long-term historical data are typically used, adjusting for any qualitative views. Expected returns, volatilities, and correlations are fed through a mean-variance optimization (MVO) to determine asset class weights. There are many variations to this approach, but they're all remarkably similar.

Problems with this building-block approach can lead to unintended risks and low confidence in portfolio allocations, including these three:

01 **Uncertain assumptions:** The equity risk premium (ERP), among others, is highly uncertain. Academic literature has justified anywhere between 0% and 7% for the ERP, and even small changes to the ERP lead to big changes in efficient frontiers.

02 **Unused inputs:** CMA producers (asset managers) have little vested interest in their use (by asset allocators). This is an open secret in the asset management industry, as it's generally known that these insights are often used more as guideposts than actual product inputs.

03 **Unconvincing outputs:** The asset allocation results do not always inspire confidence. Or, even worse, when MVO users receive results they don't expect, they tweak the inputs to arrive at a more sensible result.

Is it possible to solve these problems? We think so, by rearranging the CMA process: **Instead of going from risks and returns to allocations, we connect risk assumptions directly with allocations**. Return assumptions become the output, not the input.

Addressing the disconnect with a risk-based framework

For long-term strategic asset allocation, there's a lot of merit in the traditional approach to generating CMAs. After all, the longer the time horizon, the closer realized returns have tracked their forecasts—at least the rank order of asset returns if not their exact magnitudes. However, **realized returns over shorter horizons rarely track long-term assumptions**, making it difficult to apply this methodology to portfolio construction over the short to medium term. Portfolio managers are often judged on performance of 1- to 3-year rolling periods, not 10- to 15-year strategic horizons. As a result, disconnects can arise between what CMAs call for and what should (or does) go into a portfolio. This introduces behavioral distortions to the process for both portfolio managers and investors, undermining its consistency and casting doubt on its rigor.

Our **risk-based portfolio construction process** turns the workflow on its head. Rather than letting CMAs dictate portfolio allocations—generating risk and return assumptions and seeing what portfolios emerge—we favor assigning risk budgets to each asset to form a foundation portfolio.[1] We then ask what return assumptions are consistent with these risk budgets. Finally, we can then find the implied returns of the portfolio as a reality check that the risk budget is well spent (Figure 1).

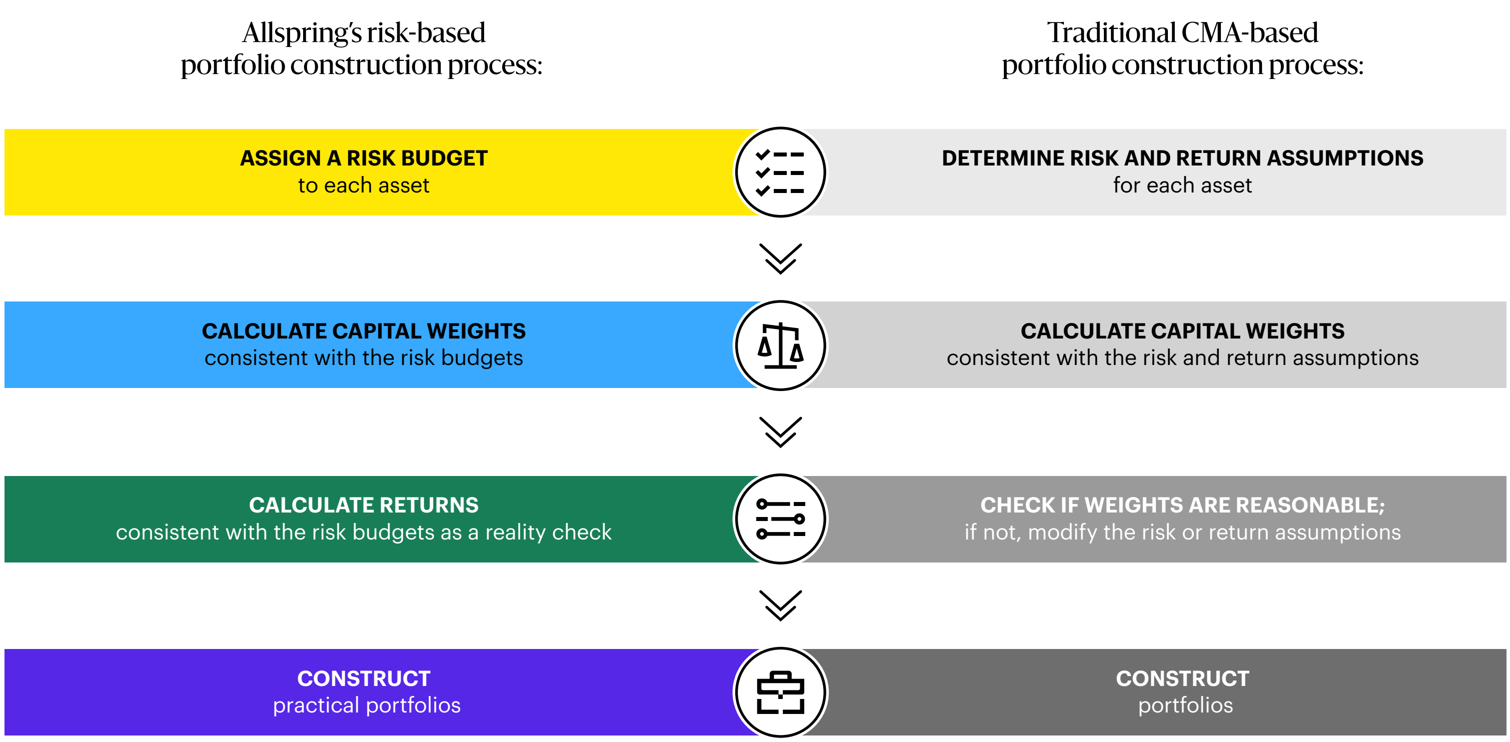
WHAT IS RISK BUDGETING?

Unlike traditional capital budgeting (e.g., 60/40 stocks/bonds), risk budgeting allocates capital according to the riskiness (volatility and correlation) of different asset classes.

The first step is to decide how much risk to assign to each asset class. The next step is to construct a portfolio such that the asset classes contribute the desired portion of risk relative to the total risk of the portfolio.

Risk parity is one type of risk budgeting in which each asset class contributes equally to the portfolio's total risk.

FIGURE 1: COMPARING PORTFOLIO CONSTRUCTION METHODOLOGIES



Source: Allspring, for illustrative purposes only.

1. The foundation portfolio is our strategically risk-balanced multi-asset portfolio agreed upon by Allspring Multi-Asset portfolio managers. It's designed to deliver the highest return per unit of risk (i.e., maximum Sharpe ratio). The portfolio acts as the engine for constructing efficient portfolios and is central to Allspring's Multi-Asset platform. It's important to point out that when CMAs of subsets or individual assets are looked at in isolation, interpretations can become more difficult. Investors have different investment goals and reasons for holding certain assets. The mean and variance, as two elements in the language of CMAs, may not capture all the utility of investing; therefore, we suggest that isolated asset-by-asset interpretations of our CMAs should be conducted with care beyond the multi-asset context.

Correlations and responsiveness to macroeconomic drivers matter

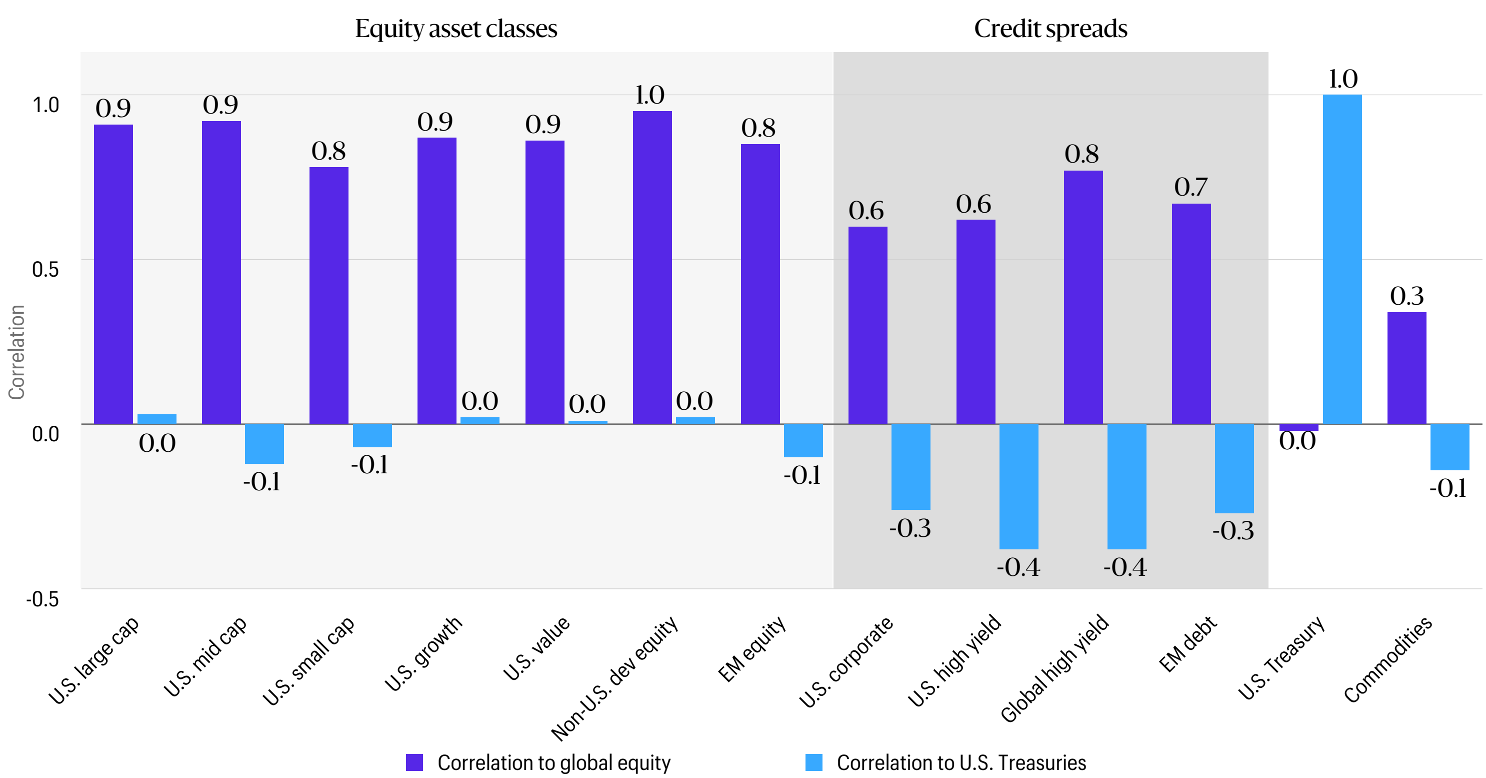
For readers wondering "Why reinvent the wheel?," consider that most CMAs involve lots of trial and error to achieve risk and return levels of a reasonable portfolio. A risk-based process, on the other hand, bakes in reasonableness from the outset, resulting in what we believe are more robust portfolios.

This is where our GRAIL framework for portfolio construction factors in. GRAIL (which stands for growth, rates, alpha, inflation, and loss mitigation) focuses on risk allocation to macroeconomic drivers of return with the goal of producing better risk-adjusted returns than traditional approaches while paying close attention to diversifiers and downside risk management. The key macroeconomic drivers of return are **growth**, **rates**, and **inflation**.

The broad terms we traditionally use for asset classes, such as "equities" and "bonds," can become misleading when viewed through the lens of risk. For example, some bonds can behave very much like equities. Looking through asset classes to understand what drives their returns is key to understanding a portfolio's true risk exposure. Figure 2 shows how various assets are correlated to global equities and U.S. Treasuries, demonstrating that their behavior is not always what their name implies. We see that:

- Equities and the credit spread component of bond returns have typically been highly correlated, which implies a common source: **growth**.
- Equities and credit spreads have had low to negative correlation to Treasuries (**rates**), implying a high level of diversification.
- Commodities have had low correlation to both growth and rates, suggesting they're driven by something else: **inflation**.

FIGURE 2: CORRELATIONS OF RETURNS TO GLOBAL EQUITIES AND U.S. TREASURIES



Source: Allspring with data from Bloomberg, 01-Jan-88 to 31-Dec-25, except for indexes with more recent inceptions in parentheses. U.S. equity correlations are based on each index's correlation to the MSCI All Country World Index; U.S. Treasury correlation is based on each index's correlation to the Bloomberg U.S. Treasury Bond Index. Credit spreads are the excess return of each index over equivalent-duration Treasuries, as calculated by the index providers. U.S. large cap is the Russell 1000 Index. U.S. mid cap is the Russell Midcap Index (June 1995). U.S. small cap is the Russell 2000 Index. U.S. growth and U.S. value are the Russell 3000 Growth Index and Russell Value Index, respectively. Non-U.S. dev equity is the MSCI World Index USA Index. EM equity is the MSCI Emerging Markets Index (January 1999). U.S. corporate is the Bloomberg U.S. Credit Index (August 1988). U.S. high yield is the Bloomberg Corporate High Yield Index (August 1988). Global high yield is the Bloomberg Global High Yield Index (September 2000). EM debt is the ICE BofA U.S. Emerging Markets External Sovereign Index (January 1997). Commodities are the Bloomberg Commodity Index.

Applying our risk-based portfolio construction process

This approach requires a starting point—our foundation portfolio. Let's say this portfolio has an expected return of cash plus 3% and the following exposures:

- 36% to growth assets (equities and credit spreads)
- 36% to rates assets (global government bonds)
- 18% to inflation assets (TIPS and commodities)
- 10% to liquid alternatives (alternative risk premia)

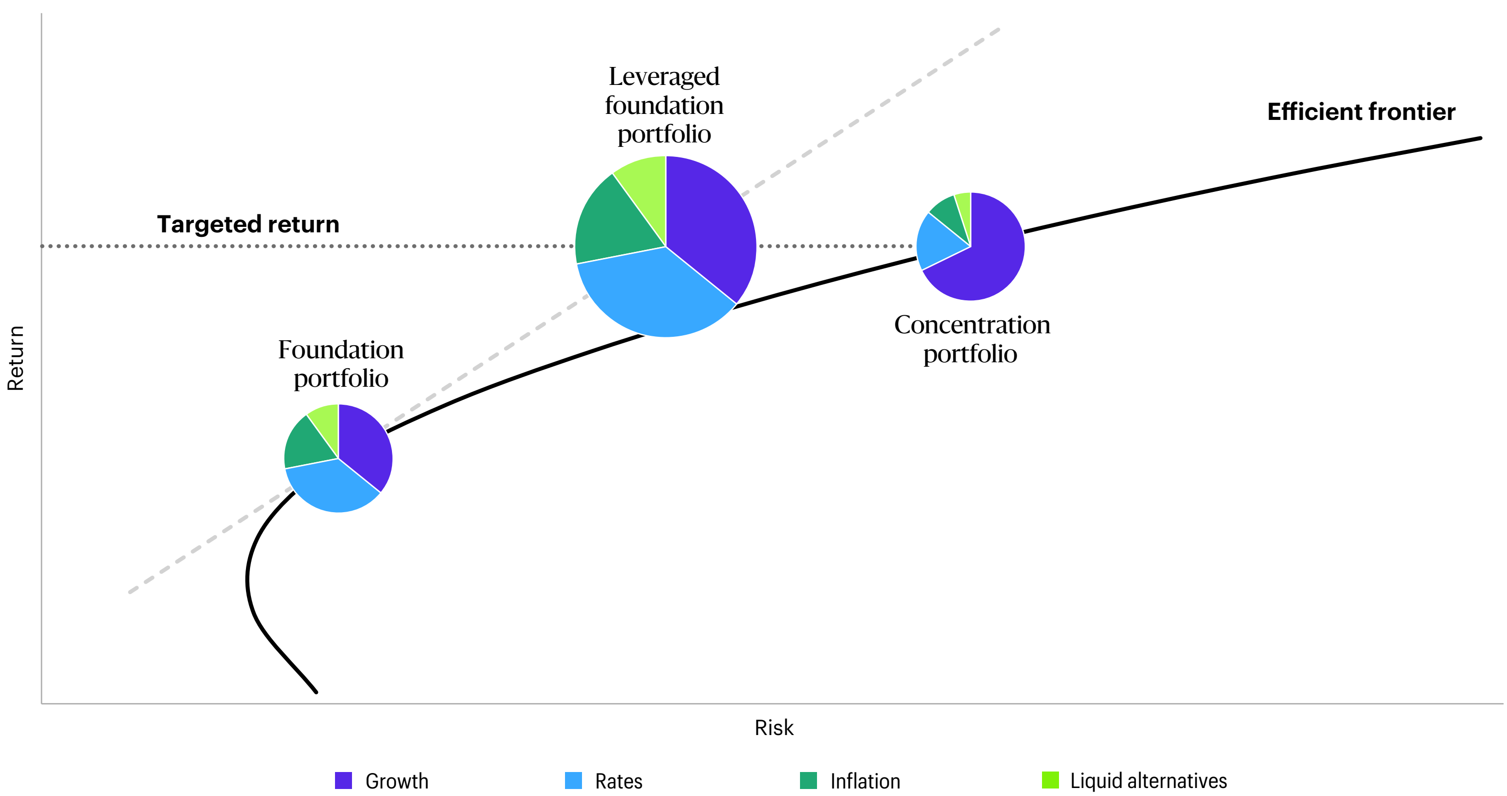
Investors have more than one objective—such as growing wealth, protecting wealth, and generating income from wealth—and they often have unique constraints, be it regulatory, tax, or liquidity. Our **risk-based framework** is adaptable to help address different needs.

If, for example, a client wanted a cash +5% expected return and was open to adding leverage, we could simply lever up the risk-balanced portfolio. However, leverage is often impractical for many investors. To achieve a higher return goal without leverage, we can concentrate the portfolio in higher-risk and higher-expected-return assets to achieve the cash +5% goal. This is where our framework comes in. We can derive reasonable risk and return assumptions from the risk-balanced portfolio to construct a cash +5% portfolio with no leverage, resulting in a concentrated portfolio (Figure 3).

Our foundation portfolio is fully unconstrained; it can serve as a basis for building unique client-centric portfolios across the risk spectrum:

- **Seeking a higher return:** For clients seeking a higher return target than our foundational portfolio, we can apply leverage or determine the right amount of portfolio concentration to more precisely target the goal.
- **Preserving wealth:** For clients more interested in preserving wealth, we can ratchet down the growth allocation or incorporate downside risk management strategies.
- **Meeting income or liability needs:** For clients with specific income needs, for example, we can incorporate constraints in the portfolio construction process.

FIGURE 3: EFFICIENT FRONTIER OF RISK-BASED PORTFOLIOS



Source: Allspring, for illustrative purposes only. The graph shows a multi-asset efficient frontier and capital market line using leverage to illustrate the potential for moving up the efficient frontier or capital market line depending on investment objectives.

Figure 4 shows sample asset allocations across the risk spectrum using our CMA process to target various objectives from conservative to aggressive without using leverage. Notice the allocation to growth assets (equities and credit) is proportional to the desired return; however, our CMA foundation biases these portfolios to be as risk balanced as possible while still targeting investor objectives. Risk budgeting is key to executing sound portfolio construction as we move out along the efficient frontier. It's not simply that equity allocations go up and bond allocations go down—the composition of bond holdings changes to higher duration and lower spread risk, helping maintain balance of exposure to growth and rates.

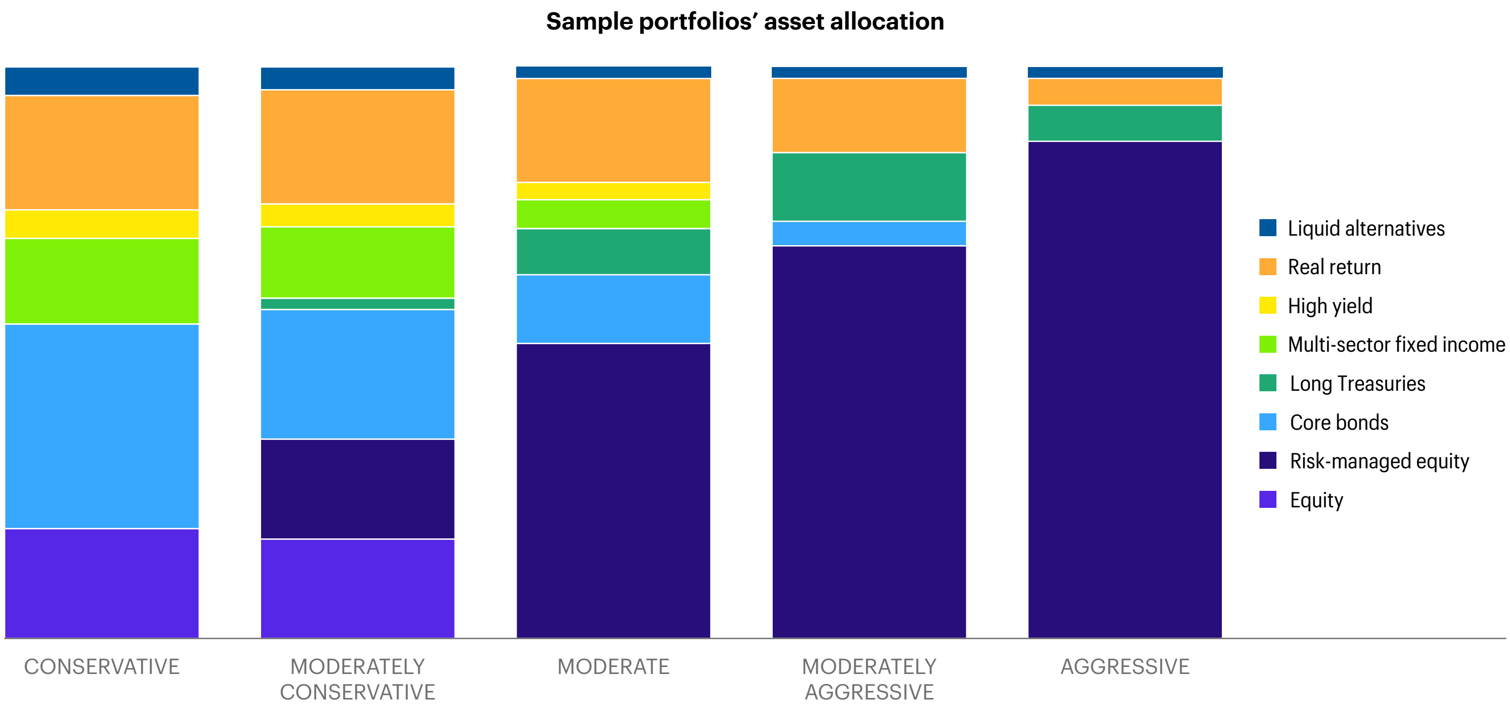
Specific client objectives or constraints can be accommodated within the risk-based portfolio construction framework. We can generate reasonable risk and return assumptions to help determine and improve the odds of achieving the desired outcome with off-the-shelf or customized solutions.

Risk-based portfolios address the disconnect

CMAs are an essential component of portfolio construction, but they may be creating unintended risks. To avoid the added uncertainty from incorporating return assumptions up front, as well as the portfolio disconnect that results from it, we created a robust framework to connect different multi-asset portfolios with a set of consistent CMAs. Our approach ensures the CMAs are relevant in that, when used in a mean-variance framework, they can produce a risk-balanced multi-asset portfolio we believe investors will deem sensible and practical.

To support this, we draw on our GRAIL framework—a macroeconomic risk-based lens for portfolio construction which helps ensure that risk is allocated across distinct economic drivers such as growth, rates, and inflation. This perspective enhances the robustness of the foundational portfolio used to derive CMAs and can improve the alignment between assumptions and investors' real-world portfolio objectives.

FIGURE 4: SAMPLE RISK-BALANCED PORTFOLIOS ACROSS THE RISK SPECTRUM



Source: Allspring. For illustrative purposes only.

	LOW EQUITY →	HIGH EQUITY
Downside risk management	Less important	More important
Bond duration	Moderate	Higher to make bonds work harder
Credit risk	Depends on risk budget	Redundant to equity risk
Liquid alternatives	Useful diversifier	Useful diversifier

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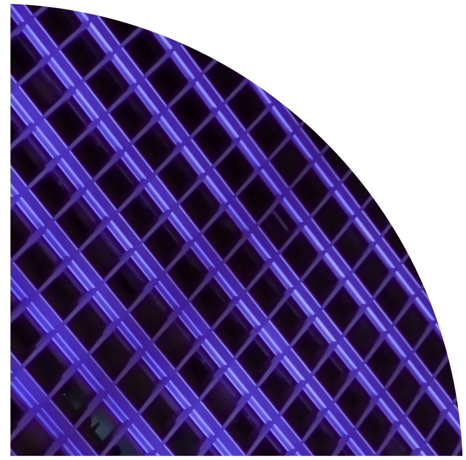

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