that if a transition from a key legacy IBOR is necessary, these risks can be well controlled only through extremely well and widely coordinated plans.

Before any transition from a key IBOR is set in motion, all major market participants, financial services regulators, industry trade associations, bar associations, and other affected parties and significant sources of professional advice should be "brought to the table" for consultation and involvement in the planning. Because the key IBORs are used globally and sometimes in tandem across currencies within the same contracts or strategies, these planning efforts should be coordinated internationally. In some settings, including the Eurozone, we also recommend supporting legislation.

The most significant risks to be mitigated by transition design are legal: the loss of contract continuity and the risk of contract frustration. Actual or alleged material differences between old and new reference rates, or old and new fixings of the same reference rate, could lead counterparties to argue that their contracts should be discharged under the doctrine of contract frustration, as explained in the report of the Legal Analysis workstream.

Other important potential transition impacts include tax effects and the costs associated with document searches, adjustments in information technology, and the rewriting of contracts.

In prior major benchmark changes, such as the transition to EURIBOR associated with the formation of the European Monetary Union, significant market disruption was avoided through careful planning, supporting legislation, and the convergence of currency prices prior to formal monetary union. A transition that includes a discontinuation of a highly referenced IBOR, however, could be significantly more challenging in terms of the magnitude of affected contracts and the degree of complexity.

As explained in more depth in the report of the Transitions workstream, we have considered the following four alternative transition approaches, which may be applied depending on the currency, tenor, and a range of legal and business considerations.

Seamless Transition

With a "seamless" transition, a particular IBOR+ would become the new fixing method for the corresponding IBOR. The new methodology would be used, but the legacy name of the reference rate would remain unchanged and the rate would continue to be published on the pages on which it is currently found. Contracts would not need to be changed. This "evolutionary change" in IBOR is the least disruptive transition path, and is less subject to legal challenge and signficant changes in the market valuation of contracts to the extent that the IBOR+ is close to the legacy IBOR fixing in value, definition, or volatility.

Successor-Rate Transition

If a particular IBOR+ differs somewhat in definition, value, or volatility from its corresponding IBOR, a "successor-rate" transition may nevertheless be possible in some jurisdictions. After a multi-year lead-in period, the legacy IBOR would cease to exist. Publication of the successor rate would commence on the following day, with the intent of converting all contracts to the new reference rate. An effective successor-rate transition would require careful advance legal groundwork, strong industry and regulatory support, and in some settings such as the Eurozone,

supporting legislation. Even if successful in a legal sense, this form of transition may cause non-trivial changes in the market values of contracts, and thus important accounting and tax effects.

Market-Led Transition

In a "market-led" transition, legacy contracts would be voluntarily renegotiated between their counterparties or allowed to mature over time. New contracts would reference alternative feasible and viable reference rates. Basis swaps between the legacy and alternative rates would assist with managing the mark-to-market risk of transition. Although this form of transition eliminates legal risk, it raises two main concerns. The first is the lengthy period of time that would be required for legacy contracts to mature, during which the legacy IBORs would need to be maintained. This increases the risk of a diminishing set of banks willing to provide the submissions needed to fix IBOR. If there are also concerns about the robustness of the legacy IBOR fixing method, at least some of those concerns would remain during the lengthy phase-out period. The other major risk of a market-led transition is that many market participants may avoid making the transition out of a self-fulfilling assumption regarding the relatively superior liquidity of legacy IBOR over the alternative benchmarks. Regulatory incentives and market-led initiatives may encourage this form of transition.

Parallel-With-Cutover Transition

The last of the transition paths that we considered is a "parallel-with-cutover" approach, under which a final discontinuation date for an affected legacy IBOR would be set. Alternative reference rates would become available during a multi-year phase-in period. Market participants, aware of the impending discontinuation date, would be encouraged to replace their existing contracts with new contracts referencing one of the alternative benchmarks. During the overlap period, basis swaps between the legacy and alternative rates would assist with managing the mark-to-market risk of transition. A key objective is that only a small stock of legacy contracts remains by the final cutover date. Conversion factors for converting legacy contracts could be recommended in protocols. It would be especially difficult, however, to identify conversion factors for volatility-sensitive products, as discussed in the Derivatives Transitions report. Problems with tax and accounting, portfolio management, and corporate treasury systems may arise from running different benchmark rates in parallel. Absent supporting legislation, discontinuation is likely to be extremely disruptive so long as there remains a large stock of legacy contracts.

Wherever it is feasible, the MPG strongly recommends a seamless transition to IBOR+ for debt products. For derivatives products, wherever feasible, the MPG recommends a combination of a market-led transition to OIS and a seamless transition to IBOR+. Creation of a robust OIS benchmark rate will enable a large number of derivatives market participants to transition to OIS, which is a more appropriate reference rate than IBOR for applications that do not benefit from referencing a rate with a credit spread. OIS is already widely used as a discount rate for the purposes of valuation and risk management of OTC derivatives portfolios. However, there will also remain a significant demand for derivatives referencing a rate such as IBOR with a credit component, particularly for users hedging cash products referencing an IBOR.