

Planning and portfolio management

Q 7-06. What are key characteristics of the debt management program?

Governments should commit to the principles of transparency, predictability, and even-handedness in managing their domestic bond programs. They should strive to publish borrowing plans well in advance, act consistently in selling government securities, and remove distortions to ensure equal treatment of different types of investors.

Q 7-06.01. What are the basic data that should appear in a published plan?

The sovereign borrower should know the approximate scale of how much it plans to borrow over the next year. The time horizon can extend beyond the current budget period. If this information is conveyed readily to the markets, it helps the state's agents find buyers for the securities.

It is neither necessary nor advisable to declare the amount to be issued in any single debt event (such as an auction) too far in advance. The unavoidable late changes will damage the public credibility of the plan. If the state acts to restrain the gradient of changes in benchmark offering sizes in consecutive offerings, the market will learn to monitor these changes and develop a good sense of the likely offering size. A strategy that evolves gradually makes it easier to be predictable by the markets.

Q 7-06.02. What is the time horizon for internal planning?

The appropriate time horizon depends upon how quickly material conditions change in the need for debt. Absent any valid argument for a longer horizon, a good two- to three-year internal plan should be sufficient to guide debt issuance with particular detail focused on several months in advance. The plan should be completely revised periodically to account for significant changes in the fiscal outlook. At a minimum, the plan should be revised with each fiscal budget, but more frequently may be better. Although the time horizon need not be strictly fixed, each revision should strive to maintain the same forward range. In this way, the plan becomes a rolling plan.

Q 7-07. What are the key aspects of a portfolio strategy?

Portfolio management, whether for a pool of sovereign debt outstanding or of assets or debt purchased, should be guided by a clear strategy. The strategy statement may be structured around four key topics in rank order from priority to least:

- the overall goal,
- key policies and constraints on options,
- risk limits or tolerances and risk preferences, and
- anticipated cost (or return, in the case of a portfolio of assets given the preceding.

Such a statement, issued publicly by the ministry of finance, informs the market how decisions will be made when choices are present. The statement may also be read as listing the order with which key portfolio elements will be relaxed if choice is not fully available. In the list given above, cost will be relaxed first. If the goal is still unmet, then some risk limits will be breached. The priorities will be relaxed going up the list until the goal is met.

A structure as given above is necessary to make sensible cost-risk tradeoffs because it identifies and enumerates key risks and establishes risk limits.

Q 7-07.01. Can one pursue multiple goals?

There can be but one goal for sovereign debt management: to meet the government's funding needs on a continuing basis. It is illogical to argue that one may pursue several goals. In the event of a conflict among these goals, something will be sacrificed and one path will be chosen. By the fact of this choice, it is clear that those goals not pursued must necessarily be of lower priority. To that end, they are not goals, but secondary objectives.

This view should not be confused with the assertion above that a debt manager may look at many performance metrics. The distinction between a goal and measurements of progress toward that goal along several dimensions is a fundamental challenge of economic policy.

Q 7-07.02. What types of constraints impinge on the strategy statement?

Given the goal of the debt management program, the priority is then given to those constraints that are imposed on the sovereign in managing debt. The debt manager must abide by constraints such as indenture agreements, public debt and guarantees laws, or IMF programs, and others. Other constraints on the debt program may follow from commitments and the sovereign's policies, such as specific steps toward auction process or capital market development or institutional investor acceptance. The strategy may also be constrained by the needs of the central bank for appropriate monetary policy instruments and adequate liquidity in the market.

Q 7-07.03. What are some of the key risks to list?

At this point, the strategy statement should be relatively explicit concerning the key risks a debt manager should manage. The statement must be more than a simple list of well-recognized risks. For example, instead of simply stating that the manager will avoid rollover risk, the statement should specify that debt management rules will limit concentration among debt maturities that hazards excessive exposure to rolling over under adverse market conditions. Similar explanations should be offered for currency risk, interest rate risk, and other risks.

Q 7-07.04. Why is cost considered last?

By putting cost in the final position, the manager is reminded that there are more important concerns than cost in managing debt. The real management aim of a sovereign debt program is to prevent a debt crisis and to manage sovereign debt so that it is a benefit to the economy rather than a burden. Often there will be pressure, particularly from elected officials with a short-run focus, for the cheapest cost with the hope that catastrophe might be avoided. The debt manager can rely on a well-written strategy statement to provide his critics with a reality check to counter that pressure.

Q 7-08. Can debt management be optimized?

Since the work of Harry Markowitz in the 1950s, new portfolio management tools have been developed as a means of dealing with risk. These tools generally have a theoretical or quantitative framework that suggests a scientific or statistical basis for risk management and portfolio optimization. The mathematics used in this work promotes confidence in its conclusions, but the assumptions needed to validate the mathematics can be an impediment.

There is also a problem in interpreting what optimization is actually achieving. Since optimization is defined as the state that is most preferred over all possible outcomes, it is difficult to use that concept in the context of the unique run of events that constitute the path of history. There is no practical way to demonstrate that the options taken at the start of the trajectory have yielded a better outcome than any other choice that could have been made.

Q 7-08.01. Why not build a long-term plan?

It is prudent for the debt manager to resist the temptation to create grand plans. What value is to be found in constructing detailed borrowing plans that extend ten years into the future if the entire plan is likely to be rendered useless by changes that can occur within the next three years? A look at financial markets and global economies over the past twenty years suggests that macroeconomic conditions

change quite rapidly and this can suddenly reverse a positive fiscal outlook and reorder any debt management plan.

Devising a long-term strategy can be more useful than a long-term detailed plan. The debt manager should consider how quickly past conditions have changed within his forecast horizon. Plans should be flexible in the range where trends may quickly turn.

Q 7-08.02. What is required to develop an optimal strategy?

There are reasons to be skeptical of claims for optimal debt management. A strategy that promises optimization is usually built on statistical models of likely outcomes based on extensive historic data. For such data to be useful, it will be necessary to assume stability in the mechanisms that generate the data. That is, that the institutional or market processes have not changed in a way that fundamentally alters the statistical properties of the data over time. Many statistical approaches also rely on knowledge of the moments of the probability distribution – the mean, the variance, the skewness, and kurtosis -- and the distribution itself to make probabilistic statements about likely outcomes.

For optimization, these data have to be projected into the future. This is a significant knowledge burden carried by many assumptions. For example, a strategy that seeks to optimize interest costs will involve extensive forecasting of interest rates over a long horizon into the future. The existence of a credible solution to this problem would find rapid application in fixed income markets.

Q 7-08.03. If not optimization, what can portfolio management do?

A key first step is to reduce impediments to market development, such as exposure to crises, liquidity strains, and excessive volatility.

One simple example is managing the refunding portfolio to avoid exceptionally large amounts of principal falling due on a single day. Market development consists of broadening the universe of investors, lengthening the yield curve, removing barriers to development of the secondary market, and deepening the primary market to permit full financing of the deficit in the domestic market in the year in which the deficit occurs.

Q 7-08.04. What short-term actions are desirable?

Portfolio management will have impacts in other areas of financial management. Portfolio management should be coordinated with cash management practices. Surplus cash should be managed through short-term secure investments. The cash balance should be maintained with treasury bills. Because government securities

are often used as a tool for monetary policy, the central bank should be aware of how the portfolio is managed.

Q 7-08.05. Are commercial debt tools a better choice?

There are many vendors of treasury workstations or portfolio management systems. The risks of relying on such systems are that the tool may be an imperfect fit for the particular government or economy and that the tool may not be well understood in what it is actually doing.

One should consider building in-house simple models for debt management that can be extended over time to address additional complexity. Most debt offices of the major economies have used spreadsheet models for debt planning rather than “black box” optimization schemes. This has a positive advantage: building an in-house model imposes a discipline that forces the analyst to understand more deeply what is being done in issuing debt and managing the portfolio.

Q 7-08.06. Are sophisticated financial tools useful to reduce costs or risks?

Some OECD countries use financial tools to reshape their portfolio or to reduce risks. Buy-backs, switches, and derivatives can mold the portfolio, but their benefits come with risks.

Unrestrained use of these tools can increase supply uncertainty among bond buyers. Over time, this sort of uncertainty can impede selling debt at a desirable price. Further, these actions have budgetary and market implications that require coordination with other governmental entities. Arrangements regarding amounts and timing should be coordinated with related policy agencies, including the central bank and the fiscal authority.