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# Credit FAQ: Assessing The Credit Quality Of Highly Leveraged Deep-Future Toll-Road Concessions

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## Table Of Contents

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Frequently Asked Questions

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Two recent U.S. transactions for existing, operating assets suggest that a trend for extended, "deep-future", toll-road concession periods is developing. This marks a departure from the conventional 25-35 year project-finance model. The Chicago Skyway was leased in 2005 for 99 years and, in January 2006, a preliminary agreement was signed that will lease the Indiana Toll Road for 75 years. These market developments follow the lease of Highway 407 (in Toronto, Canada) in 1999 to the private sector for 99 years.

The amortizing debt of these deep-future transactions is significantly higher than that of 25-35 year concessions, which typically have amortizing debt of about \$250 million-\$750 million to meet construction-related obligations. The cash flow generation capability associated with the roads mentioned above is strong, particularly given the long concession terms, and this has been reflected in their debt-financed purchase price. Chicago Skyway sold for \$1.8 billion, Highway 407 for C\$3.1 billion, and the Indiana Toll Road is expected to sell for \$3.85 billion. Not only has the debt quantum increased significantly beyond the usually observed range, but in each case the financing structures have become more sophisticated. The structures have extended beyond typical project-finance approaches to embrace a blend of corporate and structured financing solutions, commonly with deferred payment structures.

In this article we address the ten most frequently asked questions regarding Standard & Poor's approach to rating deep-future project-financed toll-road concessions, providing additional clarity regarding our views on amortization, financing structures, refinancing risk, and the presence of monoline insurance policies.

Please note, the answers provided in this article do not represent any criteria change at Standard & Poor's. Rather, the answers below simply build on our existing project-finance debt-rating criteria, which is explained fully in the article titled "Project Finance Summary Debt Rating Criteria", published on Sept. 16, 2004, on RatingsDirect, Standard & Poor's web-based analysis system at [www.ratingsdirect.com](http://www.ratingsdirect.com). For example, a number of recent enquirers have asked for guidance in terms of the minimum debt-service-coverage ratios or maximum EBITDA multiples required for investment-grade ratings on deep-future toll-road concessions. In this, and other respects, our criteria remain clear. Quantitative measures of debt capacity or debt-service protection can only be assessed in the context of the strength of the underlying business proposition supporting a transaction, and the structural provisions and contractual protections afforded to bondholders and other lenders. There is no simple formulaic approach to ratings based on a limited set of financial metrics.

## Frequently Asked Questions

### How does Standard & Poor's assess far-term revenue flows for deep-future toll-road projects?

Standard & Poor's has conducted various traffic risk studies, which have demonstrated the unreliability of traffic models' predictive capabilities over relatively short forecasting horizons. For further information please see the article titled "Traffic Forecasting Risk Study Update 2005: Through Ramp-Up And Beyond" published on Aug. 25,

2005, on RatingsDirect. The compounding challenge with long concession terms is that planning or macro-economic forecasts (relating to demographic changes or land use developments, for example), which are key inputs into most traffic models, themselves only stretch as far as 10–20 years into the future. Additionally, demand models generally remain incapable of capturing structural adjustments within travel markets—such as the longer-term impacts of changes to taste, preferences, fashions, relative pricing, technology, and so forth.

To address this concern, Standard & Poor's takes a conservative approach to longer-term traffic forecasts, reducing growth-rate expectations over time to reflect increasing future uncertainty and unforeseen events that could result in real declines. We recognize that the approach to toll tariff setting under a private-operator model will focus more on revenue maximization (under terms of a concession agreement) rather than cost recovery. Price elasticity is nonlinear, however, and we view traffic growth assumptions incorporating significant year-on-year growth, compounded over the long-term, with skepticism.

Mid- to far-term traffic growth rates exceeding 1% per year are unlikely to be considered for the purposes of investment-grade credit analysis and, depending on asset characteristics, this could be capped at zero growth. Standard & Poor's will similarly evaluate future toll schedule increases, while revenue projections will be examined and adjusted for tariff increases beyond reasonable inflationary corrections. We take the view that high growth rates and the potential for strong, longer-term revenue generation might, in fact, be achievable. This potential becomes increasingly more speculative in the far term, however, and remains inconsistent with the levels of certainty required for investment-grade ratings.

Stress tests and scenario analyses play a central role in the assessment of traffic and revenue projections. Long-term toll concessions with investment-grade aspirations are expected to remain resilient to commensurate downside stresses. The precise definition of these stress tests will vary from project to project depending on each toll facility's unique commercial and contextual characteristics. Standard & Poor's anticipates publishing a more detailed commentary outlining possible approaches to the interpretation and evaluation of traffic and revenue forecasts in the near future.

### **How does Standard & Poor's evaluate the amount of debt that projects can support at different rating levels?**

We are aware of long-term toll-road concessions with debt-to-EBITDA multiples exceeding 30x at transaction inception. For investment-grade ratings, only mature assets with strong historical performance; robust legal structures with bondholder and lender protections; and stable/predictable future cash flows could support such debt gearing. Additionally, these cash flows should have the capability to grow at a rate such that debt ratios are lowered over time to levels more traditionally associated with investment-grade credits, and debt can be fully repaid before the end of the concession with a level of certainty commensurate with investment-grade ratings. Toll facilities with revenue projections of a more speculative nature should significantly constrain their leverage aspirations if they wish to achieve investment-grade ratings. Although we do not determine the value of a toll road asset or the precise level of debt that it can support, our views on long-term growth rates and our guidance regarding amortization of investment-grade debt might, in themselves, place limitations on the quantum of debt that could be issued.

## How does Standard & Poor's evaluate the issuance of additional debt?

We generally expect any additional issuance to be constrained by test requirements such as coverage-ratio thresholds. We would expect only those projects performing beyond expectations--and where out-performance can reasonably be expected to continue--to contemplate adding future debt. The test requirements might address numerous credit concerns insofar as they might relate to the purposes for which additional debt may be raised (such as permitted capital expenditure).

Standard & Poor's will examine the issuance of additional debt for shareholder distribution, particularly in circumstances where senior lenders are effectively becoming subordinate to equity participants (in terms of the timing of distributions to senior debt and equity) and credit quality is being affected by cash payouts from a project's financial structure. To partially mitigate this risk, covenants restricting this practice during the early years of a concession can be helpful. The setting of higher additional-indebtedness coverage thresholds governing releveraging for reasons other than capital expenditure or refunding purposes can also strengthen credit quality.

## Could long concession periods of deep-future transactions support investment-grade toll-road financing structures that incorporate bullet repayments?

Outside those markets where long-term debt is not available, bullet repayments have not traditionally been commensurate with investment-grade project-financed assets that expose lenders to market risk--including toll roads. The revenue generation profiles of toll roads sit more naturally with amortizing debt structures. Standard & Poor's acknowledges, however, the step-change in revenue strength that very long concession terms introduce. It seems reasonable to assume that multi-tranche debt structures with different amortizing profiles will be proposed as an alternative. Financing trends observed to date have employed a blend of current interest bonds (CIBs, with bullet repayments) and capital appreciation bonds (CABs, with deferred repayments and/or partial deferred-interest).

One key aspect of Standard & Poor's analytical focus on bullet maturities and other nonamortizing debt instruments is to ascertain whether project cash flows can support the peaks such instruments introduce later in the concession to the aggregate debt-servicing requirement. As a guide, for larger transactions, investment-grade ratings might be difficult to achieve if more than 20% of total debt is due to be retired in any two consecutive years. Moreover, for transactions insured by "AAA"-rated financial guarantee policies, Standard & Poor's generally expects to see forward, irrevocable commitments from the monoline insurer to cover refinancing exposure (in addition to the traditional guarantees for principal and interest, and swap-settlement payments) if these guarantees are going to be incorporated into our refinancing risk analysis.

## What is Standard & Poor's approach to rating deep-future toll-concession transaction structures with deeply deferred debt-repayment schedules?

Standard & Poor's has developed preliminary guidelines regarding debt accretion prior to pay down. For very strong, mature assets, it is envisaged that the milestones would look similar to those contained in the table below.

<b>Illustrative Example: Debt Accretion Guidelines</b>				
<b>Concession term</b>	<b>Debt accretion peaks no later than...</b>	<b>50% of the maximum accreted debt is paid down by...</b>	<b>100% of the maximum accreted debt is paid down by...</b>	<b>Minimum tail</b>
Up to 60 years	Year 15	Year 30	Year 45	10 years

**Illustrative Example: Debt Accretion Guidelines (cont.)**

Beyond 60 years	Year 20	Year 40	Year 50	20 years
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The foregoing is for illustrative purposes only. Each long-term, highly leveraged toll road concession will be evaluated on its own merits.

**How does Standard & Poor's view debt-service-coverage ratios in its analysis of deep-future toll-road concessions?**

As transaction structures move away from fully amortizing debt, debt-service-coverage ratios become less useful as an indicator of credit strength. Deferred payments mean that early-period coverage ratios remain inflated, and this gives a misleading indication of projected performance. Furthermore, deferred-pay structures with their over-stated coverage ratios can shield free cash flow from debt-servicing obligations. This leaves cash available for equity distribution, to the extent that multiples of the initial equity investment could be withdrawn before any principal repayment commences. The topic of equity distributions is discussed below in the following question "How does Standard & Poor's view dividend distribution for investment-grade projects with long-term concessions?".

In analyzing aggressive debt-repayment profiling, we will request an illustrative amortizing repayment profile to be overlaid on debt structures brought forward to be assigned a rating. Note that this illustrative structure is for analytical purposes only, and should be presented, along with its associated coverage ratios, as a complement to (and not a substitute for) the proposed debt repayment profile.

The illustrative amortizing profile fulfils a number of analytical objectives. It casts light onto a project's financial strength ensuring that, for example, this strength derives from the underlying business and its cash flow generation and is not simply a function of a carefully crafted debt-repayment profile. It can also highlight periods during which, absent of payment deferrals, a project's cash flows would be stretched. Importantly, it also allows for peer comparisons to be drawn on a more consistent basis.

**How does Standard & Poor's view dividend distribution for investment-grade projects with long-term concessions?**

For a project to maintain appropriate credit quality, Standard & Poor's expects dividends to be distributed only when project performance is in-line with or beyond expectations, and is likely to remain so. Dividends flowing out of projects at other times or for other reasons could degrade credit quality.

In this context, Standard & Poor's analyses the issuer's proposed dividend distribution lock-up tests (which are usually ratio-based, but increasingly bundled with additional requirements). These lock-ups are generally set at levels just below the financial model's minimum debt-service-coverage ratio for investment-grade credits, to ensure retention of cash sufficient to meet project liquidity needs in the current and future years. The closer the permitted dividend distribution test is to the minimum coverage ratio, the better the subordination relationship between equity and debt. Standard & Poor's also focuses its analysis on the number of consecutive years that must pass (following lock-up) before dividend outflows recommence. Forward-looking tests provide for a stronger structure.

### **Does Standard & Poor's evaluate swap transactions as part of its credit analysis?**

Yes. Many project sponsors employ swap strategies in an effort to achieve more cost-effective debt financing. For example, it is possible to use an interest rate swap to produce the same economic effect as CABs. The swap counterparty might pay a floating rate (such as LIBOR) and receive a payment stream that allows for some of the interest payments due to the swap counterparty to accrete for a period.

One potential credit issue is whether or not the transaction is swap-independent. For example, if the swap were to terminate, the issuer would pay or receive a payment to or from, respectively, the swap counterparty. If the issuer did not receive a payment due to a counterparty default, the issuer might not be able to replace its swap position at similar rates or terms and, therefore, might not be able to perform at previously expected (rated) coverage levels without rate increases and/or possible rating implications.

These credit issues are central to our rating analysis as monoline bond insurance policies might guarantee swap payments due from (but not due to) the issuer. As a result, Standard & Poor's will examine within a swap transaction the level and minimum credit quality of collateral posting, and replacement requirements should minimum credit rating levels be violated by swap counterparties.

### **Aside from the covenants already mentioned, what other structural features might contribute to investment-grade ratings for deep-future toll facility concessions?**

In addition to the additional indebtedness and permitted distribution tests discussed above, Standard & Poor's considers the following structural features at the investment-grade level:

- Compliance with our ring-fencing criteria, as discussed in the article "Ring-Fencing A Subsidiary" published on Oct. 19, 1999), on RatingsDirect. This includes, with respect to the proposed debt issuer, satisfaction of our special purpose entity (SPE) criteria and receipt of a satisfactory nonconsolidation opinion.
- A covenant that means the assets acquired by a concessionaire cannot be pledged as security to any stakeholder other than senior creditors to the issuer.
- A covenant that means no debt can be issued at any of the operating companies that might hold the acquired toll-facility assets. That is, only the initial debt and future issuance that complies with the additional indebtedness covenant can exist at the holding company SPE. This principle ensures that structural subordination (in respect of the holding company SPE debt) does not occur in the future.
- Lender step-in rights that allow creditors (or a monoline insurer, as the controlling creditor) to step-in, or appoint a trustee to manage the SPE holding company, giving creditors the ability to control the debt-issuing entity for an uncured event of default.

### **Given the forward commitments of monoline insurers, how is refinancing risk factored into a credit rating?**

A monoline insurer that provides a guarantee policy for future refinancings enhances the certainty of market access but is not a substitute for credit analysis. Furthermore, in the absence of a hedging strategy, the uncertain future cost of debt refunding could narrow coverage ratios. Our analytical approach is to evaluate the underlying credit quality of a transaction before overlaying and assessing the incremental contribution of credit enhancements such as monoline wraps.

Our starting point is to assume that refinancing risk is manageable in long-dated concessions with a sufficient tail (about 10–30 years). Financial models will be examined to understand the assumptions being made about refinancing (such as the interest rate employed) and stress tests will be used to evaluate the sensitivity of transactions to less-favorable interest rate assumptions at refinancing points. Investment-grade structures will typically have secured appropriate hedging arrangements in this regard. The forward commitment of a monoline insurer simply gives additional comfort to any analysis of refinancing risk.

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