DEBT:

HOW MUCH IS TOO MUCH?

BY KRISTINE BROCK AND STEVE MURRAY

As its name suggests, debt capacity measures a government's ability to take on debt. It's a way that leaders and stakeholders can determine the affordability and risk of potential debt—and ensure decisions are made in the best interest of both present and future stakeholders.

Of course, debt agreements require both a lender and a borrower. This article will look at how a government can measure debt capacity, develop policies to support improved analysis, and provide examples for the measures used by the City of Franklin, Tennessee. **Kristine Brock** offers a nuanced take on assessing and tracking debt capacity. She draws on her experience in financial leadership for Franklin, Tennessee to explore this issue from the vantage point of the municipal borrower. **Steve Murray**, who heads Fitch's U.S. Public Finance Southwest Tax-Supported group, provides a deep dive into how rating agencies apply criteria to determine risk—and understand the unique circumstances of municipal borrowers.

MEASURING DEBT CAPACITY AND DEVELOPING POLICIES

BY KRISTINE BROCK

For most governments, state or provincial law prescribes a local debt limit—but this limit rarely takes local conditions into consideration. Without a sense of what is truly affordable, it is impossible to make wise decisions about the use of debt. This article will look at how a government can measure debt capacity and develop policies to support the process analysis and provide examples for the measures used by the City of Franklin, Tennessee.

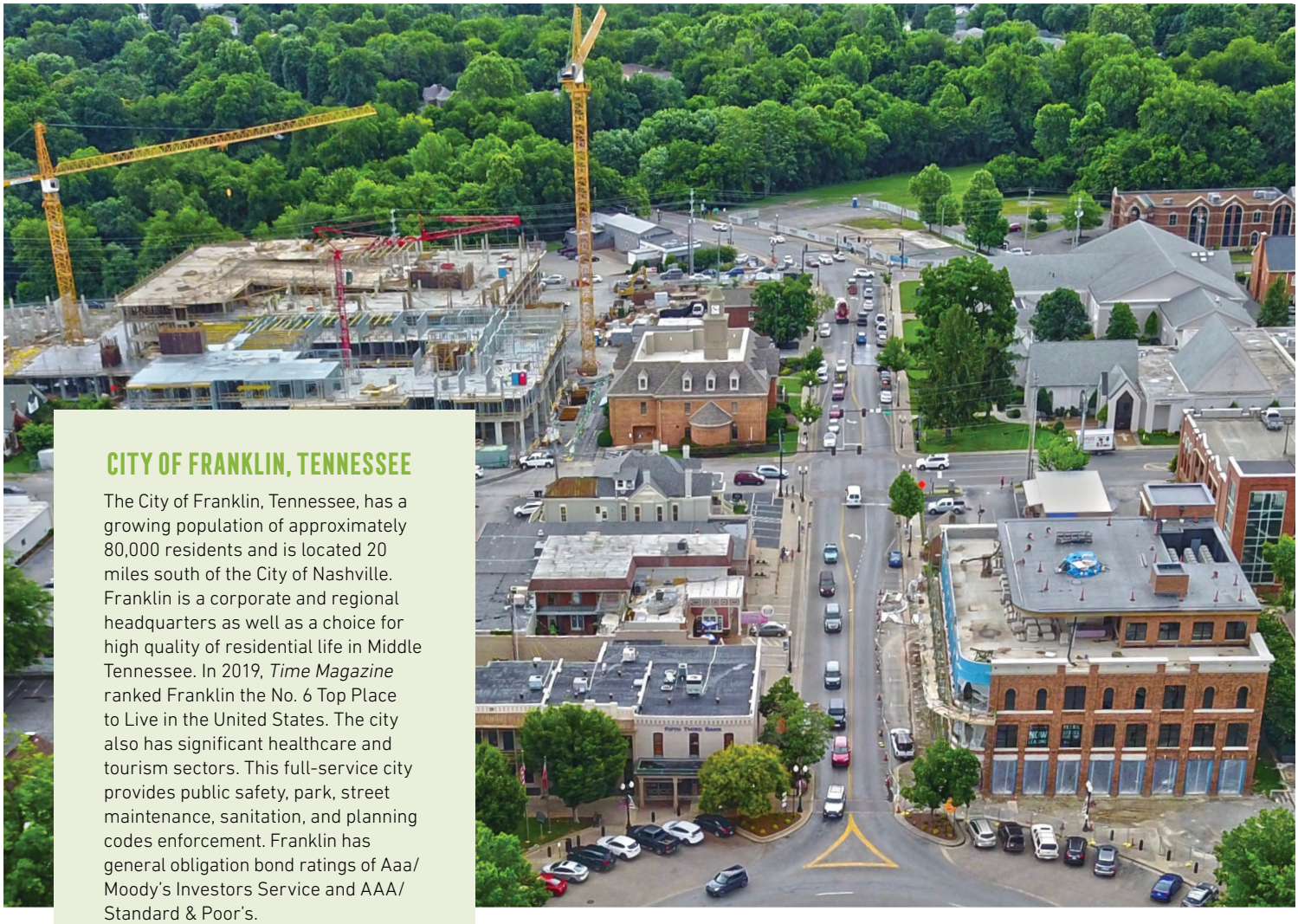
As of June 30, 2020, Franklin's most recent fiscal year-end, the city had a general obligation long-term debt, including unamortized premiums, of $160 million and water and sewer utility debt of approximately $85 million. The city is currently in the midst of borrowing more than $100 million from the State of Tennessee's revolving loan program to expand and rebuild its wastewater treatment plant, so water and sewer utility debt will increase significantly in the next couple of years.

STANDARD DEBT CAPACITY MEASURES

Standard debt capacity measures provide context about the ways in which governments compare with one another and how rating analysts and states look at local governments. Franklin's outstanding general obligation debt as a percentage of assessed valuation is 3.1 percent.

Although some states and local governments have debt capacity caps on general obligation debt, the State of Tennessee does not. In comparing Franklin's general obligation debt to that of other governments, we must consider the specific functions that each provide. Cities will have higher percentages of general obligation debt if they operate school districts, which the City of Franklin does not.

Franklin also looks at debt per capita, which is $2,250 per resident. This amount has increased in recent years because of the city's rate of growth, which has led to more frequent issuance of debt to fund its capital improvement program. This level isn't excessive, but the trend has increased in recent years.



CITY OF FRANKLIN, TENNESSEE

The City of Franklin, Tennessee, has a growing population of approximately 80,000 residents and is located 20 miles south of the City of Nashville. Franklin is a corporate and regional headquarters as well as a choice for high quality of residential life in Middle Tennessee. In 2019, *Time Magazine* ranked Franklin the No. 6 Top Place to Live in the United States. The city also has significant healthcare and tourism sectors. This full-service city provides public safety, park, street maintenance, sanitation, and planning codes enforcement. Franklin has general obligation bond ratings of Aaa/ Moody's Investors Service and AAA/ Standard & Poor's.

Franklin's population has increased four-fold in the last thirty years, requiring significant investment in new infrastructure and public safety facilities.

Another measure the city considers is annual debt service as a percentage of total revenue or expense. The constraints created by amounts of debt service affect the level at which other operational services are funded. In fiscal 2020, approximately 21.7 percent of Franklin's general fund revenue was allocated to annual debt service. The percentage is a bit higher for expenses because the city's general fund expenses are less than revenue. Also, the FY 2020 ratio was almost three percent higher than the prior year because of revenue declines resulting from the COVID-19 pandemic that begin in March 2020.

Finally, there's an overall capacity to sustain additional long-term debt service obligations. This is somewhat complicated and subjective because it involves evaluating the revenue stability of major property taxpayers and businesses that generate significant sales tax. Determining potential long-term or near-term issues with large taxpayers can be difficult, and the city needs to determine if it's counting too much on any one large property taxpayer or sales tax source. Sales tax is also difficult to fully analyze because some states don't allow disclosure of the amount of sales per business, although it may be possible to get an idea about certain sectors.

Franklin's largest property taxpayer is a commercial office park. The city has significant office commercial valuation, and its largest property taxpayer represents approximately 2.4 percent of the total valuation. The top 10 added together represent about 14 percent of the total valuation, so the city doesn't consider itself to be highly concentrated. Some local governments have a large factory or retail shopping complex that is a top taxpayer, and that one business might be up to 40 percent of its total valuation, which can obviously be a concern as that one taxpayer may not be there over the next 20 to 30 years as the government will be repaying new debt.

To understand what amount of debt a government can afford, it should identify multiple measures of debt affordability that are both quantitative and qualitative in nature.

REVENUE-SUPPORTED DEBT

Franklin has a water and wastewater utility, and the city owns a distribution collection system, a water filtration plant, and a wastewater treatment plant. Therefore, since the city has additional capital infrastructure, it also has more debt (along with the ongoing need to support additional capital costs), than a municipality that perhaps buys water from another source or sends its wastewater to be treated at a separate utility.

For fiscal 2020, Franklin's debt service coverage was at 3.51 times net revenue, significantly higher than the city's debt service coverage requirements. The city hasn't added much debt to its utility in recent years, other than planning for the state revolving fund loan for the expanded wastewater plant, and rates have increased incrementally in preparation for the project. But the debt service coverage is predicted to be less than three times net revenue once Franklin starts paying fully on its state revolving fund loans.

Another consideration when assessing capacity for revenue-supported debt is determining whether any debt holds senior status versus debt that is considered subordinate. Subordinate debt is often rated lower than senior debt and thus may incur higher interest costs. There are also covenant requirements for governments that participate in loan programs—a state revolving fund loan, for instance. For example, when Franklin borrowed from the state revolving fund loan, the program has a secondary pledge of our state shared revenues. If, for some unexpected reason, Franklin's utility didn't make full annual payments for these revolving fund loans, state shared revenues will be withheld. Therefore, conducting an inventory of all revenue debt pledges and understanding this framework should be part of the debt capacity analysis.

And finally, the city evaluates the revenue stability of its top customers to determine if the utility is highly concentrated (as with general obligation debt). For example, there might be a need to expand a plant, but how much expansion is reasonable if one business makes up 50 percent of your utility's total sales?

In our case, the City of Franklin has very little heavy industry, per se. Instead, the city's top water customer is a multifamily housing complex that represents 1.6 percent of total water revenues. While a top customer, it does not represent a large percentage of the city's water revenues. Franklin's largest wastewater customer is also a multifamily housing development representing 1.0 percent of annual revenues. The top 10 customers for the water utility represent 9.1 percent of total revenues, while the top 10 wastewater customers represent 6.6 percent.

FRAMING THE CONVERSATION

The first step in framing the debt capacity conversation is developing a historical context for the debt capacity measures. Observing trends in debt capacity measures often tells a story for your community. For example, Franklin's debt per capita has increased in recent years, from $1,921 in 2013 to $2,250 in 2020. The city has also increased its population very quickly, from 20,098 in 1990 to approximately 80,000 in 2020. Serving the needs of a growing community has led to significant investment in new and expanded roads, parks, and public safety facilities.

Next, consider debt capacity in the context of a multiyear capital improvement program, rather than looking at the project-specific need. Understanding the multiyear capital projected for the next three to perhaps even ten years requires input from staff as well as direction from administration and elected officials, but this approach to debt capacity allows the government to plan funding in a more holistic approach.

Another way to broaden the debt capacity discussion is to identify all potential capital funding sources. There are multiple options for funding sources, often involving revenues for specific uses: impact fees, grants, and also consideration of cash (either fund balance or current year appropriation). Private contributions are another consideration if there is a project a developer wants to participate in that makes sense for the government—putting in a road or a signalized intersection, for example.

Finally, governments should adopt a debt policy that describes the structure of debt issued for new projects. What's the maximum term for new debt? Will the debt be variable rate or fixed-rate? Franklin's debt policy favors amortizing general obligation debt for no more than 20 years at level debt service and in the form of traditional, fixed-rate bonds.

TAKEAWAYS

When discussing debt capacity, basic human optimism can lead to over-promise on revenue projections. It's important to guard against this tendency and be as balanced as possible when preparing revenue and growth projections. For example, if a major taxpayer makes a major expansion, it will result in significant additional real and personal property taxes, once the expansion is complete and in service. The exact timing of this additional revenue is not precisely known. If additional revenue is required for debt service, that advisement should be clearly articulated when the debt is under consideration, along with any unknown information about timing of future revenue.

There may also be a tendency to move on projects immediately, assuming the long-term financing can be put in place at a later date. In many cases, the government should determine its financing needs and work through a public process to issue debt earlier rather than later in the life of the project or near-term capital plan. For example, a municipality should review its capital funding needs periodically and issue debt based on projected needs over the next two to three years.

Another consideration of the debt capacity conversation is the assessment of additional operating costs resulting from the completion of capital projects. If the project will require new employees or add to the government's operating expenses in other ways, these costs should be identified. For example, a local government planning to build a new wing on the jail will incur additional operating expenses for hiring more staff and higher utility costs. Identifying as many of these costs as possible is part of determining the true cost of the project, both in additional debt service and ongoing expenses.

The final takeaway is the importance of speaking as plainly and directly as possible to ensure that elected officials, senior administrators, and the public understand the important pieces of the debt that is being incurred. Finance officers should keep the technical jargon to a minimum and make sure the interested parties understand what dollar amount the government is borrowing, the sufficient source of funds for repayment of the debt, and the risks associated with the structure of the financing.

CONCLUSION

To understand what amount of debt a government can afford, it should identify multiple measures of debt affordability that are both quantitative and qualitative in nature. Next, the finance officer can develop guidance that best fits the community and leads to policies that support the responsible and affordable use of debt financing for its capital needs.

Kristine Brock *is the assistant city administrator and chief financial officer for the City of Franklin, Tennessee.*

POLICIES ON DEBT CAPACITY: A RATING AGENCY PERSPECTIVE

BY STEVE MURRAY

Fitch Ratings takes a holistic look at long-term liabilities, a forward-looking analysis that concentrates on near-term and long-term affordability—which addresses the question of how much debt might be too much.

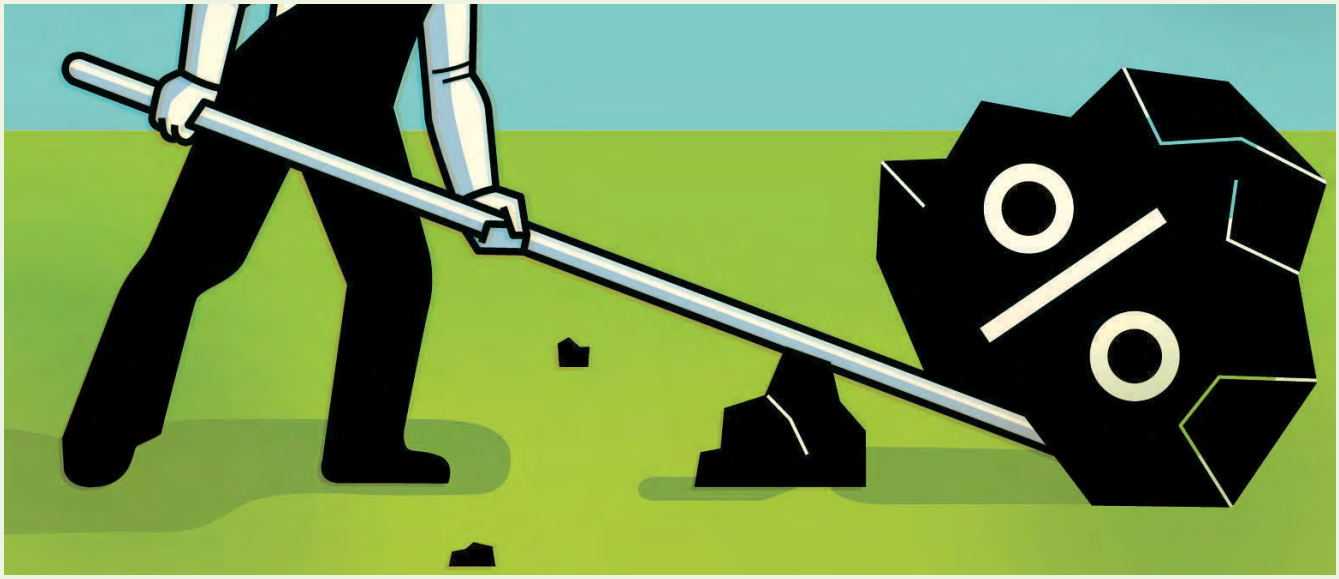
THE FRAMEWORK

The long-term liability burden is one of the four key rating drivers in Fitch's tax-supported rating criteria. The other three drivers are revenue framework, expenditure framework, and operating performance. The long-term liability assessment considers both direct and overlapping debt, along with a Fitch-adjusted net pension liability (NPL). While Fitch historically had considered pensions as part of an issuer's long-term debt picture, a major revision of its U.S. public finance tax-supported rating criteria in 2016 formally placed these obligations on par with debt obligations as a component of the long-term liability burden.

Fitch considers all governmental debt of an issuer—long-term debt, notes, and commercial paper. The only exception would be notes that are issued for cashflow purposes. The assessment is forward-looking, including a review of capital plans to get a sense of near-term borrowing and where the liability burden may be trending over time. The expectation for resource base growth is also considered.

The combined overall debt total and adjusted NPL is divided by personal income, with personal income being simply an entity's population multiplied by per capita personal income. The objective is to get a sense of the ability of the resource basis to support a certain amount of long-term liabilities. If the result falls between zero and 10 percent of personal income, the suggested assessment is aaa; 10 to 20 percent, aa; 20 to 40 percent, a; and 40 to 60 percent, bbb.

Based on the above calculation and the forward-looking considerations, Fitch assigns an assessment for an issuer's long-term liability burden. This result, along with assessments for the other three key rating drivers, informs the final rating decision made by a committee. If the debt and the resource base are growing in tandem, the liability ratio will likely stay in the same range. If a government has a stagnant economy or stagnant or declining population, however, adding more debt will



increase that percentage and may put downward pressure on the long-term liability assessment.

There are specific situations where the personal income approach doesn't really apply. A good example of this is a tourism-based economy that has a low population during certain months of the year and a much larger population during the tourism months. In this case, Fitch reverts to the more traditional tax-based approach, where long-term liabilities are measured as a percentage of property value. The pace of debt amortization also helps gauge the trajectory of this liability burden. How quickly does an entity pay off its debt? Does it have the ability to add additional debt without increasing that burden over time?

Fitch's water and wastewater rating criteria were recently revised, and the take on debt and affordability has changed to a broader leverage concept. The key term in this evaluation is net adjusted debt, which includes total system debt, capitalized fixed charges (service charges for water or sewer, plus operating leases), and the utility's portion of an adjusted NPL calculation. The inclusion of these capitalized fixed charges and the NPL calculation is new for Fitch's water and wastewater criteria; the capitalization of the fixed charges is essentially taking a percentage of the annual service cost and multiplying it by a factor to generate a debt equivalent—or capitalize it. These three items added together are measured against annual cash flows available to service the obligations, to provide a sense of affordability. The resulting net leverage ratio, which is net adjusted debt to net funds available for debt service, is a component of the financial profile key rating driver, which is one of the three key rating drivers in the revised water and wastewater rating criteria.

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PENSION AND OPEB CONSIDERATIONS

As mentioned above, pensions—specifically defined benefit plans—are important factors in the long-term liability burden calculation. Defined contribution plans are not considered here but rather are factored into an agency's expenditure framework assessment because they feature predictable annual financial commitments.

Pension funding and liability trends are as important as the current snapshot. We want to get a sense for how the asset-to-liability ratio has been performing over time. Has it been stable? Has this gap been increasing? Has it been decreasing? What has the practice been regarding funding? Has an entity been consistently contributing at the actuarially determined level? Has it been falling short over several years, or, conversely, has it been over-contributing to bring down the liability sooner?

Fitch also considers a pension plan's investment return assumption, determining how reasonable it is and what impact it will have on the future trajectory of the pension

liability burden. Because investment return assumptions vary among plans, Fitch assumes a six percent rate of return for all plans that have a higher expected return. The resulting adjusted net pension liability improves comparability among plans.

Another thing Fitch takes note of is any actions taken by management to implement pension plan reforms in an effort to address a sizable liability—and many entities have initiated major reform efforts for single employer plans. This is typically a difficult undertaking given various legal and political constraints. However, in those cases where local governments have been successful in obtaining employee buy-in and—where required—necessary legislative approval, reform efforts were acknowledged as a positive consideration if they were projected to reduce a plan's liability burden over time. Conversely, plan changes that will increase the liability burden (enhanced benefits, for example) will be viewed negatively unless accompanied by offsetting measures.

Regarding OPEB, recent reporting changes have increased its visibility. While it's not a specific component of Fitch's long-term liability calculation, sizable OPEB liabilities are noted in the ultimate assessment. The factors that go into calculating the OPEB liability often are unpredictable—a good example is healthcare cost forecasts. Also, OPEB plans typically have features that make them different from pensions. For example, plans often can be modified, and legal protections often are limited. Having said this, Fitch also recognizes that there are practical constraints to making changes with OPEB. When dealing with retiree healthcare benefits, proposing changes can often be a challenge politically; as result, this path has its limitations.

CARRYING COSTS

A separate component of Fitch's local tax-supported rating criteria offers another means to assess debt affordability—by measuring carrying costs. Carrying costs are a component of Fitch's expenditure flexibility assessment (part of the expenditure framework key rating driver). Carrying costs are defined as governmental debt service, along with actual OPEB contributions and actuarially determined pension contributions, as a percentage of annual governmental spending.

If the result of the carrying cost calculation is zero to 10 percent of governmental spending, it suggests an aaa expenditure flexibility assessment; 10 to 20 percent, aa; 20 to 25 percent, a; and 25 to 30 percent, bbb. We also inquire about an issuer's near-term borrowing plans to get a sense of where carrying costs might be trending. In addition, we examine the current debt structure.

Pension funding and liability trends are as important as the current snapshot. We want to get a sense for how the asset-to-liability ratio has been performing over time.

Is the debt structure level, or is it ascending or descending? What kind of impact is the structure going to have on the carrying cost trend? An expected material shift in carrying costs based on this information is factored into the assessment. Fitch also looks at what future pension contributions might look like, and whether contribution requirements will increase in coming years.

Fitch also performs a separate calculation, which produces a pension benchmark contribution. A hypothetical contribution amount is calculated, based on a 20-year amortization period of the Fitch-adjusted NPL and a five percent return assumption. This calculation provides additional information in those cases where a plan has a rolling and/or backloaded amortization period or the investment return assumption is particularly high. It helps identify outliers that are at heightened risk of increasing pension contributions and consequently diminished spending flexibility.

Limited or single-purpose entities—entities with limited operational responsibilities—often function primarily as capital financing vehicles. As a result, the carrying cost calculation will produce a high number because governmental spending is typically low. We take the character or operational makeup into consideration when making the expenditure flexibility assessment for these types of issuers.

ASYMMETRIC RISK CONSIDERATIONS

Fitch's long-term liability burden assessment can also be affected by asymmetric risks, or risks that are outside the norm. Examples would be a very large constrained OPEB liability, very large derivative or variable rate exposure, or debt that has a large number of bullet maturities that could affect future annual debt service payments. The key factors when considering these elements are the size of the obligation and manageability—the extent to which Fitch believes management can handle the liability.

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