Getting STIF[ed]: Louisville's Yum! Center, Sales-Tax Increment Financing, and Megaproject Underperformance

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Abstract

This article evaluates the revenue performance failings of the Yum! Center, a sports arena in Louisville, with the primary objective of explaining how a flawed deal arose in the first place. While the literature addressing public subsidization of sports facilities primarily contemplates economic impact underperformance, Louisville provides an extreme instance of failed financial performance leading to a bailout. The revenue challenges, arising from sales-tax increment financing and the lease agreement, link the arena to a wider literature on megaproject underperformance, characterized by three primary threads: rent-seeking, governance structures, and project cultures. This article evaluates the Yum! Center through representative lenses from each of these threads before offering key lessons for future projects.

Keywords: tax increment financing, megaproject, Louisville, underperformance, local government

Introduction

Sports arenas frequently represent significant instances of megaproject underperformance. While plenty has been written on lacking benefits from public subsidies for sports facilities as well as the financial underperformance of infrastructure megaprojects, these two literatures are often detached. This article connects sports venues to a larger discussion of infrastructure megaprojects through a case study that stands out as one of the worst examples of financial and revenue underperformance of a major North American sports facility in decades.

In Louisville, Kentucky, the original revenue structure of the KFC Yum! Center has completely failed to cover the arena's debt. As a result, the Louisville Arena Authority (LAA), responsible for the facility's construction and operation, was left headed towards default before a substantial restructuring in 2017. Now state taxpayers are responsible for a far larger share of debt service than under the original deal (KEDFA 2008; Convention Sports & Leisure 2017, 47). This financial failure has centered on two elements: sales tax increment financing (STIF) and the arena lease. The primary purpose of this article is to evaluate how these outcomes arose.

After a three-pronged literature review on megaproject underperformance, public finance of sports facilities, and STIF, the article moves to the Louisville case. The core of the article then evaluates the Louisville experience through works representative of the primary explanatory lenses in the megaproject underperformance literature. This is followed by broader conclusions on how the Yum! Center debacle came to fruition, as well as key lessons for future projects.

Literature Review

Explaining Megaproject Underperformance

Although any project may be prone to underperformance, the scale, complexity and financial cost of megaprojects makes the risks associated with their failure far more potentially damaging to governments and firms. These magnified consequences have inspired a vibrant literature, well discussed under three theoretical headings by Sanderson (2012): the planning fallacy and rent-seeking, flawed governance structures, and project culture. Each of these categories has some merit in evaluating the Yum! Center.

The rent-seeking heading is dominated by Flyvbjerg and collaborators (2002, 2003, 2005, 2005, 2007, 2008, 2009, 2009, 2014). These articles highlight the role of over optimism and intentional misrepresentation in forecasting costs and benefits by key decision makers and influencers to ensure the approval of poorly conceived projects (Sanderson 2012). The primary alternative explanation is failed or inadequate governance structures (see De Meyer et al. 2002; Loch et al. 2006; Miller and Hobbs 2009; Morris 2009; Winch 2009). Sanderson (2012) summarizes these authors as focusing on "the presence of incoherent, inappropriate or underdeveloped governance arrangements that are incapable of handling the risks, uncertainties and turbulence inevitably associated with these endeavours." The main distinction between the rent-seeking and governance explanations is explained as the former being concerned with how the deal was made and the latter on the inadequacy of governance frameworks to deal with unforeseen problems (2012). Finally, Sanderson's (2012) third heading can be viewed as approaching underperformance as arising from a divergent range of cultures and project rationales frequently at odds with one another (Alderman et al. 2005; Atkinson et al. 2006; Clegg et al. 2002; Pitsis et al. 2003; van Marrewijk et al. 2008). Here underperformance is viewed more as a product of "managers trying to cope with an organizational environment that is complex, ambiguous and often highly conflictual" (Sanderson 2012).

Why Governments Subsidize Arenas

Whereas the megaproject underperformance literature is generally concerned with cost and revenue underperformance, stadium related articles are more often focused on sports facilities as underperforming economic development subsidies. A strong literature exists indicating that stadiums and arenas do not positively impact conventional measures of economic growth in a city or metro area (see Baade 1996; Baade and Sanderson 1997; Noll and Zimbalist 1997; Quirk and Fort 1997; Swindell and Rosentraub 1997; Coates and Humphreys 1999; Siegfried and Zimbalist 2000; Fort 2006).

However governments might decide that an inner city facility has more utility than a less central alternative. This geographical redirection argument has both an economic and a social component. With the former, some argue that a centrally located stadium brings relative economic advantages (such as income gains) where two stadiums are present in a central business district (Nelson 2001), or that urban facilities induce longer and higher spending visits (Santo 2005). Others see a facility as a once in a region amenity opportunity best used as a mixed use neighborhood development anchor. Rosentraub argues that while sports are an insignificant influence on a regional economy, sports are unique in driving traffic to a geographic location, and if accompanied by enforceable commitments to real estate development, a facility can be a worthy public investment (Austrian and Rosentraub 2002; Rosentraub and Swindell 2009).

Building off this, each of the stadium, the club, and an entertainment district, can be viewed as a means to compete with alternative locations for firms and workers. This competition is both between metro areas for the scarce opportunity to host a club because of league monopolies, and between jurisdictions within the same metro area to direct facility and club impact to their particular corner of the region. Effectively, these are extensions of Tiebout-like (1956) competition between local governments and regions. For firms evaluating locations with talent in mind, the opportunity to access a professional sports team may influence decisions (Delaney and Eckstein 2006, 2007).

Local growth coalitions fronted by major local corporations, supported by media outlets, and aligned with prominent politicians, have been noted as influential in pushing politicians towards funding facility projects (2006, 2007). In addition to selling the stadium as a magnet for talent and redevelopment, these coalitions frame a bleak alternative if a deal is not reached, and spend heavily on ballot measures. This no deal alternative is typically made real by the monopoly scarcity of major league teams, and history of teams moving to resolve unsatisfactory stadium situations.

Additionally, this competition can induce a form of desperation impacting key actors' cost-benefit calculations. Sports represent a highly visible national representation, placing pressure on politicians to avoid losing a team (Zimbalist 1998, 23). Delaney and Eckstein (2007) outline that local growth coalitions have been more successful in places that have experienced economic declines (Cleveland, Cincinnati, and Pittsburgh), a notion supported by Euchner's (1994, 77) analysis of why cities fight to keep teams. The inverse of desperation also applies, in that cities without major league teams strive to attain or reclaim status, or at least parity with cities they see as their peers. In attempting to gain status striving cities may be willing to outbid others. In Oklahoma City and Memphis for example, arenas for relocated teams were completely paid for with public funds (Long 2010).

Delaney and Eckstein (2007) argue that growth coalitions go beyond traditional models of relocation threats extracting rents. Instead, elite coalitions are deeply embedded into local political culture and this element makes their efforts more effective. Evidence from Buist and Mason (2010) on newspaper framing and referendum results provides further support to the media advocacy element. For Delaney and Eckstein (2006, 2007), the success or failure in getting a stadium is in many respects a function of the strength or weakness of a local growth coalition. In Louisville, the local growth coalition serves as a crucial supplement to explaining the rent-seeking and cultural roots of underperformance.

TIF and STIF

A tax increment financing (TIF) project typically designates a geographic area within a taxing jurisdiction and sets a baseline tax level. Taxes below the baseline flow as before, while new revenues are allocated for projects in the geographic area. In many respects TIF has become the "most popular tool" for local economic development in America (Briffault 2016). TIF subsidies are intended to bring investment that would not happen as quickly or with the same fiscal benefit absent the subsidy. Thus TIF is supposedly diverting funds that would not otherwise exist. Since TIF only diverts revenues and does not entail a tax rate increase, the impact is less directly felt by taxpayers (Briffault 2016, 73-74). However, if the self-financing aspect is not actually present, taxpayers will be in a negative position relative to the alternative of no TIF project and rates may have to be raised as a consequence. In these instances where taxpayers are indirectly worse off, TIF can be seen a means of rent-seeking (Greenbaum and Landers 2009).

Although instances of TIF have been found in every state, as of 2015 STIF was limited to 16 states (Council of Development Finance 2015). There are multiple explanations for this. First, sales taxes most often flow to state governments. Where STIF is present, local governments have every incentive to capture locally created sales taxes as opposed to having taxes diffused at the state level (Mikesell 2001, 65-66). This is contrary to property TIF where increment is overwhelmingly diverted from local revenues. For STIF, the overlapping capture incentive is still present (Smith 2009, 722), but more directed towards state revenues than counties or school boards (Mikesell 2001, 57, 65-66).

Likewise, STIF helps detach the local incentive for capturing state revenue from the traditional TIF objective of alleviating blight. Without proper controls in STIF legislation, such as functionally restrictive blight and "but for" tests, local governments intent on sales tax capture will be incentivized to design zones to maximize increment (Mikesell 2001, 66-67; Smith 2009, 722). By definition, the most prospectively lucrative STIF districts are not likely to include blighted areas where redevelopment is a tough prospect, but will encompass places where retail development would already proceed (Mikesell 2001, 67). Yet STIF does have significant potential benefits (Mikesell 2001, 59). For instance, STIF revenues can greatly exceed the revenue potential from property TIF, meaning that STIF can retire bonds more quickly and allow projects to be larger in scope (Smith 2009, 719-720).

These benefits are clouded by major risks. Foremost is volatility (Smith 2009, 720-721). Regardless of tenancy, property values will not disappear overnight. With sales taxes however, amounts generated in any geographical area are hostage to the continued presence of sales tax generating trade–the same building that may suffer a slight assessment decline will cause a more significant hole in sales tax revenues if retail tenants leave the TIF boundaries without replacement (Mikesell 2001, 66). Thus a STIF project with construction and retail tenant gains can be financially undermined by a major business departure. When a district is over inclusive, revenues legitimately spurred by the TIF funded project may be undermined by departures at the distant edges. This is compounded by STIF's exposure to recessions (Smith 2009, 720). Consumption driven revenues are among the first tax streams to experience negative recession impacts

(Chapman and Gorina 2012, 198). If STIF projections assume linear growth based on historical results, they are susceptible to normal economic downturns.

Methods

The primary research question is how did such a flawed revenue structure emerge in Louisville? Using a retrospective, single case study method (in the framework of Thomas 2011, 517), this article evaluates the Yum! Center project through three representative lenses corresponding to each of the previously listed theoretical headings in the megaproject literature. From this exploration of a key case, the study aims to add new perspective to this literature that can be instructive to the understanding of similar projects.

Data is synthesized using a snowball technique from sources under three broad categories: the LAA, government, and media. The first focuses on the original 2008 bond prospectus, the 2017 refinance prospectus, the loan agreement, audited LAA financial statements, LAA meeting minutes between 2006 and 2017, as well as ancillary contracts (such as lease and management agreements). Of particular note, the 2008 prospectus includes detailed cash flow projection consulting reports from Leib Advisors, as well as state TIF projections and methodology.

The initial LAA review described government documents of potential relevance which were then located through search engines and directly on government sites. These searches revealed further sources for the media review. The media review consists of press releases, interviews, editorials, and general reporting, with a focus on public statements from prominent actors. Sources were found through combinations of over 30 search terms until new and relevant results were exhausted. Media sources filled the place of traditional interviews, with the benefit of being able to identify the contemporaneous comments of key actors and local media.

The Arena Deal

In a city with no major league team, the Cardinals are the closest alternative. Building the University's reputation through basketball success, Athletic Director Tom Jurich was able to intertwine the University of Louisville Athletic Association (ULAA) with the local growth coalition. Surrounded by comparably sized cities with professional sports however (Indianapolis, Nashville, Cincinnati, and Columbus), many in this power elite–including "mayor for life" Democrat Jerry Abramson–aspired to more, and saw a model for downtown revitalization and image transformation in Nashville's arena project (Nocera et al. 2017).

After losing the Grizzlies to Memphis and a prospective Houston Rockets relocation largely due to the absence of an adequate arena, this aspirational local growth coalition set its sights on the Charlotte Hornets (Nocera et al. 2017; Poynter 2000). By 2003 a non binding agreement was reached to relocate the Hornets to a new downtown arena shared with the Cardinals. Despite Louisville being a prime relocation candidate (Rascher and Rascher 2004), Jurich and influential coach Rick Pitino wanted no part of sharing an arena or market, leading NBA Commissioner David Stern to question "if Rick Pitino doesn't want us there, why are we going there?" (Nocera et al. 2017).

Undeterred, the local growth coalition continued pursuing arena driven downtown development, this time financially premised on the arena hosting the Cardinals with the possibility of a future NBA tenant. However the ULAA, favoring a campus site, had no interest in Mayor Abramson's preferred location adjacent to the convention center (Crawford 2017). In April 2005 detailed proposals emerged for a campus arena supported by the ULAA, Republican Governor Ernie Fletcher, and the Kentucky State Fair Board (KSFB). However Metro politicians pushed back and refused to consider funding the campus site. This stalemate ensued until the Courier-

Journal's publisher proposed a riverfront site occupied by a power substation and near the proposed 62 story Museum Plaza project (Crawford 2017).

Later that month Governor Fletcher appointed the Louisville Arena Task Force, mostly consisting of representatives from business, political, institutional, and University interests (including Athletic Director Jurich) (Louisville Business First 2005). Effectively headed by sport business dealmaker and then state Commerce Secretary Jim Host, the Task Force eventually voted 16-1 for the riverfront site, citing greater economic development benefits than the alternate downtown locale (LEO Weekly 2006a). With lowest common denominator support from the Governor, Mayor, ULAA, the primary local newspaper, and major Louisville businesses, a formidable coalition was assembled for the riverfront site (LEO Weekly 2006b).

The lone Task Force dissenter however, pizza mogul "Papa John" Schnatter, was concerned with transparency, that the number of events required for debt service was severely underestimated by Host (who, as put by a local newsmagazine in 2006, played "fast and loose with the facts") and that the arena cost was a "fictitious number" (Kahne 2016; LEO Weekly 2006a). Schnatter claimed the Task Force was a "waste of time" and "rigged for the [riverfront] site" (Courier-Journal 2005; Kahne 2016; Wolfson 2013). Papa John was joined in skepticism by Humana co-founder David Jones, who alleged that that he passed on information about alternatives to Governor Fletcher, Mayor Abramson, and Host, "and nothing happened" (LEO Weekly 2006a).

After the Governor's office confirmed months later that the Task Force cost estimates were $50 million too low, Schnatter and Jones funded a comparison study between the two downtown sites (LEO Weekly 2006a). Concluding that a substantially similar arena would cost $114 million more at the riverfront, the study made Schnatter, Jones, and some skeptical politicians fodder for the Courier-Journal (LEO Weekly 2006a). Coach Pitino piled on further, telling a local television station that “everybody should be united because Louisville is not playing at the other site” (Platt 2006). By June 2006, Schnatter and Jones publicly “surrendered” in a letter to council, outlining that “[w]hile we think the arena plan as currently proposed remains very risky, we feel we have fulfilled our promise to the community of providing the decision makers with all the relevant facts before they have to decide” (LEO Weekly 2006d).

However, the decision was already made. At a March 2006 “Louisville Arena Unity Rally” Fletcher outlined that “[t]here's been a lot of speculation about where the arena should be located. But at the end of the day the arena will be built at the riverfront site. End of story” (Governor Ernie Fletcher’s Communication Office 2006). The arena was an electoral opportunity for Fletcher in populous Jefferson County, and a chance to flip the switch from a major hiring scandal that led to a 2006 indictment (LEO Weekly 2006b; Urbana 2006; Wolfson 2013). With a $75 million state grant to cover land costs signed into law, and a TIF agreement accompanying the Metro yearly payment commitment, the arena could proceed under the auspices of the LAA. Chaired by Jim Host, now labelled “easily the most powerful non-elected official in the state,” (LEO 2006d) the LAA was delegated responsibility for site acquisition and preparation, construction, arena operations, lease negotiation, and debt repayment.

Arena Finance and Revenues

The arena was primarily financed through a $349 million bond issue by the Kentucky Economic Development Finance Authority (KEDFA) (KEDFA 2008, 1-2), which loaned the proceeds to the LAA (KEDFA 2008, 2). The issue included almost $27 million in capital appreciation bonds, frequently used to defer larger payments until revenues can grow. The bonds closed on September 3, 2008, with Host bragging about sealing the deal despite predicting that “I think the markets are going to come unglued after Labor Day” (Sonka 2013).

The ULAA signed a lease through 2044 to become the primary tenant (KEDFA 2008, 3) and was granted priority from October to the end of basketball season, meaning that less attended Louisville teams could block major concert tours. Management was contracted to the KSFB, but the KSFB was replaced by AEG (the world's largest owner of sports teams and events, and second largest presenter of live music) in 2012 (LAA 2012).

Arena debt was to be repaid by three roughly equal sources: yearly payments from Metro Louisville, TIF revenues, and arena operations (see KEDFA 2008, Summary of Flow of Funds). Metro payments were intended to cover shortfalls and scheduled to run from 2010 through 2039 (KEDFA 2008, 6). Minimum payments ranged from \$6.5–6.8 million, and the maximums from \$9.5–10.3 million (KEDFA 2008, 6). The lease divided arena revenues into Category A and B, the former "Contractually Obligated Income" and the latter "Other Operating Income" (KEDFA 2008, 35-39). Category A included naming rights, corporate sponsorship, and premium seating (club seats and luxury boxes), while other revenues generally fell into Category B. "A" revenues were committed directly to debt service and "B" revenues were first applied to operational expenses with the remainder diverted to debt coverage (with priority over additional payments from Metro Louisville).

Kentucky Fried TIF

Kentucky was a latecomer to TIF, with the 2000 pilot program introduced to fund megaprojects in Louisville (Parsons). The Yum! Center was one of two pilot projects (Think Kentucky 2016). Under the pilot, up to 80% (the Yum! Center used the full 80%) of all incremental property, sales, and income taxes for 20 years in a designated TIF area was available under contracts between the state ("acting by and through the Governor") and a development authority (KRS 2006, §65.490-

95). Of particular note is the governor's exclusive power to enter into TIF contracts with no further legislative authorization required (KRS 2006, §65.495).

As the pilot was primarily intended for projects in the Democrat stronghold of Louisville–formally limiting TIF to "first class" cities with populations over 100,000–one potential explanation for this design was as a hedge against a Republican controlled state senate from killing future projects under Democrat governors. At the time of the TIF pilot Democrats had controlled the governor's mansion since 1972 and had held almost 65% or more of the state house since the 1920s, but Republicans possessed a narrow senate majority. Leaving control with the governor and only needing a few Republican votes for initial passage could have been viewed by Democrats as a safer way to ensure the program's continued availability to divert state sales taxes to Democrat leaning areas.

The original TIF district extended six square miles south from the arena, encompassing almost all of downtown Louisville (OSBD 2008, 1). Baselines and projections were created for the three taxation categories: property, sales, and employment withholding (OSBD 2008, 10). A 1.9% inflation multiplier was applied for property and sales taxes from the 2005 baseline year (OSBD 2008, 9), ostensibly so increment was closer to reflecting new growth instead of inflation. Two forms of modeling were applied with sales taxes. First, the zone was divided into three districts based on proximity to the arena, assuming that "sporting arenas have a gravitational economic impact inversely proportional to the distance from the Arena" (OSBD 2008, 7). Establishments were then categorized by use–those associated with event demand were assumed to experience larger incremental gains. A further assumption was made that economic development close to the arena would see sales tax growth rates for arena complimentary businesses of 7%, above the 6.3% compound annual statewide 20 year growth rate (Leib 2008, 158). Non event related businesses were estimated to see gains below this statewide average. The percentage reductions for the second 10 year period were lessened "to accommodate the empirical observation that the excitement of a new sporting arena tends to dissipate after a number of years as the facility takes on age" (Leib 2008, 158). However, the state's hypothetical STIF calculation showed that a real growth rate of 5.66% was only 3.69% once the 1.9% inflation multiplier was applied (OSBD 2008, 9).

Still, $531 million was expected to be collected over the TIF lifespan, with $486 million from sales taxes and $44 million from property assessments (OSBD 2008, 10). These steady projections were assumed despite reports upon which the numbers were grounded showing considerable variance (Leib 2007, 158). This variance was made more troublesome due to the selection of 1990 as the baseline year, meaning that the 27% increase between 1990 and 1991 was included in the compound annual change rate. As highlighted by the 2017 state audit, this increase can be mostly explained by the 1% sales tax rate increase in 1990 as opposed to economic growth between 1990 and 1991 (Weber 2017).

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Although the basis for the projections at the time may have been defensible (or designed to be so), performance has reflected historical variance and there has been a massive shortfall in TIF revenues since the first year of increment, 2010. At the heart of this failure, consistent with the literature, has been the conceptualization of STIF projections. With property taxes, regardless of occupancy land and improvements will maintain some assessed value that will not immediately leave the TIF zone. However with sales taxes, a business can depart for whatever reason. While in a healthy market there is an expectation of replacement, Louisville's downtown has been plagued by storefront vacancies, including near the arena (Boyd 2014). Even if there is growth in other places, the removal of sales tax revenue does not necessarily alter the baseline value down–rather it creates a deficit that incremental increases will have difficulty making up.

The risk of business departure is heightened by the possibility of recession or low growth years. In a recession, revenues would lose years of assumed positive compounding that later years would struggle to make up. Further, a severe recession in the zone's early years (which occurred in 2008-2009) could reduce revenues well below the baseline. This combination of business departure and major recession is why Louisville TIF revenues are wildly off from projections. Indeed public officials have cited departing businesses miles away from the arena as costing "several million dollars in cash flow" (Robinson 2013). While the projections contemplated new businesses on vacant properties, the methods did not anticipate retail loss without replacement (OSBD 2008, 9).

In pursuit of a solution the TIF baseline and zone boundaries were adjusted. After 2009 saw an 8% reduction in sales tax revenues, the state lowered the baseline and outlined that the 1.9% inflation adjustment would only apply in years where a minimum ratio of 1.3 times debt coverage was achieved–a ratio not met in any year to date (Reuters 2012). The revenue maximization analysis then reduced the TIF zone from six to two square miles to exclude areas with less expected growth. Since this 2011 formula change and 2013 zone redraw, increment results came closer to projections, but significant gaps persisted (KEDFA 2017).

Lease Outcomes

Major TIF underperformance has been accompanied by event revenues failing to meet projections, while Louisville saw its revenues surge beyond any other college basketball program

(Sonka 2016). This contrast has largely arisen from a lease that sees the ULAA only paying 10% of gross receipts and 12% of premium seating revenues in rent, while the LAA is responsible for event expenses (KEDFA 2008, 29-31). Yet these revenues have not been the principal issue–although consistently failing to meet projections, “A” underperformance has still seen revenues in the 80–95% range of expectations. The five year average “A” revenue shortfall of 13% has translated into $4.3 million and 28% of the combined gross event underperformance.

With Category B (other operational income) however, the gap between projections and reality has been more severe. This difference can be largely accounted for by the net nature of Category B–any “B” revenues are first applied to operating expenses, so this category is vulnerable to both underperformance and cost overruns. Once the arena opened, the KSFB experienced operating expenses well beyond projections combined with softer event revenues. After the KSFB was replaced by AEG in 2012 (LAA 2012), a 2013 uptick quickly reverted to underperformance. In fact, after 2013 net “B” revenues have largely mirrored the guaranteed profits AEG has committed to the LAA under its management agreement (LAA 2012, 5).

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Category B revenues have seen an almost 60% shortfall. But for the minimum guaranteed net operating profit in AEG’s contract, the outcome may well have been worse (LAA statements report the final number *after* AEG’s minimum payment is applied). For the ULAA however, the combination of rent payments amounting to only 10% of non premium gross and 88% retention of premium seating revenues (LAA 2008, 17-19), allowed its basketball team to become the NCAA’s most profitable by a considerable margin (Sonka 2016). Effectively the ULAA, a non profit public entity, has filled the role of a rent-seeking professional club extracting the upside of a new venue while being shielded from risk.

However, a lease with a more equitable division of revenues or residual protection to allow ULAA windfalls to be shared with the LAA in the event of distress, was not a likely outcome. With only one possibility for a primary tenant to make the arena feasible "[Athletic Director] Jurich took advantage of a city that was willing to do anything to get a downtown arena" (Nocera et al. 2017) and exercised bargaining power typically associated with monopoly-scarce professional teams (Baade and Dye 1988; Coates and Humphreys 2000).

A Flawed Deal

Combined with continued far weaker than expected event revenues despite a change in management, the LAA chairman publicly outlined in 2016 that debt obligations may not be covered as soon as 2020 (Green 2016). Although Metro Louisville was responsible for roughly $3 million per year beyond its minimum payment to cover shortfalls, after this the $15 million reserve fund was all that remained between a default (Leib 2008, 28). Tapping the reserves was already once avoided through $5 million in debt forgiveness by the KSFB that was due under the original management contract's termination clause (Boyd 2013).

On the other hand, Louisville men's basketball saw its net revenues greatly exceed those of other top NCAA basketball programs since moving downtown (Sonka 2016). This prompted strong bipartisan criticism, with a Republican state senator commenting: "[y]ou open an arena, and the athletic association sees an annual increase of $15 million in revenue. The taxpayers are being fleeced, period" (Weber 2017). A Democrat colleague agreed: "[i]t's scandalous how much they are taking away" (Weber 2017). Responding to public pressure, the ULAA floated building its own campus arena (Mason 2016), but this was implausible with the basketball program committed to the Yum! Center through 2044 and being hard pressed to create a better financial reality.

In March 2017, a legislative solution emerged with a TIF zone extension through 2054 (Sonka 2017). Eventually Metro Louisville committed to paying $10.8 million annually regardless of revenues, and the ULAA agreed to increase its yearly payments by $2.42 million (KEDFA 2017), setting the stage for refinancing. Despite a major scandal and FBI investigation into the Cardinals leading to the ouster of Athletic Director Jurich and Coach Petino, which was viewed as a threat to event revenues, the new bonds received significantly improved ratings (Bailey 2017).

Explaining the House of Cards

The Yum! Center is not an isolated instance of an underperforming megaproject. This section evaluates the Louisville case through three explanatory lenses, each a particularly appropriate representation of the theoretical headings in the megaproject literature: rent-seeking, failed governance structures, and project culture.

Rent-seeking and Optimism Bias

Representative of works from Flyvbjerg and collaborators explaining underperformance from a rent-seeking perspective, this section focuses on “Delusion and Deception” (Flyvbjerg et al. 2009). These models understand forecasting errors in megaprojects as a combination of over optimism and strategic misrepresentation (2009, 5).

Delusion: The Planning Fallacy and Anchoring

Flyvbjerg et al. (2009, 5) argue that decision makers too often succumb to the planning fallacy, meaning that estimates are biased towards optimism over realism. Anchoring–where the first estimate becomes a reference point from which insufficient adjustments are made–compounds this issue (2009, 8). We see examples of both in Louisville. The underperformance of TIF has only been exceeded by the failure of event revenues to produce any revenue for debt service beyond that guaranteed by the new facility management contract (LAA Financial Statements

2011-2015). Likewise, the linear projection of sales taxes based on historical averages did not properly account for the possibility of recession or business movement, despite the consultant's report explicitly noting significant variance (Leib 2007, 158).

When it became clear that both TIF and event revenues were nowhere near projections, adjustments did not adequately correct the situation. For instance, upon the management switch to AEG, Metro Council President and LAA Board member Jim King commented: "I don't think there is any question that there will be more events and more concerts and more dates here because we have set up a model where the operator of the arena has incentive to accomplish that. They make more money if we make more money and that's the way it should have been set up to begin with." Despite this optimism and AEG's record of turning losing buildings (such as London's O2 Arena) into winners, event revenues have not sufficiently changed (LAA Financial Statements, 2011-2015).

While the 2013 TIF readjustment reduced the deviation of forecast from reality, there remained a roughly 40% gap (from the 45% to 85% previously experienced). Yet after the supposed fix, King suspected bond rating agencies would "like what they see with the new TIF numbers" as revenues were "going up on a pretty strong basis" and that growth was more than enough to cover escalating payments (Kitchen 2014). King also expected to reduce the Louisville yearly payment below the maximum, and that a new financial forecast "show[ed] no problems with cash flow out into the future" (Kitchen 2014). The same year Host expressed that there was no financial danger: "the operational side is fixed and the TIF district is fixed." A local reporter summarized: "[then LAA Chairman] Hayes and King have admitted that the original arena financing plan was not well thought out and did not provide incentive to maximize revenues. Yet they are both confident things will get better by making minor tweaks to the management of the arena while hoping for the best with regards to TIF revenues" (Stahmer 2012). Within three years the arena was headed towards default.

Deception: Strategic Misrepresentation and Agency Problems

Strategic misrepresentation arises through divergent incentive structures leading to risk minimization and upside inflation (Flyvbjerg et al. 2009, 6). In megaprojects, a second tier agency problem complicates matters with local governments conflicted by the duty to propose value for money and incentives to capture scarce state resources that may go elsewhere (2009, 12). This issue can be compounded by asymmetric information, differences in risk perception, and accountability diffusion (2009, 14).

In Louisville, STIF was a volatile means of debt coverage, but without the arena the taxes may have been diverted from the region. State TIF allowed the project to be sold locally as requiring no new taxes and to the state (in the words of Mayor Abramson) as being "generated by the folks who use the facility and the surrounding property owners where jobs are created and the appreciation for taxes will occur" (McArthur). Louisville leaders had the incentive to believe that the project could be both efficient and beneficial with safeguards sufficient to mitigate major risks. Secondary parties (consultants, professionals, and bureaucrats) benefitting from the project process (Flyvbjerg et al. 2009, 13) were able to help frame deal structures in sufficiently safe terms for decision makers, despite red flags.

The powerful elite coalition, covered by the Task Force recommendation, was able to prevail over dissent. The then Lt. Governor and formal Task Force chair framed the project as having "…scientifically chosen a site that will continue to pay the city and the state cultural and economic dividends for decades. The time has come to stop debating and start building the arena" (Governor Ernie Fletcher's Communication Office 2006). He was supported by Mayor

Abramson commenting that "[i]t's the best investment because it will serve as a catalyst that will spark private investment…It isn't the cheapest choice, but it is the best choice" (2006).

Governance and Risk Management

Alternatively, the failings of the Yum! Center can be explained through the inability of a governance structure to manage risk profiles. Providing an apt lens for evaluating Louisville, De Meyer et al. (2002) categorize project uncertainty in four ways: variation, foreseen, unforeseen, and chaos. The TIF and arena revenue problems in Louisville could feasibly be placed under the headings of "foreseen" or "unforeseen". Foreseen uncertainties are viewed as identifiable, but possibly requiring "full-blown risk management with several alternative plans." Unforeseen risks are those that cannot be "identified during project planning" including "spectacular out-of-the-blue events". De Meyer et al. (2002, 63) contend that both sets of risks can be dealt with through decision trees.

With event revenues, the primary problem came from the arena being more costly to operate than expected. This fits better as a foreseeable risk. With TIF revenues, the applicability of foreseen or unforeseen largely turns on whether the Great Recession was a foreseeable event. While the extent of this recession was unforeseen, recessions are a normal part of the economic cycle. If when the bonds were being closed on, indicators such as the housing bubble bursting and that the LAA was having trouble selling the bonds due to credit market turmoil should have been cause for decision makers to take a step back on a project where revenues were reliant on linear consumer spending growth, a degree of foreseen risk analysis may be appropriate.

The prescription for foreseen uncertainty is anticipation of alternative paths and contingency planning, then triggering contingencies when risks materialize and motivating stakeholders to deal with changes (De Meyer et al. 2002, 63-64). In Louisville, the primary contingency was the supplemental Metro payment. Beyond this and a $15 million reserve fund, there was no contingency for recession impacting TIF or event performance, and little appetite from stakeholders to contribute more when large shortfalls arose. The governance structure did not specify what happened if revenue holes emerged larger than the Metro supplemental payment and reserve fund capacity, and the LAA lacked the ability to motivate the three key stakeholders to cover the shortfalls until the bonds faced obvious default. While there was default insurance, the state (the party of the three with the most to lose in a default) blinked and used its powers over a public university to force the ULAA to also contribute more.

However the scope of impact beyond a "normal" range recession and the Great Recession can be viewed as an unforeseen risk. De Meyer et al. (2002, 63-65) propose that managers can still add new contingencies and mobilize new partners, while using "flexible relationships" with existing stakeholders to "develop mutually beneficial dependencies." To this end, the LAA can be seen as implementing new contingencies through TIF zone and baseline tinkering. Beyond these relatively minor concessions from the state, the LAA did not have the capacity to bring about sufficient change as there was no other contractual contingency. Nor were there relationships with the ULAA that could overcome its entrenched refusal to contribute more of its record revenues. Instead of softening up resistance, these efforts saw the ULAA threaten moving to a campus arena.

Many of the problems faced in Louisville could have been mitigated if the original contracts spelled out who would pay what in the event of a structural shortfall larger than the maximum Metro payment. While the extent of the TIF hole created by the Great Recession can be viewed as an unforeseen risk, much of the deficit (what a "normal" recession and scope of arena underperformance could have expected to impact) can be attributed to foreseeable risks.

The absence of better contingencies is a clear governance failure, if not a direct explanation of how such a bad deal emerged in the first place.

Project Culture

A third lens comes from the project culture literature. As an explicit rebuke to Flyvbjerg's concepts, this subsection evaluates alternatives offered by van Marrewijk et al. (2008). Specifically, these authors contend that megaproject performance can be better explained by project design and culture "determining how managers and partners cooperate to achieve project objectives to a greater or lesser extent" (591). Van Marrewijk et al. collect data from interviews, observations, and transcript review for cases with "high uncertainty, ambiguity and complexity," in order to evaluate five "issues of social construction": "(1) basic project orientations, (2) social interaction, (3) dominant paradoxes between the players, (4) how these configurations were structured and disciplined via power-related connections, and lastly, (5) the way knowledge was distributed between partners" (593).

In Louisville, the evolutionary deal-making process framed the basic project orientation. The initial social interaction was dominated by a largely cooperative local growth coalition, where early resistance from the ULAA was overcome and the construction phase proceeded without notable conflict or overrun. This first phase was seemingly smoothly overseen by the LAA, itself a melding of state and local interests directed by a dominant player in the initial social interaction, Jim Host. Despite delivering during construction, once event and TIF revenues massively underperformed, the dominant paradox became how to close revenue gaps that the original contractual structure proved inadequate in solving.

Power relations then became ruled by a combination of hoping revenues would improve, while stakeholder parties (and new politicians) did not want to be held individually responsible for shortfalls. This moved the LAA from being a cooperative melding of growth coalition actors to being powerless to force its constituent parts to sufficiently rectify the revenue holes. While the LAA was able to work with stakeholders to implement stopgap measures such as the TIF zone adjustment and management change, it was ineffective in bringing substantial financial amendments that would directly burden Kentucky, Metro, or the ULAA. Instead, it took the near term prospect of bond default for the state to step in and force concessions that appear to have finally solved revenue gaps.

With knowledge distribution, van Marrewijk et al. argue that the presence or absence of such distribution and organizational harmony between partners is a key attribute of success or failure. This heading shares some common ground with the Flyvbjerg concepts of agency problems and information asymmetry. The difference arises with intent: Flyvbjerg believes that these problems stem from strategic misrepresentation and van Marrewijk et al. blame less sinister roots. Seen from the latter perspective, while key actors were savvy enough to take lessons from past construction failures and place delivery underperformance at the risk of contractors, this being a pilot TIF project, there was little local experience to draw upon that could have highlighted issues with heavy STIF reliance.

More generally, the van Marrewijk et al. lens is useful in adding color to why over optimism could take root as well as the inability of the governance structure to force sufficient correction. In the smooth early phases, the growth coalition got along well as there was no major financial threat to any party's interests. When things went wrong, the LAA managers were unable to correct the financial structure because the governance structure did not have built in levers to do so, and the constituent parts did not want to bear the cost. Instead, the LAA was left rearranging deck chairs by tinkering with TIF geography or firing arena managers. Perhaps a more compromising, realistic, and resilient project culture could have allowed revenue problems to be more expediently solved without formal governance provisions detailing contingencies, but new money would have come from someone.

What Best Explains the Yum! Center?

When returning to the core question of how such a flawed structure arose, project culture is a more viable explanation to the extent that the growth coalition was driven by the need to build the arena. While van Marrewijk et al. (2008, 592-593) agree that "getting megaprojects off the ground and keeping them going…presents ample opportunity for…the organisation of hypocrisy," they argue that this stops short of the systematic misrepresentation and underestimation of risks proposed by Flyvbjerg. Instead van Marrewijk et al. emphasize that "practical rationalities and practices of the players whose projects are at stake, need to be considered and analysed in the context of their project designs and project cultures" (599). This said, although case specifics matter, megaprojects commonly share over optimistic projections as well as unaccounted risks.

There are also instances where strategic misrepresentation manifests. In Louisville, a state audit underlines the extent to which public officials now believe deception to have been present. Examining "unrealistic" TIF projections, the state auditor explained that "[w]hen they were beginning to set those TIF boundaries, they looked at 10 years of property tax and looked at 16 years of sales tax, and of course sales tax makes up the primary amount of the TIF, and during that year 1990, 1991, that included a 1% increase, which was adopted, so that kind of skewed the numbers" (Weber 2017). Yet this was not a sole instance of questionable numbers–years earlier, Metro Council President and LAA board member Jim King admitted that the arena maintenance fund "is just an arbitrary number that was picked and no one ever did the math and said, 'This is what we're going to need to do and this is what we're going to need to repair.' It was just a nice round number that was picked" (Stahmer 2012).

For the state legislature, Louisville's theoretical shortfall responsibility reduced the incentive to ensure that the projections were accurate. More deviously, Governor Fletcher wanted an arena to help with a tough election fight (Fletcher ultimately lost by 20 points in 2007) (Wolfson 2013) and TIF was a revenue source controlled completely by Fletcher. Without the need for further legislative approval, the Governor controlled each of whether the state entered into a TIF contract, the creation of the other contracting party (the LAA), as well as who would run the other contracting party (Jim Host). The $75 million state grant for site preparation, which required new legislative approval, was likely far more politically palatable than a grant for the entire state TIF contribution plus potential further liability for underperformance.

Agency issues persisted in the operational phase. The state audit outlined that "operational analysis is based on the [LAA]'s reliance on information from parties that have a vested interest in maintaining their contracts" (Finley 2017). Elaborating before the Capital Projects and Bond Oversight Committee, the state auditor highlighted the development of asymmetric information and accountability concerns arising from the LAA's lack of internal controls: "Other than its board of directors for whom this is not a full-time job, all functions of the arena, including management, are outsourced. This had led to a web of contracts, and some revenue generated by the arena is not reported to the authority" (Weber 2017).

After hearing from the state auditor, a state senator outlined "[i]t's [the Capital Projects and Bond Oversight Committee's] belief when this project was initiated, the intent was you make the numbers look appropriate to pass what we need to pass to put this arena here. There was manipulation of data, in historical tax data, to get us to the point and I think it was simply intended to get the arena built and punt on the payments of it" (Weber 2017). Another committee member added "[t]he original projections were made just to get the deal done - taxpayer be damned. They understood the bonds would default but they didn't care. They knew that once the YUM! Center was built, taxpayers would be forced by legislators and Metro Council to bail it out or there'd [b]e a massive scar in the middle of the state's marquee city" (Moffett 2017).

While van Marrewijk et al. (2008, 599) may explain this as "post hoc moral outrage," the sales tax manipulation is a compelling indicator of strategic misrepresentation. To the extent project culture mattered, it may have been that the local growth coalition was too eager to get the deal sealed considering the history of lost opportunities. This dominant culture allowed a certain amount of deception to take advantage of actors primed to succumb to over optimism through their willingness to close a deal and lack of experience with TIF. The result was a deal with an absence of governance controls that could address the lurking flaws before a near default prompted state action. Thus, the culture perspective provides context to key governance failures in a project that more broadly fits rent-seeking models.

Conclusion

This article has documented the performance failings of the Yum! Center in Louisville, which have been most pronounced in STIF and lease revenues, with the objective of explaining how such a deal arose in the first place. Whereas the literature concerning public subsidization of sports facilities focuses on economic impact underperformance or cost overruns, Louisville provides one of the most extreme instances in recent decades where revenue bond repayment streams for a sports facility have failed and led to a public bailout. This failure links the arena to a wider literature on megaproject underperformance, characterized by three primary threads: rent-seeking, inadequate governance structures, and project culture. Although in many respects the arena's problems can be explained through rent-seeking and governance failure, understanding the local growth coalition provides important cultural context. More specifically, the Yum! Center debacle demonstrates the presence of optimism bias in deal design and revenue projections, incidences of strategic misrepresentation and agency issues, as well as the failure to identify and manage risks through formal governance or informal relationship structures.

The process leading to severe revenue underperformance has made the Yum! Center the source of two primary lessons for future stadia and megaprojects. First, local growth coalitions can strategically misrepresent risks and succumb to over optimistic projections, making projects vulnerable to failure from the outset. In order to craft politically saleable projects and bring on necessary partners, rent-seeking behavior can create governance structures unable to survive foreseen and unforeseen turbulence. Second, the Louisville project is a reminder of STIF volatility relative to property based TIF due to STIF's vulnerability to business movement and recession. Although STIF may tempt governments with high revenues, Louisville shows that reliance on STIF should serve as a major warning sign in projects where the financial stakes of failure are high.

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