

TENNESSEE MUSIC CLUSTER



Microeconomics of Competitiveness

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1. Executive Summary

The United States economy continues to struggle following the global financial crisis of 2008.

Falling GDP coupled with near double-digit unemployment rates have crippled the country's economic performance; yet, barriers to long-term recovery and sustained competitiveness are much structural and institutionalized in nature. Political gridlock has hindered efforts toward substantive progress and improvement on critical issues including: the inefficiency of the government itself, a needed overhaul of the tax code to address longer-term fiscal issues, a restructuring of the healthcare system to mitigate relentlessly rising costs, and a public debt level which has reached unsustainable heights. These factors, in addition to other fundamental shortcomings, are contributing to the underperformance of the U.S. on a global competitiveness scale.

Tennessee has suffered along with the rest of the United States during the recession and has inherited many of the structural and systemic problems that are reflected on a national scale. Historically a hub of agriculture and trade, Tennessee now lags the nation by a wide margin on average incomes, productivity, and economic growth. Significant gaps in the state competitiveness diamond, especially in factor conditions, are responsible for Tennessee's current economic challenges. Measures being adopted by the current administration to revitalize the state are steps in the right direction, but their success depends on a consistent and relentless commitment to reform.

To date, Nashville and its music industry have successfully avoided the downward trend facing many of Tennessee's clusters. By investing in infrastructure and positioning itself as a location of choice for recorded music and live performances – the two bookends of the music value chain – Nashville has thus far shielded itself from the tectonic shifts taking place in the music industry. In spite of these short-term successes, significant challenges to Nashville's music cluster remain in the medium to long term. Among the most significant of these challenges are the digital revolution in recorded music, the relative lack of strong statistical tracking of the cluster's components, and the competition from other forms of

entertainment for the consumer's time and financial resources. To confront these challenges and successfully grow the cluster, stakeholders must undertake a number of reforms, beginning with those targeting the development of new, adjacent clusters positioned to thrive in the digital age, as well as reforms providing for improved tracking of cluster performance.

2. U.S. Economy Overview

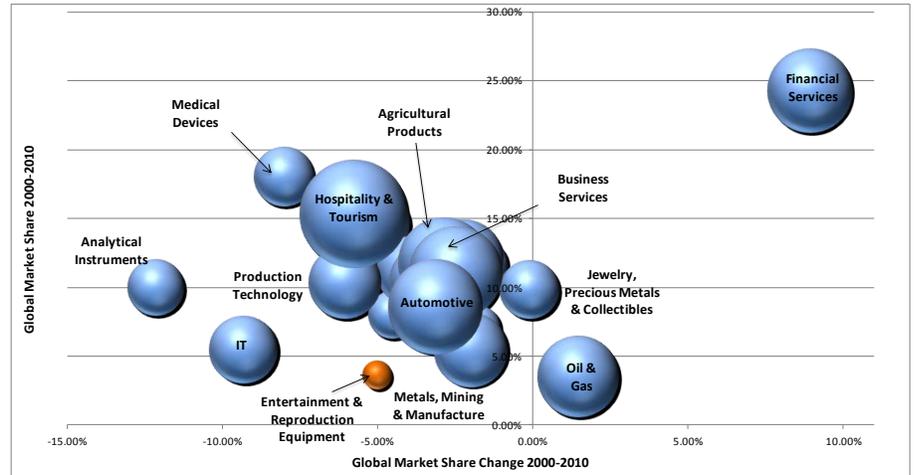
The Tennessee music cluster operates in the context of the broader United States economy. Over the past five years, the U.S. economy has been tumultuous as a consequence of the global recession, resulting in a contraction of GDP in excess of 4% year-over-year (Economist Intelligence Unit 2012). The contraction, coupled with high unemployment, which at times exceeded 9% (Economist Intelligence Unit 2012), has crippled the already weak American competitiveness position.

Before the financial crisis, GDP growth averaged ~3% for much of the 1990s and 2000s. Since the crisis, however, economists are predicting much lower levels of growth (~2%) through 2016. A slower projected growth rate is the result not only of the most recent financial recession, but of the disadvantaged U.S. competitive position that has developed over the past few decades. The greatest threats to competitiveness are structural and may over time hinder the country's ability to sustain growth and increase productivity (Porter and Rivkin 2012). One of the most fundamental challenges facing the United States is that the government institutions are highly inefficient and polarized along political party lines. The country's flailing macroeconomic policies, and the institutional acceptance of crippling levels of debt, which have reached levels not experienced since WWII (on a percentage-of-GDP basis), are by-products of systemic inefficiencies. Contributing to this issue is the fact that healthcare costs are increasing exponentially. The U.S. government has been complicit in allowing the costs to bloat by increasing healthcare spending without resolving fundamental causes of the healthcare system's inefficiencies, such as the lack of accountability on the parts of the U.S. population, the healthcare

insurance industry, and physicians alike, as well as the tort law system. Finally, the capabilities and efficiency of American workers are eroding relative to other countries. Deteriorating quality of primary, secondary, and vocational education exacerbate the situation.

These structural weaknesses and systemic inefficiencies, along with others, explain the loss of competitiveness over the decade from 2000-2010, during which

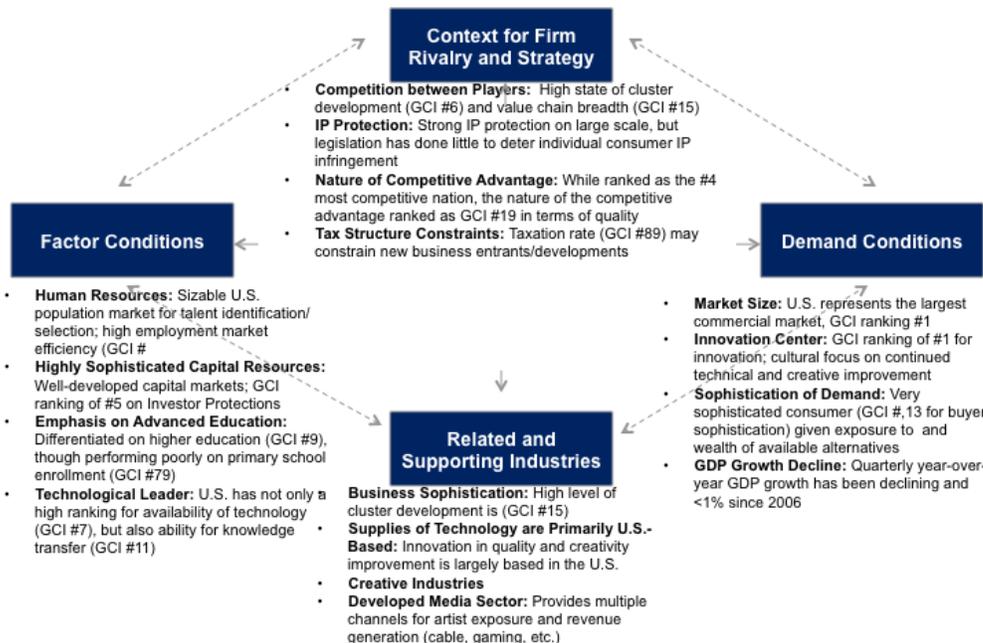
Figure 1: United States Export Portfolio by Cluster (Institute for Strategy & Competitiveness, 2012)



the country lost share in most of its largest industries. The wider entertainment cluster, of which the Nashville music cluster is a part, currently generates \$8.8T per annum with a 4% market share, and has declined 5% over the decade (Institute for Strategy and Competitiveness 2012).

While the United States continues to be a compelling location in which to do business given its high

Figure 2: United States National Diamond



level of innovation, market size, and sophisticated demand (Schwab 2010), the challenges that the country currently faces are unprecedented. In order to regain prominence on the global stage, the U.S. must address the fundamental

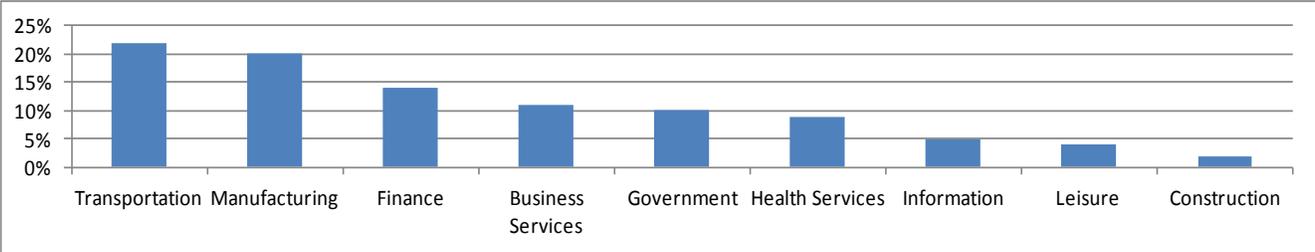
structural challenges that underlie its current growth and productivity decline.

3. Tennessee and Nashville: The State and City’s Competitive Positions

Tennessee is a state in the southeastern-central United States. Bordered by the Mississippi River to the West, the state of Kentucky to the North, the Blue Ridge Mountains to the East, and Mississippi, Alabama, and Georgia to the south, the state is richly endowed with rivers: the Tennessee River and the Cumberland River, which connects to the Mississippi and the Ohio and flows through Nashville, as well as the Mississippi River. The Western and Central parts of the state are largely flat, while the Blue Ridge Mountains present the hilliest terrain in the East of Tennessee.

The state’s central location as well as its access to major rivers quickly made it a trade and transportation center. Agricultural activities benefitted from ample rain and winds bringing subtropical, humid air from the Gulf of Mexico make the state ideal for crop growth, especially in the Western and Central parts of the state (Agricultural Classroom 2010). Today the state’s economy no longer relies on agriculture, yet it still boasts transportation and logistics industries. Also important are manufacturing, healthcare, and financial services. Leading traded clusters in the state include automotive, chemical products, motor driven products, plastics, and building fixtures, equipment, and services (Porter 2011).

Figure 3: Tennessee GDP Composition



In spite of early economic prosperity, Tennessee has struggled in recent decades to keep up with prosperity growth in the rest of the United States. Sadly, given current trajectories, this pattern looks set to worsen unless serious intervention takes place. Labor supply and skill level, productivity, and innovation all present critical challenges for Tennessee’s economic growth.

3.1) Population and Labor

With more than six million inhabitants, Tennessee accounts for just over 2% of the US population. Demographically, the state has fewer Hispanic individuals than US averages (US Census Bureau 2012). In the future, Tennessee will follow the same pattern as the rest of the United States: it will get older, more Hispanic, and poorer on average (Center for Business and Economic Research 2010).

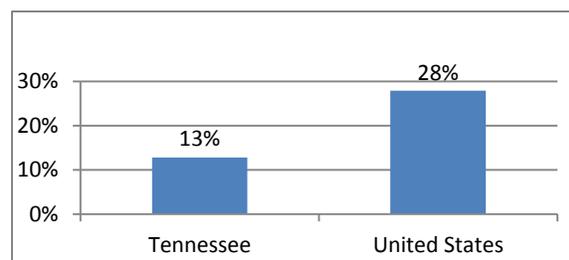
Income growth and employment growth in Tennessee are lower than U.S. averages, and recent trends predict worsening conditions in the future. In 2009 the average wage in Tennessee was \$37,196, 12.28% below the U.S. average of \$42,403 (Institute for Strategy and Competitiveness 2012). Wages in 2009 had grown only 2.9% since 1998, ranking the state 34th in wage growth (Institute for Strategy and Competitiveness 2012). Employment growth is also a challenge. From 1998-2009, Tennessee employment growth per year was 0.07% as opposed to 0.52% for the U.S. This performance ranks Tennessee 44th of U.S. states (Institute for Strategy and Competitiveness 2012). In spite of this weak employment growth, in 2010, the unemployment rate was tied with that of the U.S. at 9.4% (Porter 2011).

One of the major challenges facing Tennessee’s economy is a skilled labor supply shortage. Partly, this is driven by slow growth in the overall labor supply. From 2000-2010 the Tennessee labor force grew by 6.4% while the U.S. labor force grew 7.8% (Center for Business and Economic Research 2012). This problem is partly driven by the low skill level of the local population and incoming labor. Tennessee residents have fewer skills than the country on average and relative to neighboring states (US Census Bureau 2012).

Figure 4: Percentage of No or Low Skill Labor by State

| State | No Skill | Low Skill | Total No Skill or Low Skill |
|----------------|----------|-----------|-----------------------------|
| Tennessee | 24.1% | 31.6% | 55.7% |
| Kentucky | 25.9% | 33.6% | 59.5% |
| Florida | 20.1% | 28.7% | 48.8% |
| Georgia | 21.4% | 28.7% | 50.1% |
| Alabama | 24.7% | 30.4% | 55.1% |
| Mississippi | 27.1% | 29.4% | 56.5% |
| North Carolina | 21.8% | 28.4% | 50.2% |

Figure 5: Percentage of the Population with a Bachelor’s Degree or Higher



Compounding Tennessee’s skill challenges is the poor match with necessary skills. In a match of national industry skill demand and state skill supply, the only industries in which Tennessee is compatible are retail trade and personal services (Murat 2002). The labor force’s skills are a poor match for manufacturing as well as entertainment and recreation.

3.2) State Business Environment

One positive characteristic of Tennessee’s economy is its superior transportation infrastructure, which surpasses national levels in roads, bridges, and airports (American Society of Civil Engineers - Tennessee Section 2009). Maintaining transportation infrastructure quality is critical for Tennessee’s transportation and logistics cluster. This cluster boasts the world’s busiest cargo airport outside of Memphis, the nation’s third busiest trucking corridor, and its third largest rail center (Tennessee ECD 2011). In 2012, the Tennessee Department of Transportation initiated a consolidation and redesign of its construction and maintenance divisions resulting in a \$6.2 million reallocation (Tennessee Forward 2012). These efforts should continue in the future to sustain the growth of this cluster.

Another highlight in Tennessee’s business environment is its friendliness to business. General Ease of Doing Business rankings and tax policy reviews place Tennessee in the top 20 of all states for both metrics. In the 2010 CNBC Ease of Doing Business analysis of all U.S. states, Tennessee ranked 16th (CNBC 2010). Driving this statistic upward was the low cost of living, which was #1 of all states. Tennessee also offers a low tax burden for businesses relative to other U.S. states. Tennessee’s Ease of Doing Business ranking was negatively impacted, however, by the poor quality of life in the state (#49), the state education system (#41), and the state’s struggling economy (#36) (CNBC 2010).

Figure 6: U.S. State Rankings for Tax Policy’s Friendliness to Business

| State | Ranking |
|----------------|---------|
| Tennessee | #14 |
| Mississippi | #17 |
| Alabama | #20 |
| Kentucky | #22 |
| Arkansas | #31 |
| Georgia | #34 |
| South Carolina | #36 |
| North Carolina | #44 |

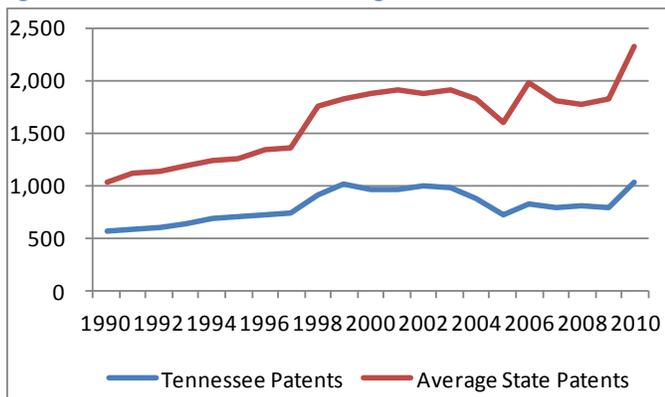
Tennessee’s economy struggles with low productivity as a result of these many challenges. Total factor productivity is 46th of all states, and total factor productivity growth since 1960 ranks 44th

(Federal Reserve Bank of Cleveland, 2006). Labor productivity was 15th U.S. in 2001 at 1.5%. By 2011, however, labor productivity had fallen to 0.3%, or 20th in the country (Federal Reserve Bank of Cleveland, 2006).

Tennessee is the 7th most reliant of any state on foreign investment, with international firms having invested more than \$22B in the state as of March 2011 (Tennessee ECD 2012). These investment figures are driven up dramatically by Japanese automobile companies. By 2011, 179 Japanese firms had announced investment of \$14.625B and employed 34,813 people in the state (Tennessee ECD 2012). Roughly a quarter of the value of all products shipped from Tennessee issue from foreign owned firms, and one in seven manufacturing jobs is in a foreign owned firm.

Although the country as a whole continues to excel in innovation, Tennessee innovates little (U.S.

Figure 7: Tennessee Patents vs. Average U.S. State Patents



Patent and Trademark Office n.d.), and is falling further behind. Total patent numbers are behind U.S. averages, and the gap is widening. In Tennessee, there were 2.68 patents per 10,000 employees in 2009 versus 6.95 for the entire U.S. (U.S. Cluster Mapping 2012).

Patent productivity in the state has fallen below what it was 10 years ago and in some clusters more than others. Plastics, for example, produced 78 patents in 1999, but dropped to 39 patents in 2009 (U.S. Cluster Mapping 2012). Other industries, such as production technology, biopharmaceuticals, motor driven products, metal manufacturing, textiles, processed food, forest products, and apparel, have witnessed similar declines in patents in recent years.

3.3) State Clusters

Tennessee ranks 18th for traded cluster employment in the United States in 2008 (Porter, 2011). The largest traded cluster employer in Tennessee is businesses services, which employs 90,798 people.

Automotive is the next largest cluster with 56,086 employees (Porter 2011). Education and knowledge creation follows (45,780 employees), then transportation and logistics (43,443 employees), and then hospitality and tourism (42,228 employees). Entertainment in the state has 1.62% of the national cluster employment, with 17,400 people in 2009 (U.S. Cluster Mapping 2012).

To combat many of the challenges facing Tennessee's prosperity, Governor Bill Haslam launched a new economic development plan in 2011. This plan, "Job4TN", follows competitiveness principles:

1. **Prioritize Key Clusters and Existing Businesses:** Recruitment for the state's competitive clusters: automotive; chemicals/plastics; transportation, logistics and distribution services; business services; health care; and advanced manufacturing and energy technologies.
2. **Establish Regional "Jobs Base Camps":** The Department of Economic and Community Development ("ECD") is restructuring operations to divide the state into 9 distinct regions. With all stakeholders, ECD will develop and carry out economic plans for each region.
3. **Invest in Innovation:** Launch a \$50 million INCITE Innovation program to coordinate unique innovation plans for each region, improve processes to move new products and technologies from the lab to the marketplace faster, and fund business incubators.
4. **Reduce Business Regulation:** ECD will work with businesses, advocacy groups, and state agencies to identify federal and state laws and regulations inhibiting job growth. It will work with the Governor and the state's congressional delegation to change these regulations.

Although the Jobs4TN plan is still in its infancy, there is some debate about its success. Governor Haslam credits the plan with the highest job creation in the state in 5 years in 2011. Other individuals in Tennessee, however, are skeptical of ECD's ability to carry out the regional plan details (Massey 2012).

3.4) Nashville Economy Overview

Nashville has been the capital of Tennessee since 1843 and is often considered as one metropolitan area with the surrounding communities in Williamson and Rutherford Counties. There are 1.74 million people in the broader Nashville area, nearly a quarter of the state's population (Center for Regional Economic Competitiveness 2008). The area surrounding Nashville is endowed with good agriculture and hunting conditions. The city sits on the northwestern edge of the Nashville or Central Basin which is characterized by fertile land well suited for crops and particularly for grasses favored by horses. These grasses are the basis for the name of bluegrass, the musical genre that began in this region. When

steamboats appeared in 1819, merchant enterprises grew in the area, and soon banking, printing, and publishing industries appeared (Tennessee Historical Society 2012). Today the city is 600 miles from half the U.S. population, along interstates such as I24, I65, and I40 (Vanderbilt University 2012).

Nashville grew to become an education center after the Civil War. Much of this education growth catered to African Americans, a group largely ignored in the education system elsewhere. In 1866, Fisk University was one of the first private schools dedicated to African American education, and in 1876, Meharry Medical College was established for educating black doctors. Other universities were also founded at this time, including Vanderbilt University in 1873 and Peabody College in 1875. In 1968, the Hospital Corporation of American was founded in Nashville and established health care services as Nashville's largest industry (Tennessee Historical Society 2012). At that time, other large industries in the city included music and entertainment, printing and publishing, education, and tourism (Center for Regional Economic Competitiveness 2008).

Although Tennessee's economy is struggling to grow and compete, Nashville's economy is more competitive and faces better trends going forward. Nashville exceeds its home state in income, education level, labor force growth, and labor force participation rate. However, the city's clusters face skilled labor supply shortages similar to the rest of the state. Nashville residents are generally higher paid than the rest of Tennessee. In 2008, the average wage and salary in the 10-county Nashville area was \$43,258, higher than the state average of \$39,730, but still slightly below the U.S. average (Center for Regional Economic Competitiveness 2008). Looking at the 10 prior years, Nashville's annual wage growth (0.9%) was higher than the state's of 0.7% (Tennessee Historical Society 2012). The U.S. average grew 1% over the same period (Center for Regional Economic Competitiveness 2008).

In addition to income, Nashville residents are generally more educated than the rest of the Tennessee population, and on some measures, relative to the rest of the United States. Adults who reside in Nashville are more likely to have a bachelor's degree than the broader U.S. population. Twenty-eight

percent of Nashville adults have a bachelor's degree or higher, compared to 26.7% for the U.S. average and 21.6% for Tennessee (Center for Regional Economic Competitiveness 2008). Nashville is between Tennessee and U.S. averages. 8.9% of Nashville residents have a graduate or professional degree while 7.6% of Tennessee residents do and 9.7% of U.S. residents do in Tennessee.

Following current trends, Nashville's labor supply will improve faster than the state's in the future. The city's labor force has larger growth and has higher participation rates. The labor force in Nashville was 860,639 in 2009, representing a 1.6% annual increase since 2004 (Center for Regional Economic Competitiveness 2008). Over that same period, the state's labor force had an annual increase of 0.9%. Participation is also superior in Nashville; in 2009, the labor force participation rate was 68.3%, while the state's rate was 63.3% (Center for Regional Economic Competitiveness 2008).

3.5) Nashville Clusters

Nashville occupies many of the same clusters as the rest of the state. The most important traded clusters in the Nashville area by employment are business services (39,971 employees), automotive (35,613 employees), education and knowledge creation (23,613), hospitality and tourism (19,530), and financial services (18,308) (Porter 2011). Entertainment is the 12th largest traded cluster by employees, with 9,956 employees, 5,935 of whom are employed in entertainment-related services (Porter 2011). Looking at the regional clusters by specialization, we see that automotive occupies the largest share of national cluster employment (4.28%) and is also the fastest growing, having grown 0.92% from 1998-2009 (Porter 2011). Other large clusters by specialization include tobacco (3.67% of national cluster employment) and motor-driven products (3.64% of national cluster employment) (Porter 2011).

When it comes to job creation, Nashville clusters have performed roughly at national averages (Porter 2011). Interesting outliers include the automotive cluster, which substantially outperformed national benchmark clusters. From 1998-2009, Nashville automotive lost 13,058 jobs, while the national automotive cluster lost an equivalent of 20,728 jobs when adjusted for size (Porter 2011). Transportation

and logistics and information technology also outperformed benchmark clusters but motor-driven parts underperformed, losing 12,450 jobs during the same period (Porter 2011).

The future strength of each of these clusters differs. In a recent Nashville Workforce Study, The Center for Regional Economic Competitiveness argues that healthcare, headquarters, and financial services clusters have in recent years seen the strongest growth. Healthcare jobs have grown 5.2%, and the cluster boasts an impressive list of companies with operations or headquarters in Nashville (Center for Regional Economic Competitiveness 2008). Headquarters operations, more generally, have also seen growth. Between 2004 and 2009, many companies established or moved headquarters to Nashville, growing the jobs in this cluster by 7.7% (Center for Regional Economic Competitiveness 2008). Hospitality and tourism has not grown much but will benefit from a new convention center, which will be complete in 2013. Logistics, which stagnated as the national economy struggled after 2008, is expected to rebound as the U.S. economy picks up. Recent investments in green manufacturing technologies by Nissan's Leaf and a green semiconductor plant could also spark a green manufacturing cluster to take advantage of existing manufacturing and rising IT activity.

In spite of these strengths, Nashville clusters face a shortage of skilled labor. Across the board, all clusters face skilled-labor-supply challenges for different levels of skills. In healthcare, the cluster needs highly educated individuals as well as nurses with management and IT skills (Center for Regional Economic Competitiveness 2008). For headquarters operations and financial services, the clusters will require staff for the offices, almost all of whom will require some skills. During the economic downturn, companies removed on-the-job training programs, which often would have been sufficient to get local labor up to speed and ready to work. (Center for Regional Economic Competitiveness 2008)

3.6) Tennessee and Nashville Diamond

Factor Conditions: Overall, Tennessee and Nashville have some divergence in their factor conditions. The education levels, growth of the labor force, and labor force participation rate are higher

in Nashville than the state and the U.S. On the other hand, Nashville and Tennessee both benefit from good transportation infrastructure such as highways, bridges, and roads, although the urban areas could use a better transit system. In spite of the higher educational attainment for Nashville residents, both the city and the state are in need of skilled labor for almost all clusters going forward. The state's workforce is not as skilled as neighboring states and is a poor skill match for manufacturing and entertainment. Especially needed are workers with IT skills, management skills, and high educational attainment.

Demand Conditions: Tennessee offers low-quality demand conditions to business due to its low-income population, but Nashville's slightly higher income levels could create conditions for more sophisticated demand. The housing crisis has been less severe in Tennessee than in neighboring states, and a very low cost of living could signal more available funds in the future. Growing diversity in the state (the Hispanic population grew 8.5% vs. 3.3% in the U.S. overall from 2006-2011) could create demand for more diverse consumption. Currently, the presence of 700 churches and several seminaries creates sophisticated demand for religious music content. Finally, post-secondary institutions maintain a young population in Nashville (median age is 33.9) with an interest in music, concerts, and festivals.

Context for Strategy and Rivalry: Tennessee as a state provides a favorable environment for business with low cost of living and low tax burden. The Governor's Jobs4TN and INCITE plans bring a regional cluster approach to economic development and could create funds for new innovation. State debt is low (\$304/person), and Nashville has superior access to the political process as the state capital. The new Nashville convention center could boost the hospitality, tourism, and headquarters industries.

Related and Supporting Industries: The automotive industry in the state is large and continues to grow, especially with major recent automotive investments by Volkswagen, GM, and Nissan. However, the motor-driven parts cluster is falling in share of national cluster employment. Headquarters operations also looks set to continue recent growth. Healthcare and medical devices will also thrive in the future, given that the state exports 6.2% of U.S. medical/dental surgical equipment, and Nashville is home to

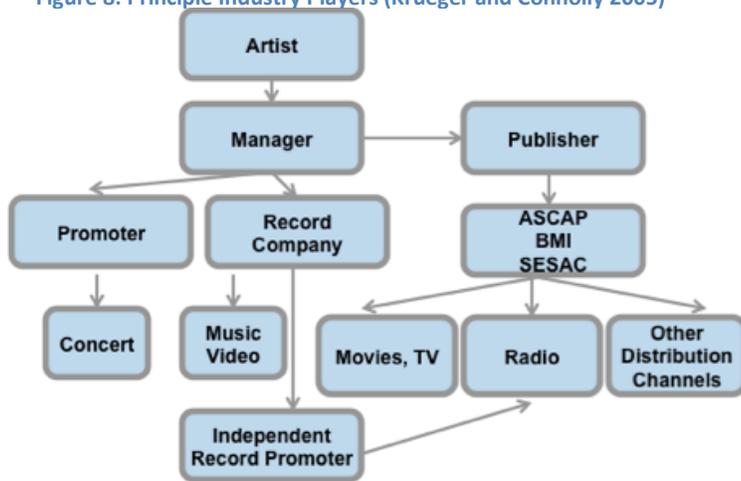
250 healthcare companies. Although the state has historically been a religious publishing center, this industry and publishing in Nashville will likely decline in employment going forward.

4. The Global Music Industry

4.1) Industry Participants

The artist remains the focal point and key driver of value in the music industry. Artists sign

Figure 8: Principle Industry Players (Krueger and Connolly 2005)



exclusive contracts with labels to produce four to six albums and are then free to renegotiate. Artists receive advances from labels initially to launch their latest album, and once those advances have been repaid, an artist begins to earn royalties (typically 15-20% of sales) (Krueger and Connolly 2005).

The label, meanwhile, agrees to manufacture, distribute, and promote an artist's music. Labels hold diversified portfolios of artists and sometimes manage as many as 300 to 400 at a time. Commissions to labels typically range from 25-30% of gross margin (Krueger and Connolly 2005).

Finally, the manager is responsible for successfully directing the career of the artist, both on a day-to-day basis, as well as with a long-term perspective. The role varies significantly, but is based on the maturity and success of an artist's career. Contract terms of three to five years are typical, and managers are compensated either on commission (15% of an artist's gross earnings are typical terms) or on a fixed salary (Krueger and Connolly 2005).

4.2) Industry Overview

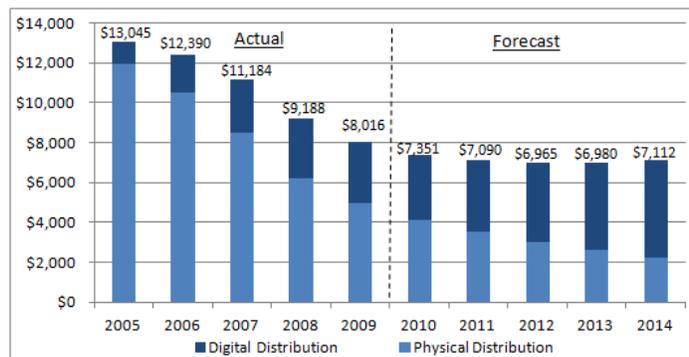
To most outside observers, the \$26.4B recorded music segment defines the music industry. This classification, however, encompasses only a small portion of music-related consumption and is limited

to consumers' purchases of music, subscription-based consumption, and advertising. Within the global recorded music industry, there are interesting shifts in both the format through which consumers enjoy music and the geographies in which most music is consumed. The overwhelming shift to digital music consumption is self-evident. In 2005, digital music consumption was nominal, and today, it accounts for ~40% of all recorded music purchases (PricewaterhouseCoopers LLP 2011). Also, while North America has historically been a dominant market for music consumption, the region's consumption is expected to remain flat over the projected period, while Asia Pacific represents the highest prospects in terms of growth at 4.3% (PricewaterhouseCoopers LLP 2011).

Figure 9: North American Music Market by Component (US \$MM) (PricewaterhouseCoopers 2011)

| Region | 2009A Mkt. Size (\$B) | 2014E Mkt. Size (\$B) | 2009A-2014E CAGR |
|---------------|-----------------------|-----------------------|------------------|
| North America | \$8.0 | \$7.1 | -2.4% |
| EMEA | 9.3 | 9.4 | 0.9% |
| Asia Pacific | 8.4 | 10.4 | 4.3% |
| Latin America | 0.6 | 0.6 | -0.3% |

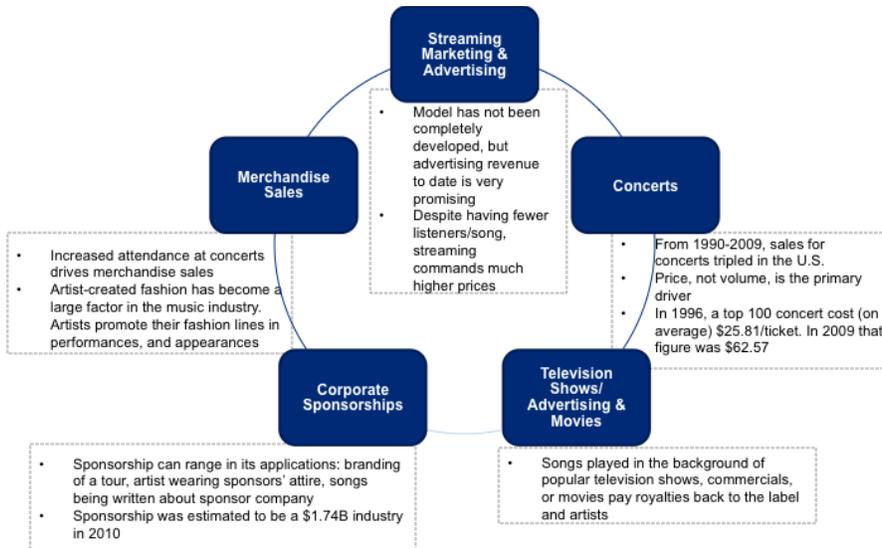
Figure 10: Regional Market Size & Growth Trajectory (PricewaterhouseCoopers, 2011)



Some analysts have attributed the effects of the digitalization of recorded music as leading to the downfall of the music industry. Online piracy has led to free consumption for many users, and even paying consumers are no longer buying albums, but instead disaggregating consumption to focus on purchasing select hits. Additionally, artists and labels are struggling to find fee-earning models which can both: (1) keep up with the pace of innovation, and (2) remain as profitable as the previous form of album-focused consumption. Many observers have questioned whether this is the end of the music industry's profitability.

Challenges in the industry have led to a proliferation of music consumption in diversified channels, expanding the overall music industry ecosystem to \$134B (IFPI 2012). While recorded music is still the foundation of the broader industry, revenues are generated at multiple levels throughout the value chain. Therefore, not only is the music industry surviving, but in many instances, thriving, through ancillary channels including: concert revenues; corporate sponsorship of musicians to create music or promote corporate brands; ancillary media channels, such as video games; television and movies; and online marketing.

Figure 11: Music Industry Diversification & New Opportunities



The shift to live music has led to the preponderance of growth in the music industry. Concert revenues have increased three-fold from \$1.5B in 1990 to \$4.6B in 2009 (The Economist 2010), as artists and labels seek out ancillary revenue streams to compensate for lackluster financial performance in recorded music.

Corporate sponsorships have increased as companies view music as a new and innovative way to market to customers. Other media outlets have also encouraged integrating new music into their content, by adding current, popular music to their user experience. Finally, online marketing, particularly through streaming, is a very promising channel and currently commands a premium cost / viewer relative to other online channels.

4.3) The State of Country Music

Relative to other genres of music, in North America, country music has maintained its market share and grown slightly from 11% in 1999 to 12% in 2010 (The Nielsen Company and Billboard 2012). As the industry continues to market to country music customers, it is learning more about its clientele. Interestingly, an estimated 42% of Americans self-identify as liking country music, representing a strong 95 million person audience in the United States. The country music fan also typically spends a substantial amount of his or her income on entertainment and travel. As a collective group, country music fans account for \$46B spending on domestic travel annually (MusicRow 2010). These demographic data are promising in that they show a high propensity toward discretionary spending and a means to channel additional revenue to the music industry. Additionally, there is a significant opportunity for country music to extend beyond targeting the U.S. population. Although awareness of country music is global, little focused advertising has been executed to target the international community.

4.4) Opportunities and Challenges

Without question, the industry music is facing challenges, whether from declining physical sales, copyright infringement, shifting industry economics or an aging demographic of purchasers (vs. the younger population that is consuming for free), but by utilizing the creativity of an inherently creative industry, promising growth opportunities exist. The new paradigm of focusing on per-hit consumption allows for labels to engage in earlier launches of new artists through social media channels and trending of top songs on digital music sites. The streaming of music allows for an alternative outlet for traditional radio consumption. Given the shift toward live performances, artists are gaining more financial power relative to other industry participants (e.g., labels), which incentivizes and promotes new talent. Lastly, consumption across media channels, which has increased markedly over the past decade, whether directly centered on music or not, will propel the music industry forward in terms of revenue growth and expansion.

5. Nashville Music Cluster

5.1) History of Music in Nashville

Nashville's roots in the music business date back to at least 1824, when the city produced its first hymnal; however, its founding is perhaps more officially marked by the Fisk Jubilee Singers of the 1860s, Fisk University's choral group (How Nashville Became Music City n.d.). The group, the city's first internationally touring music group, became extremely well known as they travelled globally raising funds for the young university. Next, the Union Gospel Tabernacle, which quickly became known as the Carnegie Hall of the South, was completed in downtown Nashville in 1892. Though it is now officially named Ryman Auditorium, the unofficial name remains "the Mother Church of Country Music" because of its three-decade stint as home to the Grand Ole Opry.

From Radio to Recording: By 1925, when the 650 AM WSM radio station was founded, Nashville was well on its way to becoming a music center for the country. Originally, the National Life and Accident Insurance Company build the radio station as a public service to the community and to create a new medium for its own advertising; however, George Hay, WSM's first program director, quickly instituted what would become the most popular program on the radio, the Saturday night "WSM Barn Dance," which aired after the New York Opera program and included singers and musicians from across the Southeastern United States (History of the Opry n.d.). It was after the construction of a 50,000-watt transmitter – the tallest in the world at the time – that the station was able to broadcast its programming nationally and Nashville's ability to attract musicians and music fans began. The show, now called "The Grand Ole Opry," proved to be enormously popular, even in its early days, and is among the longest-running radio stations still today. Other cluster entities began to locate in Nashville because of WSM and the location of the Grand Ole Opry. For example, the popular Grand Ole Opry star Roy Acuff teamed up with Fred Rose to form the first song-publishing firm in 1942. Also, later in the 40s, RCA Victor opened the first recording studio after coming to town to record the music of Eddy Arnold. By 1950, Nashville had been coined Music City USA.

Institutionalization and Expansion: In the 1960s and 1970s, more music institutions came to Nashville and the culture of the music industry solidified. For example, until 1960 when Tootsie's Orchid Lounge opened, there was no other live music venue in Nashville outside of the Opry (Hight 2010). In the past half century, Tootsie's has become a world famous hang-out for singers, songwriters, and the like and has shaped the music scene in the city. Additionally, Bob Dylan's recording of "Blonde on Blonde" in Nashville in 1966 set off a wave of singer-songwriter copycats flocking to the area seeking similar success. Finally, the addition of a music business program to the curriculum at Belmont University in 1971 meant that, in addition to the musicians themselves, the area boasted a sophisticated population to manage the business side of the industry.

Growth Continues... The music cluster in Nashville has expanded to include other supporting entities in its most recent phase of growth. Examples include the expansion of the country music scene into television production with Country Music Television ("CMT") and The Nashville Network ("TNN") and the reopening of Ryman Auditorium as a live concert venue. Additionally, the Music City Music Council was created in 2009 out of a partnership of the Nashville Mayor's Office, the Nashville Area Chamber of Commerce, and the Nashville Convention and Visitors Bureau and has most recently been charged with developing strategies to heighten awareness and development of Nashville as THE global Music City (Music City Music Council n.d.).

5.2) The Music Cluster Map

The music cluster in Nashville includes a wide array of the music industry entities (Figure 12). Although the industry revolves around the presence of the numerous headline artists who call Nashville home, these artists are supported by a host of entities which manage each step of the artists' careers, from discovery and music creation to the pinnacle of an artist's career – the tour. The Nashville MSA itself is home to over 80 record labels, 130 music publishers, 180 recording studios, 40 national producers of ad jingles, and 27 entertainment publications (Raines and Brown 2006). The recording

labels include well-known names like Sony and Capitol Records that continue to operate under the

legacy model of the music

industry as well as newer labels

like Big Machine, founded in

2005.

Co-location of these labels

with songwriters, recording

studios, and producers has

traditionally drawn emerging

artists to the area in hopes of “making it big” by getting discovered at any number of the city’s

numerous clubs and bars offering opportunities for live music performances every day of the week.

Because of Nashville’s central location and connectivity to the interstate system, support industries

such as tour bus companies and technical crew companies also have a substantial presence in the area.

These tour bus companies compete fiercely for the business of top musicians, meaning that companies

like Diamond Coach offer personalized and customizable

tour buses for their clients and often partner with technical

crews locally trained by targeted vocational education

programs.

Nashville has been able to leverage scale in its

listenership historically through the presence of radio

stations like 650AM WSM and the Grand Ole Opry.

Furthermore, the city also boasts large performances

venues like the Nashville Municipal Auditorium, the

Figure 12: Nashville Music Cluster Map



Figure 13: Top Country Artists 1985-2011 (Jessen 2011)

| All-time Rank | Artist | Hometown | Launch of Career Location | Year |
|---------------|-------------------|-------------------|---------------------------|------|
| 1 | George Strait | San Marcos, TX | San Marcos, TX | 1982 |
| 2 | Garth Brooks | Yukon, OK | Nashville | 1989 |
| 3 | Reba McEntire | McAlester, OK | Nashville | 1986 |
| 4 | Alan Jackson | Newna, GA | Nashville | 1991 |
| 5 | Tim McGraw | Start, LA | Nashville | 1994 |
| 6 | Kenny Chesney | Luttrell, TN | Nashville | 1997 |
| 7 | Toby Keith | Clinton, OK | Nashville | 1993 |
| 8 | Randy Travis | Marshville, NC | Nashville | 1986 |
| 9 | Alabama | Fort Payne, AL | Myrtle Beach, SC | 1980 |
| 10 | Brooks and Dunn | | Nashville | 1991 |
| 11 | Rascal Flatts | Columbus, OH | Nashville | 2002 |
| 12 | Clint Black | Houston, TX | Texas | 1990 |
| 13 | Hank Williams Jr. | Mount Olive, AL | Shreveport, LA | 1947 |
| 14 | Shania Twain | Windsor, Ontario | Ontario | 1995 |
| 15 | The Judds | Ashland, KY | Nashville | 1983 |
| 16 | Keith Urban | Queensland, Aust. | Nashville | 2001 |
| 17 | Brad Paisley | Glen Dale, WV | Nashville | 1999 |
| 18 | Faith Hill | Ridgeland, MS | Nashville | 1994 |
| 19 | Dixie Chicks | Dallas, TX | TX | 1998 |
| 20 | Vince Gill | Norman, OK | Nashville | 1992 |
| 21 | Ricky Van Shelton | Danville, VA | Nashville | 1987 |
| 22 | Dwight Yoakam | Columbus, OH | Los Angeles, CA | 1988 |
| 23 | Martina McBride | Sharon, KS | Nashville | 1995 |
| 24 | Taylor Swift | Reading, PA | Nashville | 2007 |
| 25 | Travis Tritt | Marietta, GA | GA | 1990 |

Tennessee Performing Arts Center, and Ryman Auditorium and uses these venues throughout the year for single-artist performances. More importantly, the city draws national audiences with multi-artists events like the yearly CMA Music Festival and events like the St. Jude Country Music Marathon and Half-Marathon which boasts 50 local bands playing on 28 stages along the race-course. The national branding of Nashville as Music City has positive spillovers for the tourism industry in general; in a recent survey conducted by the Nashville Convention and Visitors Bureau (“NVB”), 73% of respondents indicated that the music attractions were “somewhat to extremely important” in their decision to visit Nashville.

5.3) Music Cluster Highlights and Performance Analysis

The concentration of stars and upcoming artists in Nashville certainly perpetuates Nashville’s brand as Music City USA. Nashville is the epicenter of country music as measured by songs for purchase (Billboard, 2011). Additionally, 17 of the top 25 country music artists in the last quarter century lived in or moved to Nashville at the start of their careers (Figure 13). However, performance metrics for a creative industry are notoriously difficult to quantify since the nature of the industry doesn’t lend itself to steady wage employees but rather includes a spectrum of artists from superstars to casual artists with full-time jobs in other industries. Additionally, Caves (2002) appropriately notes that creative industries produce products that are idiosyncratic, making demand is impossible to determine in advance.

Markusen (2004) and Scott (1999, 2000) note that one of the key characteristics of innovation and originality in cultural industries like music is the degree of agglomeration. One way to measure agglomeration is to use the location quotient, which is a measure of the share of music-related employment in Nashville compared to the share of music-related employment in the United States as a whole. Nashville stands out with high location quotients nationally for the recording industry, professional musicians, and musicians (Figures 14-16). One particular detail to note from the following

figures is the concentration of “professional” musicians, defined as those who self-report their primary incomes as attributable to careers as musicians, in contrast to the dispersed nature of casual musicians.

Figure 14: Recording Industry Location Quotient, 2000

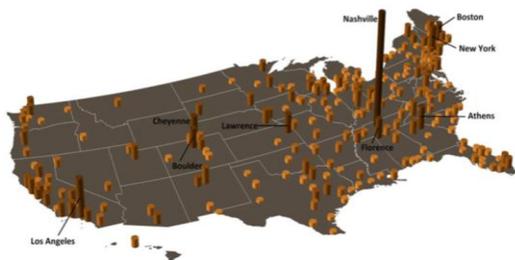


Figure 15: Professional Musicians Location Quotient, 2000

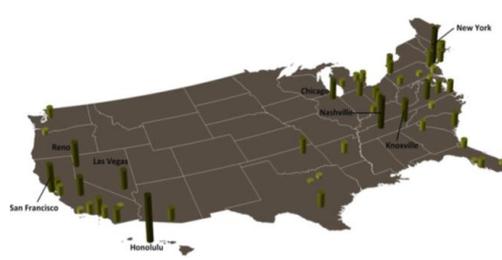
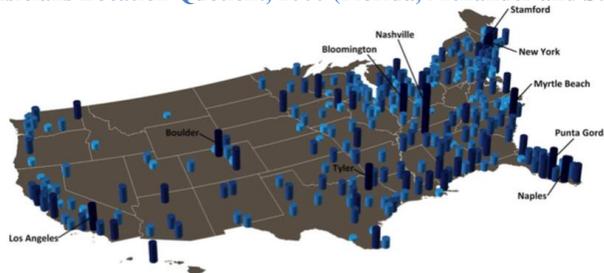


Figure 16: Musicians Location Quotient, 2000 (Florida, Mellander and Stolarick 2010)



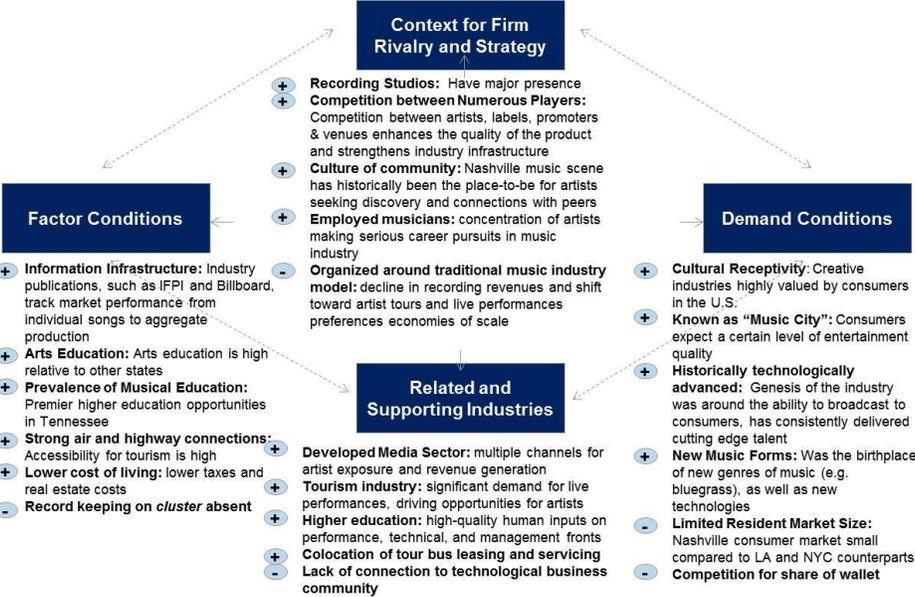
While Los Angeles, New York City, and Chicago boast the most musicians by raw count, Nashville is among the top three cities to employ musicians nationally. Employed musicians are those who cite their income from entertainment as their primary form of income. The Nashville MSA employs 4.9% of the nation’s musicians and singers, and these musicians earn an average hourly wage of \$36.28, which is 20% higher than the national average wage of \$30.22 (Bureau of Labor Statistics 2011). Additionally, Nashville is the only city in the U.S. that since 1970 has enjoyed an increasingly concentrated employment of musicians, singers, composers, directors, and music repairmen.

5.4) The Cluster Diamond

If analyzed only in terms of the location quotient measures noted above, the Nashville music cluster looks to be performing well. A deeper analysis of the four facets of the cluster diamond (Figure 17), however, reveals a number of significant weaknesses of the cluster. More positively, some of the less readily measurable strengths of the cluster can also be clarified in this analysis. The previously mentioned strengths of the cluster range across the diamond, from the concentration of music education

(FC) to the major presence of recording studios and musicians (CSR) to the historically technologically advanced methods of music delivery (DC) to the connection with the tourism industry (RSI). The digitalization of music has, however, effected a disruptive change to the current industry structure and profitability that will cause shifts across the landscape of Nashville’s current cluster map. Worryingly, the lack of sophistication in tracking the contribution of the music industry to the economic development of the area leaves the city ill-equipped to detect a changing and potentially weakening cluster overall.

Figure 17: Music Cluster Diamond



Factor Conditions: The music cluster draws on some of the strengths of the Nashville factor conditions, such as the city’s central location and numerous colleges and universities, to enhance its own position. Nashville’s central location, combined with strong air and highway connections, allows performance venues to draw audiences from the surrounding regions, making the city easily accessible for tourism. Many of the local higher education institutions in the area have specifically targeted music education programs such as Vanderbilt’s Blair School of Music and Belmont University’s undergraduate and graduate music and music-business management programs. Many of the graduates of these schools remain local, as Nashville alone employs 4.9% of the nation’s musicians and singers, as mentioned previously. Among the prominent alumni of Belmont University, for example, are Brad Paisley, Trisha

Yearwood, and Lee Ann Womack. Additionally, nearby Dollywood in Pigeon Forge attracts 2.5 million visitors a year and is the largest single music-related employer in the state (Blackhurst 2009).

One major weakness of this cluster is its relative lack of reliable data for tracking its cluster entities. While the music-publication industry is robust and offers comprehensive tracking of trends in the industry at large, Nashville does not maintain accurate statistics on the component entities and size of its music cluster. In order to move forward as a cluster, a better monitoring of the industry, either by one of the local Institutes for Collaboration (“IFCs”) or the local government, is imperative.

Context for Firm Strategy and Rivalry: Nashville boasts a variety of entities across the value chain of the creation of the artist. At the input stage, the city is home to a host of recording studios as well as independent songwriters, managers, and advertising firms. Additionally, the city offers a wide range of venues for artist visibility at the output stage, from “open mic” nights at the Bluebird Café to the weekly live radio show at the Loveless Café Barn to concerts held in Ryman. While labels compete aggressively to attract the best artists and burgeoning artists compete with each other to attract a loyal fan base, the city nevertheless also offers a unique history of community in its music cluster. Artists have historically flocked to the city because of the opportunities it affords for connections with well-known artists and industry players. Nashville’s ability to offer a city with a lower cost of living that is co-located with the recording labels and studios has historically been of utmost importance. However, the age of digitalization, with discovery of artists through non-traditional channels, such as on YouTube or through social media followings, means that the context in which the major entities in the music industry compete will likely change in the coming decades. As such, Nashville’s music cluster will need to anticipate and adjust in order to support this changing landscape.

Demand Conditions: In creative industries, the depth and quality of a cluster facilitate increasing sophistication of local demand for the cluster’s end-product, in a virtuous circle of enhanced competitiveness. In the case of the music industry in Nashville, the availability of a large volume of

high-caliber live performances in a variety of genres forces the local population to become increasingly discriminating in order to select the events to which to allocate their limited time and share of wallet.

While the city itself is at a disadvantage relative to larger resident markets like New York City and Los Angeles, the density of music offerings often attracts larger audiences from the surrounding areas. This continued ability to create local market demand is of the utmost importance for Nashville in the future.

One way that this demand will be sustained will be through the increasing prominence of country music itself. Increasingly, top country artists like Taylor Swift and Lady Antebellum have been able to transcend genre and reach the top of the pop music charts as well. This trend increases Nashville's ability to benefit from its distinctive competitive advantage in country music. As another example of the rising prominence of country music and Nashville's contribution to nationwide demand, Garth Brooks came out of retirement to perform at the Wynn in Las Vegas and performs sold out shows.

Related and Supporting Industries: The music cluster in Nashville is supported by a sophisticated network of 39 IFCs, which are deeply integrated with the common goal of sustaining local competitiveness in the music industry. In particular, the Music City Music Council is a partnership between the Nashville Mayor's Office, the Nashville Area Chamber of Commerce, and the Nashville Convention & Visitors Bureau that has since 2009 been charged with developing strategies for raising the awareness and development of Nashville as *the* global Music City. This particular IFC works with entrepreneurs, artists, the recording industry, and the local government; other IFCs, such as the Country Music Foundation and the Nashville Convention and Visitor's Bureau, work with educational and tourism institutions to enhance competitiveness. In particular, the music cluster's connections with the higher education and tourism cluster have been strong to date. On this note, and as mentioned earlier, an overwhelming majority of tourists visiting Nashville cite a music-related destination as important to their visit, and the Mayor has recently mandated a greater primary school focus on arts education.

One area where the cluster is not leveraging its potential is in its connection to the technology-driven business community. While Nashville has a modest technology and start-up scene, with strong research universities attracting technical talent and organizations like the JumpStart Foundry and the Nashville Entrepreneur Center providing support for new and innovative companies, a relatively limited number of technology companies outside of the healthcare industry have been created in the city (McCarty 2011). Given Nashville's strengths in music and media, the potential is ripe for the creation of an adjacent digital-media-focused technology cluster in the city. Amid the rapid changes taking place in the music industry, moreover, cluster participants must adapt and evolve their capabilities in order to continue to improve their competitiveness.

5.5) Review and Assessment of Nashville's Current Strategy

Nashville's municipal government, in cooperation with the Nashville Music Council ("NMC"), has adopted a strategy of pursuing the relocation of cost-sensitive operations from New York and Los Angeles to Nashville. Because companies in these relatively high-cost areas face pressure to reduce their overhead expenses amid the economic downturn and the shifting dynamics of the recording industry, the city and the NMC view the current environment as a strong opportunity to recruit those business to relocate to a lower-cost location. Numerous factors account for Nashville's cost advantage relative to its coastal competitors. Among the most important of these factors are: lower taxes on corporate income, personal income, and capital gains; lower rents for office space; lower average housing prices / mortgage costs; and a lower overall cost of living (Music City Music Council 2012). Nashville's existing infrastructure (encompassing elements across the music cluster) provides a high-value "plug and play" option for these New York- and Los Angeles-based music companies, in contrast to other low-cost areas in the U.S. like Raleigh or Dallas that lack the required level of infrastructure and cluster sophistication (Goodman and Hopkins 2012).

Near-term opportunities for consolidation of the scope and scale of the city’s music cluster through recruitment constitute the sort of “low-hanging fruit” that can provide fast growth, but it is also critical for the city’s long-term competitiveness not to focus solely on that strategy without simultaneously undertaking efforts to improve local cluster productivity. As the competitive landscape for music production evolves, Nashville will need to adapt its strategy dynamically, facilitating continued enhancements of competitiveness driven not only by cost advantages, but also by improvements in cluster productivity. Enhancements in productivity will allow the city’s residents to drive increased wealth-creation and to command the higher wages that will sustain the city’s prosperity in the future.

5.6) Key Challenges and Opportunities for the Cluster

In order to maximize its potential for success, the Nashville music cluster must confront a number of critical challenges within the four key drivers of competitiveness. The table (page 30) outlines nine of the most important of these challenges and provides recommendations for how to address them. The highest priorities combine viability for action with magnitude of impact and relevance to the near- and long-term development of the Nashville music cluster. In order to support the city’s current strategy of corporate recruitment most effectively, improving the availability of accurate and detailed data on the cluster is essential. Access to this information is necessary in order not only to facilitate the telling of the cluster’s story, but also to support a rigorous system of metrics to assess progress toward the cluster’s strategic goals. In order to support the cluster’s future success, addressing the challenges of the digital revolution and the music industry’s shifting economics will also be of paramount importance. Toward that end, the city must foster an environment in which start-up businesses can thrive, with additional office space and support for business incubation available in close proximity to the NEC and to the city’s core centers of research and technical knowledge, particularly Vanderbilt and Belmont Universities.

In addition to the challenges facing the cluster, numerous significant opportunities exist to leverage the strengths of the cluster for further growth. The table (page 31) outlines seven of the most promising of these opportunities and provides recommendations on how to pursue them. Many of the most attractive opportunities for the cluster revolve around the music cluster's related and supporting industries. Nashville currently attracts tens of thousands of visitors every year to its music festivals, but minimal integration currently exists between these events and purposeful business travel. In coordination with local institutions for collaboration such as the Nashville Music Council, the Nashville Technology Council, and the Nashville Entrepreneur Center, city and cluster leaders should seek to replicate the success that Austin's South by Southwest event has experienced in combining its music and film programs with business and technology events, which have facilitated Austin's development of a strong technology cluster and have enhanced its profile as a destination for businesses. This strategy could support new initiatives to accelerate the growth of a new media-focused technology cluster in Nashville, building on the city's existing strengths in music and traditional media. Amid the digital shifts occurring in the music industry, such moves would allow the city and its clusters to adapt more effectively to the new economic environment for music. Another potential avenue for growth in the cluster is expansion into additional creative industries. Filmmaking, for example, requires not only creative capabilities, but also many of the same business and technical skills possessed by existing Nashville-based cluster entities (e.g., sound engineering, talent management). The city should consider expanding its recruiting efforts to include film-related companies in Los Angeles and New York that currently face cost pressures similar to those of music companies.

| Target Area | # | Recommendation | Challenge to Address | Institutions Responsible | Level | Priority |
|-------------|---|---|---|---|----------------|----------|
| FC | 1 | Increase detail and precision of music-related statistical records | Statistical records of music cluster in Nashville are relatively underdeveloped | Government, IFCs | Cluster | 1 |
| FC | 2 | Encourage real-estate developers to create more artists' compounds with shared facilities and affordable housing, i.e., expand Ryman Lofts model | Severity of budget constraints faced by emerging artists in the early stages of their careers, which may limit those artists' abilities to live in or relocate to Nashville | Private property developers, government | Cluster | 3 |
| CFSR | 3 | Leverage strength in music to develop new technology cluster focused on digital media (e.g., start-ups like Spotify) | Digital evolution of the music industry has shifted the needs of emerging artists and the traditional economics of the recording industry | IFCs | Cluster | 1 |
| | 4 | Redevelop under-used city properties and promote concentrated development of start-up office space near the NEC and Vanderbilt University | | Private property developers, government | | 1 |
| | 5 | Provide free WiFi access in key public areas to support digital activity in city | | Government, IFCs | | 3 |
| CFSR | 6 | Ensure rigorous enforcement of IP / copyright protection | Piracy of recorded music online continues to undermine traditional business models | Government | State | 2 |
| CFSR | 7 | Strengthen benefits of agglomeration for creative class; e.g., complete Pantheon Park Project | Improving quality of low-cost recording equipment has diminished the necessity for artists to co-locate with music labels in order to produce recordings of their music | IFCs | Cluster | 2 |
| DC | 8 | Leverage country music fans' demand for other leisure activities by creating multi-product vacation packages to increase tourism volumes and spending | Music faces increased competition for share of consumer entertainment and leisure budgets | IFCs, hotel & leisure businesses | Cluster, state | 3 |
| DC | 9 | Encourage venues and studios to continue diversifying activities by genre; continue broad-based "Music City" branding | Heavy weighting toward country music concentrates sensitivity to potential shifts in market tastes | IFCs, government | Cluster | 2 |

| Target Area | # | Recommendation | Opportunity to Seize | Institutions Responsible | Level | Priority |
|-------------|----|---|--|--|----------------|----------|
| RSI | 10 | Leverage strength in music festivals and events to attract business and technology-related activity to Nashville (e.g., replicate Austin's SXSW) | Tens of thousands of visitors come to Nashville annually for music festivals, but no avenue currently exists to integrate business activities into their travel plans | IFCs, major event planners | Cluster | 1 |
| RSI | 11 | Promote fashion-related business activities (e.g., design and brand management) to take advantage of Nashville artists' brands | Country music fans are more loyal to brands than the average American | Artists' managers | Cluster | 2 |
| RSI | 12 | Expand strategy of recruiting LA- and NYC-based music businesses to include film-related companies | Significant room for growth exists in related arts industries | Government | Cluster | 2 |
| RSI | 13 | Encourage increased multi-activity tourism (see also recommendation #8 above) | Country music fans spend \$46 bn annually on domestic vacations | IFCs, hotel & leisure businesses | Cluster, state | 3 |
| RSI | 14 | Encourage innovation in music- and media-related technologies in order to diversify Nashville's cluster portfolio and to facilitate adaptation of cluster participants to digital shifts (see also recommendation #3 above) | Rapid changes in the digital environment have created opportunities for new technologies to revolutionize entertainment and media | IFCs | Cluster | 1 |
| FC | 15 | Expand secondary music education to include technical / recording / lighting, etc. skills | Current initiatives to improve music performance education in Nashville public schools provide promising support for improving some, but not all, critical elements of the music cluster | Government | Cluster | 2 |
| | | Encourage creation of apprenticeship programs to connect students with cluster early | | Government, studios / performance venues, etc. | | 2 |
| FC | 16 | Continue with efforts to ensure ease of doing business in TN and emphasize value-for-money in recruiting messaging | Labels at risk of consolidation or relocation of offices due to economic pressures | Government | State, cluster | 1 |

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