GROWING AN INDUSTRIAL CLUSTER?: MOVIE PRODUCTION INCENTIVES AND STATE FILM INDUSTRIES

A Summary of Conclusions from Two Studies

by

Ric Kolenda, Ph.D.

Growing an Industrial Cluster?: Movie Production Incentives and State Film Industries

A Summary of Conclusions from Two Studies

Ric Kolenda, Ph.D.

Conclusions and Policy Implications from a Multistate Study

Based on the findings presented here, there is relatively strong evidence supporting the hypothesis that a positive correlation between the existence of and persistence of movie production incentives and growth in the local film industry. While the descriptive statistics failed to show a strong relationship between MPIs and either film industry employment levels, the number of establishments, or the number of people working in film-related occupations, the linear regression models told a different story. And while the strength of lagged variables shows some evidence for a path-dependence argument, suggesting that growth in the industry is largely dependent on the previous levels of film industry activity, the panel data tell a different story. This may be due to the effects of the 2008 recession on some of the larger filmmaking states, because the panel data allows analysis of year-to-year data, rather than cross-sectional data at the beginning and end of the period. In addition, other factors such as climate, geography and accessibility to the primary film industry hub in Los Angeles also seem to play a part in determining growth.

My research questions going in were the following:

H_1: The number of film industry firms, employees and occupations in each state is positively correlated with the existence of tax credits.

The evidence as presented above seems to largely support this hypothesis.

H_2: The persistence of these subsidies over the years contributes to the employment, firm and occupational outcomes.

Again, the evidence as presented above seems to largely support this hypothesis.

H_3: MPIs and their persistence contributes to the growth of film industry employment, firms and occupations.

And yet again, the evidence as presented above seems to largely support this hypothesis.

H_4: MPIs and their persistence increase the relative concentration of film industry employment (location quotient) in the state.

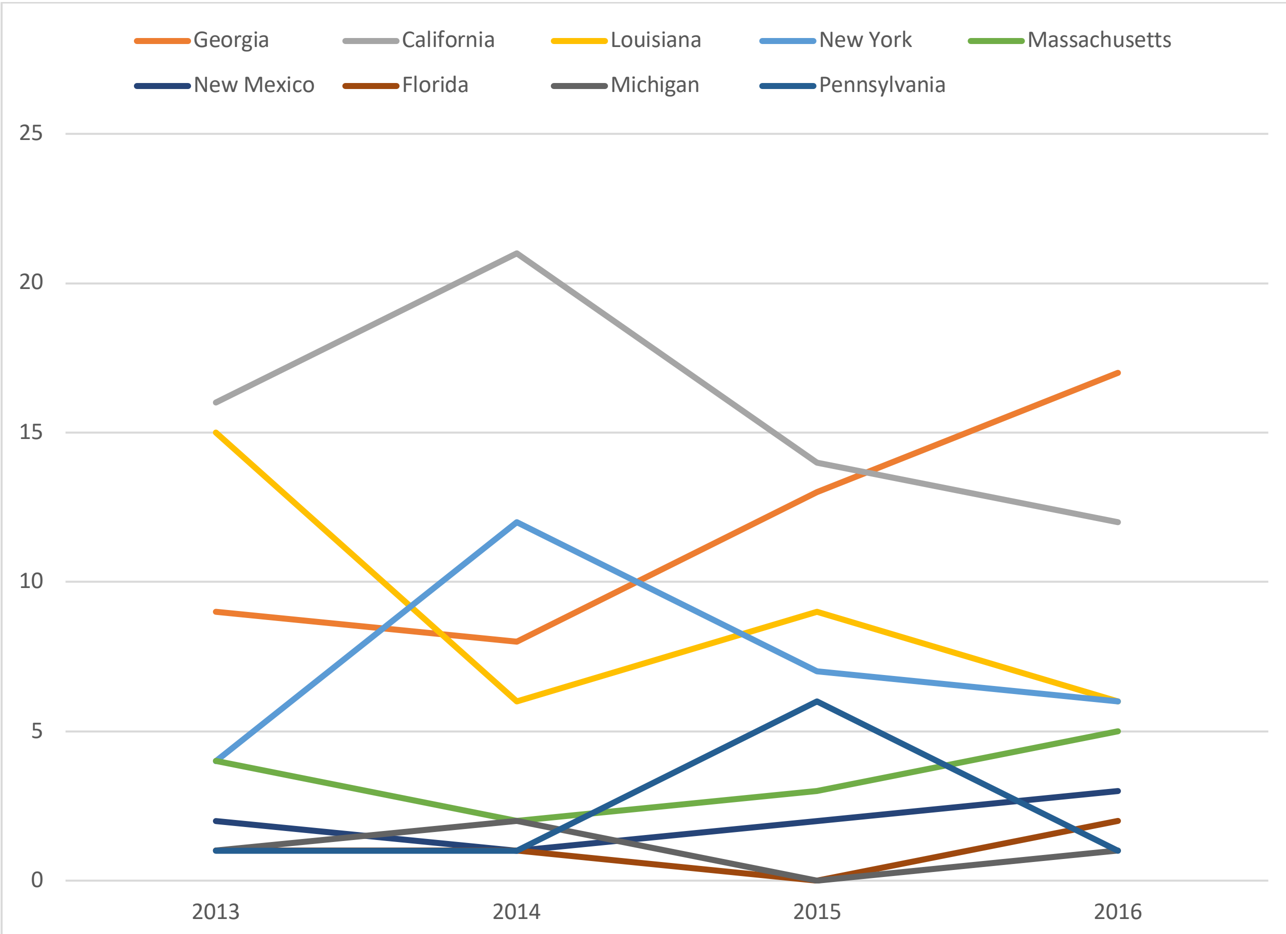
This is the only hypothesis that does not seem to be supported by the evidence here.

This does not in itself prove or disprove that the other primary rationale for such incentives—the economic effects of footloose production in the short-term—might in fact justify such tax expenditures, though several state studies have suggested otherwise[1]. Nor does it necessarily prove that MPIs, even when sustained over several years, work to build a local industry in all cases. Therefore, especially in light of the increasing costs of MPI programs, further evaluation of these subsidies should be done, and policymakers should in general consider implementing means by which more benefits can be achieved, and to reduce the dependence on the policy. At the very least, there should be more transparency in the implementation and administration of such programs in order to avoid the corruption and/or just poor outcomes in the future.

[1] See Chapter 2, Previous studies: fiscal & economic impact analyses, for details.

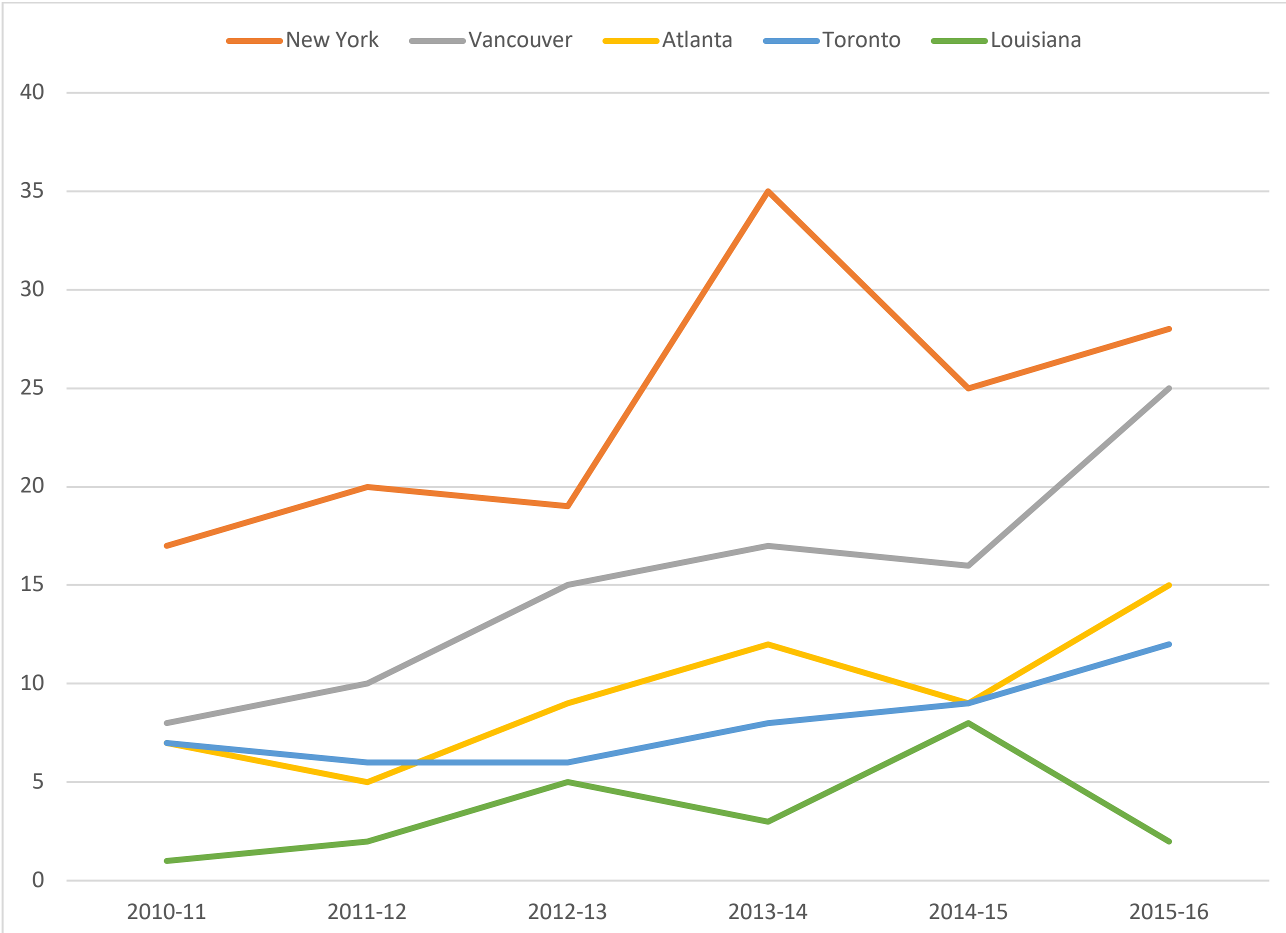
Recent updates

Data since 2013 may help us understand the long-term implications of MPI policies. FilmL.A. has done a series of studies (McDonald, 2014, 2015, 2016, 2017) over the past few years that suggest there is more to the story; or in Hollywood terminology, a twist ending. Four states emerge as key characters in this story: California, Georgia, Louisiana and North Carolina. These studies are limited, as they only look at the top 100 or so feature films by box office sales produced anywhere in the world, but they may offer some insight.



Source: FilmL.A. 2016 Feature Film Study

Figure 0.1 U.S. Feature Film Locations, Top 100 Films



Source: FilmL.A. 2016 Pilot Production Report

Figure 0.2 Pilot Production Locations (Not Including Los Angeles)

What we can see in four states

Among the states highlighted in the FilmL.A. reports, four states emerge as notable. First, California, as the first and still reigning leader of the film and television business, has seen its dominance degraded over the last several years, especially among the feature film "blockbusters." After reaching the high of 21 of the top 100 films in 2014, California has dropped to second place over the last couple of years. The new leader? Georgia, which has been gaining in recent years. Even the dominance of Los Angeles as the producer of television pilots has been challenged, with even ones set there moving to other locations—again, most notably, Georgia, as well as Louisiana and Canada.

Georgia, which is covered in depth in Chapter 4, is especially notable in the last few years. As could be seen in the data from IMDb Pro, productions have increased, but employment levels have mostly only returned to those of the pre-MPI era. This started to change dramatically in the last few years, as the number of top box office features and pilots has increased. Employment nearly doubled between 2012 and 2013. And while there was a drop-off in 2014, 2015 showed strong growth again[2]. Figure 3.5 shows that Georgia has also been gaining in television pilots, especially at the expense of Louisiana.

Louisiana may be the best example of the importance of persistence. Beginning in 2002 (after a number of years of other efforts to attract filmmakers), the state's generous incentives have helped to grow an industry nearly from the ground up. Lacking many of the natural and infrastructural advantages of Georgia and other neighbors, nevertheless Louisiana made a great effort to build not only the production base, but also to invest in the infrastructure to support it.

North Carolina does not get a lot of attention in the FilmL.A. reports, but it is important in a different way. Known for decades as "Hollywood East," with the largest studio between California and New York, North Carolina began to see productions move to Louisiana after 2002, and struggled to maintain its status for several years before and after starting their own more modest MPI program. It wasn't until their incentive rose from 15 to 25 percent in 2011 that they began to see results. But the real lesson of North Carolina may be more recent, and the reason they don't receive the notoriety of Georgia and Louisiana. After all, but eliminating the program in 2014, there was a virtual exodus of film production from the state; even before the

[2] From author's calculations from County Business Patterns.

business-killing effects of the state's now infamous HB-2 was conceived (though that has not helped). The new governor, elected in 2016, has pledged to bring back the MPI program, and hopefully, film production jobs with it.

Focus on a single state

One way to move this research forward is too look more closely the year-to-year data. As my research continues, I plan to use a variety of time-series and panel data analyses to do just that. In the following chapter, I plan to do a detailed analysis of one state, Georgia, where incentives have been in place for several years, and where state officials feel the policy has been successful in growing an indigenous motion picture industry; a conclusion in alignment with that of the recent FilmL.A. studies discussed above.

Conclusions and Discussion from the Georgia Case Study

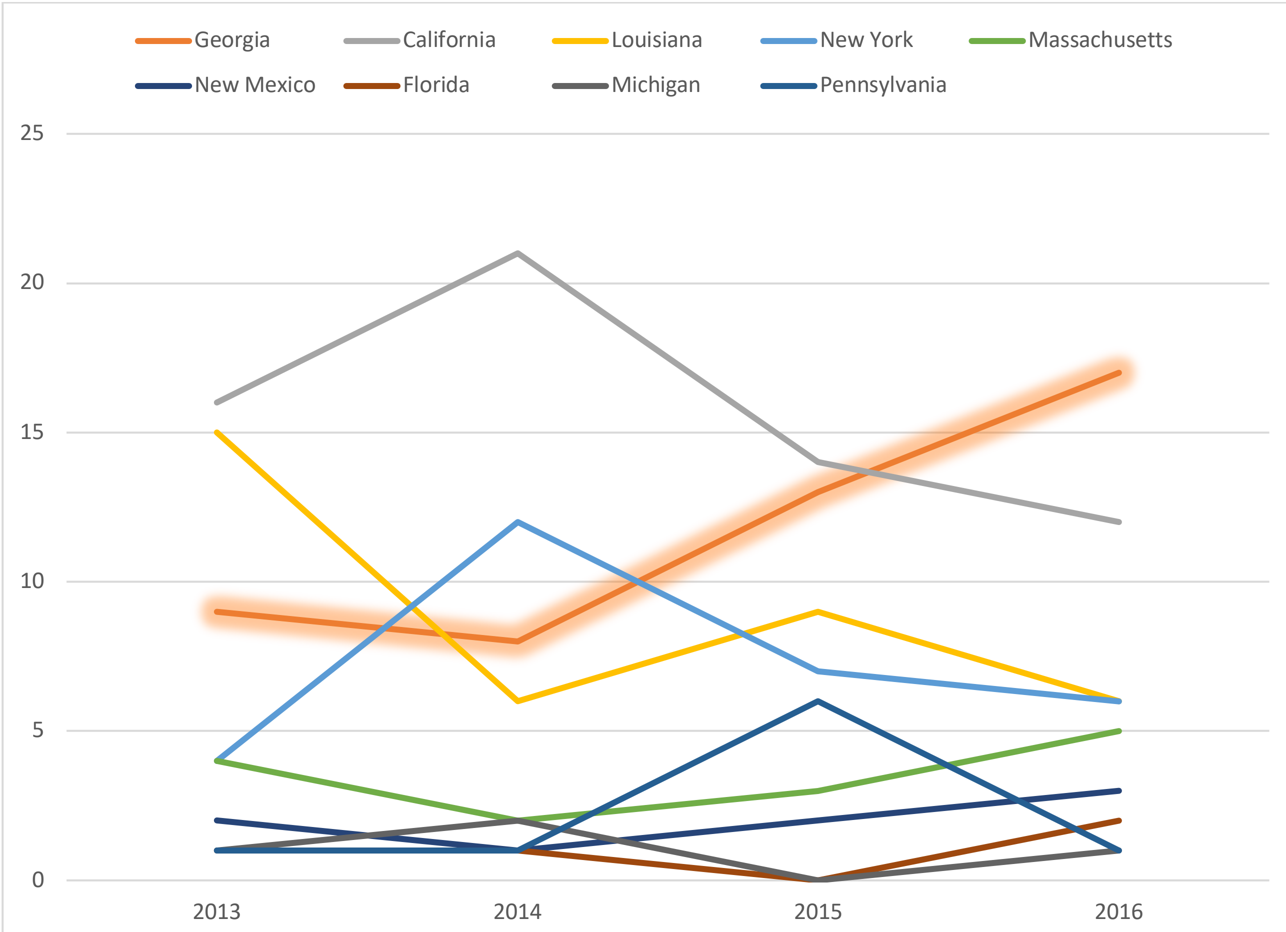
Returning to the theory, and the research questions from which they sprang, what does this evidence show? In considering the first question, that growth over several years in key metrics, is inconsistent, though some preliminary data show signs of production & employment growth in the few after those in the IMDb and CEW data.

Based on the findings presented here, the evidence suggests a positive correlation between implementation and level of movie production incentives and growth in the film industry, especially in later years. Using the metrics of productions, employment by industry, and employment by occupation, there is evidence to support the hypothesis that the incentives implemented in 2005 and expanded in 2008 have had some impact on the growth of the film and video cluster in Georgia.

It is interesting to note that, though the overall number of Georgia-based productions slowed in the years following their earlier peak in 2006, feature films and television series have shown especially strong growth since 2010. This phenomenon may be interpreted in more than one way, based on earlier studies, large feature films, with their commensurately large budgets, might be more likely to base production location based on budgetary considerations such as refundable tax incentives. However, they are also more likely to import crew, and to use subcontractors not based in the production location. The other big takeaway from the production numbers is the growth of smaller films, which may support the cluster theory regarding a sustainable industry.

At the same time, both film production employment and establishments showed some signs growth since the first MPIs were introduced in 2005, which was at a low point at that time.

In terms of production, Georgia seems to be gaining ground since 2013, according FilmL.A. (McDonald, 2017). In their study of the top 100 feature films by box office sales produced anywhere in the world, Georgia was number one in 2016, up from number five in 2013, the first year of the study (See Table 4.4). Georgia saw steady growth in this study since 2014.



Source: FilmL.A. 2016 Feature Film Study

Figure 0.3 U.S. Feature Film Locations, Top 100 Films (Featuring Georgia)

However, motion picture employment tells a somewhat more nuanced story. Based on CBP data, film employment more than doubled between 2010 and 2015 (118%). However, the state's location quotient actually dropped between 2013 and 2015, from 0.75 to 0.42, while states like California and Louisiana saw theirs grow. Occupations showed less steady growth, but a spike in 2013 and solid growth in film and video technicians corroborate these findings.

Questions two and three, that a competitive film industry will be characterized by a network of organizations and individuals geographically clustered in one or more regions of a state, and that this network will have impact beyond its direct members, also seems to be true in Georgia based on the degree of geographic concentration and the growth of non-MPI-qualifying films, suggesting a functional, if not a formal, network cluster and its less-connected beneficiaries.

And finally, hypothesis four on critical components is supported by evidence of many ancillary establishments and activities making up these components. The presence of this increasingly established ecosystems of firms, workers and support services make sustainability seem more likely. Recent data from the FilmL.A. studies[3] bolster this conclusion with data on production through 2016, as does the growth in employment since 2013.

All of this present a somewhat mixed message, with many signs pointing to the benefits of MPIs, but others that question their efficacy.

General Conclusions and Discussion

Tying the two studies together, we can see that in general, MPIs may have a modest effect, but that in Georgia specifically, this effect has been exaggerated. At this point, Georgia does benefit from some of the things that do seem to matter, however. With ten years of solid growth in film and video production, path dependence favors them over many less successful states going forward. In addition, other factors such as access to Los Angeles (as measured by time and number of non-stop flights).

[3] See Chapter 3, "Conclusions and Policy Implications," for more details.

Some General Conclusions

So, given the evidence from both the multistate study and the case study of Georgia, should state policymakers implement and/or double down on MPIs? Returning to the theory may be helpful in answering this question.

First, the literature discussed in Chapter 2 above suggests caution. Economic development theory generally cautions against incentives for several reasons, many of which are applicable here. The biggest concerns are around state competition leading to rent seeking behavior and a "race to the bottom," while the effects of labor hysteresis are likely to be modest.

Second, attributes of the motion picture industry suggest that incentives should be even less effective based on the lack of permanent physical investment relative to other industry sectors such as manufacturing. That said, the networked nature of production projects requires a different kind of infrastructure; one which requires a larger ecosystem within which the production functions. In addition, some degree of both general (e.g., transportation access) and industry-specific (e.g., large film studios) infrastructure are also important, and can be developed in conjunction with public policy decisions.

Policy Implications

Combining these observations with the findings in both studies, one might conclude that, while MPIs have resulted in positive outcomes in many states, these theory-based caveats should give policymakers pause when considering incentives for the film industry. First, there are the fiscal and economic studies showing often large net costs, including costs per job created, and that opportunity costs might offer the possibility of more effective policies for creating good jobs for state workers. Second, few states have ended their MPI programs, and those which have usually seen a dramatic drop in production activities. While this may be fine if the purpose is to merely take advantage of the multiplier effect of production spending, this does not bode well for building a local film industry.

All of this suggests caution as policymakers consider implementing, expanding, or in some cases, reinstating, their film tax incentives. North Carolina is having this debate now, after witnessing losses in production following the major downsizing of its program a two years ago (Handfield, 2014; McHugh & Boardman, 2014). There are certainly many voices calling for this form of rent-seeking behavior, but any consideration should include a detailed analysis of what to expect, and transparency in the programs that are implemented.

On the other hand, for states who commit to MPIs for long periods, there do seem to be payoffs. I would argue, however, that based on what happened with North Carolina, and nearly happened to Maryland a couple years ago, these payoffs may be fleeting if the state either lacks other key features attractive to filmmakers, or fails to invest in building the infrastructure and ecosystem without which producers will merely seek out the best deal (rent-seeking).

Suggestions for Future Research

One possible reason for the outcomes may be the effects of extra-jurisdictional actors. Other states have been implementing and altering tax incentive programs of their own, in many cases in direct reaction to those of competing states. I saw some evidence of that with the employment drop after 2002, when the first states began implementing incentives. A more complex model would be needed to assess the competition effects of states' policies.

Another way to move this research forward is too look more closely the year-to-year data. As my research continues, I plan to use a variety of time-series and panel data analyses to do just that.

I also found it difficult to assess the motivations of location decisions. I was able to find no academic research on film location decisions that didn’t discuss more than the effects of MPIs on attraction strategies. Interviews with decision-makers would be a good way answer this question.

I had also hoped to use social network analysis to assess the networked nature of the industry, but between my weakness with the methodology and lack of good network data, this was not possible in this dissertation.

And finally, I plan to continue exploring the components of sustainability by doing some comparative study with a few other states with existing industry clusters, most notably California and New York.