June 12, 2009 No. S2009-04 • ISBN: 1-890624-85-3

Special Effects: Flawed Report on Film Incentive Provides Distorted Lens

By Michael D. LaFaive

Executive Summary

A recent Michigan State University report on the Michigan Film Incentive program is of limited use in determining the program's success because it fails to enter the film subsidy's costs into the economic model used to calculate the benefits to Michigan's economy. This is analogous to an accountant leaving the liabilities off a company's balance sheet and concluding it has a high net worth.

The omission is especially troubling given that a substantial portion of the subsidy costs are actual cash outlays — checks to film producers from the Michigan Treasury. When a "multiplier effect" is applied to the tax revenues taken from the private economy to pay the subsidies — balancing the "multiplier" the MSU study authors applied to the supposed benefits — the costs of the program would be seen to be even higher.

At the very least, the state should commission a new report based on the very same expenditure data used in the MSU study, but mandate that the costs of the program be included in the model. It should also require the study to be peer-reviewed by professional economists and commissioned by a neutral state agency, such as the state Office of the Auditor General.

The material in this Policy Brief was originally submitted as written testimony to the Michigan Senate Finance Committee. That testimony was lightly edited to produce the text below.

ABOUT THE AUTHOR

Michael D. LaFaive is director of the Morey Fiscal Policy Initiative at the Mackinac Center for Public Policy. He would like to thank Mackinac Center Senior Legislative Analyst Jack McHugh for his help in editing the manuscript.

History vs. Hollywood Magic

In early 2008, state lawmakers passed an incentive program for filmmakers that provides refundable tax credits (potential cash subsidies) to those who produce films in the Great Lakes State. The program has been a public relations boon for its advocates. The glare of Hollywood lights and the excitement of "new jobs" seem to have convinced many people the program is a success. They should look more carefully.

For a variety of reasons, government subsidies targeted at particular industries have a terrible track record when it comes to boosting a state's economy.² This conclusion is supported by economic theory, history and empirical research. Hollywood magic cannot replace economic fundamentals.

The MSU Study Fails to Include Costs, Producing a Flawed Methodology

The Michigan Economic Development Corp., which oversees the Michigan Film Office, commissioned Michigan State University's Center for Economic Analysis to provide a study of the economic impact of the spending done by films receiving refundable tax credits under the Michigan Film Incentive program. The resulting report, written by Steven R. Miller and Abdul Abdulkadri, was published on Feb. 6, 2009.³

The MSU report has two strengths. To the authors' credit, they take care to exclude from their calculations film spending that probably had no impact on Michigan's economy because it likely occurred outside the state. This decision is noteworthy, not simply because it is the right thing to do, but also because the Michigan Film Office does not appear to have shown similar care in its own report on the MFI program. Hence, the MSU study's authors conclude that \$65.4 million was spent in Michigan by the 32 films for which they had data, 4 while

the Film Office states that total Michigan expenditures were \$125 million for the 35 films for which it had data (the Film Office, writing later, had information for several additional films).⁵

The MSU figure appears to be the better estimate, although it is difficult to say with perfect certainty, since the original data has not been made publicly available. Nevertheless, to argue (as the MEDC did to the Mackinac Center's Kathy Hoekstra) that the difference between the two figures is due to the MSU researchers' using earlier, unaudited figures is implausible. Those early figures would have had to be inexcusably inaccurate to produce an estimate that was off by nearly 50 percent. Nor is it likely that the three extra films the Film Office included could account for such a startling difference. The MSU authors' care in this regard has thus helped raise important questions about the Film Office numbers — questions that would have been difficult to ask otherwise, given the lack of public access to the original data.

The second strength of the MSU report lies in a similar area. The Film Office report states that the films' spending produced 2,800 Michigan jobs. The MSU report mentions direct gains of 2,763 jobs, but adds that these involved short-term employment of just 23 days on average, producing a "full-time equivalent" of just 254 jobs. Again, the MSU report disclosed important information that appears to have been omitted in the Film Office report.

Unfortunately, the MSU report is otherwise a flawed product. The authors take great pains to explain the workings of the model they employ — known as REMI' Policy Insight — and the impact that film industry expenditures have on Michigan's economy through the "multiplier effect." This multiplier effect involves subsequent rounds of spending. For example, a film company may contract with a hotelier, caterer and set designer. Those individuals then spend the money hiring new employees or buying more ingredients to make their products and so on.

The authors report that due to such multiplier effects, more jobs were created than just the 254 full-time equivalents that were the direct result of the filmmakers' hiring. Rather, the authors conclude, "[F]ilm productions generated 1,102 year-round equivalent jobs in 2008," and, "Based on generally accepted economic theory, multiplier impacts will increase over time." They report that with the multiplier effect, annual state economic output will increase by \$335.6 million by 2012.

In other words, significant taxpayer costs were not entered into the model. Had they been, the output would have been different — perhaps dramatically so — showing far fewer jobs created, for instance, or even a net job loss.

Thus, when MSU's Center for Economic Analysis boasted in a press release that the film incentive law was a "big hit," they did so knowing the model used in their study had been programmed with only the benefits of film expenditures, not the costs. 12 Ignoring these costs in the model is roughly equivalent to a certified public accountant omitting a balance sheet's liabilities and then touting the success of the company.

The costs of the Michigan Film Incentive are significant. In 2008, the program is said to have produced \$48 million in refundable tax credits; 13 estimates for future years indicate that costs could exceed \$200 million. 14 Due to the extraordinarily generous film credits being "refundable," a substantial portion of these costs represents actual cash outlays — State of Michigan checks written to producers — rather than the "forgone revenues" of most targeted tax breaks. Moreover, these subsidy outlays represent revenue taken from Michigan employers and families. If that money had been left in their hands, it would also have generated a multiplier effect. In other words, if the proponents of film subsidies attribute a multiplier effect on the benefit side, they must also acknowledge the same effect on the cost side.

MSU Study Contradicts Author's Explanation for Ignoring Costs

On April 27, I asked Steven Miller, co-author of the MSU report, why they had not included the costs of the program in the work. He quickly responded that the costs were left out because he and his co-author were measuring the "economic impact of the film industry expenditures, not necessarily the incentive program."

However, the title of his study belies this assertion: "The Economic Impact of Michigan's Motion Picture Production Industry *and the Michigan Motion Picture Production Credit*" (emphasis added). It is hard to imagine from the title alone why the paper would not examine the net impact of the incentive program — that is, why it would not include the costs, too.

News agencies around the state dutifully reported this apparent good news — which is probably what the Michigan Film Office had in mind. But these numbers are grossly overstated because the paper's authors deliberately excluded the costs associated with the program.

^{*} REMI is an acronym for Regional Economic Models Inc.

And consider the opening paragraph of the press release that accompanied the report: "A Michigan State University study has found that the state of Michigan's law providing tax credits for film production companies that shoot their movies in Michigan is a big time hit." ¹⁵

At a minimum, the MSU report and press release should have included a disclaimer that the costs of the program were not included, so that news agencies and others would have a better perspective on the report's conclusions.

Ironically, on Page 4 of the study, the authors write, "Deriving meaningful estimates of the economic impact of film production expenditures requires careful consideration of what makes up the direct expenditures and proper assignment of these direct expenditures to various industries." In fact, meaningful estimates of any government program's efficacy require careful consideration of all its aspects — including its costs. Without a massive and costly state subsidy, the authors would have had little filmmaker activity on which to report.

How could MSU publish a study with such a fundamental flaw? Simply put, the REMI economic model does not force its users to input a budget constraint. The model treated all of the expenditure data the MSU authors entered as the equivalent of manna from heaven.

It is not. In order to enrich filmmakers through taxpayer subsidies, the state must necessarily diminish the wealth of others.

Assume for a moment that the program really did create 1,102 jobs in 2008. At a cost of \$48 million, this figure works out to a state subsidy of \$43,557 per job: a staggering sum in light of Michigan's fiscal problems.

More troubling yet is that this program was born on the heels of 2007's \$600 million Michigan business tax surcharge, up to one-third of which may one day be eaten up each year by checks written to filmmakers. Lawmakers should realize that Michigan businesses might easily have created a mere 1,100 additional jobs in 2008 if the Legislature had simply not raised their taxes.

Economic Literature Documents, Chides Misuse of Models

The MSU authors should have recognized that excluding the costs of the film incentive program leads to significant distortions. Economics 101 — not to mention common sense — teaches each student that everything has a cost, even if it is just an opportunity cost. This is one of the most fundamental precepts of economic science.

The MSU authors may argue that leaving out the costs somehow does not invalidate their conclusions, but to do so, they would have to rebut an extensive body of economic literature that documents the misapplication of economic models.

For example, in his 1993 paper "The Misuse of Regional Economic Models," economist Edwin Mills shows how models like REMI are misapplied to advance policy goals. He offers a number of conjectures for why this occurs, several of which include:

... [T]o justify increased spending, government officials must identify some publicly desired goal to be accomplished by government spending. Creation of new jobs is among the best such goals that can be found. ... [T]hey must make it plausible that government can accomplish the goal in a way that the private sector cannot. This is where REMI is so valuable. It is a complex computer model that lay people cannot understand or evaluate, and it has important scientific merits. Thus, the frequent government claims that the best scientific model available shows that x thousand jobs will be created by the project helps to carry the day.¹⁷

In a 2005 book about business economics and finance, Lansing-area economist Patrick Anderson made a public plea for ethics in economic impact analysis, arguing, "Because the claimed economic impact of a proposed development can affect political support for a proposed project — and sometimes taxpayer funding — an incentive often exists to exaggerate the benefits." Whether intentional or not, a simple way to exaggerate benefits in an impact analysis is to exclude the costs.

In a 2006 academic paper "Economic Impact Studies: Instruments for Political Shenanigans?" John L. Compton argues: "Most economic impact studies are commissioned to legitimize a political position rather than to search for economic truth. Often the result is mischievous procedures that produce large numbers that study sponsors seek to support a predetermined position." ¹⁹

Compton goes on to specifically criticize ignoring total costs, omitting opportunity costs and abusing multipliers. The study, published in the Journal of Travel Research, focuses primarily on tourism-related impact analysis. Many of its arguments against impact analysis, however, apply to analysis of other "economic development" programs.

In fact, Compton's critique of tourism analyses is directly relevant to the MSU paper, which, among other things, cites film-related tourism as a benefit of the subsidies. Members of Michigan's tourism industry have seized upon this to trumpet the film incentive program's alleged virtues.

Why Government Subsidies Won't Save Michigan's Economy

There are many explanations for why government has a difficult time creating net new jobs with targeted subsidies like the Michigan Film Incentive. First, government must tax Peter to pay Paul. This creates an inherent risk of creating no new jobs, but rather just shifting them around.

Second, redistributing tax revenues costs money. The officials who run these programs don't work for free. For example, Michigan Film Office Director Janet Lockwood alone makes more than \$95,000 annually plus benefits, 20 and members of the MEDC who work with the film program are well-compensated, too. One published report indicates that the Michigan Film Office also received \$2 million for "marketing efforts." This is money taken first from Michigan employers who might otherwise use it to create jobs.

Third, Lansing civil servants and political appointees are unlikely to possess special talents when it comes to picking winners and losers in the marketplace. Even Wall Street experts have a checkered record when it comes to outguessing the market as a whole. There is no reason for taxpayers to think that political appointees who have no money of their own at risk will do better than Wall Street.

Lastly, bureaucrats may be inclined to make political decisions, rather than economic ones. This political incentive will tend to lower the return on a public "investment" made with tax dollars.

Hard empirical evidence suggests that these and other factors hobble government economic development programs of every sort. In their 2004 literature review of economic development programs, University of Iowa economists Alan Peters and Peter Fisher note that states spend about \$48 billion to \$50 billion annually on state and local incentive programs with little to show for it. Their article, "The Failure of Economic Development Programs," concludes in part:

The upshot of all of this is that on this most basic question of all — whether incentives induce significant new investment or jobs — we simply do not know the answer. Since these programs probably cost state and local governments about \$40-\$50 billion a year, one would expect some clear and undisputed evidence of their success. This is

not the case. In fact, there are very good reasons — theoretical, empirical, and practical — to believe that economic development incentives have little or no impact on firm location and investment decisions.²²

And:

We need to begin by lowering [policymakers'] expectations about their ability to micromanage economic growth and making the case for a more sensible view of the role of government — providing the foundations for growth through sound fiscal practices, quality public infrastructure, and good education systems — and then letting the economy take care of itself.²³

Recommendation: Increase Film Program Transparency, and Reperform the Film Subsidy Study Using Valid Methodology

As you can see, there are good reasons to believe that the Michigan Film Incentive, like other targeted economic development programs, is not capable of generating net new jobs or economic growth. This calls the wisdom of the program into doubt.

Nevertheless, if policymakers are intent on continuing state subsidies to the film industry, the state should consider consulting with the company that actually created the REMI Policy Insight model (the model used by the MSU economists) to replicate the work produced for the MEDC, but with one important change: The costs of the program would be included.

The "direct expenditure assumptions" data used by the MSU Center for Economic Analysis is available to the public and could be easily provided to REMI's economists in Amherst, Mass. The total cost of the program could also be provided (including the net MBT subsidy), but for the best results, it might be ideal if the state provided REMI economists with a breakdown of subsidies per project and the estimated costs by year. The question is, Would the Michigan Film Office cooperate?

The Michigan Film Office has been decidedly stingy about providing detailed information on this expenditure of taxpayer dollars — so much so that Mackinac Center Senior Legal Analyst Patrick J. Wright observed in March 2009 that the Film Office violated the law in its annual report by failing to provide the type of detailed information demanded of the program by statute.²⁴ Wright explained that state law mandates that the report provide detailed spending figures for each film

receiving the incentive program's refundable tax credits, but that the Michigan Film Office supplied only the total spending figure, leaving the report "sorely lacking in key information required by state law." The Film Office originally claimed that legal concerns over the "confidentiality" of the data prevented disclosure of figures for individual films, but the Office of the Attorney General of Michigan later disagreed, and the Film Office finally made the information public.²⁵

Here's the bottom line: Because the MSU report ignored the program's costs, it is of little use in determining the success or failure of the state's film incentive program. Unfortunately, the study, issued under the imprimatur of Michigan State University, was seized upon and widely reported by the media.

The state should commission a new report based on the very same expenditure data used in the existing one, but mandate that the costs of the program be included in the model. The cost of paying for a second analysis should be funded from the existing Michigan Film Office budget, but commissioned by a neutral state agency, such as the state Office of the Auditor General. The paper should also be subject to publicly acknowledged peer-review prior to publication. In the meantime, the state should refrain from approving any more film incentive awards until the new study is complete.

Endnotes

- 1 Michael D. LaFaive, "Special Effects: Flawed Report on Film Incentive Provides Distorted Lens," Mackinac Center for Public Policy, http://www.mackinac.org/10477 (accessed June 9, 2009).
- 2 See, for instance, Michael D. LaFaive, "MEGA: A Retrospective Assessment," (Mackinac Center for Public Policy, 2005), http://www.mackinac.org/archives/2005/s2005-02.pdf, (accessed June 10, 2009).
- 3 Steven R. Miller and Abdul Abdulkadri, "The Economic Impact of Michigan's Motion Picture Production Industry and the Michigan Motion Picture Production Credit," (Michigan State University Center for Economic Analysis, 2009), http://www.michigan.gov/documents/filmoffice/MSU_Economic_Impact_Study_269263_7.pdf, (accessed May 22, 2009).
- 4 Ibid., 5.
- 5 "Michigan Film Office 2008 Annual Report: Film Industry Refundable Tax Credit Operation and Effectiveness," (Michigan Film Office, 2009), 4, http://www.michigan.gov/documents/filmoffice/ MFO_2008_Annual_Report_269261_7.pdf, (accessed June 10, 2009).
- 6 Kathy Hoekstra, "The Scene and the Unseen: Act III," Mackinac for Center for Public Policy," http://www.mackinac.org/10388 (accessed June 14, 2009).
- 7 Ibid.
- 8 Miller and Abdulkadri, "The Economic Impact of Michigan's Motion Picture Production Industry and the Michigan Motion Picture Production Credit," 7.

- 9 Ibid., Executive Summary.
- 10 Ibid
- 11 Ibid., 8.
- 12 "MSU Study Finds Film Industry Big Hit in Michigan," Michigan State University, http://news.msu.edu/story/6082/ (accessed June 10, 2009).
- 13 "Michigan Film Office 2008 Annual Report: Film Industry Refundable Tax Credit Operation and Effectiveness," 4.
- 14 David Zin, Michigan Senate Fiscal Agency, e-mail to Michael D. LaFaive, April 29, 2009.
- 15 "MSU Study Finds Film Industry Big Hit in Michigan."
- 16 Miller and Abdulkadri, "The Economic Impact of Michigan's Motion Picture Production Industry and the Michigan Motion Picture Production Credit," 4.
- 17 Edwin S. Mills, "The Misuse of Regional Economic Models," *Cato Journal*, Vol. 13, No. 1 Spring/Summer, (1993), 38, http://www.mackinac.org/archives/2009/nr043009-REMI-misuse.pdf.
- 18 Patrick Anderson, *Business, Economics, and Finance with MATLAB, GIS, and Simulation Models* (Boca Raton: Chapman & Hall/CRC Press LLC, 2005), 129.
- 19 John L. Compton, Journal of Travel Research Vol. 45, No. 1 (2006): 67.
- 20 Trace Graham, Michigan Economic Development Corporation Freedom of Information Act Coordinator, mailing to James Hohman, Mackinac Center, April 6, 2009.
- 21 Randy J. Stine, "Movie Magic in Michigan," *The Greater Lansing Business Monthly*, September 2008, http://www.lansingbusinessmonthly.com/article_read.asp?articleID=4716 (accessed June 10, 2009).
- 22 Alan Peters and Peter Fisher, "The Failures of Economic Development Incentives," *Journal of the American Planning Association* Vol. 70, No. 1 (2004): 32.
- 23 Ibid.: 35-36.
- 24 Kathy Hoekstra and Patrick J. Wright, "News Release: Film Office Report Violates Michigan Law and the Spirit of Sunshine Week," Mackinac Center for Public Policy, http://www.mackinac.org/10391 (accessed June 10, 2009).
- 25 Patrick J. Wright, "News Release: State Attorney General Agrees That Michigan Film Office Violated State Law by Failing to Disclose Required Film Spending Information," Mackinac Center for Public Policy, http://www.mackinac.org/10485 (accessed June 14, 2009).





Board of Directors

D. Joseph Olson, Chairman Senior Vice President and General Counsel, Amerisure Companies

Joseph G. Lehman, President Mackinac Center for Public Policy

Lawrence W. Reed, President Emeritus Mackinac Center for Public Policy

Joseph J. Fitzsimmons Retired President, University Microfilms

Hon. Paul V. Gadola U.S. District Court Judge

Kent B. Herrick
President and CEO, Thermogy

Richard G. Haworth Chairman of the Board, Haworth, Inc.

Phil F. Jenkins *Chairman, Sweepster Inc.*

Edward C. Levy Jr. President, Edw. C. Levy Co.

Rodney M. Lockwood Jr.

President, Lockwood

Construction Company, Inc.

Joseph P. Maguire President, Wolverine Development Corporation

Richard D. McLellan
Attorney, Dykema Gossett

James M. Rodney Chairman of the Board, Detroit Forming Inc.

Linda K. Rodney Attorney at Law, Law Offices of Linda K. Rodney, P.C.

Board of Scholars

Dr. Donald Alexander Western Michigan University

Dr. William Allen
Michigan State University

Dr. Thomas Bertonneau Writer and Independent Scholar

Dr. Brad Birzer Hillsdale College

Dr. Peter Boettke George Mason University

Dr. Theodore Bolema

Anderson Economic Group

Dr. Stephen Colarelli Central Michigan University

Andrew Coulson Cato Institute

Robert Crowner

Eastern Michigan University (ret.)

Dr. Richard Cutler
University of Michigan (ret.)

Dr. Jefferson Edgens Brewton-Parker College

Dr. David Felbeck *University of Michigan (ret.)*

Dr. Burton Folsom

Mackinac Center for Public Policy

Dr. Wayland Gardner Western Michigan University (ret.)

John Grether
Northwood University

Dr. Michael Heberling *Baker College*

Dr. Ormand Hook Mecosta-Osceola Intermediate School District Robert Hunter

Mackinac Center for Public Policy

Prof. Harry Hutchison Mason School of Law

Dr. David Janda Institute for Preventative Sports Medicine

Annette Kirk Russell Kirk Center for Cultural Renewal

David Littmann

Mackinac Center for Public Policy

Dr. Dale Matcheck
Northwood University

Dr. Paul McCracken
University of Michigan (ret.)

Charles Meiser

Lake Superior

State University (ret.)

Glenn Moots
Northwood University

Dr. George Nastas III

Marketing Consultants

Dr. John Pafford
Northwood University

Dr. Mark Perry University of Michigan - Flint

Gregory Rehmke

Economic Thinking/
E Pluribus Unum Films

Dr. Steve Safranek

Ave Maria School of Law

Louis Schimmel Jr.

Mackinac Center for Public Policy

Dr. Howard Schwartz
Oakland University

James Sheehan

Deutsche Bank Securities

Rev. Robert Sirico Acton Institute for the Study of Religion and Liberty

Dr. Bradley Smith
Capital University Law School

Dr. John Taylor

Grand Valley State University

Dr. Richard K. Vedder *Ohio University*

Prof. Harry Veryser Jr. *University of Detroit Mercy*

John Walter Jr.

Dow Corning Corporation (ret.)

Dr. William Wilson *Economic Consultant*

Mike Winther Institute for Principle Studies

Dr. Gary Wolfram Hillsdale College

Guarantee of Quality Scholarship

The Mackinac Center for Public Policy is committed to delivering the highest quality and most reliable research on Michigan issues. The Center guarantees that all original factual data are true and correct and that information attributed to other sources is accurately represented.

The Center encourages rigorous critique of its research. If the accuracy of any material fact or reference to an independent source is questioned and brought to the Center's attention with supporting evidence, the Center will respond in writing. If an error exists, it will be noted in an errata sheet that will accompany all subsequent distribution of the publication, which constitutes the complete and final remedy under this guarantee.

©2009 by the Mackinac Center for Public Policy. All rights reserved.

Permission to reprint in whole or in part is hereby granted, provided that the Mackinac Center for Public Policy is properly cited.

ISBN: 1-890624-85-3 S2009-04