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Pennsylvania's Flawed Film Tax Credit:
What the ERA study won't tell you

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EXECUTIVE SUMMARY

The Pennsylvania Legislative Budget and Finance Committee contracted with Economics Research Associates (ERA)[1] to analyze Pennsylvania's Film Tax Credit (FTC). In general, the ERA report, "Pennsylvania's Film Production Tax Credit and Industry Analysis," fails to provide legislators and citizens with a reliable assessment of the program by not counting all the costs associated with the film tax credit and falling short in its tax revenue claims.

This critique addresses the flaws in the ERA report in order to foster a more educated debate on Pennsylvania's FTC initiative. Among the problems with the report include:

- The ERA report has **not established a causal link** between larger tax credits and higher film production in Pennsylvania. It is just as plausible that the causality could be reversed—that greater film production in the state fosters lobbying for more favorable tax policies.

- The ERA report claim that a significant portion of film production would be lost if not for the $75 million tax credit incentive is **purely speculative** given that no tax elasticity estimates are provided. Furthermore, ERA's admission that the majority of film productions have not applied for film tax credits suggests an inelastic response, meaning that the benefits are likely overstated.

- The $58 million in tax credits awarded to film producers is estimated to be offset by an $18 million gain in additional state and local tax revenues. This $40 million differential means that the film tax credit **did not "pay for itself"** in terms of tax revenue.

- The FTC program is **unlikely to have a significant positive effect on employment and incomes** in Pennsylvania. Numerous economic studies find that tax incentives for professional sports teams and facilities create no positive net gains in income and employment.[2] The film industry, with its temporary or seasonal employment, is no different. This means that the estimated net benefits are not likely to materialize once all of the opportunity costs are understood.

- ERA estimates the $58 million of lost revenue from actual tax credits taken by filmmakers is estimated to generate about $525 million in additional industry output (11% revenue loss as a share of the benefit). But ERA's admission that **the majority of film productions have not applied for film tax credits** suggests an inelastic response, meaning that the actual response to the tax credit is likely well below the estimated benefit of $525 million.

- ERA's cost-benefit analysis **ignores the opportunity costs** of the FTC program, which means that the actual benefits are lower than they estimate. Proponents of the FTC ignore the fact that this tax credit comes at the expense of alternative tax cuts or credits that could create income and employment elsewhere outside of the film industry. Additionally, the state would have to make up for $58 million in lost revenue by raising other taxes or reducing other spending.

The FTC program is unlikely to have a significant positive effect on employment and incomes in Pennsylvania.

- The structure of the film tax credit is such that it is unlikely to attract the studios that have less than 60 percent of their productions in Pennsylvania. This requirement is more likely to **favor films that would have been produced in Pennsylvania even without the tax credit.**

- The FTC program violates the principles of sound tax policy by giving arbitrary **preferential treatment to the film industry** at the expense of other industries in Pennsylvania that can generate more benefit for the state from a similar tax credit. The film industry should not be favored over other industries or over taxpayers with preferential tax treatment. While the film industry generates higher paying jobs than some other industries, it is difficult to justify giving away tax credits to wealthy movie stars and industry professionals who may not reside in Pennsylvania, while withholding the same benefit from working class Pennsylvanians in other industries.

- Due to the ongoing economic downturn, the state is experiencing a significant shortfall in tax revenues. **It is inappropriate to offer tax credits to the film industry while raising taxes on working Pennsylvanians and other industries**. Even if the film tax credit was sound economic policy, it might be prudent to ask the film industry to make the same sacrifices as the rest of Pennsylvania during these tough economic times.

A Detailed Analysis of ERA Claims

No causal link shown between film tax credit and movie production

The Economics Research Associates' (ERA) report did not establish a credible causal link between the film tax credit (FTC) and film production. Without a causal link, there is no benefit from the FTC for the taxpayers' money allocated. The first FTC legislation in Pennsylvania was enacted during fiscal year 2004-05, but there was no significant increase in the number of films produced in Pennsylvania until 2008. The 2008 increase in Pennsylvania film productions is not likely to be due to the FTC, since Ohio, which did not have any tax incentives, also experienced a 21% increase in film production in 2008 (based on IMDb data). This trend of increased film production in 2008 in both states with dramatically different film tax incentives suggests that tax credits along the lines of Pennsylvania's FTC play no discernable role in film production.

ERA's insinuation that a single year of higher movie production can serve as evidence of causality between film tax credit and movie production cannot be taken seriously. In fact, one could argue that the causality might go the other way around: a stronger presence of film industry lobbyists leads to more favorable tax legislation, such as the current FTC program, that further serve their interests.

The incentive would principally target films that, for artistic or other reasons, would have been filmed in Pennsylvania anyway.

No elasticity estimates are provided to support the claim that the tax credit matters

The ERA report claims that a significant amount of film production in Pennsylvania would be lost if it was not for the $75 million tax credit initiative. This claim is purely speculative, given that no tax elasticity estimates are provided. Furthermore, ERA's report admits that the majority of the film productions have not applied for Pennsylvania film tax credit, which suggests that the film industry's response to the tax credit is rather inelastic. Thus, even if there were a causal link between the film tax credit and movie production, the inelastic response guarantees that the proposed film tax credit would have a very small effect on film production in Pennsylvania.

Another way to consider this is to realize that the $58 million tax giveaway would amount to 11% of the estimated $525 million in additional industry output as a result of the tax credit. This number suggests a small "bang for the buck" or an inelastic response to tax incentives by the film industry. The inelastic response should not be surprising, since the right combination of quality inputs might be more important for the film industry than production costs. As production and marketing costs continue to rise, film studios become increasingly interested in locations with lower production costs and tax incentives that help to keep costs down, but there are other important considerations such as unique infrastructure and labor force talent that matter as well.

The ERA report cites workforce and physical infrastructure as the most important consideration when producers decide where to film. For example, nationally-televised TV series such as Cold Case and The Office are set in Pennsylvania, but are primarily filmed in Los Angeles, except when filming at exterior locations in Pennsylvania is required. These two examples support the suspicion that movie studios may not consider tax incentives as the key factor in deciding where to film.

Does the tax credit provide the right incentives?

In order for Pennsylvanian's film tax credit to attract more productions, it needs to strike the right incentives with the film studios. The lack of significant response to the tax credit suggests that the film tax credit does not target the right incentives. And given the way the tax credit is structured, it shouldn't: according to ERA's report, approved film productions are eligible to receive a tax credit for up to 25% of qualified production expenses if at least 60% of the qualified production expenses occurred in Pennsylvania. This 60% requirement means that the incentive would principally target films that, for artistic or other reasons, would have been filmed in Pennsylvania anyway.

ERA report hides the budget hole that would be created by the tax credit

ERA estimates that the FTC program will cost $58 million in lost tax revenues that would be partially offset by $18 million in additional state and local tax revenues from supposedly expanded film activity. However, by subtracting the $58 million loss from the total film industry revenue of $63 million, the ERA report makes it look like the FTC program is going to bring a positive net gain of about $5 million dollars. Instead, the FTC program creates a net loss of $40 million in tax revenues, further worsening the state budget deficit that must be dealt with by raising taxes or cutting spending. This $40 million net tax revenue loss implies that the tax credit is not paying for itself. A tax cut or credit that "pays for itself" is the one that actually brings in as much or more tax revenue after the tax rate cut.

The ERA report ignores the opportunity cost of the FTC program by failing to compare the estimated benefit to what could have been accomplished with a similar tax incentive in other industries, or for all businesses.

ERA report ignores the opportunity cost of the tax credit

The ERA report fails to account for opportunity costs of the FTC program. A proper cost-benefit analysis requires one to look not only at the explicit costs and benefits of the proposed initiative but also at the implicit or forgone cost of the alternative solutions or options that must be turned down in favor of the chosen initiative. The ERA report ignores the opportunity cost of the FTC program by failing to compare the estimated $525 million benefit to what could have been accomplished with a similar tax incentive in other industries, or for all businesses. Failing to account for the opportunity costs makes the net benefit from the FTC program look larger than it actually is and misinforms policymakers about the true cost of the FTC program.

Policymakers should be informed of the benefits of giving the same amount of tax credits to another industry. ERA's report lists cheese, handtool, milk and butter, leather and hide tanning and fishing, and poultry industries as those that have higher multiplier effects than the film industry in Pennsylvania. This means that a dollar spent in any of these industries would generate more additional spending than a dollar spent in the film industry. Thus, a tax credit given to the film industry generates fewer benefits than if it were given to the poultry industry, for example.

The opportunity costs of the tax credit do not stop there. State government would have to make up for about $40 million in lost revenue by cutting spending or raising taxes, which will discourage other types of activities. Thus, it is possible that the film tax credit might cause more harm than benefit when all opportunity costs are accounted for.

ERA report double counts the benefits

The ERA report double counts the benefits of the film tax credit. For example, the economic benefits of the FTC program are estimated to be about $525 million of additional economic output, where jobs (3,960), wages ($147 million), spending ($267 million), and tax revenue of $18 million are all parts of the $525 million benefit supposedly induced by the tax credit. ERA lists $18 million as an additional gain in tax revenues from additional film productions encouraged by the tax credit that would help to offset the $58 million loss in tax revenues. However, the $18 million gain in revenues would be collected or taken from the estimated $525 million increase in output.

ERA's report estimates that the total amount of tax revenue collected from the film industry with the tax credit is about $63 million. However, ERA's estimated additional gain in tax revenue of $18 million due to the tax credit is a part of the same $63 million. Moreover, the same $18 million gain in revenues is a part of the estimated increase in the value of film productions that ERA's report terms output and counts as the economic benefit of the FTC program. Thus, the net benefit of the film tax credit can be calculated as $525 million + $45 million - $45 million - $58 million, which equals $467 million rather than $525 million as the net gain from the film tax credit program.

Under the film tax credit program, Pennsylvania taxpayers could be forced to pay a high cost in terms of large public subsidies and lost income or employment for the privilege of having a few more movies filmed in Pennsylvania.

The film tax credit does not promote economic development

ERA's report emphasizes the contribution of the film industry to Pennsylvania's economy in terms of jobs and additional spending that would supposedly be only enhanced with the film tax credit. Similar arguments have been used by the proponents of various tax incentives designed to lure professional sports teams and facilities for the benefit of urban economies. Despite these claims, economists find no evidence of economic benefits.[3] In fact, a few studies find that these franchises can have a net negative impact on income and employment.[4]

These non-existent or even negative results occur because of tax-induced economic distortions that create, at best, no additional economic value because they simply reallocate resources and employment from one industry to another. The same argument could be applied to the film industry, which due to its seasonal or temporary employment very much resembles the professional sports franchises.

Since it is unnatural for the film industry to create long-lasting, year-round jobs in Pennsylvania, the FTC program is unlikely to have any significant effect on local economic development. Thus, under the film tax credit program, Pennsylvania taxpayers could be forced to pay a high cost in terms of large public subsidies and lost income or employment for the privilege of having a few more movies filmed in Pennsylvania.

The film tax credit goes against sound tax policy

The film tax credit violates the principles of sound tax policy by giving an arbitrary preferential treatment to the film industry at the expense of other industries in Pennsylvania that could qualify for a tax credit of their own. This preferential tax treatment of the film industry transfers resources away from the other industries and towards the film industry, which creates economic distortions or inefficiencies in Pennsylvania's economy that would not occur if policymakers created an equal playing field for all enterprises. Several economic studies find that the economic distortions from favorable tax treatment of sport teams and facilities can lead to negative effects on income and employment.[5]

Pennsylvania tax payers would pay the cost but get few benefits from FTC

While the costs of subsidizing the film industry through generous tax credits are very tangible, the benefits likely are not. ERA's report praises the film industry for the high-paying jobs and the multiplier effect that would be created by additional film productions. However, these higher-paying jobs are likely to be temporary, as movies come and go, and much of the income paid by the industry is likely to be spent outside of Pennsylvania, given that most actors, makeup artists, and other movie professionals tend to reside out of state. Hence, the film industry might create a few higher-paying but short-lived jobs, at the sacrifice of more, albeit lower-paying, jobs that would benefit a wider and less fortunate share of Pennsylvania residents.

It would be inappropriate to offer $58 million in tax credits to the film industry while raising taxes on working Pennsylvanians and other job creators.

The film industry is not unique

The ERA report praises the film industry for its high-tech and high-paying jobs, but these jobs are not necessarily better or worse than the jobs that could be created with a similar tax reduction elsewhere. In fact, according to ERA's multiplier estimates, more jobs could be created in the poultry processing industry with a similar tax credit. There is no objective reason to favor acting jobs over alternative jobs that would be created with a similar tax credit elsewhere. Otherwise, we should give preferential tax treatments only to the industries employing doctors, lawyers, professional athletes, and other types of well paid occupations. This would not be a particularly meaningful or equitable policy.

The film industry should not be exempt from the sacrifices of all Pennsylvanians

Pennsylvania, like many other states, is required to operate on a balanced budget, which is rather difficult to do during the ongoing economic downturn. The state is already falling short in its revenue collections and will have to increase taxes. create new taxes, or make spending cuts to balance the budget. This will be all the more difficult to do if the film tax credit is maintained. The state may simply be unable to afford this luxury, and it would be inappropriate to offer $58 million in tax credits to the film industry while raising taxes on working Pennsylvanians and other job creators.

Endnotes

1. Economics Research Associates, an AECOM company (ERA | AECOM), "Pennsylvania's Film Production Tax Credit and Industry Analysis," ERA Project No. 18238, May 2009.
2. See an authoritative review of these studies in Coates, Dennis and Brad R. Humphreys (2003). "Professional Sports Facilities, Franchises and Urban Economic Development" UMBC Economics Department Working Paper 03-103. Available at: http://www.umbc.edu/economics/wpapers/wp_03_103.pdf
3. Ibid.
4. Ibid.
5. Ibid.

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