Subsidy-giving has many potential drawbacks: cost per job estimates are often high, spillover effects are uncertain, politics may influence subsidy decisions, and competition drives up the subsidy size. However, there is also a clear allocative efficiency argument for allowing subsidies. Locations that would benefit the most from attracting a firm, but where the firm is less profitable, can express this benefit with a subsidy. In effect, these less attractive locations can use the subsidy to compensate the firm for locating where it is less profitable, thereby increasing total welfare.

The allocative efficiency argument is not as compelling when subsidy competition occurs within a single metro area. In this case, two states that share a metro area compete to attract the same firm, or one state spurs a competition by offering subsidies to poach a firm from the other side of the border. When a firm relocates from one side of the metro area to the other, very little new economic activity is generated. Instead, the most salient change is the commuting pattern of the firm’s employees. Therefore, local coordination or harmonization—limiting subsidy competition between neighbors—may have large welfare gains. In fact, past work has found that regional tax harmonization can achieve most of the gains of national tax harmonization, given that the regions are sufficiently homogeneous (Fajgelbaum, Morales, Suárez Serrato and Zidar 2018). Kim (2023) studies local coordination in the subsidy competition context, with a specific focus on the fierce subsidy competition, and subsequent truce, in the Kansas City Metro Area.

Consider subsidy competition with three competitors: Kansas City, Kansas, Kansas City, Missouri, and another, outside Kansas City, location. These three locales are competing for a single firm, and the firm has a simple decision to make—which location offers the highest profit? This profit is a function of the location specific characteristics, and the subsidy offer. The cities have a more complicated problem—what subsidy should they offer the firm? The benefit from attracting the firm
is the sum of the economic and political payoff, less the subsidy payout. \cite{Kim2023} specifies the subsidy competition as a first price auction: cities privately submit bids (subsidy offers) and the city that offers the highest profit for the firm wins the auction. Therefore, the city trades off between maximizing benefit with a lower subsidy, and maximizing the probability it wins the competition with a higher subsidy. With the auction, the model can predict optimal incentive offers and the firm’s location choice when all three localities compete.

The model incorporates spillovers by allowing for economic linkages between jurisdictions. For example, if a firm locates in Kansas City, MO, then Kansas City, KS might also benefit from job creation. This economic linkage allows for free riding between neighbors, and effects equilibrium bids. Neighboring locations are also linked via the competitive externality—neighbors are more likely to be close substitutes. A marginally higher subsidy offer from Kansas City, MO, for example, is more likely to divert a firm to choose that location instead of Kansas City, KS, thus affecting the Kansas bid.

Given the baseline model, \cite{Kim2023} then demonstrates how incentive offers would change if Kansas and Missouri coordinate to compete against the “outside” location. Now, the two sides of the state border can internalize the economic payoffs in the whole metro area—there is no free riding, which would allow for a larger incentive offer, all else equal. Also, the two states are no longer competing against each other, which puts downward pressure on the incentive offer. Therefore, the predictions on the changes in equilibrium bids, and hence gains from coordination, hinge on the economic spillover and the competitive externality (Table 1, \cite{Kim2023}).

Table 1 shows that there are very little gains to coordination when the competitive externality and the economic spillover are both high. This is exactly the case in Kansas City. Often there is no “outside” location, firms are choosing between either side of the border, and the economic linkage is strong and the locations are close substitutes. What can be done? Well, here there are gains to another type of coordination: a regional truce.

In 2019, Kansas and Missouri did just that. No subsidies for firms relocating from the other side of the border, within Kansas City \cite{Hardy2019}. This was an interesting development, because there were two previous attempts at a truce before the successful agreement in 2019. What changed to allow the governments of Kansas and Missouri to agree to the truce in 2019? Or, why did the previous attempts fail?
Kim (2023) argues that the political payoffs changed. In effect, in the setting where the competitive externality and economic spillovers are high, the two forces counteract each other and political payoffs drive the equilibrium bids. Therefore, due to the political gain from attracting firms, politicians do not have an incentive to agree to a ceasefire. Kim (2023) highlights 2 changes between the first attempt at the truce (in 2014) and the agreement (in 2019). First, both states saw a change in leadership: new governors, with new political incentives, were elected. Second, with the departure of Kansas’ previous governor, Sam Brownback, the infamous “Kansas Experiment” came to an end. Therefore, Kansas no longer needed to offer generous incentives to buoy its’ job creation statistics.

I do not disagree that the political payoffs changed between 2014 and 2019, certainly with the added pressure of the “Kansas Experiment.” Kim (2023) also mentions a growing public distaste for the border war, which helped to motivate the opening of the negotiations in 2014. But, I am still left with a puzzle. The competition between Kansas and Missouri was ongoing for at least 30 years before negotiations begun, according to NPR (Planet Money 2016). Was there public support for subsidy competition throughout this period, or added media attention led to the recent change? And if the subsidy competition was not salient in earlier years, what did the politicians have to gain? Moreover, in other metro areas that cross state borders, like the New York Metro Area, spanning New York, New Jersey, and Connecticut, why has there not been any coordination?

I propose an additional, complementary, theory: heterogeneity in firm profits. Consider the firm’s problem in the model. In the case of the truce, the firms are only choosing between Kansas City, Kansas and Kansas City, Missouri, and it will not see any incentives. Therefore, the firm will just locate at the side of the border that has the maximum profits. Even if the two sides of the border are close substitutes, it may be that one is more attractive, and importantly, is more attractive to most firms. Therefore, Kansas did not want to agree to a truce with Missouri because it predicted that all of the firms would prefer Missouri in the absence of incentives. In fact, Missouri, the more dominant side of the metro, always instigated the truce. This also may partly explain why the truce has been so tenuous. Similarly, it is the states that I predict would do well in the absence of subsidy competition that propose national bans (Slattery 2022).

For the remainder of my discussion I will consider the type of coordination that is the focus of the Kim (2023) model: coordination in incentive offers. I will go through a few real world cases, and

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1New York legislators drafted and circulated the “End Corporate Welfare Act” to try to gain traction for a national subsidy truce.
consider reasons why it is not more commonly practiced. Then, I will consider whether there are gains to alternate strategies.

**Coordination in Subsidy Offers**

**USDA and the Kansas City Metro Area.** The model in [Kim (2023)] illustrates how equilibrium subsidy offers change when localities can coordinate—i.e. Kansas City, Kansas and Kansas City, Missouri offer one incentive to a firm to attract that firm to the Kansas City Metro Area. As mentioned in the paper, this is exactly what the two states did in 2019 when they submitted a joint bid to attract the USDA to Kansas City. USDA was looking to relocate two research agencies outside of the DC area.

The joint bid was successful, and the USDA chose to locate in the Kansas City Metro, over 135 other locations that competed. When the winner was announced, the USDA had not yet chosen which side of the metro, though feasibly it could have located one agency on each side. Four months later, the USDA signed a lease for a building on the Missouri side of the metro to house both teams—the Kansas side would not get either agency.

Again, Kansas' reluctance to coordinate with the “stronger” side of the metro may have been well-founded. While certainly Kansas will receive some benefit from the influx of federal workers, Missouri will likely reap the majority of the gains. This opens some questions about the incentive offer.

According to the USDA the incentive package from the Kansas City metro amounted to about $26 million from state and local governments [Shurr (2019)]. What is not clear is how that incentive offer is split between the two jurisdictions. Does Kansas still have to contribute to the incentive given the final location is in Missouri? How do two jurisdictions share in the “indirect benefit” that is a large focus when governments calculate subsidy offers? It would be interesting to get some perspective from practitioners in the Kansas City area, as this type of information is not available in the press releases or reporting on the deal.

**Amazon HQ2 and the Detroit-Windsor Joint Bid** Another example comes from the infamous competition for Amazon HQ2 in 2017. Detroit, Michigan and Windsor, Ontario made a joint incentive offer to attract the retail headquarters. This seems like it could have been much more complicated than the Kansas City case, because the two jurisdictions are across the US-Canada border, not merely
state lines. However, it may have been simpler in two ways.

First, it is not clear that Detroit and Windsor have a long history of competing for businesses. Therefore, when the opportunity arose to cooperate, both cities were favorable to the idea. The Detroit Free Press reported soon after the offer was announced: “The involvement of Windsor in the Detroit deal came early. Shortly after the Amazon contest was announced Windsor Mayor Drew Dilkens emailed Dan Gilbert to see if he had considered including the city across the river. According to Dilkens, Gilbert wrote back within an hour or two saying that the email was ”timely” and that he was just going to call Dilkens” (Gross, 2017).

Second, the incentive offer was clearly demarcated across jurisdictions. While Michigan and Detroit offered exemptions to income, property, utility and corporate taxes for employment and property in Detroit, Windsor offered real estate and tax credits for property across the border. Therefore, the incentive payment was targeted to a location and investment size. Specifically, Windsor offered to contribute incentives worth over $100 million if Amazon located 5,000 workers in Canada (Guillen and Reindl, 2017). The split of workers between cities is feasible in the case of a mega project like Amazon, which original promised up to 50,000 workers associated with the headquarters. Therefore, there would be little need for ex-post negotiation on incentive payouts.

In the end, Amazon did not choose to locate in Detroit-Windsor, but the offer did make it through the first round of the competition. However, given the size of the headquarters proposed, and the public nature of the competition, it is surprising that we did not see more joint offers from states and cities. In contrast, the original winning cities—Long Island City in New York and Arlington in Virginia—competed fiercely with their neighbors of Newark, New Jersey and Montgomery, Maryland.

Alternate Strategies

The paucity of coordination across jurisdictions may be due to the political payoff to attracting firms, the presence of a consistently “stronger” neighbor, the difficulties in splitting incentive payouts, and other administrative and political barriers to communication across jurisdictions. One might consider an alternative type of coordination for Kansas City, Kansas and Kansas City, Missouri: explicit collusion via bidding ring.

With a bidding ring, bidders collude to suppress competition (McAfee and McMillan, 1992). There are different bidding ring schemes, but generally this group of bidders arrange so that only one bidder

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2Perhaps due to the nature that relocating across countries is not as straightforward as across states.
from the group participates in each auction of interest. Sometimes it is as simple to assigning different
dates in the calendar to different bidders, in other schemes the colluding players hold a first round,
knockout, auction, which determines who will bid. Then, side payments are arranged to the bidders
who did not participate, but would have liked to (Asker, 2010).

Kansas and Missouri should be able to find a way to rotate their participation in auctions—for
some firms, Kansas offers an incentive and Missouri offers nothing, and visa versa. A calendar based
approach is the most simple, and would allow for different shares: the Missouri side of the metro has
a larger population and perhaps the percentage of auctions that they can participate in should reflect
that. Here, Kansas does not need to worry about being slightly less attractive than Missouri, because
Missouri will not bid against Kansas when it is Kansas’ turn to participate. Also, the two sides do
not need to negotiate the incentive payout when putting together a joint bid, or re-negotiate once the
firm chooses one side of the metro. Moreover, if Kansas and Missouri are truly close substitutes for
firms, this will have the effect of suppressing competition and lowering the incentive offers necessary
to attract firms.

An important caveat is necessary: bidding rings are in violation of the Sherman Act. Therefore, it
must be that cities receive some exemption, much like how the federal government allows for limited
antitrust exemptions in the agriculture industry (US Department of Agriculture 1985). Perhaps the
growing distaste for subsidy-giving is consistent with this type of reform.

A final thought I have concerns the logistics of coordination. The issue of ex-post subsidy renego-
tiation is a sticking point for me in the USDA case study. Perhaps we do not see more jurisdictions
coordinate on subsidy offers because it is hard to split the incentive offer across localities. If the USDA
locates in Missouri, does Kansas still contribute to the incentive? Does that contribution account
for the economic spillovers that it benefits from? And how do the states measure that spillover?
Perhaps, the most straightforward thing to do is agree to incentive payments based on employment.
Both states should be able to easily identify employees that work at the USDA in Missouri but live in
Kansas. Therefore, Kansas could agree to some incentive contribution by employed Kansans. This
is certainly more straightforward than measure ex post economic “benefit” in each state.

In conclusion, Kim (2023) provides a helpful framework to study coordination between neighboring
jurisdictions in subsidy competitions. The paper also provides rich texture in light of the Kansas City
border war and subsequent, but tenuous, truce. I hope this discussion provides some food for thought

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3Notably, Kansas and Missouri do not have tax reciprocity
of why coordination is not more widespread, and some motivation for further exploration into possible obstacles and, of course, solutions.

References


Hardy, Kevin. 2019. “‘Sometimes common sense does prevail.’ Missouri, Kansas celebrate end of border war.” Kansas City Star.


