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JUSTIFYING BOEING:

A Post-Mortem Analysis On The Process

By Joseph Haslag

EXECUTIVE SUMMARY

Last year, Missouri's General Assembly passed and the governor signed legislation that would provide $1.7 billion in tax incentives to Boeing conditional on the company locating all or part of the assembly plant for the 777 aircraft in Missouri. In January 2014, Boeing reached a deal with the key unions in the state of Washington and decided to continue manufacturing the Boeing 777 there.

In this post-mortem review, the emphasis will be on the process used to justify the Missouri tax incentive package. In particular, the governor proclaimed that this deal would generate an additional $2.9 billion in state revenues, thus more than paying for the costs of the tax incentive package. Quantitative analysis is imperative for a society to make good public policy decisions. Unfortunately, it is imperative that transparency is part of the quantitative analysis. In short, how did the governor arrive at the $2.9 billion figure? In an effort to demonstrate what a transparent quantitative analysis would look like, a revenue projection requires two components — namely, what the size of the Boeing investment injection would have been and the economic model. Because the governor's numbers make neither piece of information available, a reasonable person must ask, how reliable is such a number?

In terms of the economic model, one of the most important features is that it explicitly deals with the state economy *over time.* Because I do not know how big the Boeing investment would have been, I have to work backwards, asking how big the investment would have to be for the

state to break even in terms of paying for the tax incentive package. In other words, the black box through which the Boeing investment would have affected the Missouri economy is carefully described.

I use the model to answer two questions. First, let's consider a tax incentive-matching break-even value. Consider a case in which Boeing is given tax incentive packages for the next 10 years and produces planes, or some part of a plane, in Missouri for the next 10 years. In this setting, Boeing's investment would have to be between $5 billion and $6 billion to pay for the $1.7 billion tax incentive package.

The second option is to assume the Boeing production lasts longer than the tax incentive package. For example, consider a case in which Boeing produces planes in Missouri for 25 years. If the Boeing operations lasted for, say, 25 years, you would still need Boeing's investment to be close to $1.9 billion to generate enough additional state revenues to offset the present value of the tax incentive package.

Of course, this analysis completely avoids the bigger economic question. Is giving only Boeing a $1.7 billion tax incentive package the best way to spend those resources? In other words, would it be better to spend these resources on other expenditure items or give every Missourian a tax break? Missouri has been applying tax incentive packages quite aggressively for some time. Our economic performance has been one of the lowest in the country. Why would we let government officials—albeit well-intentioned ones—decide which companies deserve investments and which do not? Unless they have compelling qualifications, it is time to drop the charade and try a more general tax cut.

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INTRODUCTION

Missouri's General Assembly passed legislation and Missouri Gov. Jay Nixon signed the bill that would provide up to $1.7 billion in tax incentives to lure Boeing to Missouri. In January 2014, however, key unions in the state of Washington voted to accept a new contract with Boeing. The upshot is that Boeing will continue to build the 777 model in Washington.

For people supporting the tax incentive package in Missouri, the news that Boeing will not relocate is disappointing. For these proponents, however, there is a silver lining; namely, that there is significant value to signaling that Missouri will work with companies to lure them here. Because there will be future corporate suitors asking for tax incentive packages, it is useful to do a port-mortem assessment of the arguments put forward to justify the tax incentive package to Boeing.

Foremost among the claims was the one that Gov. Nixon put forth. In a December 2013 press release, Gov. Nixon asserted that Missouri's net general revenues would increase by $2.9 billion over the next 23 years. If true, then spending $1.7 billion, which is what the tax incentive package really is, to generate $2.9 billion in additional taxes passes a basic capital budgeting test. In short, this would be a great deal for Missouri.

The purpose of this post-mortem is twofold. The first question is, why should we accept the $2.9 billion figure at face value? It is good for public policy to provide quantitative analysis, thus allowing

Jeffersonian citizens to assess the competing uses of public monies. Another key feature of such quantitative traditions is to be transparent. Admittedly, it is boring, except perhaps for the specialist, to go through the process of carefully documenting and analyzing the numbers. Most people do not have the stomach for it and simply rely on the specialist to give them a number. However, it is probably wise for a second opinion, for another specialist, to verify whether that number makes sense.

The second aim is to provide a transparent way to measure the economic impact of the Boeing tax incentive package. The hope is to provide a set of conditions under which the tax incentives offered to Boeing are less than the tax revenues that the additional economic activity would generate.

We begin with a critical assessment of the $2.9 billion figure.

HOW DO WE GET THE $2.9 BILLION FIGURE?

I start with an assertion. Good public policy requires careful assessment of a proposed program's costs and benefits. This part is boring for most people. They want the answer, trusting the analyst supplying the answer. The analyst will cheerfully let someone assess the quality of their work, defending their assumptions when needed. The goal is clear, let's get the analysis right on the most important dimensions.

Moving forward from this assertion, there is a gaping hole in the projection that the Boeing plant will generate $2.9 billion in additional state revenues. The number is not impossible, but as the *St. Louis Post Dispatch*'s David Nicklaus pointed out, we have no idea where he got the $2.9 billion figure. Without transparency, we are left with a claim; someone is telling you the figure is $2.9 billion and you should just accept my claim because of my office, or my title, or my credentials. If you accept the assertion above as a useful guide, claims should be rejected.

So, to move beyond the claim, we need to know what we need. The description is not hard; there is an input into the economy. Over time, we can compare the Missouri economy with and without Boeing. The economic impact is the difference between these two paths. To implement the comparison, we will treat Boeing's investment like an unexpected increase in the productive capacity in the Missouri economy. In other words, we will treat the quantity of plant, equipment, and workers added to the Missouri economy. In short, there is an input, some black box that corresponds to how the Missouri economy operates in response to that change, and an output. The basic idea is represented in Figure 1.

No doubt, it is a challenging process to work through Figure 1. The middle box is extremely complicated. Economists focus on the key dimensions of the problems that people living in the state solve in order to build a mathematical model that can be used to quantify the economic impacts. To link Figure

In an effort to demonstrate what a transparent quantitative analysis would look like, a revenue projection requires two components—namely, what the size of the Boeing investment injection would have been and the economic model.

Figure 1

If the Boeing operations lasted for, say, 25 years, you would still need Boeing's investment to be close to $1.9 billion to generate enough additional state revenues to offset the present value of the tax incentive package.

1 back to my assertion, you need information about the first two boxes to be transparent so that anyone can assess the quantity reported in the third box. In this case, how much Gross Domestic Product (GDP) will change over time, and accordingly, how much additional revenues the state will collect, ultimately depends on the quantity in Figure 1's first box and the structure in Figure 1's second box. Gov. Nixon gave us the third box in the sequence without the first two boxes.

The most challenging part of Figure 1 is the middle box; here is where the analyst characterizes how an economy transforms inputs, like the Boeing investment, into the impact on GDP.[1] Economists spend lifetimes trying to understand how aggregate economies work to be able to explain how injections—like a Boeing investment in plant and equipment—affects a state's or a nation's GDP. There are different economic models that lead to very different numerical answers.

So, how do people compare competing ideas? The scientific method is the means. There are data and researchers who put forward ideas (theories) that can explain the data. Other researchers vet the ideas and this is how people publish papers. Over time, researchers develop models that offer deeper insight into the transformation process, improving our understanding. I am not saying that the current knowledge has led us to agree completely, but the most up-to-date economic models—the second box in Figure 1—has gone through the process and represents the state-of-the art. Just like doctors used leeches in all sorts of applications several hundred years ago, we now have—through the scientific method—a better understanding of when leech therapy is useful. Here, we apply the most up-to-date knowledge to help us understand whether the Boeing therapy is useful.

In order to assess the economic impact of Boeing, we need the second box and we need the first box. How much is Boeing investing in the Missouri economy? Herein lies another problem with Gov. Nixon's $2.9 billion figure. We are told that between 2,000 and 8,000 jobs will be added, but nothing else about the additional plant and equipment.

What economic model is used to transform whatever Boeing's investment is into a future stream of state tax revenues? Without being told, I can only guess. For regional economic analysis, the REMI model is used. The REMI model is a relic, building on models developed in the 1950s. REMI's key summary value is embodied in something called a multiplier. In short, for every dollar injected into the state economy, you get something like $1.8 in extra economic activity. Presumably, this multiplier process is the outcome of some dynamic process the economy goes through. One critical problem is that the REMI model is not a dynamic model in the sense that the people living in the REMI economy are not forward-looking and making decisions over time. So, to say anything about the dynamics it implies is disingenuous.

The second devastating problem is that the model is logically inconsistent. The contradiction owes to a critique that Robert Lucas made famous more than 40 years ago. The break in logic can be explained as follows: REMI treats the model as if its structure is invariant to changes in economic policy variables—such as tax rates. Yet, Lucas

demonstrated that the model's key parts unambiguously change as policy variables change. By relying on a model that abandons logic, it is equivalent to telling you any number I want. So, at best guess, the governor touted a number that is based on an investment size that nobody else knows and runs that through a model that fails at basic logic. With two of three pieces of Figure 1 missing, it seems the third part is highly suspect. Therefore, based on these concerns, it is fair to treat the $2.9 billion figure as hokum.

NEXT PHASE: PUTTING FORWARD A TRANSPARENT ANALYSIS

While I cannot know how big the Boeing investment was going to be, I can develop a model of the Missouri economy that is transparent and can be used to derive conditions in which the $1.7 billion tax incentive package makes sense.

In the early 1990s, Sergio Rebelo developed the *Ak* model as a dynamic model of the aggregate economy. The people who live in this model economy are treated as if they are making decisions over time, meanwhile keeping an eye on what the future will be like as they make decisions today. The other key assumption is that prices adjust over time so that quantity demanded equals quantity supplied in each market simultaneously. This assumption is really important because it means that prices play a meaningful role in a disciplined, market economy; market participants—companies and people—are behaving in a logically consistent way and are not free to do whatever they want. Economists do not talk about capitalism as a system, but study how markets—prices and quantities—are solved when they speak about markets working.

It is easy to implement and to do policy analysis in the *Ak* framework. Peter Ireland did just that in a 1996 study about income taxation. Because the *Ak* builds in the notion that economic growth is a function of tax rates and other things determined outside the model, we do not have to mess with the leap from a multiplier to a description of the economic adjustments over time. The *Ak* model completely describes the dynamic adjustment for us explicitly. Moreover, because the concept of equilibrium is embedded in the model analysis, we know that prices are adjusting along the growth path to do their primary job; that is, prices adjust to equate demand with supply.

Formally, the production of final goods and services produced within Missouri's boundaries is represented by the function

$$Y_t = Ak_t \quad (1)$$

where Y stands for Missouri's GDP for a year indexed by t, k is the quantity of human and physical capital employed at date t, and A is the technology that represents the rate at which human and physical capital are transformed into units of final goods and services.

The purpose of this report is to compute the economic impact of an increased Boeing investment in Missouri. More specifically, the question is, what would Missouri's economy look like with and without the existence of the Boeing investment?

To compute the impact, I need to calibrate the *Ak* model to the Missouri economy. To do so, I can use the average annual growth rate for Missouri's real GDP between 1997 and 2012. I focus on real GDP in order to

Because there will be future corporate suitors asking for tax incentive packages, it is useful to do a post-mortem assessment of the arguments put forward to justify the tax incentive package to Boeing.

Table 1
(millions of chained 2005 $)

Year	1997	2012
Real GDP	$189,990	$221,702

Source: Bureau of Economic Analysis. View online here: http://www.bea.gov/iTable/iTable.cfm?reqid=70&step=1&isuri=1&acrdn=1#reqid=70&step=1&isuri=1

The first question is, why should we accept the $2.9 billion figure at face value?

avoid having to forecast future movements in the inflation rate. Table 1 reports the values of real GDP in each year.

According to Table 1, Missouri's real GDP was close to $190 billion in 1997 and more than $220 billion in 2012. I compute the average annual growth rate by applying the formula: $Y_{T+t} = (1+g)^t Y_T$, where Y_T stands for Missouri real GDP in some particular year represented by the subscript T. After t years have passed, Y_{T+t} is the measure of Missouri real GDP. The average annual growth rate over those t years is measured by g. Based on the data presented in Table 1, Missouri's annual average growth rate between 1997 and 2012 was 1.03 percent, or $g = 0.0103$.

Here, I begin to construct the control values of Missouri real GDP for each year between 2012 and 2037. I assume that Missouri's real GDP can be computed from the following equation: $Y_T = 1.010344 * Y_{t-1}$, where Y is state real GDP. I initialize this forecast with $Y_{2012} = \$221{,}702$. Note that the formula forecasts that $Y_{2037} = \$286{,}749$ million.

The *Ak* model yields a very simple expression for the average economic growth rate. In equilibrium, Ireland (1996) derives the economy's growth rate as $(1 + g) = (\beta R)^{\frac{1}{\sigma}}$, where β stands for the rate at which people discount future economic outcomes, R is the gross after-tax real return, and σ is the rate at which people value future consumption relative to present consumption. Armed with the value of Missouri's real GDP growth rate, I follow the convention and use $\beta = 0.96$. Here, the gross after-tax real return is represented by $R = (1 - \tau)(A + 1 - \delta)$, where A is the rate at which physical and human capital are transformed into output (I am looking for A), τ is the marginal income tax rate, and δ is the rate at which capital depreciates. Here, I use $\tau = 0.43224$, which is the sum of the maximum federal marginal income tax rate plus the Missouri maximum marginal income tax rate after revising for the deductibility of federal income taxes. Following convention, I use $\delta = 0.1$ and $\sigma = 1.5$. With these values, I compute $A = 0.863236$.

A NUMERICAL EXAMPLE

An increase in Boeing's investment will result in an increase in Missouri's real GDP. The reason for taking this approach is that GDP is positively correlated to the items that are subject to Missouri taxes. Individual income and corporate income will increase with Missouri GDP, and so will the sales tax base. Historically, Missouri's net general revenue increases by 3.8 cents for every additional dollar of Missouri GDP. By calibrating the *Ak* model, one can impute different increases in the capital stock—representing Boeing's

investment—to different increases in Missouri's GDP. From there, we apply the 3.8 percent rule to compute the increase in Missouri's net general revenue.

Suppose, for example, that Boeing increases the capital stock located in Missouri by $5 billion. Based on the value of *A* from the model economy, Missouri's GDP will increase by 0.86x$5 *billion* = $4.3 *billion*. We depict this in Figure 2, which simply fills in values from Figure 1 presented earlier in the paper.

Next, the change in Missouri's net general revenue is calculated. With 3.8 cents per dollar of additional Missouri GDP, net general revenue that the state collects is $0.038 x $4.3 *billion* + $163.4 *million*. The implication is that if Boeing invests $5 billion in plant, equipment, and human capital, Missouri's net general revenue will increase $163.4 million per year.

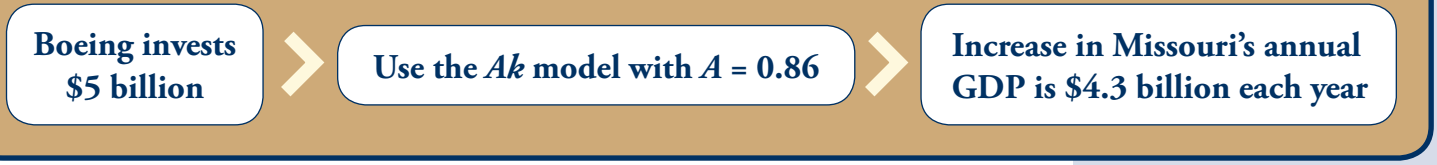
If we assume that the life of Boeing's investment located in Missouri is equal in duration to the duration of the tax incentive package, then a year-by-year analysis is equivalent to examining the net present value for Missouri government. The tax incentive package is $175 million per year for the next 10 years. Thus, a $5 billion investment is not sufficient to generate enough extra Missouri net general revenue to offset the tax incentive package offered. In this year-by-year approach, one would need $175 *million* ÷ 0.038 + $4.6 *billion* in additional Missouri GDP to offset the tax incentive package. This means that Boeing would have to invest $4.6 *billion* ÷ 0.86 = $5.36 *billion* in plant, equipment, and people per year to produce this level of additional GDP.

If we relax the constraint and let Boeing's investment operate for 25 years, then we can compute the stream of additional GDP *over time* and get the discounted sum of net general revenue. In the appendix, I present table A1, where I compute the present value of the Boeing $5 billion investment on the Missouri economy. Basically, I compute a path for the Missouri economy without the Boeing investment for the next 25 years. Next, I compute the impact that a $5 billion investment from Boeing would have on the Missouri economy over the next 25 years. I assume that the Boeing investment does not affect the economy's average economic growth rate. Rather, the investment shifts the line up by $4.3 billion in 2015. With a 1.03 percent growth rate applied to a larger level of GDP, there are gains from the Boeing investment that are felt for the entire 25-year period. With the difference in Missouri GDP computed by taking the difference between Missouri's GDP with and without the Boeing investment, I have a measure of the "gain" in Missouri GDP. I then multiply the gain in Missouri's GDP by 0.038 each year. Finally, I take the discounted sum of the increases in Missouri net general revenue and the discounted sum of the $175 million tax incentive package over the next 10 years.

The results indicate that with a $5 billion investment, the discounted sum of the increase in Missouri's net general revenue is $3.316 billion. The discounted sum of the tax incentive package over the next

The second aim is to provide a transparent way to measure the economic impact of the Boeing tax incentive package.

Figure 2



10 years is $1.466 billion. Thus, the tax incentive package does pay for itself if the Boeing investment is initially $5 billion. Appendix Table A2 does the same analysis for a case in which the Boeing investment is $1 billion. The discounted sum of the tax incentive package is $1.466 billion. With a $1 billion Boeing investment, however, the discounted sum of the gains in Missouri net general revenue over the next 25 years is $934 million. In order for Missouri net general revenue to break even—that is, the discounted sum of the increase in net general revenue over 25 years is equal to the discounted sum of the tax incentive package—the Boeing investment would have to be $1.894 billion (see Table A3).

SUMMARY

In the most recent round of directed tax incentive packages, Boeing was offered $1.7 billion in state tax incentives to locate some, or all, of the 777 model production in Missouri. Quantitative analysis was brought to bear on the subject: Gov. Nixon asserted that the Boeing tax incentive package would generate $2.9 billion in additional revenues for Missouri. Unfortunately, the public cannot assess such a claim without being told how the governor arrived at the figure. In particular, we do not know the size of the Boeing investment nor are we told what economic model generated these values.

In this essay, the key message is to warn people that accepting such a figure at face value is dangerous. For example, states typically rely on a model economy (REMI) to quantify the effects of corporate relocations. The REMI model, however, suffers from logical inconsistency. It quantifies the effect that a company relocation and the tax incentive package will have on the Missouri economy as if values inside the black box would not be affected by the change corresponding to the tax incentive package. You cannot hold one thing constant when logic tells you it will change.

Instead, I present a model of the Missouri economy that allows us to compute the gains in state revenues for different values of Boeing investment in a logically consistent, dynamic model of the state economy. In a 10-year production comparison, I find that Boeing would have to invest $5.36 billion in order to cover the costs of the tax incentive package. Alternatively, if Boeing production lasted 25 years, I find that the size of the investment needs to be $1.894 billion in year one to generate enough extra net general revenues to offset the discounted sum of the tax incentive package.

Because we do not know how big the Boeing investment in Missouri was, we cannot tell if the tax incentive package would have been worth it or not. Moreover, this analysis asks a narrow question; that is, under what conditions will the state of Missouri realize an increase in state revenues that exceeds the cost of the tax incentive program? It should be common practice for state officials to rely on a transparent quantitative analysis to assess the net present value of future tax incentive packages.

There is a deeper question that I have not considered. What is the most efficient use of the $175 million per year, including potentially lowering income tax rates or maintaining other state government purchases?

Good public policy requires careful assessment of a proposed program's costs and benefits. Without transparency, we are left with a claim; someone is telling you the figure is $2.9 billion and you should just accept my claim because of my office, or my title, or my credentials.

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APPENDIX

Table 1

Year	Growth Rate	Missouri GDP with $5 Billion Boeing Investment	Baseline Missouri GDP	Diff	Increase in Missouri Net General Revenue	Disc Factor	PV of Diff	Tax Incentive Package	PV Tax Incentive Package
2015	1.010344	226,002	221,702.0	4,300	163	1	163.4	175	175
2016		228,340	223,995.3	4,344	165	0.96	158.4866012	175	168
2017		230,702	226,187.0	4,515	172	0.9216	158.1081499	175	161.28
2018		233,088	228,526.7	4,561	173	0.8847	153.3538757	175	154.8288
2019		235,499	230,389.5	5,110	194	0.8493	164.9155455	175	148.635648
2020		237,935	232,772.6	5,163	196	0.8154	159.9565747	175	142.6902221
2021		240,396	235,180.4	5,216	198	0.7828	155.1467189	175	136.9826132
2022		242,883	237,613.1	5,270	200	0.7514	150.4814943	175	131.5033087
2023		245,395	240,071.0	5,324	202	0.7214	145.9565518	175	126.2431763
2024		247,934	242,554.3	5,379	204	0.6925	141.5676734	175	121.1934493
2025		250,498	245,063.3	5,435	207	0.6648	137.3107674		
2026		253,090	247,598.2	5,491	209	0.6382	133.1818656		
2027		255,708	250,159.4	5,548	211	0.6127	129.1771188		
2028		258,353	252,747.0	5,606	213	0.5882	125.2927939		
2029		261,025	255,361.4	5,664	215	0.5647	121.5252696		
2030		263,725	258,002.9	5,722	217	0.5421	117.8710339		
2031		266,453	260,671.7	5,781	220	0.5204	114.3266802		
2032		269,209	263,368.1	5,841	222	0.4996	110.8889044		
2033		271,994	266,092.3	5,902	224	0.4796	107.5545017		
2034		274,807	268,844.8	5,963	227	0.4604	104.3203636		
2035		277,650	271,625.7	6,024	229	0.4420	101.1834753		
2036		280,522	274,435.4	6,087	231	0.4243	98.1409125		
2037		283,424	277,274.2	6,150	234	0.4073	95.18983881		
2038		286,355	280,142.3	6,213	236	0.3911	92.3275032		
2039		289,317	283,040.1	6,277	239	0.3754	89.55123734		
2040		292,310	285,967.9	6,342	241	0.3604	86.85845313		
						Present Value of Additional Tax Receipts	3316.074	**Present Value of Tax Incentive Package**	1466.357218

Table 2

Year	Growth Rate	Missouri GDP with $5 Billion Boeing Investment	Baseline Missouri GDP	Diff	Increase in Missouri Net General Revenue	Disc Factor	PV of Diff	Tax Incentive Package	PV Tax Incentive Package
2015	1.010344	222,562	221,702.0	860	33	1	32.68	175	175
2016		224,864	223,995.3	869	33	0.96	31.69732024	175	168
2017		227,190	226,187.0	1,003	38	0.9216	35.13139213	175	161.28
2018		229,540	228,526.7	1,014	39	0.8847	34.0749996	175	154.8288
2019		231,915	230,389.5	1,525	58	0.8493	49.22335659	175	148.635648
2020		234,314	232,772.6	1,541	59	0.8154	47.74322207	175	142.6902221
2021		236,737	235,180.4	1,557	59	0.7828	46.30759484	175	136.9826132
2022		239,186	237,613.1	1,573	60	0.7514	44.91513658	175	131.5033087
2023		241,660	240,071.0	1,589	60	0.7214	43.5645492	175	126.2431763
2024		244,160	242,554.3	1,606	61	0.6925	42.25457366	175	121.1934493
2025		246,686	245,063.3	1,622	62	0.6648	40.98398877		
2026		249,237	247,598.2	1,639	62	0.6382	39.75161007		
2027		251,815	250,159.4	1,656	63	0.6127	38.55628869		
2028		254,420	252,747.0	1,673	64	0.5882	37.39691035		
2029		257,052	255,361.4	1,690	64	0.5647	36.27239423		
2030		259,711	258,002.9	1,708	65	0.5421	35.18169204		
2031		262,397	260,671.7	1,726	66	0.5204	34.123787		
2032		265,111	263,368.1	1,743	66	0.4996	33.09769292		
2033		267,854	266,092.3	1,761	67	0.4796	32.10245323		
2034		270,624	268,844.8	1,780	68	0.4604	31.13714017		
2035		273,424	271,625.7	1,798	68	0.4420	30.20085384		
2036		276,252	274,435.4	1,817	69	0.4243	29.29272141		
2037		279,110	277,274.2	1,835	70	0.4073	28.41189631		
2038		281,997	280,142.3	1,854	70	0.3911	27.5575574		
2039		284,914	283,040.1	1,874	71	0.3754	26.72890827		
2040		287,861	285,967.9	1,893	72	0.3604	25.92517641		
						Present Value of Additional Tax Receipts	934.313	**Present Value of Tax Incentive Package**	1466.357218

Table 3

Year	Growth Rate	Missouri GDP with $5 Billion Boeing Investment	Baseline Missouri GDP	Diff	Increase in Missouri Net General Revenue	Disc Factor	PV of Diff 163.4	Tax Incentive Package	PV Tax Incentive Package
2015	1.010344	223,331	221,702.0	1,629	62	1	61.89592	175	175
2016		225,641	223,995.3	1,646	63	0.96	60.03472454	175	168
2017		227,975	226,187.0	1,788	68	0.9216	62.61669749	175	161.28
2018		230,333	228,526.7	1,806	69	0.8847	60.73382842	175	154.8288
2019		232,716	230,389.5	2,326	88	0.8493	75.08056082	175	148.635648
2020		235,123	232,772.6	2,350	89	0.8154	72.82290638	175	142.6902221
2021		237,555	235,180.4	2,375	90	0.7828	70.63313906	175	136.9826132
2022		240,012	237,613.1	2,399	91	0.7514	68.50921752	175	131.5033087
2023		242,495	240,071.0	2,424	92	0.7214	66.44916179	175	126.2431763
2024		245,003	242,554.3	2,449	93	0.6925	64.45105144	175	121.1934493
2025		247,538	245,063.3	2,474	94	0.6648	62.5130238		
2026		250,098	247,598.2	2,500	95	0.6382	60.63327217		
2027		252,685	250,159.4	2,526	96	0.6127	58.81004423		
2028		255,299	252,747.0	2,552	97	0.5882	57.04164032		
2029		257,940	255,361.4	2,578	98	0.5647	55.32641188		
2030		260,608	258,002.9	2,605	99	0.5421	53.66275995		
2031		263,304	260,671.7	2,632	100	0.5204	52.04913364		
2032		266,027	263,368.1	2,659	101	0.4996	50.48402868		
2033		268,779	266,092.3	2,687	102	0.4796	48.96598606		
2034		271,559	268,844.8	2,715	103	0.4604	47.49359061		
2035		274,368	271,625.7	2,743	104	0.4420	46.06546974		
2036		277,206	274,435.4	2,771	105	0.4243	44.68029212		
2037		280,074	277,274.2	2,800	106	0.4073	43.33676646		
2038		282,971	280,142.3	2,829	107	0.3911	42.03364029		
2039		285,898	283,040.1	2,858	109	0.3754	40.76969882		
2040		288,855	285,967.9	2,887	110	0.3604	39.54376376		
						Present Value of Additional Tax Receipts	1466.637	**Present Value of Tax Incentive Package**	1466.357218

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NOTE

[1] As a reminder, we define GDP as the values of final goods and services produced within a state's or nation's boundaries during a year.

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