The Johns Hopkins University
Institute for Policy Studies

The public actions toward industry in the US:

Selected aspects of the States and local incentive policy through automotive industry and air&space industry case studies

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### Summary

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Foreword:
As an economist among the Paris Region urban planning institute (IAURIF) my aim in coming to the JHU fellowship program was to find out if the US States and localities had specific actions toward the automotive industry, in which way these actions were conducted and how this experience could be translated to the Ile-de-France context as our region is a main automotive and air&amp;space industry center which faces a deindustrialization process.

Because the USA is a federal state, there are at least as many policies and regulations as states. Moreover, as this study went on, I found out that it was difficult to say there was a specific action toward the automotive industry with specific tools. It finally appeared that the policies undertaken by localities toward the automotive industry are part of a wider attracting/retention war among the various states which use similar tools whatever the economic activity of the company. Some states choose to focus on selected sectors, some others just try to attract any possible incoming company.
In that matter I will not pretend to be exhaustive as I choose to focus on a few examples that illustrate an attraction policy or a retention policy in these two economic sectors.

The Ile-de-France region in brief

The Ile-de-France region is the capital region and the first French region by its population of nearly 12 millions inhabitants which represents 20% of the total French population. Throughout the centuries it benefited from the French centralism tradition that made it the first decision center of France. This legacy still has effects on the characteristic of the 5.5 millions jobs of the region with the highest white collar jobs rate of the country (27% against 18% for the whole country). Its Euros 400 billions gross regional product is 29% of the whole French GDP, it equals the Dutch or the Florida, fifth US state GDP.
Paris metropolitan region ranks second close behind London in term of GDB among the European metropolises.

With an old industrial tradition the Ile-de-France region is still the first French manufacturing center with 15% of the national industrial employment. The main industrial sectors represented in the capital region are the automotive industry, the air&amp;space industry, the Drugs industry, the electric&amp;electronic industry.

As one of the two cradles of the French automotive industry with the birth of Renault at Boulogne-Billancourt, the Ile-de-France region has a long lasting automotive tradition that is still alive. The capital region ranks first among the French automotive regions with 100 000 employment among which 18 000 involved in the R&amp;D (60% of national automotive R&amp;D).

The Ile-de-France region concentrates world class decision centers with 2 automakers world headquarters, Renault and Peugeot, and many other suppliers, production facilities
with 3 main assembly plants, and also R&D state-of-the art facilities among which the Renault's technocenter with alone represents 11 000 jobs.

The Paris region produced 1.1 million vehicles in 2003 which is 1/3 of the French production. This production is similar to the Kentucky one, ranking 4th among the US states.

The Capital region is also the first French market with 490 000 vehicles sold in 2003.

Since 20 years the Paris region is facing a global deindustrialization process with manufacturing losses either related to a shift of manufacturing facilities to other regions or countries or to outsourcing of activities to the service sectors. During this time the service sector has dramatically grown to represent now 80% of the jobs.

These trends are similar in the automotive industry, even though the automotive manufacturing capacities are still substantial in the region. The automotive industry is the first industrial sector of the region in terms of manufacturing presence.

The Ile-de-France automotive industry faces an outsourcing process from the carmakers to the suppliers and a growing competition from lower cost areas as Eastern Europe countries (Czech rep., Poland, Slovakia, ...). During the same time the technological needs have grown rapidly pushing the carmakers R&D employment to a similar level as their manufacturing employment.

Facing these issues, the capital region politicians are trying to answer several questions about the future of the automotive industry in the region, should they help the automotive industry keep its manufacturing facilities within the region? How should they proceed with which tools?

The present report aims to give some examples of the US local economic development policies toward the automotive industry.
I) The actors and tools of the economic development in the US

A) The actors: a strong involvement at every level

Different kind of actors are involved in direct economic development: public actors, private non-profit actors and private profit actors. These actors often work together, either because they deal with overlapping territories, or because they need to cooperate for better coordination purposes. This cooperation is particularly tight when a project is identified.

Their aim is to ease economic development by managing the communities’ assets which are seen as essential to their activity by the business sector.

Among these assets some are basic and always quoted in the top 10 factors, some others can be seen as important depending on the economic trends and the nature of the activity. Some of these assets or factors cannot be changed easily and can be regarded as fundamental assets, even though the action of communities can affect them on a long term. In the case of the industry the main and constant factors are:
- Existence of a minimum sized market in a 12 to 24 hours transportation distance
- Quality of infrastructures for local and long distance access
- Good trained, available and not too expensive labor
- Proximity of other related business, clients or suppliers, for better cluster effects
- good business climate including safety

Among other assets, quality of life does not seem to have such impact at least for the first round of choice

The public actors and their current actions:

- The States:
The states are the main actors of the economic development in the US, they have the legislative power and the highest budget means for their policy. Their current actions deal with promotion, attracting new activities or retention.

Promotion can take form of targeted advertising to selected sectors, large communication campaigns, participation in shows with delegations of business men.

Attraction policy is more aggressive and mostly requires the grant of incentives. Most of the time, States react to a company’s wish to locate or relocate to offer the incentive package. Sometimes States literally chase the companies by directly contacting them even if they do not have official project. Taking advantage of a change in the company’s life (major economic environment change, change in strategy, merge, change of chief executive…) the State propose them to invest or even relocate in the state.

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The retention policy is less developed among the states but is now more taken in consideration. The retention actions mostly consist in having a close relation with the companies that operate on the territory. Most of the time it consists in a pool of people devoted to visit the firms regularly and enquire about their needs and how to fulfill them. This is the first step of retention, when the company is about to leave for several reasons, the incentive is increasingly used.

The states have also current actions in workforce development, helping unskilled to upgrade their capacities, developing education programs to fulfill the company needs. They also take actions in order to favor entrepreneurship with start-up funds and by financing incubators. The States are also involved in improving access to new technologies for smaller companies: the state contracts engineers, who actually are employed by universities to visit firms, help them get contacts with other firms, universities, research centers, in order to get access to a new technology they need for their development. This is called the "modernization services", half of this program is financed by federal government funds. There is also a similar system at the county level.

Maintaining and improving infrastructures is also one of the States missions on its devoted field.

- The metropolitan regions do not have any direct action in economic development, their role is to plan urban development, even though planning has a fundamental effect on the future economic development.

- The counties and cities:
  Depending on the state and the relative size between the county and its leading city, their role can be very different. For instance, the county of L.A. is actually more active and powerful than the city in itself in economic development.
  In the Detroit, Chicago, or Seattle cases, the city is prevailing and the county has mainly an advertising role.
  In the Baltimore case, both city and county have an equal power due to the fact that the City of Baltimore is not administratively included in the Baltimore County.

Both have similar attraction, retention, advertising policies as the State, they also conduct workforce improvement for instance by improving the relation between the local education system (College ...) and the companies in order to build adapted educational programs. They also both conduct training programs to unemployed people and finance incubators.

As a main difference, both are implicated in land use regulation, which is used as an economic development tool. For example, the "assemble land" competency can help to provide the company the required space needed. The level of land taxation as well as
construction regulations buildings height, parking...and even the possibility to rapidly deliver construction permits are other tools. These tools are particularly used in redevelopment, empowerment, renaissance, brownfield policies. The localities create special delimited zones on which they wish to have a specific action. Most of the time, companies who decide to invest on these special sites are granted incentives which mostly rely on tax breaks.

One of the key tools of local development used by localities i.e. counties or cities is the Tax Increment Finance (TIF) which uses the private's sector funds as a lever to improve a specific geographically limited sector on a several years period program (most of the programs last 10 to 12 years). This program which couldn't be realized without private funding brings no additional cost to the community and no obligation to raise taxes.

The Tax Increment Finance (TIF) a lever for local development:

"Tax increment financing funds infrastructure improvements through a partnership between local government and a private developer or company. Expected growth in property tax revenues from a designated area are used to finance the bonds that pay for improvements in the TIF district.

Under tax increment financing, developers or companies continue to pay real estate taxes on the value of the property prior to the creation of the TIF district. As the improvements increase the value of their property, however, the new tax money is directed into a fund to pay for the improvements.

The TIF system relies on the appreciation in value of the land and buildings in a TIF district. If a development is profitable, then the costs will be paid for in the growth of property tax revenues. If the property fails to increase in value, the improvement costs fall back on the general taxpayer.

This risk makes some governments wary of employing TIFs. Such concern, while important, must be weighed against the alternative. Without the use of TIFs, cities must either use general tax revenues or have no improvements at all. In light of this, the decision to use tax increment financing for improvements is really the difference between the possibility of taxpayer responsibility and the assurance.”...


In lot of cases when a company plans to locate or threats to relocate, the three levels are concerned and work together. Because of its specific position, the State is often consulted about the incentive project of the cities and counties. Sometimes the final vote comes after the settlement with the
company. At the end, it is the town, county or/and State that grant the company with the incentives.

In their strategy to gain new companies, localities have learned to work together at a State level. Most of them at least speak with one voice at the city, county and State level. In this type of competition a city, even a county cannot win alone.

The private non-profit actors

- The economic development agencies:
  Most of the states, counties and cities have created a private and non-profit economic development agency. The private status is regarded as a necessity in order to ease negotiations with companies by giving the agency the possibility to keep a total secrecy on its contacts with the business. These agencies act for and in the name of the body they depend on. Being separated from their supervisor administration (State, County or City) they are considered as more reactive, their budget is also isolated from the other budgets. These agencies have no financial power but their operation budget. Their action consists mainly in marketing activities to promote a territory, contact companies and conduct the negotiations. Therefore, to definitely settle an arrangement it has to have to get the agreement from the supervisor organization with a vote procedure in order to grant companies with incentives. The votes procedures can be very quick, during extraordinary cessions in particular cases, with sometimes consequences on the lawfulness of the agreement.

- The Chambers of commerce:
  The chamber of commerce are also private non-profit organizations but they are not related to the administrations, they are a representation of the local business. In that aim, their main action consist in networking between their members, information about regulations and law, and a lobbying in favor of industry toward local governments (advocacy). The State chambers of commerce have mainly a legislative competence. Despite being a representative of the local business interest, the chambers of commerce also plays a role in attracting and retaining companies, whether or not in coordination with localities economic development agencies. Even if they do not always work closely with the public administrations, the chambers of commerce are often part of the team when an important project is expected.

Other entities like port authorities can occasionally take part in the economic development process, especially when a special project requires it.
The private profit sector:
Since the competition between localities has become harder and the possibility to get incentives became easier for the companies, a new actor entered the economic development, turning it into a business.

The consulting agencies developed services to both companies wishing to bargain at best an incentive package and to localities in order to help them to improve their attraction policy.
Though answering for a need, the action of these consulting agencies has undoubtedly contributed to develop the incentive policies throughout the country.
These services are now frequently, without saying systematically used by both companies and localities in their bargaining process.

B) The incentives as an investment for the future

Beside the current actions in favor of economic development, the incentives tailor-made packages have become compulsory in the US economic developers tool-box if they wish to attract the companies which are the more likely to generate strong development.
These companies are very mobile as they are very much in demand because of the better quality of jobs they offer, with higher wages and better perspective of development, especially if they deal with high tech. When it comes to a large industry, its attraction power to suppliers is always highly valued. These companies are also often more exposed to the international competition and thus very sensitive on their costs of operations.

The incentive can be either addressed to a single company, or to any firm dealing with a targeted sector (automotive or Airspace for example).

The incentives packages have become more sophisticated since they first appeared during the 80's. They now often consist in a cocktail of proposals which can be sorted in three main categories which correspond to the business main concerns which localities can effectively influence: Taxes, labor and access:

- Taxes: Incentives are rarely cash money, they often take shape of tax breaks on property taxes, business tax and income taxes, during several years, up to 25 years in some cases. These customized tax cuts can be increased if the company chooses to locate in a special area where the local authorities already provide specific helps (empowerment zones, renaissance zones, Brownfield zones...) for their current economic actions.

Tax breaks now takes the largest share of incentives packages, principally because they appear harmless to the community's current budget and are presented as an investment on the future.
The incoming company will thus generate no new or less tax revenue than without the package, but in return advantages are expected to largely repay for the community’s future non-revenue. In its economic calculations the communities expect to gain on related jobs created by the wealth brought by the new wages, by the company’s expenses and by the business attraction power of the company toward other related business, subcontractors or clients.

Tax breaks have become the 6th decision making-element among 10 others in 2002 (a year of economic slow down), according to a survey of executives led by the Area development Magazine. From this survey also led in the economic year 1997, it appears that tax breaks become more important during low activity years as they were not even among the top 10 factors mentioned in this year of higher activity.

- Actions on labor: The second aspect of incentive lays on employment which is as we have seen before one of the top location factors. These actions are mostly of two types, sometimes combined: Providing the labor they need to the new company. That means the localities search for the people at their expenses, or hire a consultant to do the job, sometimes they create a dedicated structure to this purpose. Training programs either to the existing employees to help upgrade their skills or to the new hired to make them fit the company’s requirement.

When cash is granted to company as incentive it is often due to be spent on training or educational programs. Then the company often works with local companies or local educational structures (colleges, high schools, universities) to design a curriculum around its own needs.

In some cases the deal includes special agreements about the workforce’s side costs, especially in unionized states or companies.

Theses deals can lay on acceptance of lower hourly wages, changes in health care system or retirement system, more flexible hours of work...sometimes the agreements have special clause on tighter strike procedures to avoid production stops.

When they occur these agreements are often supported by the localities who propose counterparts to the workers which are part of the package offered to the company. This has been a key point in the UAW/GM/Chrysler/Ford agreement a couple of years ago, it has also played a role in the 7E7 case for the State of Washington.

- Infrastructure:

As one of the top three location criteria, infrastructure is often included in the standard package. These requirements can range from a simple and precise need as an access improvement to a highway up to a broader demand as global traffic improvement which requires a deep renewal of the highway system. Theses infrastructure requirements can touch every mean of transportation that concerns the company for its business. Industry activity often require railway access and improvement, sometimes a port facility improvement, storage facilities, even public transportation in the case of an office based activity as a headquarter or a back office.

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2 seen note 1 page 5
As the requirements concern every mean of communication, some companies require a particular action on telecommunication or high speed internet access. Alongside with the infrastructure improvement, the company sometimes requires either reduced costs for buildings and premises for new ones or to upgrade them, either a free location. The land can also be offered for free, sometimes even after been cleaned from pollution. Some agreements include special terms on land use with easy construction permit possibilities, lower requirements regarding the urban regulation.
Case studies
II) The automotive industry in the US:

The USA is home of the two world automakers leaders GM and Ford, Chrysler being currently part of the German Daimler-Chrysler group since 1998.

Despite great losses during the 80's and 90's the core of the US automotive industry still lays in the great lakes regions, first in Michigan with about 534,000 related jobs, Ohio 314,000, Indiana 126,000, Illinois 114,000…

These four states represent 45% of the nation direct and indirect automotive employment.

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3 According to the study "Contribution of the Automotive Industry to the US economy in 1998" Center for Automotive Research, environmental research institute of Michigan

4 Same source. Direct employment is the carmakers employment, indirect employment is the suppliers employment.
The state of Michigan in itself is the center of the US automotive industry and the world largest decision center: Altogether the two Michigan based US automaker control the production of 15 millions vehicles all over the world, which represents 30% of the world production. The second largest decision center is the Kanto region in Japan (Tokyo) with 7.5 millions vehicles. The Michigan State is also the center of the US automotive R&D with 85% of the total US employment, California is the second largest R&D state, home of several Japanese R&D facilities especially design centers. Michigan is also still the first production center of the US with 2.7 million vehicles produced in the state over the 12 Millions US production.

Nevertheless several evolutions have led to a reduction of the northern states leadership. During the 80’s, the competition between car makers took a new step and became worldwide instead of continental wide. Thus the competition to gain the more lucrative local markets, especially the US market, became wilder.
Foreign carmakers decided to produce in the US in order to ease this goal, partly because of trade barriers. First and mainly Japanese but also more recently Korean or European, principally German, the carmakers built new factories.

For several reasons including a lower cost of labor which is also far less unionized, a much lower cost of land, and a will to keep away from their main US competitors, but also thanks to aggressive attraction policies, the US southern states captured most of these new investments. The Toyota Plant in Smyrna Tennessee in 1983 was the first of numerous ones. From this time the southern states began to grow as automotive states by also attracting suppliers. Among these states, the States of Missouri, Kentucky, Tennessee, Georgia and Alabama were the most successful in building a local automotive cluster.

During the same time, the US carmakers, “the big three” GM, Ford and Chrysler in their search for lower costs triggered a relocation process outside of the US, to Canada but mainly to Mexico and also South America. US carmakers also followed the path of their competitors by opening facilities in the southern states.

This process occurred in two waves one at the end of the 80’s/beginning of the 90’s, the second more recently, at the end of the 90’s, beginning of the 2000’s as they were losing market shares, in a depressed market, resulting overcapacities.
The result has been particularly dramatic for Detroit and its region. The Detroit region lost 80,000 jobs in the automotive sector alone between 1975 and 1999, plunging from 300,000 to 220,000\(^5\).

The loss of jobs is still underway in the automotive sector, as between 1997 and 2001 the Michigan State lost 35,000 jobs (-13.5\%)\(^6\).

**Evolution of the automotive employment in the US and in some selected States**

<table>
<thead>
<tr>
<th></th>
<th>1997-2001</th>
<th>1997-2001 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total US Auto industry</td>
<td>-69,000</td>
<td>-6%</td>
</tr>
<tr>
<td>Michigan</td>
<td>-35,000</td>
<td>-13.60%</td>
</tr>
<tr>
<td>Ohio</td>
<td>-22,000</td>
<td>-14.60%</td>
</tr>
<tr>
<td>Illinois</td>
<td>-5,000</td>
<td>-11%</td>
</tr>
<tr>
<td>Tennessee</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Missouri</td>
<td>1,700</td>
<td>9%</td>
</tr>
<tr>
<td>South Carolina</td>
<td>5,100</td>
<td>29%</td>
</tr>
<tr>
<td>Kentucky</td>
<td>7,200</td>
<td>18.3%</td>
</tr>
</tbody>
</table>

*Source: Annual survey of manufactures US Census Bureau*


\(^6\) Source: Annual survey of manufactures US Census Bureau. One must be cautious as some of the 'lost jobs' are in fact outsourced jobs to suppliers which are not included in the automotive sector regarding the survey's classification.
The result of this double movement was a shift to the south for the US automotive industry, with now 30% of the US production being realized by the 5 over-mentioned US southern states. States like Alabama came from no production in 1996, up to the 12th place in 2002 and is due to rank 5th by 2005.

Car production in the US States (1)

<table>
<thead>
<tr>
<th>State</th>
<th>Car production in 2002</th>
<th>Number of production facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>2,700,000</td>
<td>13</td>
</tr>
<tr>
<td>Ohio</td>
<td>1,700,000</td>
<td>7</td>
</tr>
<tr>
<td>Missouri</td>
<td>1,200,000</td>
<td>6</td>
</tr>
<tr>
<td>Kentucky</td>
<td>1,100,000</td>
<td>4</td>
</tr>
<tr>
<td>Illinois</td>
<td>600,000</td>
<td>3</td>
</tr>
<tr>
<td>Indiana</td>
<td>600,000</td>
<td>3</td>
</tr>
<tr>
<td>Tennessee</td>
<td>500,000</td>
<td>2</td>
</tr>
<tr>
<td>Georgia</td>
<td>440,000</td>
<td>2</td>
</tr>
<tr>
<td>California</td>
<td>350,000</td>
<td>1</td>
</tr>
<tr>
<td>New Jersey</td>
<td>280,000</td>
<td>2</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>250,000</td>
<td>1</td>
</tr>
<tr>
<td>Alabama</td>
<td>230,000</td>
<td>2</td>
</tr>
<tr>
<td>Texas</td>
<td>200,000</td>
<td>1</td>
</tr>
<tr>
<td>Virginia</td>
<td>200,000</td>
<td>1</td>
</tr>
<tr>
<td>Minnesota</td>
<td>173,000</td>
<td>1</td>
</tr>
<tr>
<td>Kansas</td>
<td>170,000</td>
<td>1</td>
</tr>
<tr>
<td>Louisiana</td>
<td>150,000</td>
<td>1</td>
</tr>
<tr>
<td>South Carolina</td>
<td>120,000</td>
<td>1</td>
</tr>
<tr>
<td>Maryland</td>
<td>80,000</td>
<td>1</td>
</tr>
<tr>
<td>Delaware</td>
<td>80,000</td>
<td>1</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>60,000</td>
<td>1</td>
</tr>
</tbody>
</table>

| Total U.S.    | 11,183,000             | 55                             |

(1) rounded figures
A) Alabama: an offensive incentives strategy to built an automotive cluster

The State of Alabama after great losses in its traditional industries was ready to attract the new coming automotive manufacturing at a high cost. Indeed, during the recent years Alabama has won fierce battles to attract automotive manufacture units on its soil. This battles began when Mercedez-Benz, said in 1993 it was looking for a location within the US.

Looking for a location for its first manufacturing facility in the states, Mercedes analyzed 170 sites in 30 states in the US. North and South Carolina and Alabama were the 3 finalists.

As the final negotiations went on, Mercedez-Benz rose it’s pretensions and when finally it asked the 3 States to pay the future 1,900 workers’ salaries for the first 2 years, only Alabama was ready to say ‘yes’.

The package proposed included:
- 2 years wages paid by the localities
- Training for the workers
- Cleaning and improvement of the future factory’s site
- Upgrade utilities
- buy 2,500 vehicles from the future production
The value of the package offered by the state was 150M$

The city of Tuscaloosa offered
- Tax abatements
- Workforce training
- Land
The package was worth $250 millions

The whole package was worth $400 millions for an investment from Mercedes of $400 millions for building the plant due to begin production by 1996.

There has been a controversy about the efficiency of such offer and the benefit for the community, especially when it appeared that only 15% of the expected suppliers to come effectively located in Alabama. The controversy grew up when short of finances, the state missed a $43million payment, and first tried to raid money from its education budget to finally borrow money from its own pension fund system, with a 9% interest loan to recoup it.

The over costing project finally appears to have been worth as Mercedes decided in 2000 to expand its facility which shall double size by 2005. But once again, the package must have been persuasive as the state had to transfer $43millions from a bond issue to pay for it and promised a $40Million worth training program.
However, Alabama is now hosting 3 main assembly plants...
- Mercedes-Benz with 4000 jobs and a 160 000 car production forecast in 2005
- Honda announced in 1999 a $440million plant due to operate in 2001. The package offered was lower than the one proposed to Mercedes-Benz but still $158million, with $55millions State tax breaks, $45million in improvements around the site and $30million for training program. Short after the beginning of operations an expansion was announced, followed by an other one 6 month later which led to a total of $1billion investment, 4 300 jobs and an annual production capacity of 300 000 vehicles and engines per year.
- Hyundai announced in 2002 its wish to build a $1billion plant due to begin a 300 000 vehicles production by 2005, with 2000 jobs. The incentive was at least $253million worth for the States share.

...2 engine plants...
- International diesel of Alabama choose Alabama in 1999 for a motor plant which began operations in 2002, producing 500 motors a day for Ford with 300 jobs
- Toyota motor corp. announced in 2001 its installation in Alabama for $220million to built 120 000 engines per year from 2003 with 350 jobs

...with also many suppliers who followed their path.
With now an automotive industry employment representing 6% of the total industry and a 750 000 vehicle production forecast for 2005, which would put Alabama among the first five US producer states, Alabama has undoubtedly succeeded in building an automotive cluster.

For Alabama as for the other states, incentives are investments on the future, but the cost for Alabama is also high as it regularly suffers budget shortages. Therefore, like other southern states previously did, Alabama raised its debt limit to be able to keep on supporting its economic development policy. Meanwhile as the economic slowdown went on and the unemployment kept rising much beyond the national level, Alabama had to reduce the other expenses (education, infrastructure, social...) in order to keep its budget balance.
B) Michigan economic development policy: between hi-technology and automotive manufacturing

The Michigan, and particularly the Detroit region suffered great losses in car manufacturing employment in the last 2 decades. The state authorities as well as the city of Detroit can do but little to stop this phenomenon, especially regarding the fierce competition from the southern states and other countries to attract these high employment but also high-waged activities.

In this matter they choose to look on other directions and ease the shift to hi-tech and R&D activities rather than to keep car manufacturing activities at all costs. The main idea is that Michigan has to focus on its assets. Concerning automotive industry the assets are: being the center of automotive industry in terms of decision making and R&D, especially in the Detroit Region.

Neither the state of Michigan, nor the city of Detroit have a targeted policy toward the automotive industry, but given the fact that most of the projects still concern the automotive industry, this sectors benefits from the current attraction/retention programs of the Michigan localities. However, the State of Michigan and the city of Detroit have the power to decide for which project they are ready to struggle for and bargain the most.

Looking to the future ...

Taking advantage of a $350 millions federal program about new energies, the state of Michigan has initiated a special program named ‘next energy’ which aims to develop expertise in the alternatives energies for the car industry.

Based at the Wayne University of Detroit, the program is due to offer training programs, provide research facilities and technical assistance alongside with information resources. A 700 acres business park on a tax free renaissance zone will welcome companies concerned by investigating in new energies in order to initiate a cluster, with attached incentives.

This program benefits from a $95 millions financial support from the State and a $2 millions federal grant.

The next energy program describes itself on its web site as follows:

**NextEnergy Center** – a 40,000 square-foot facility affiliated with the Wayne State University’s Technology Park in Detroit. The facility’s power grid will include the use of fuel cells, advanced combustion engines, clean burning Sterling Engines, as well as Photovoltaics and advanced solar systems. The building will also house a laboratory, conference room, product demonstration area, office space and exhibition area.
Michigan NextEnergy Zone – a 700-acre, state-owned site being designated a tax-free Renaissance Zone

National Alternative Energy Program – a type of Underwriters Laboratory

NextEnergy Tax Incentives – Exemptions from the SBT and personal property tax for companies, whose primary focus is alternative energy R&D or manufacturing.

Spurring NextEnergy Demand – Steps include an exemption from the sales and use tax of any purchases of stationary and vehicular devices using alternative energy technologies.

Nevertheless this public involvement, the next energy program will not reach its full impact on the local economy until it is fully backed by the automotive industry companies.

The state of Michigan has initiated another hi-tech program in order to develop new high added value activities in the state, and especially to retain projects coming out the Michigan’s universities. A $1/2 billion budget has been allocated to this program to finance funds dedicated to help companies emerging from university-based research in the life science sector, resulting in the creation of a 300 companies biotech cluster in Michigan.

While keeping an eye on the manufacturing

Even if Michigan seeks to diversify its economy, it has to keep an eye on the existing activity, principally the automotive industry which still represents 30% of the state’s industrial sector employment.

The high social cost of deindustrialization is a concern that pushes the State to try to slow down the move toward fewer factories, in order to soothe the transition.

In that goal, the State of Michigan keeps on offering automotive companies incentives packages for manufacturing projects, either for attraction but also for retention. In that matter the State took two actions:

A restructuring of its incentive program in 1995 to be more competitive with other states.

Michigan also took part in the negotiations which led to the historical agreement between the mighty automotive union UAW and the big three (Ford, GM, and Chrysler). The outcome of this negotiations is a reinforcement of the Michigan competitiveness for automotive production projects.
Michigan still fighting for factories:
Among several examples of incentives, the GM case is one of the worthiest.

GM decided several investments in Lansing, the capital town of Michigan in 1999 and in 2000. The first project worth $558 million investment and 2000 jobs required a $99 million package which was a record since the 1995 reform.

In 2000, GM announced an extension with two new plants in Lansing and 2,800 jobs, for a $1 billion worth investment. This required a $256 million incentive package from the state and localities on a 25 years time. Most of it is tax incentives, either from the state (62 million) or from the city of Lansing (165 million), but also in infrastructure improvement ($28 million), and also training ($6.8 millions altogether with a technical education center).

This package was made possible by a law enabling the Michigan economic growth authority (MEGA) to grant companies tax credits to existing employers who locate in a brownfield area.

More recently in 2003, a consortium of 3 automakers (Chrysler, Hyundai Motor, Mitsubishi motors) decided to build a new 400 employees engine plant.

The package offered by the State and localities was worth $115 million, with $36 million of tax abatement, $38 million of highway improvement, $5 million in land acquisition and site preparation and improvement, and $400,000 in training program.

The deal has been said possible thanks to a special agreement with UAW, due to the particular 3 companies structure.

These few examples show that the state of Michigan has not given up its status of first automotive state in the US, even for production. Despite its declarations, the State of Michigan is still ready to give a lot of incentives for manufacturing facilities, even if its competitive advantages now lays more on the R&D and headquarters side.

Nevertheless, even being by far the decision center for automotive industry and thus the place to be for decision makers in this economic sector, the Michigan State still has to struggle for headquarters to come as this last example shows.

Fighting for headquarters too:

By the end of 2003, Hyundai decided to relocate and expand its new subsidiary headquarter in Michigan on a site 13 miles away from its Pittsfield township MI. testing center site, where it was previously installed.

Despite this flees jump and because the state of Alabama who had welcomed Hyundai future first US manufacturing plant was in competition, Hyundai received a $177 million incentive package from the State and communities of Michigan. The package includes a 20 years tax abatement worth $28.4 million from the state and the superior township.

The whole project represented a $117 Million investment for Hyundai and 350 jobs created by 2024.
III) The US air&space industry:

The US air and space industry represented a total of 2,034 million jobs in 2001, among which 696,000 directly related to manufacturing (34%) and 1,338 in services (air transportation, airports services, satellites communication services, space and Research & technology).

Between 1996 and 2001, the total employment has risen by 7% with a total of 138,200 new jobs.

Nevertheless, this growth is mainly due to services with a 13% and 156,000 jobs growth, as the aerospace and aviation manufacturing sector lost 18,000 jobs (-3%).

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<thead>
<tr>
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<tbody>
<tr>
<td>Aircraft and parts</td>
<td>462,169</td>
<td>0%</td>
<td>-559</td>
</tr>
<tr>
<td>Guided missiles and space vehicles and parts</td>
<td>82,955</td>
<td>-9%</td>
<td>-8,644</td>
</tr>
<tr>
<td>Search, detection, navigation, guidance</td>
<td>151,124</td>
<td>-6%</td>
<td>-9,022</td>
</tr>
<tr>
<td><strong>Sub total manufacturing</strong></td>
<td>696,248</td>
<td><strong>-3%</strong></td>
<td><strong>-18,225</strong></td>
</tr>
<tr>
<td>Transportation by air</td>
<td>1,302,900</td>
<td>+14%</td>
<td>+163,357</td>
</tr>
<tr>
<td>Communication services</td>
<td>18,044</td>
<td>-18%</td>
<td>-3,927</td>
</tr>
<tr>
<td>Space Research &amp; technology</td>
<td>17,395</td>
<td>-15%</td>
<td>-3,029</td>
</tr>
<tr>
<td><strong>Sub total services</strong></td>
<td>1,338,339</td>
<td>+13%</td>
<td>+156,401</td>
</tr>
<tr>
<td><strong>Total Aerospace and aviation</strong></td>
<td>2,034,587</td>
<td>+7%</td>
<td>+138,176</td>
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Source: US aerospace and aviation industry, commission on the future of the US aerospace industry oct 2002

The Manufacturing employment lost 3% of its jobs especially in the military sector and the navigation devices. The aircraft and part sector is characterized by a 5% (-12,838) employment drop in aircraft manufacturing sub-sector and a 8% (+9,566) rise of aircraft parts and auxiliary equipment sub-sector employment. This may indicate an outsourcing movement from the first to the latter.

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7 All the general information related to the air&space industry are extracted from the report : US aerospace and aviation industry, oct 2002.
8 aircrafts and parts, guided missiles and space vehicles and parts; search, detection, navigation, guidance
9 air transportation, airports services, satellites communication services, space Research & technology
The US geography of aerospace and aviation industry shows:

- California as the top state in term of employment (294,000, 14.4% of national jobs) and is home of 2,800 related establishments. California is more specialized in military related industry with the first place in guided missiles manufacturing (20,600 out of the 83,000 jobs), a first place in Navigation devices (48,100 out of the 151,100 jobs), and a first place in satellite communication (3,900 of 18,000). California is second for Aircraft and part manufacturing (70,200 out of 462,200 national jobs). California is first again for air transportation services jobs (148,000,000 out of 1,302,900 nationwide).
- Texas second with 184,200 jobs in 1,700 establishments. Most of these jobs are related to air transportation as Texas comes second in this matter with 128,600. Texas comes first for space research with 3,000 (17% of national space research jobs).
- Washington comes third with 117,600 jobs concentrated in 700 establishments. The state of Washington is specialized in civil aircraft manufacturing (74% of the airspace related jobs) with the strong presence of Boeing. A total of 87,000 jobs in aircraft and parts manufacturing puts Washington at the first place. The state of Washington is the most dependant state to the aircraft industry with a 43.7% rate.

**EMPLOYMENT IN THE US AEROSPACE AND AVIATION INDUSTRY - 2001**

Map design: Muriel Quintard
Illinois comes in 6th place with 88,709 jobs. Most of these are air transportation jobs with 92.6% of the Illinois total.

Between 1996 and 2001, the state of California experienced the most dramatic fall in airspace employment (-14,000). Meanwhile Texas gained 15,600, ranking first. The state of Illinois is second in terms of employment gains. The state of Washington gained 4,000 on that period, but it is not possible to say what share the services had in that growth.

**Map design:** Muriel Quintard

![Map of the United States showing employment changes in the air & space industry from 1996 to 2001.]
A) The state of Washington gains the new Boeing 7E7 plant

The State of Washington has long being relying on aircraft industry sector’s good health and particularly Boeing who was the first job provider in the state. Hopefully, the states economy and particularly in the king county has diversified with the outcoming of software companies cluster led by Microsoft. Nevertheless, the aircraft industry is still one of the main activities of the State.

The state of Washington is one of the 3 main Boeings locations and home of the commercial airplane manufacturing facilities and headquarters. Since several years, Boeing has dramatically reduced its employment, part of it by outsourcing activity toward suppliers. The state of Washington was the most affected by this evolution and lost 50% (about 50 000 jobs) of its Boeing employment since then, including the 450 corporate headquarters jobs which settled in Chicago in 2003.

9/11 and its aftermath increased the dramatic evolution suffered by the US aircraft industry that particularly stroke the civil aviation strongly represented in the state of Washington. Meanwhile the software industry was facing a slow down. In this depressed environment, the state of Washington was determined to do whatever the cost to keep the new 7E7 plant announced by Boeing due to create up to 1,200 direct jobs.

After a 8 month competition with 15 other states between may 2003 and January 2004, The state of Washington and the city of Everett won the bid thanks to “...a statewide alliance that includes the many people, communities and organizations that are supportive of Boeing and want to keep building Boeing airplanes in Washington.

State, county and local leaders; business and union leaders; and representatives of our community service agencies stand united in purpose: working together in close
partnership to keep Boeing jobs in Washington State and to add more”, according to the dedicated website www.actionwashington.com which symbolizes this union in the struggle.

Among the 27 official partners stood the Seattle port authority, the chamber of commerce, the State of Washington, The city of Seattle, the king county, the city of Everett, the Snohomish county and all the economic development agencies of the concerned areas.

The package offered to Boeing is one of the biggest even offered to a company, even though it is addressed to the whole air&space sector. This package seems to go beyond the 3,2 billions of $ voted by the representatives of the state and closer to 4 billions $, according to the newspaper Seattle Times.10

The main terms of this package include:

A voted 20 years $3.2billion valued package for the whole airspace sector, among which Boeing’s share would represent $1,4billion:
- Business tax, property tax, tax credit for R&D and for computer use...$1.1 Billion
- Unemployment insurance reform : 150 Million
- Boeings workers compensations reform : $46 Million
- Infrastructure improvement (highway, port) :$41 Million
- Workforce training program including an 7E7 dedicated employment resource center : $24 Millions
- Site Assembly : $22 Millions
- Ombudspersons dedicated to the 7E7 project for coordination with localities: $0,8 Million

Of course, most of this package is a 20 years long valued gain for Boeing, most of it being a “non-tax” revenue. The infrastructure, workforce training and site would represent a $67Million cost for the localities.

It is far too short to make any comment about the outcomes of this deal. The State of Washington and the localities hope to have stopped the job loss process and secured the existing jobs.

A controversy came out about the total amount and the State has been sued by a non-profit organization complaining about the lack of transparency and of information about the deal. Most of the project elements have been released since then but unreleased information may rise the final cost.

IV) Conclusion

In a world economy with very mobile companies, governments and localities have lesser means to attract or retain the most hi-valued activities on their soil because of fierce competition among the various world territories. As centralized public regulation is fading away, especially in Europe and particularly in France, incentive in its basic meaning “to incite” have become a general rule to lure companies. Incentives can have several forms, from proposing the best attractive business environment possible to offer strong subsidies packages.

In the European Union a strong regulation strictly restricts the use of incentives, particularly when it comes to subsidies and tax breaks. Nevertheless the competition among states is strong in order to gain new jobs as the regulations evolution about companies taxation or tax revenue, or VAT show throughout Europe. In France the local territories have no choice to attract companies but to offer the best environment possible as they have few power to offer tax breaks. One of the last direct action tool is the level of the “taxe professionnelle”, a tax based on land and property value paid by companies to the city or town when having an activity on its soil. However, since several years and under pressure of the state’s decentralization laws, efforts have been made to reduce the competition among towns through this tool, by creating larger communities with one single “taxe professionnelle level.

In the USA, from these various examples and many others, it appears that incentives and especially tax breaks constitute the frame of the localities action toward the industry and business in general. The US have a long and constant tradition of favoring the private sectors development and use its strength to lever local development actions in any sector as housing, urban development, transportation development and of course economic development. The use of financial incentives was a way to lure new business for geographical areas that were not naturally attractive enough regarding to other locations.

This policy has both advantages and drawbacks.

A) Avantages of the financial incentives:

- At a local level, they are very efficient to impulse a new development or help renew areas without great expends for the community, thanks to the Tax Increment Finance system, they work as a levy effect to make possible investments that wouldn’t be possible other ways. The drawback of this is that the community has less power to impose its view on the way to make the development.
- At a very local level, in a retaining or attracting policy, incentives are useful tools to modify the terms of competition in counterbalancing the lack of "natural" advantages of some localities in their favor. The drawback is that a company that settles only on financial arguments is not likely to stay long and may be acting as an incentives hunter, this is expensive at the end for the community. Nevertheless this strategy may be necessary and is very efficient when you have a cluster strategy, as did some southern states with automotive: Kentucky, Alabama, Tennessee, Missouri These states used larger companies to attract smaller suppliers who had to come close to the larger ones, without or with less incentives granted.

**Drawbacks:**

- Incentives, especially when based on tax cuts can finally be costly for the community: If the project concerns a small community trying to gain or maintain one large company, without any cluster strategy, then the local finances may come to a disaster, especially in a new coming company. This company will attract new jobs, inhabitants with new needs the community will have to fill and pay for (schools, infrastructures: roads, housing, electricity, water supply, why not public transportation...)

  - Giving incentives, especially tax breaks, means less money for other expenses needed by the community as said before. Giving better services is at the end more efficient to retain or attract companies than giving them money.

  - It is unfair to other companies who are there and fully pay their taxes, event if they might indirectly benefit from the activity generated by the newcomer. In many places, local companies complain about the fact that they pay for the new company to come and that they are not rewarded for being faithful to their environment.

  - It is even more unfair and costly when companies do not respect their goals in terms of employment, event by leaving a few years after having received the help.

More generally, incentives have become less efficient than they used to be, especially looking at a national point of view. As incentives have been integrated by the companies in their location strategy they have become compulsory for localities if they want to have a chance to lure new activities. The consequence is that these policies have risen the budgets of economic development nationwide with negative consequences on other public budgets. The problem is that by helping some companies at great expenses by these actions, localities threat the other existing companies, especially when the consequences are budgets cuts in education or in infrastructure and equipment, which can lead to a deterioration of these most valuable and basic assets a territory can offer to attract activity.
In this matter we can question the role of consulting cabinets who advise companies on their strategy to get more incentives but also localities on the best way to attract or retain firms. The role is particularly questionable when these cabinets are paid by firms on the amount of the package granted by the locality.

The development of incentives has it has been observed seems to confirm that at least some companies feel they can benefit from services and assets provided by the localities for free.

Still, companies as other members of the local communities (inhabitants, workers, administrations…) have rights among which to ask for good services at the best price to ease their activity and development. But they also have duties, among which to contribute financially to these services and assets, because in most cases they settled in these communities thanks to the existence of these good assets and services.

Finally looking at a national level, incentives have led to huge budgets wastes. Because of a “incentive civil war” climate throughout the US, the whole country had to pay for companies which either would have settled in the States anyway or would have relocate elsewhere in the US.
The gain for a few communities led to great losses for all.

B) Criticism led to some positive evolutions

Recent evolutions
All the examples presented and all that we can read on this question show a need for more regulation in the way contracts between localities and companies are settled when deciding of giving incentives.

First, there was often a great lack of reporting on the side of communities which did not systematically try to check the reality of jobs creation.

In that matter a lot of states have now adopted laws in order to reinforce the localities obligations in reporting the use of the community budget to attract or retain budget, but also gave them more power to make companies respect their engagements and get back money if they fail to meet their targets. Systems of modulation of incentives linked to the level of achievement of the project are now more common, theses laws have been named “claw backs laws”. To be able to activate these laws the communities have to provide incentives in a way to keep a negotiation power all along the contract schedule with the company.

Alongside these new measures, some communities now lead investigations to find out the reality of the wish of the company to leave its actual location or the credibility of the alternative locations in order to track incentive chaser companies.

In the same matter, communities not only pay attention to the reality of the job creation but also to the quality of the created jobs. More and more communities add job quality standard attached to development subsidies. According to a study led by the good job
At least 43 states, 41 cities, and 5 counties – a total of 89 jurisdictions – now attach job quality standards to at least one development subsidy. These standards are either based on wages or on health care benefits providing. The wage standards are the more widespread. Market based wage standards are more common at State level, while poverty-based swage standards are numerous at local levels. These standards seem to have positive impact on the local developments and eliminated the "hidden taxpayer costs" (e.g., food stamps, Medicaid, and the Earned Income Tax Credit) that accompany poverty-wage work.

It seems that now the incentive policies are much less been used than during the 90's, but it is not because communities have changed their way of competing or that the legislative environment has changed. This evolution is mainly due to the economic slowdown since sept 2001. On one hand there are less large investments, especially from the automotive industry due to overcapacities, and in other hand the communities have less financial capacities and cannot afford this kind of policy at such large scale.

Nevertheless, some improvements have been made as we have seen before, and also in the use of incentives. Localities and States, now seem to use these tools in a more global strategy which can include cluster strategy. Because budgets have tightened, more and more localities target some specific sectors or functions instead of a systematic search for any kind of activity.

The incentives cocktail has also changed in including more low rate loans than before, which is more convenient for companies, especially when this loan finally turns to a grant after a period of time. The gift of a building or premise is now more common too.

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What more could be done?

Harmonization at a federal level, eventually through a federal law, could be useful to avoid this pointless concurrence or at least limit the amount of incentives to be provided. The former governor of Maryland tried to settle an agreement with its neighboring states, but this action failed because it’s simply impossible to act on a regional level, federal level is the only way to succeed such a regulation, or at least agreement.

As an example, one could imagine a redistribution systems among states based on the amount of incentives received by the companies. Each company would transfer one share of its incentives to a federal development fund aimed at helping the local development. That would make incentives less interesting for a state to propose or for a company to get.

To be plainly efficient, localities should be given the possibility to focus on improving their objective advantages and less on the financial aspects. Investing for the whole community (including companies) is more rewarding on the long term than giving money to one single or a group of company. Attracting or retaining a company mainly on financial aspects is pointless, because sooner or later the company may leave the place when it realizes the cost is higher than expected, or just because the profitability is not high enough. Incentives should be the last tool used after long term development tools.

Actually in the long term, policies based on anchoring the companies in their environment should at least lead to comparable successes as the actual policies without its negative consequences on the deterioration of the public school system or local infrastructures. Such assessment is based on the fact that as developed before companies put financial incentives after market proximity, transportations costs and quality of infrastructure, cost and quality of labor that means good schools and universities, the existence of other companies (networking and cluster effect is very important), in their choice of location. One should not loose sight of these fundamental assets to improve in priority.

But the strongest argument against actual incentive policies is given by some associations who doubt the lawfulness of certain aspects of these policies regarding the most recent world trade treaties. Will their enforcement conduct to a significant change among US local incentive policies?
C) What can be learnt from the US experience in the French and European context?

For automotive industry 3 main assumptions:

Working on innovation is a strong factor for attracting or retaining industries and is more rewarding than a sole production facilities retaining policy. These two actions can even more efficient when coupled.

Target the actions to focus on the highest potential activities for the community because financial resources are rare. Now competition is so high that specialization and differentiation help to be more efficient and also reduce the number of potential competitors.

Regarding the incentives policy:

- France has a long lasting centralization and public action tradition. Under the European regulation this tradition has faded away but French localities still suffer from a lack of know-how in working together with the private sector. French localities should try to improve these relations by working closely with the private sector at the conception level in order to integrate their needs. Tools inspired from the TIF could be developed in this matter.

- From the US example, it seems necessary to keep on the path of reducing competition between territories. Locally by nationwide regulation for instance through policies that favors inter-community development, between European countries through EC regulations especially since the enlargement has brought new members.

Of course in a world opened economy, only a worldwide agreement can be totally efficient. Would the States and localities accept to abandon their power of action to the sole forces of the market? is it desirable? These central questions are not yet settled, but can they really be solved in a world characterized by huge living levels gaps?
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