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Carlos Henrique Ferrari

ECONOMIC AND FISCAL DISTORTIONS CAUSED BY TAX INCENTIVES

Advisor: Nicholas Vonortas
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1 INTRODUCTION:

Federalism may be defined as a system in which a number of somewhat autonomous units and a central government cooperate to achieve the same objectives. It includes countries with federal constitutions, those where public service provisions and taxation are decentralized, and sovereign units form an economic union. This definition, despite being broad, is most fitting for the topic of fiscal competition.

Fiscal competition may be vertical, when higher and lower levels of government are competitors; or horizontal, when it involves governments at the same level. In all cases, one cannot presume whether fiscal competition is welfare enhancing or harmful.

Fiscal federalism theory discusses the assignment of the economic functions of the public sector, allocation, distribution, and stabilization to different levels of government. The government has to provide public goods, such as national defense. These goods cannot be provided through market mechanisms but are still essential for consumers and therefore, the government has to provide them. Because of that, the government has to decide how to allocate resources between private goods and public goods.

The economy of a country is affected by economic fluctuations, such as conditions of boom and depression. Such changes benefit some and harm others. In such a situation, appropriate policy measures are required to avoid inflation and unemployment. Through its tax and expenditure policies, the government affects distribution of personal income of households in a manner that is just and fair. As
such, it taxes the rich and spends toward schemes that provide more benefits to the poor.

The general conclusion is that, in federalism, a given central government should be responsible for macroeconomic stabilization and income redistribution, as well as for the provision of national public goods, (i.e., those whose benefit scope includes the whole country or economic union).

2 TAX IN BRAZIL

The Brazilian government is divided into three political levels: the federal, state and local. In order to accomplish the obligations stated in the constitution, each political sphere has its own revenue through a complex tax system.

2.1 FEDERAL TAXES

The federal level of government has been granted with seven different taxes:

- Income tax (*imposto sobre a renda*) – levied on any kind of revenue or profit;
- Industrialized products tax (*imposto sobre produto industrializado*) – due on operations that industrialize goods;
- Import tax (*imposto de importação*) – used to protect the national industry and avoid international, unfair competition;
- Export tax (*Imposto sobre a Exportação*) – not currently implemented;
- Financial transactions tax (*imposto sobre operações financeiras*) – due on some financial operations;
- Rural property tax (*imposto territorial rural*) – owed by rural property owners;
- Large fortunes tax (*imposto sobre grandes fortunas*) – not implemented.
2.2 STATE TAXES

The state level of government has three taxes:

- Value added tax (*imposto sobre circulação de mercadorias*) – this is the most important state tax, it is applied on merchandise sold;
- Heritage and endowment Tax (*imposto sobre a transmissão causa mortis e doação*) – applied to heritage or endowment;
- Motor vehicle tax (*imposto sobre a propriedade de veículos automotores*) – due every year on owned vehicles.

2.3 LOCAL GOVERNMENT TAXES

There are three local taxes:

- Services Tax – (*imposto sobre serviços*) – applied to services that are not burdened by VAT;
- Tax on property transfer (*imposto de transmissão inter vivos*) – levied on real estate operations;
- Tax on Urban Property (*imposto sobre propriedade territorial urbana*) – applied to ownership of urban real estate.

3 VAT

The Value Added Tax (VAT) is a kind of retail tax, which levies each transaction in the production and distribution chain, rather than being collected only at the retail stage. Companies can obtain a full credit, or deduction for VAT paid on inputs offset against the VAT due on outputs. As a result, the tax is indirectly pushed to the next level, until the final consumption, where the last buyer will bear the full tax burden.
In a regular VAT system, with each step of commercialization, a non-cumulative 19% tax is levied (Rio de Janeiro, Brazil, rate used as example). That means that in each step, the government levies 19% of the added value. The equation below shows the total tax over a good that has been industrialized and distributed in many steps. The AV is the added value in each step. The sum of all the added values is the final price of the product, so it is clear that the final consumer of any good will bear an effective burden of 19% in Rio de Janeiro, no matter how many steps of production or distributions it goes through before the consumer buys it.

\[ 19\% \times AV_1 + 19\% \times AV_2 + \ldots 19\% \times AV_n = 19\% \times (AV_1 + AV_2 + \ldots AV_n) = 19\% \times \text{final price} \]

Usually the VAT is due on a destination basis, meaning that it will be payable in the jurisdiction of consumption. The main advantages of VAT are:

- As compared to other taxes, there is a less chance of tax evasion. VAT minimizes tax evasion due to its catch-up effect;
- VAT is simple to administer as compared to other indirect taxes;
- There is ass participation of taxpayers;
- Stability;
- Export neutrality, thus improving foreign trade;
- The minimum negative effect on allocation of resources.

During crises periods, revenue from corporate taxes, personal income taxes and social security contributions are relatively low and take a few years to recover, since corporations will have a decrease in profits, people will lose their jobs and have their
salaries frozen, and unemployment increases. On the other hand, VAT will not suffer that much with the reduction of consumption.

3.1 HISTORY OF VAT

The idea of a VAT is credited to Wilhelm Von Siemens in the 1920s, but Maurice Lauré, Joint Director of the French Tax Authorities in France, in fact implemented VAT later on in 1954. VAT was then implemented in two former French colonies. In the late 1960s, less than ten countries used VAT, as the most common consumption tax was the retail sales taxes.

VAT became a prerequisite for membership of the European Union spreading its use throughout Western Europe. IMF also recommended the adoption of VAT, and now, it is spread among more than 140 countries and represents an average of 20% of the tax revenues from many countries.

3.2 VAT IN BRAZIL

State administrations have VAT as their larger source of revenue, the following figure displays the relation between the values paid in federal taxes, state VAT, and other state taxes:
We can see that VAT represents 23% of the combined federal and state total taxes, and 87% of the state total taxes.

### 3.3 Perspectives for VAT Implementation in the US

The US has around 40% of its revenue coming from individual income taxes, as shown in the picture below:

The United States is the only developed country without a federal VAT. The opposition to VAT in the US is based on its perceived complexity and administrative burden; increase in federal taxing power over the state and local governments; perceived regressivity of a VAT denounced by liberals; and government growth as a result of the VAT’s money machine reputation.

Before any tax reform, the US must decide if the preferred revenue basis is the income tax or the consumption tax, otherwise any VAT-style reform proposal will be
rejected again, as in each proposal offered between the presidencies of Richard Nixon and George W. Bush. If the balance changes to consumption tax, VAT is the best alternative.

3.4 FRAUDS

Since VAT is due in small parts over every step of the chain, frauds tend to be smaller and less offensive to the Treasury. Small frauds in the middle of the chain, as non-accounted operations, are inoffensive because the buyer will not obtain a full credit or deduction for VAT paid on inputs offset against the VAT due on outputs.

The most common fraud in VAT is the "missing trader fraud." It happens when the fraudulent individual charges a buyer the price of the goods plus VAT, but does not pass on the VAT to the Government. He becomes a "missing trader." If someone should profit 30% in an operation, he could conspire with another company to come in the middle, and profit 20%, leaving the first company with only a 10% added value. The middle company then vanishes out, saving 2/3 of the taxes.

In VAT systems, the fraudulent will try to operate on the link, or “buffer” as it is called, where the added value is higher. The import and export buffers are particularly sensible to frauds, as we can see in the following figure carrying fictitious operation values and a 19% VAT:

![Diagram of VAT fraud example]

It is clear that the VAT due in the import operations is the highest one, so it will be much more subject to fraud.
There is an even worse type of fraud called “carousel,” which combines a missing trader operation on the import and a fictitious export operation where the exporter will claim for the restitution of all VAT paid, including the import step that has never been paid!

On this operation they include many intermediate resellers, all helping to blur the line between the final reclaim and the original importer.

This is called “carousel” because it may be repeated many times with the same merchandise.

4 TAX BENEFITS AND STATE ECONOMIC DISTORTIONS

Regulations may be used as a remedy against market failures, such as externalities and monopolistic power. However, if profit-maximizing manufacturers take into account the compliance costs of local regulation, it will affect competitiveness, so, governments may use lax regulations to attract business to the territory of the unit. Another way to attract business would be the reduction of taxes, but, as lax regulations, it would affect the entire unit.

Instead of lowering taxes or loosening regulations, decentralized governments may resort to the concession of tax incentives, subsidies and provision of public inputs to firms in specific regions. These are typical regional development policy instruments and, when used for decentralized industrial policies, they may bring about a destructive competition: the so-called fiscal war.
The practice of reducing state value-added taxes to attract investment has been unlawful in Brazil since 1975, except in cases in which the intended reduction is unanimously approved by the 26 states and the Federal District. Yet, the law has been disregarded and tax competition among Brazilian states has intensified since the beginning of the 1990s.

In an attempt to reduce inequality between the states in Brazil, some states on their own, grant tax benefits to attract businesses and to induce economic development. These benefits granted without the consent of the other states, as required by the constitution, generated the so-called fiscal war.

Momentary political interests motivate many of these benefits, in many cases political marketing is more important than a plausible economic result. It is very common to read in the newspaper that public administration attracted a new industry that will create hundreds of new jobs. There is no study about the validity of this job creation feature, or its real cost in terms of tax waivers. Usually a single letter of intentions is the base for this widely publicized information. It is no surprise that a behavior that prioritizes advertising over real economic development may cause an economic disaster in terms of competitiveness.

Some of these tax benefits ultimately generate large distortions between competing companies, going far beyond the incentive region. Such distortions affect both the supply chain as the subsequent distribution chain.

As seen before, VAT is a neutral tax and any tax incentive should only compensate some negative externality of starting a business in a specific district, for example, overcoming entry barriers or implementing some economic policy (e.g., stimulating economic growth incentivizing the creation of business with high level of innovation).
4.1 NON-VAT INCENTIVES

As a non-cumulative tax system, it is useless to reduce the tax rate in an intermediate level of the production chain in order to stimulate business because this kind of incentive would be annulled in next level of trade or consumption. Therefore, to incentive business, some kind of waiver must be granted in the intermediate operation, perhaps as an assumed credit or as partial abrogation of tax due. These tax waivers would be suitable to compensate some externality, such as higher cost of labor, energy, or even transportation on a specific district.

Another way of incentivizing is replacing the whole VAT system at one level of the chain, charging a small fixed tax rate over the output price. After that product returns to the regular VAT chain, it is taxed as usual, granting a VAT credit as if the tax were collected on a regular basis in the previous level. This system, instead of promoting specializations, will incentivize that the company to carry all levels of the industrialization in order to have a greater added value and save more taxes. As displayed in the next section, this kind of incentive is much more subject to fraud.

5 CASE STUDY – RIO DE JANEIRO STATE LAW 5636/2010

In 2010, the state of Rio de Janeiro introduced a new state law, 5636/2010, aimed at establishing a regionalized industrial recovery policy. This law grants tax incentives for industries established in some districts of the state of Rio de Janeiro.

The 5536/2010 law allows some industries to calculate their taxes in an alternate way, using a non-VAT cumulative system using a lower rate, but without the right to deduct the tax paid in the previous operation. The most import points of this new calculation are:
- Industry will only pay 2% of sales revenues as tax;
- Someone who sells inputs to a benefited industry will pay no tax on that operation;
- Someone who buys industrialized products from a benefited industry will calculate his own tax over his added value, in the exactly same way as if he has bought from a non-benefited industry.

The 5.636/2010 law intended to attract companies from other states. As an example, consider a regular factory that buys its supplies for $50 with an included $9.5 VAT, and sells its production by $100 to a reseller that sells for $120, as show below:

![Diagram of the transaction chain]

Total state VAT due for all chain is $22.80:

\[
\text{TOTAL VAT} = 9.5 + (19.00 - 9.50) + (22.80 - 19.00) = $22.80
\]

Looking only to the factory, the factory has a VAT of $9.5.

\[
\text{FACTORY VAT} = 19.00 - 9.50 = $9.50
\]

The factory profit, deduced tax, is $40.50.

\[
\text{FACTORY PROFIT} = 100.00 - 50.00 - 9.50 = $40.50
\]
Since VAT is a neutral tax, it should not interfere with profits or total tax due, even if part of the chain is in another state. In the following example, despite the 12% interstate VAT, we can see that there is no interference on the TAX collected nor on profits:

As we can see in the expressions below, there is no change in TOTAL VAT, or in the factory profit.

\[
\text{TOTAL VAT} = 5.52 + (11.04 - 5.52) + (22.80 - 11.04) = 22.08 \\
\text{FACTORY VAT} = 11.04 - 5.52 = 5.52 \\
\text{FACTORY PROFIT} = 92.04 - 46.02 - 5.52 = 40.50
\]

We only notice a change in the VAT division between two states. Now, state 1 will only receive $22.08 - $5.52 and state 2 will receive $5.52, but the total tax burden is exactly the same. Therefore, under a regular VAT system, the factory will choose the more suitable place to establish itself, considering logistic and labor issues, for example.

The purpose of the law was to attract factories from other states to Rio de Janeiro, so some economic incentives should be granted to move factories. Lawmakers imagined the following expected scenario, after the factory would move from another
state. In this new scenario, we must look from the companies’ point of view to understand why it should move to Rio de Janeiro.

\[
\text{FACTORY BENNEFITED VAT = $1.84}
\]

\[
\text{FACTORY PROFIT = $92.04 – $46.02 - $1.84 = $44.18}
\]

This increase from $40.50 to $44.18 in the factory profit is a result of less tax due. The state is subsidizing the factory production on a less attractive place.

### 5.1 TAX ON INDUSTRY SALES

As shown previously, in Rio de Janeiro any product will carry a 19% tax burden on its final price, but, whenever there is a benefited industry in the loop, the equation will change from

\[
19\% \times AV_1 + 19\% \times AV_2 + ... 19\% \times AV_n = 19\% \times (AV_1 + AV_2 + ... AV_n) = 19\% \times \text{final price}
\]

to:

\[
19\% \times AV_1 + ... 0\% \times AV_{i-1} + 2\% \times V_i + 19\% \times AV_{i+1} + ... 19\% \times AV_n,
\]

where the \( i^{th} \) operation is the industrialization, an \( V \) is the value of the sale.

It becomes clear that if any industry promotes an aggregation of more then 11.7%, it will pay less tax with the benefit than it would pay without it, as shown in the expressions and table below:

<table>
<thead>
<tr>
<th>FACTORY</th>
<th>RESELLER</th>
<th>SUPPLIER</th>
</tr>
</thead>
<tbody>
<tr>
<td>40.50</td>
<td>97.20</td>
<td>1.84</td>
</tr>
<tr>
<td>+ 5.52</td>
<td>+ 22.80</td>
<td></td>
</tr>
<tr>
<td>46.02</td>
<td>+ 11.04</td>
<td>(1.84)</td>
</tr>
<tr>
<td></td>
<td>92.04</td>
<td>effective burden</td>
</tr>
<tr>
<td>$1.84</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Benefited tax = 2% \times \text{acquisition price} \times \text{margin}
Non benefited tax = 19% x (acquisition price x margin) – 19% x acquisition price

<table>
<thead>
<tr>
<th>Margin of aggregation</th>
<th>Acquisition price</th>
<th>Sale price</th>
<th>TAX benefited</th>
<th>TAX - non-benefited</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td>100,00</td>
<td>110,00</td>
<td>2,20</td>
<td>1,90</td>
</tr>
<tr>
<td>50%</td>
<td>100,00</td>
<td>150,00</td>
<td>3,00</td>
<td>9,50</td>
</tr>
<tr>
<td>100%</td>
<td>100,00</td>
<td>200,00</td>
<td>4,00</td>
<td>19,00</td>
</tr>
</tbody>
</table>

As many industries work with aggregation between 50% and 100%, we notice that they will have a huge decrease in tax due.

The non-VAT calculation in this law has brought numerous distortions and opportunities of fraud graphically exemplified in this study. Apart from fraud, will show the tax engineering, on the edge of illegality.

5.2 FRAUD

5.2.1 STATE FRAUD

As previously shown, the expectation was that factories would move from other states to less developed districts from Rio de Janeiro, but a Rio de Janeiro pre-established factory, in a non-beneficiated district, can simulate the existence of a new factory in a beneficiated district, as shown below:

Previous:
Fraud:

In this case, no “new” factory has been built, no new jobs were created, and there is only a simulation of an industry in the new plant. The profit increases from $40.50 to $48.00, and the taxes decrease from a $28.00 to $15.30.

5.2.2 INTERSTATE FRAUD

In this case, a factory established in another state does not want to move its plant to Rio de Janeiro, but it builds a pretended factory in Rio de Janeiro, to take advantage of the tax benefits, as shown next:

Previous:

Fraud:

In this case, no “new” factory has been built, no new jobs were created, and there is only a simulation of an industry in the new plant. Tax calculations become
slightly tricky now, since the original factory does not have to pay a tax, instead it will receive a tax return of $3.50 ($6.00 - $9.50). The profit increases from $40.50 to $43.70, and the taxes decrease from a $28.00 to $18.80.

5.2.3 INTERSTATE STRUCTURED FRAUD

In the interstate fraud, there is a “waste” of taxes paid by the conspirators especially in interstate operations. To improve the fraud, two resellers are included forming a complex structure as shown below:

![Diagram of interstate structured fraud]

With this new structure, conspirators will have a total tax of - $15.46, which means a tax return of $15.46, as follows:

$$
(\$6.00 - \$9.50) + (\$0.00 - \$6.00) + \$2.00 + (\$11.04 - \$19.00) = -\$15.46
$$

The new profit, less taxes, will be $92.04 – $50.00 + $15.46 = $57.5, that represents a 42% increase over the original $40.50 profit.

5.2.4 DISTRIBUTION FRAUD

This is very similar to state fraud, and sometimes it can even be legal! In this case there is no conspiracy, the new pretend factory only takes advantage from the tax gap created by the law as shown in the example below, it is more like another reseller:
This “new factory” will have a $7.00 profit, even if it has no operation. In some cases, the law considers some small operations as industrialization, as packing the merchandize or even changing the original package.

### 5.3 TAX WAIVER ON INDUSTRY SUPPLIERS

From the suppliers’ perspective, there is an even larger waiver, since the purchase by benefited industry will be exempt from tax. This waiver is 19% of the supplier’s added value. Quite often, the industry uses great added value input materials, resulting in great waiver in tax.

Obviously, this tax waiver is intended to benefit only the industry, not the supplier, but, as it will be shown next, this is not what occurs:

Suppose that demand is represented by the equation:

\[ Q = a - b \times P \]
Moreover, since the supplier can sell its products to 5636/2010 beneficiaries and to non-beneficiaries, we will represent these two markets by the following equations, with price as a function of quantity:

\[ P_1 = \frac{a_1 - Q_1}{b_1} \text{ and } P_2 = \frac{a_2 - Q_2}{b_2} \]

The total revenue for the supplier can be represented by the equation:

\[ \Pi = P_1 \times Q_1 + P_2 \times Q_2 - C \times (Q_1 + Q_2) - FC \]

Substituting the price with the previous equation, we get that the total revenue, as a function of quantity sold in market 1 and quantity sold in market 2 is:

\[ \Pi = \frac{a_1 - Q_1}{b_1} \times Q_1 + \frac{a_2 - Q_2}{b_2} \times Q_2 - C \times (Q_1 + Q_2) - FC \]

The supplier will maximize its profits when:

\[ \frac{\partial \Pi}{\partial Q_1} = \frac{a_1 - 2 \times Q_1}{b_1} - C = 0 \]

\[ \frac{\partial \Pi}{\partial Q_2} = \frac{a_2 - 2 \times Q_2}{b_2} - C = 0 \]

Or:

\[ \frac{a_1 - 2 \times Q_1}{b_1} = \frac{a_2 - 2 \times Q_2}{b_2} \]

The previous equation shows that a supplier will maximize profits setting marginal revenue on each market equal to the margin of production cost.
We must emphasize that since the benefited industry cannot use VAT credit on its acquisitions, if the price of an input is up to 12% more expensive in Rio de Janeiro, the prices after taxation will still be less than from other states. This local advantage, especially on segments with few providers, may be taken as a local monopoly or an increase in monopoly power.

The following diagram shows how a supplier with some monopoly power views the local state market. The buyer could purchase from another state with a 12% tax or could purchase from a supplier in Rio de Janeiro with a subsidy (no tax). If he buys in Rio de Janeiro, the equilibrium would move from point P, over the 12% tax demand.

![Diagram showing supply and demand with subsidy share and buyer subsidy share.]
curve, to point P’ over the subsidized 0% tax curve. From the suppliers’ view, equilibrium would move from P to P’’:

From the graphic, one can see that part of the subsidy will benefit the supplier and only partially benefit the buyer, which shows that this benefit will be inefficient, wasting a lot of tax with the suppliers. In the cases where there suppliers have some market power and the supply curve is more inelastic than the demand curve, suppliers will get much more of the subsidy than the buyers will. So this kind of benefit, subsidizing inputs, should not be used unless demand elasticity is much lower than supply elasticity.

6 TAX BENEFITS EVASION AND FRAUD INVESTIGATION

Traditional VAT systems fraud has a usual fingerprint: some companies, in the supply chain, do not pay any tax. Most of the frauds consist of fake purchase operations that create fake credits. There are some variations to increase the tax evasion values, but there is always some company in the chain that does not pay any tax.

Regular tax auditing consists on identifying these fake operations, thus canceling fake credits. It is quite easy to identify a fake invoice or to identify a company that issues a great quantity of invoices and does not pay the due tax. These events trigger regular auditing in a specific company or even on the entire chain.

When a non-VAT system is used, an entire new set of frauds can be implemented. These frauds, as shown in the previous section, are much more grievous for tax administration and are much more difficult to identify since they do not use fake invoices nor do they have tax payments due. Little experience from tax agents and well-
implemented structured frauds almost always lead to ineffective audits and no tax recovery.

A second point that must be outlined is that something as important as uncovering the fraud structure is the fact that the real beneficiary must be properly identified for tax recovery and criminal prosecution. Again, regular tax auditing will not be able to accomplish either of these goals.

6.1 INTELLIGENCE TECHNICS APPLIED TO FISCAL BENEFITS AUDITING

Criminals use denial and deception to hide the real beneficiaries and to give an artificial tax compliance aspect to their business. Uncovering the real business and actual beneficiaries requires a set of methods known as intelligence.

We will divide the investigation into two parts: the first part consists of finding a company or group of companies cheating the tax system, and the second part obtains strong evidence against the real owner.

For companies with tax benefits, the starting point is checking if they really carry their operations in their plants. This can be done by direct and indirect means. The direct means is visiting the plant to verify the existence and size of stock, existence of production machinery, employees, administrative sector, and so forth. Interviews with less skilled people, like delivery drivers and manual laborers, will also provide information about the effective operation of a production plant.

Despite being a strong method of proving that no operation is carried on the factious plant, direct targeting visits may lead to two unwanted results: charging the false owners for tax and alerting the real beneficiaries about the investigation. Charging
the wrong person for owned tax may end the investigation since the administration understands that the owed tax was identified and it is just a legal matter to try to recover that money, moving the focus from tax agents to public prosecutors. This is exactly the criminals’ aim: having someone else blamed for their crime. Usually the formal owner of the company, who will be charged, is a poor and less structured person, who often does not know anything about the company.

A direct visit to the suspected company will also alert criminals about the investigation, encouraging them to destroy evidence of their criminal activity, withdrawing money from bank accounts, and so forth. This will make further investigations much more difficult. The result from a direct visit to a fake company will be the escape of the criminal gang who will start a new fake company some weeks later.

The only positive result of this action is the collection of intelligence. Even if criminals are not arrested or even identified, it will be possible to follow the supply chain and identify companies who did business with them. Experience shows that, despite strong denial, many of these companies were aware of the illicitness of the business and will keep their business with new illegal companies to be created by the same gang.

Therefore, since a direct visit is not recommended and also very time consuming, the use of early fraud indicators is recommended, some of which can be obtained without human intervention:

- Excessive profits for that economic segment;
- Low employee/production ratio;
- Participant in unusual long supply chain;
- Participant in circular supply chain;
- Having partner involved in previous fraud;
- Partner that was a former employee of same company;
- Low transport over sales tax ratio;
- Number and model/price of private vehicles owned by partners;
- Low ration between own residence value and company profit;

When a suspicion is raised against a company or a group of companies, by pointing fingers or by other indicators, it is suggested that indirect methods of investigation, especially the intelligence ones, should be used. The figure below shows the classic model of intelligence cycle:

![Intelligence Cycle Diagram](image)

Usually the starting point of the investigation would be the writing the requirements. In this phase it should be outlined what data is necessary to generate the wanted intelligence. Sometimes the goal is just to know if there is a fraud going on; sometimes
the goal is to also identify the perpetrators. The requirement phase will define data and methods by which it can be obtained.

The next step is data collection from many sources and methods as exampled below:

- Electronic invoices from state databases;
- List of current and former partners from target companies;
- Personal information from target partners;
- List of employees and former employees from target companies;
- List of labor lawsuits against target companies;
- Electric and communications bill from target companies;
- Wiretapping;
- Reconnaissance and surveillance;

The collection stage consists of gathering and storing data for further processing. Often data cannot be acquired, as planned and new methods must be used.

After collection, data must be processed before use: invoices must be loaded in data bases, phones communications must be parsed and important pages transcribed; films and recordings must be enhanced; and more.

The final step is the analysis, where all information will be interpreted, the needs of new data will be outlined, and, eventually an intelligence report will be produced with the desired intelligence.

Drawing conclusions about real owners is far more difficult than verifying the simple fraud existence, and the intelligence cycle may be repeated many times to overcome denial and deception barriers.
As in any intelligence report, there will be no overwhelming evidence provided. In fact, the intelligence report must be used to direct a fiscal and criminal operation, to be conducted simultaneously in every location that may be evidences against the real beneficiaries and also with bank and assets seizure. Doing so will prevent criminals from destroying evidence, selling assets, and withdrawing money, which will help tax recovery and prevent gang resurrection.

7 CONCLUSION

The common idea that tax benefits can induce development in a certain region, in turn generating a great gain in tax revenue as well as job creation, is a narrow view of the problem. Much better results in relative tax revenue increase and economic development would be achieved by simply lowering tax rates from a neutral tax as VAT, giving the same equivalent tax waive. In general, no distortion created by a fiscal benefit will be more efficient than a free market.

In a select few cases, where market failure is present, an intervention such as offering companies a fiscal benefit would be indicated. This is not the general rule and an economic survey must precede any fiscal benefit granting. The survey must state which market imperfection was detected, the best way to fix and amount of tax waiver. Tax benefits must be conceived and granted on a technical basis, otherwise they will be encroached by companies willing to take extraordinary profits.

A misconception in tax benefit structure may lead to a severe waste in tax revenue as extensively shown in the 5636/2010 law case study.

Searching and fighting tax frauds is a complex task which is much harder to accomplish when there is a mistaken tax benefit involved, since the whole operation
may be real, just not carried in districts it should, leading to no economic grow in that region, despite the tax waive.

The investigation of complex frauds needs special supercomputers to analyze data from billions of invoices from hundred thousands of taxpayers looking for fraud indications. Use of intelligence specialized tax agents is mandatory to identify the actual perpetrators and freeze assets to pay taxes and fines.

From the standpoint of any particular state, granting fiscal incentives to attract investment seems worthwhile. Unless the beneficiary would choose to locate his or her business in the state, even in the absence of the incentive, the amount of tax revenue foregone would not exist anyway. Further, aside from their direct impact on production and employment, newly attracted firms induce additional economic activity, creating still more jobs and income, and, of course, some tax revenue.

If this were the whole story, state tax incentives would be a valuable development tool. But, when other states replicate the successful experience of one of them, a destructive tax competition starts.

Tax benefits should not be seen as a tool of interstate attraction, since all states practice it, but rather as a tool of internal attraction and allocation of resources. The final analysis that must be made with respect to tax benefits is about variation in social indicators and average tax revenue in the state, not just in that region. It is always possible that the installation of a new company attracts people from poorer regions or states. In this case, on average, the situation worsens! Biased analyses are usually presented by the tax beneficiaries to justify obtaining or continuing benefits. The simplest way of doing so is to present a partial analysis, citing only the enrichment of a
given region and ignoring the impoverishment of all others. Finally, it is not possible to
do good politics with bad economics decisions.
8 BIBLIOGRAPHY


JCX-49-11, Joint Committee on Taxation, September 22, 2011, pp 4, 50.


