

What Do We Mean by Economic Output? Tobacco Model FAQ's

Where do the Data Come From?

The data gathered for this model came from Data-Axle, RAI, and federal and state government sources. Data-Axle is the leading provider of business and consumer data, which includes addresses, business titles and job totals. Since the Data-Axle data are adjusted on a continual basis, staff from John Dunham & Associates scanned the data for discrepancies, verifying individual facilities using Google Maps, web searches, and any available online government documents. Each office or facility has its own employee count; therefore, a company with a separate manufacturing plant, a warehouse and an office location would have three facilities, each with separate employment counts. In addition, for cases where employment data were available, Data-Axle employment figures were replaced with industry sources. Field sales force employees were located by zip code with Altria sales employees located in the same zip codes as those working for RAI. This is how we arrive at our direct employment totals.

What Model is Used?

These employment totals are entered into the IMPLAN Model. The IMPLAN model is based on the input-output accounts published by the US Department of Commerce, Bureau of Economic Analysis and is one of the standard models used to calculate economic impact figures. Input-Output tables representing the economy in 2020 (the last year available at the time of this study) were used in this analysis. The IMPLAN model is designed to run based on the input of specific direct economic factors, like direct jobs, and generates estimates of direct wages and outputs.

Explanation of Economic Impact Terms

Direct Impact Categories:

The direct impacts of this study were divided up into the categories of the tobacco industry. The tobacco industry (as defined in this study) includes manufacturers of combustible cigarettes, moist snuff, cigars, other tobacco products and non-combustible cigarettes, vaping products, wholesalers, and retailers that sell tobacco products such as: Convenience stores, supermarkets, gasoline stations, pharmacies and drug stores, warehouse clubs and supercenters, and discount tobacco stores. Data on tobacco farms and growers are included in the analysis; however, these are considered suppliers to the direct industry.

What is Meant by the Term Direct Impact?

Direct Impacts are those jobs, wages or economic output solely attributable to the industry defined for the study; in this case manufacturers of combustible cigarettes, moist snuff, cigars, other tobacco products and non-combustible cigarettes, vaping products, wholesalers, and retailers that sell tobacco products such as: Convenience stores, supermarkets, gasoline stations, pharmacies and drug stores, warehouse clubs and supercenters, and discount tobacco stores. These are the jobs that one can count. If one were to go to a manufacturing facility and count the number of people working there, that would be the direct employment (although there may be many more people working than there are jobs since many people work only part time). JDA uses direct employment at manufacturing facilities, offices, retail locations and other sites that are defined to be part of the industry to calculate all of the other effects presented in the study. For example, if a company facility employs 500 people, JDA then uses the IMPLAN model to calculate how much in wages and output those 500 employees create.



Indirect is the term used in economic impact studies to define those effects that result from firms in the defined (or Direct) industry purchasing goods and services from other industries. JDA defines these as Supplier Impacts in its models. For example, when a tobacco manufacturer pays rent on its warehouse to their landlord, or when they hire a trucking company to deliver products, or purchasing tobacco from a farm or warehouse, they are creating indirect effects in the real estate sector or trucking sector of the economy.

In the case of wholesalers, retailers and others that handle products through a supply chain, the value of the goods moving through a warehouse, or a store are not counted as indirect impacts; only those goods and services used to provide the wholesale or retail service are included. When a wholesaler pays an electric bill for its facility, or a retailer buys paper for its store, indirect impact is created. Whereas, when a tobacco product wholesaler buys cigars from a manufacturer, this transaction is not considered in the supplier impact.

What is Meant by the Term Induced?

Induced effects are the response by the economy that occur through re-spending of income received by payments made to employees and business owners measured in the direct and supplier parts of the economy. When people work for a retail location selling tobacco products or for firms that supply goods and services to the industry, they receive wages and other payments. This money is recirculated through their household spending inducing further local economic activity. Economists call these induced impacts the multiplier effect of an activity or industry.

Examples of induced effects are the jobs created in a diner located outside of a tobacco factory or retail store where people purchase sandwiches for lunch, or at the gas station where they purchase fuel for their commute, or even in neighborhoods, where workers purchase houses, go to restaurants or visit the movie theater.

What Specifically Do You Mean When You Say a Job?

Jobs are a measure of the annual average of monthly jobs in each industry as defined by the Quarterly Census of Employment and Wages put out by the Bureau of Labor Statistics. Jobs in our models are derived independently and do not match jobs reported by government entities in that the model defines the industry differently, and because it includes proprietors and other employees not eligible for unemployment benefits, and data from more firms and facilities than are surveyed by the government. Jobs are measured in full-time equivalent units.

What is Meant by The Term Economic Output or Economic Impact?

JDA uses output in its models as a general measurement of economic impact because it is the broadest and most comparative measure. Output can be considered similar to final sales; however, it differs due to the fact that it also includes adjustments in inventories and does not include certain taxes. In general, output represents the value of industry production for the model year calculated in terms of producer prices. Output differs depending on the industry being measured. In the case of the tobacco industry, Output is similar to gross sales for tobacco manufacturers. For retailers and wholesalers, Output does not represent sales, but rather is similar to the accounting measure of gross margin. Simply put, Output in the case of retailing can be seen as total sales revenue minus the cost of goods sold. This is similar to the wholesale or retail markup on a product.



This economic impact study measures the tobacco industry's total tax contributions. The model includes information on income received by the Federal, state and local governments, and produces estimates for the following taxes at the Federal level: Corporate income; payroll, personal income, estate and gift, and excise taxes, customs duties; and fines, fees, etc. State and local tax revenues include estimates of: Corporate profits, property, sales, severance, estate and gift and personal income taxes; licenses and fees and certain payroll taxes.

In addition, the model includes data on federal and state excise taxes as well as state and local sales taxes paid by tobacco consumers.

The Effect of COVID-19 on the Model

While the data used in this model are derived from facilities and jobs as of 2022, the impact figures are subject to the effects of the COVID-19 pandemic, since there are lags in all data, including the employment figures included in the Data-Axle database. Some facilities reported as closed in the Data-Axle database may have subsequently opened and are yet to be updated.

In addition, to certain data lags, the IMPLAN input/output tables used in this model are from 2020, the height of the COVID-19 recession. Supplier and Induced wages, output and jobs may be impacted to some extent by this; however, the main factor used to calculate these multiplier effects are the direct job numbers entered into the model.



What Do We Mean by Economic Output? Cigarette Model FAQ's

Where do the Data Come From?

The data gathered for this model came from Data-Axle, RAI, and federal and state government sources. Data-Axle is the leading provider of business and consumer data, which includes addresses, business titles and job totals. Since the Data-Axle data are adjusted on a continual basis, staff from John Dunham & Associates scanned the data for discrepancies, verifying individual facilities using Google Maps, web searches, and any available online government documents. Each office or facility has its own employee count; therefore, a company with a separate manufacturing plant, a warehouse and an office location would have three facilities, each with separate employment counts. In addition, for cases where employment data were available, Data-Axle employment figures were replaced with industry sources. Field sales force employees were located by zip code with Altria sales employees located in the same zip codes as those working for RAI. This is how we arrive at our direct employment totals.

What Model is Used?

These employment totals are entered into the IMPLAN Model. The IMPLAN model is based on the input-output accounts published by the US Department of Commerce, Bureau of Economic Analysis and is one of the standard models used to calculate economic impact figures. Input-Output tables representing the economy in 2020 (the last year available at the time of this study) were used in this analysis. The IMPLAN model is designed to run based on the input of specific direct economic factors, like direct jobs, and generates estimates of direct wages and outputs.

Explanation of Economic Impact Terms

Direct Impact Categories:

The direct impacts of this study were divided up into the categories of the cigarette industry. The cigarette industry (as defined in this study) includes manufacturers of combustible cigarettes, (both menthol and traditional), cigarette wholesalers, and retailers that sell cigarettes such as: Convenience stores, supermarkets, gasoline stations, pharmacies and drug stores, warehouse clubs and supercenters, and discount tobacco stores. Data on tobacco farms and growers are included in the analysis; however, these are considered suppliers to the direct industry.

What is Meant by the Term Direct Impact?

Direct Impacts are those jobs, wages or economic output solely attributable to the industry defined for the study; in this case manufacturers of combustible cigarettes, cigarette wholesalers, and retailers that sell cigarettes such as: Convenience stores, supermarkets, gasoline stations, pharmacies and drug stores, warehouse clubs and supercenters, and discount tobacco stores. These are the jobs that one can count. If one were to go to a manufacturing facility and count the number of people working there, that would be the direct employment (although there may be many more people working than there are jobs since many people work only part time). JDA uses direct employment at manufacturing facilities, offices, retail locations and other sites that are defined to be part of the industry to calculate all of the other effects presented in the study. For example, if a company facility employs 500 people, JDA then uses the IMPLAN model to calculate how much in wages and output those 500 employees create.



Indirect is the term used in economic impact studies to define those effects that result from firms in the defined (or Direct) industry purchasing goods and services from other industries. JDA defines these as Supplier Impacts in its models. For example, when a cigarette manufacturer pays rent on its warehouse to their landlord, or when they hire a trucking company to deliver products, or purchasing tobacco from a farm or warehouse, they are creating indirect effects in the real estate sector or trucking sector of the economy.

In the case of wholesalers, retailers and others that handle products through a supply chain, the value of the goods moving through a warehouse, or a store are not counted as indirect impacts; only those goods and services used to provide the wholesale or retail service are included. When a wholesaler pays an electric bill for its facility, or a retailer buys paper for its store, indirect impact is created. Whereas, when a cigarette wholesaler buys cigarettes from a manufacturer, this transaction is not considered in the supplier impact.

What is Meant by the Term Induced?

Induced effects are the response by the economy that occur through re-spending of income received by payments made to employees and business owners measured in the direct and supplier parts of the economy. When people work for a retail location selling cigarettes or for firms that supply goods and services to the industry, they receive wages and other payments. This money is recirculated through their household spending inducing further local economic activity. Economists call these induced impacts the multiplier effect of an activity or industry.

Examples of induced effects are the jobs created in a diner located outside of a cigarette factory or retail store where people purchase sandwiches for lunch, or at the gas station where they purchase fuel for their commute, or even in neighborhoods, where workers purchase houses, go to restaurants or visit the movie theater.

What Specifically Do You Mean When You Say a Job?

Jobs are a measure of the annual average of monthly jobs in each industry as defined by the Quarterly Census of Employment and Wages put out by the Bureau of Labor Statistics. Jobs in our models are derived independently and do not match jobs reported by government entities in that the model defines the industry differently, and because it includes proprietors and other employees not eligible for unemployment benefits, and data from more firms and facilities than are surveyed by the government. Jobs are measured in full-time equivalent units.

What is Meant by The Term Economic Output or Economic Impact?

JDA uses output in its models as a general measurement of economic impact because it is the broadest and most comparative measure. Output can be considered similar to final sales; however, it differs due to the fact that it also includes adjustments in inventories and does not include certain taxes. In general, output represents the value of industry production for the model year calculated in terms of producer prices. Output differs depending on the industry being measured. In the case of the cigarette industry, Output is similar to gross sales for cigarette manufacturers. For retailers and wholesalers, Output does not represent sales, but rather is similar to the accounting measure of gross margin. Simply put, Output in the case of retailing can be seen as total sales revenue minus the cost of goods sold. This is similar to the wholesale or retail markup on a product.



This economic impact study measures the cigarette industry's total tax contributions. The model includes information on income received by the Federal, state and local governments, and produces estimates for the following taxes at the Federal level: Corporate income; payroll, personal income, estate and gift, and excise taxes, customs duties; and fines, fees, etc. State and local tax revenues include estimates of: Corporate profits, property, sales, severance, estate and gift and personal income taxes; licenses and fees and certain payroll taxes.

In addition, the model includes data on federal and state excise taxes as well as state and local sales taxes paid by cigarette consumers.

The Effect of COVID-19 on the Model

While the data used in this model are derived from facilities and jobs as of 2022, the impact figures are subject to the effects of the COVID-19 pandemic, since there are lags in all data, including the employment figures included in the Data-Axle database. Some facilities reported as closed in the Data-Axle database may have subsequently opened and are yet to be updated.

In addition, to certain data lags, the IMPLAN input/output tables used in this model are from 2020, the height of the COVID-19 recession. Supplier and Induced wages, output and jobs may be impacted to some extent by this; however, the main factor used to calculate these multiplier effects are the direct job numbers entered into the model.



What Do We Mean by Economic Output? Menthol Product FAQ's

Where do the Data Come From?

The data gathered for this model came from Data-Axle, RAI, and federal and state government sources. Data-Axle is the leading provider of business and consumer data, which includes addresses, business titles and job totals. Since the Data-Axle data are adjusted on a continual basis, staff from John Dunham & Associates scanned the data for discrepancies, verifying individual facilities using Google Maps, web searches, and any available online government documents. Each office or facility has its own employee count; therefore, a company with a separate manufacturing plant, a warehouse and an office location would have three facilities, each with separate employment counts. In addition, for cases where employment data were available, Data-Axle employment figures were replaced with industry sources. Field sales force employees were located by zip code with Altria sales employees located in the same zip codes as those working for RAI. This is how we arrive at our direct employment totals.

What Model is Used?

These employment totals are entered into the IMPLAN Model. The IMPLAN model is based on the input-output accounts published by the US Department of Commerce, Bureau of Economic Analysis and is one of the standard models used to calculate economic impact figures. Input-Output tables representing the economy in 2020 (the last year available at the time of this study) were used in this analysis. The IMPLAN model is designed to run based on the input of specific direct economic factors, like direct jobs, and generates estimates of direct wages and outputs.

Explanation of Economic Impact Terms

Direct Impact Categories:

The direct impacts of this study were divided up into the categories of the menthol industry. The menthol industry (as defined in this study) includes manufacturers of menthol cigarettes, wholesalers and retailers that sell menthol products such as: Convenience stores, supermarkets, gasoline stations, pharmacies and drug stores, warehouse clubs and supercenters, and discount tobacco stores. Data on tobacco farms and growers are included in the analysis; however, these are considered suppliers to the direct industry.

What is Meant by the Term Direct Impact?

Direct Impacts are those jobs, wages or economic output solely attributable to the industry defined for the study; in this case manufacturers of menthol cigarettes, wholesalers, and retailers that sell menthol products such as: Convenience stores, supermarkets, gasoline stations, pharmacies and drug stores, warehouse clubs and supercenters, and discount tobacco stores. These are the jobs that one can count. If one were to go to a manufacturing facility and count the number of people working there, that would be the direct employment (although there may be many more people working than there are jobs since many people work only part time). JDA uses direct employment at manufacturing facilities, offices, retail locations and other sites that are defined to be part of the industry to calculate all of the other effects presented in the study. For example, if a company facility employs 500 people, JDA then uses the IMPLAN model to calculate how much in wages and output those 500 employees create.



Indirect is the term used in economic impact studies to define those effects that result from firms in the defined (or Direct) industry purchasing goods and services from other industries. JDA defines these as Supplier Impacts in its models. For example, when a menthol manufacturer pays rent on its warehouse to their landlord, or when they hire a trucking company to deliver products, or purchasing menthol products from a farm or warehouse, they are creating indirect effects in the real estate sector or trucking sector of the economy.

In the case of wholesalers, retailers and others that handle products through a supply chain, the value of the goods moving through a warehouse, or a store are not counted as indirect impacts; only those goods and services used to provide the wholesale or retail service are included. When a wholesaler pays an electric bill for its facility, or a retailer buys paper for its store, indirect impact is created. Whereas, when a menthol product wholesaler buys products from a manufacturer, this transaction is not considered in the supplier impact.

What is Meant by the Term Induced?

Induced effects are the response by the economy that occur through re-spending of income received by payments made to employees and business owners measured in the direct and supplier parts of the economy. When people work for a retail location selling menthol products or for firms that supply goods and services to the industry, they receive wages and other payments. This money is recirculated through their household spending inducing further local economic activity. Economists call these induced impacts the multiplier effect of an activity or industry.

Examples of induced effects are the jobs created in a diner located outside of a menthol factory or retail store where people purchase sandwiches for lunch, or at the gas station where they purchase fuel for their commute, or even in neighborhoods, where workers purchase houses, go to restaurants or visit the movie theater.

What Specifically Do You Mean When You Say a Job?

Jobs are a measure of the annual average of monthly jobs in each industry as defined by the Quarterly Census of Employment and Wages put out by the Bureau of Labor Statistics. Jobs in our models are derived independently and do not match jobs reported by government entities in that the model defines the industry differently, and because it includes proprietors and other employees not eligible for unemployment benefits, and data from more firms and facilities than are surveyed by the government. Jobs are measured in full-time equivalent units.

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JDA uses output in its models as a general measurement of economic impact because it is the broadest and most comparative measure. Output can be considered similar to final sales; however, it differs due to the fact that it also includes adjustments in inventories and does not include certain taxes. In general, output represents the value of industry production for the model year calculated in terms of producer prices. Output differs depending on the industry being measured. In the case of the menthol industry, Output is similar to gross sales for menthol manufacturers. For retailers and wholesalers, Output does not represent sales, but rather is similar to the accounting measure of gross margin. Simply put, Output in the case of retailing can be seen as total sales revenue minus the cost of goods sold. This is similar to the wholesale or retail markup on a product.



This economic impact study measures the menthol industry's total tax contributions. The model includes information on income received by the Federal, state and local governments, and produces estimates for the following taxes at the Federal level: Corporate income; payroll, personal income, estate and gift, and excise taxes, customs duties; and fines, fees, etc. State and local tax revenues include estimates of: Corporate profits, property, sales, severance, estate and gift and personal income taxes; licenses and fees and certain payroll taxes.

In addition, the model includes data on federal and state excise taxes as well as state and local sales taxes paid by menthol consumers.

The Effect of COVID-19 on the Model

While the data used in this model are derived from facilities and jobs as of 2022, the impact figures are subject to the effects of the COVID-19 pandemic, since there are lags in all data, including the employment figures included in the Data-Axle database. Some facilities reported as closed in the Data-Axle database may have subsequently opened and are yet to be updated.

In addition, to certain data lags, the IMPLAN input/output tables used in this model are from 2020, the height of the COVID-19 recession. Supplier and Induced wages, output and jobs may be impacted to some extent by this; however, the main factor used to calculate these multiplier effects are the direct job numbers entered into the model.



What Do We Mean by Economic Output? Flavored Tobacco FAQ's

Where do the Data Come From?

The data gathered for this model came from Data-Axle, RAI, and federal and state government sources. Data-Axle is the leading provider of business and consumer data, which includes addresses, business titles and job totals. Since the Data-Axle data are adjusted on a continual basis, staff from John Dunham & Associates scanned the data for discrepancies, verifying individual facilities using Google Maps, web searches, and any available online government documents. Each office or facility has its own employee count; therefore, a company with a separate manufacturing plant, a warehouse and an office location would have three facilities, each with separate employment counts. In addition, for cases where employment data were available, Data-Axle employment figures were replaced with industry sources. Field sales force employees were located by zip code with Altria sales employees located in the same zip codes as those working for RAI. This is how we arrive at our direct employment totals.

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Explanation of Economic Impact Terms

Direct Impact Categories:

The direct impacts of this study were divided up into the categories of the flavored tobacco industry. The flavored tobacco industry (as defined in this study) includes manufacturers of flavored tobacco products (including menthol flavored products), wholesalers and retailers that sell flavored tobacco products such as: Convenience stores, supermarkets, gasoline stations, pharmacies and drug stores, warehouse clubs and supercenters, and discount tobacco stores.

What is Meant by the Term Direct Impact?

Direct Impacts are those jobs, wages or economic output solely attributable to the industry defined for the study; in this case manufacturers of flavored tobacco products, wholesalers, and retailers that sell flavored tobacco products such as: Convenience stores, supermarkets, gasoline stations, pharmacies and drug stores, warehouse clubs and supercenters, and discount tobacco stores. These are the jobs that one can count. If one were to go to a manufacturing facility and count the number of people working there, that would be the direct employment (although there may be many more people working than there are jobs since many people work only part time). JDA uses direct employment at manufacturing facilities, offices, retail locations and other sites that are defined to be part of the industry to calculate all of the other effects presented in the study. For example, if a company facility employs 500 people, JDA then uses the IMPLAN model to calculate how much in wages and output those 500 employees create.



Indirect is the term used in economic impact studies to define those effects that result from firms in the defined (or Direct) industry purchasing goods and services from other industries. JDA defines these as Supplier Impacts in its models. For example, when a flavored tobacco products manufacturer pays rent on its warehouse to their landlord, or when they hire a trucking company to deliver products or purchasing flavored tobacco products from a farm or warehouse, they are creating indirect effects in the real estate sector or trucking sector of the economy.

In the case of wholesalers, retailers and others that handle products through a supply chain, the value of the goods moving through a warehouse, or a store are not counted as indirect impacts; only those goods and services used to provide the wholesale or retail service are included. When a wholesaler pays an electric bill for its facility, or a retailer buys paper for its store, indirect impact is created. Whereas, when a flavored tobacco products wholesaler buys products from a manufacturer, this transaction is not considered in the supplier impact.

What is Meant by the Term Induced?

Induced effects are the response by the economy that occur through re-spending of income received by payments made to employees and business owners measured in the direct and supplier parts of the economy. When people work for a retail location selling flavored tobacco products or for firms that supply goods and services to the industry, they receive wages and other payments. This money is recirculated through their household spending inducing further local economic activity. Economists call these induced impacts the multiplier effect of an activity or industry.

Examples of induced effects are the jobs created in a diner located outside of a flavored tobacco products factory or retail store where people purchase sandwiches for lunch, or at the gas station where they purchase fuel for their commute, or even in neighborhoods, where workers purchase houses, go to restaurants or visit the movie theater.

What Specifically Do You Mean When You Say a Job?

Jobs are a measure of the annual average of monthly jobs in each industry as defined by the Quarterly Census of Employment and Wages put out by the Bureau of Labor Statistics. Jobs in our models are derived independently and do not match jobs reported by government entities in that the model defines the industry differently, and because it includes proprietors and other employees not eligible for unemployment benefits, and data from more firms and facilities than are surveyed by the government. Jobs are measured in full-time equivalent units.

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JDA uses output in its models as a general measurement of economic impact because it is the broadest and most comparative measure. Output can be considered similar to final sales; however, it differs due to the fact that it also includes adjustments in inventories and does not include certain taxes. In general, output represents the value of industry production for the model year calculated in terms of producer prices. Output differs depending on the industry being measured. In the case of the flavored tobacco products industry, Output is similar to gross sales for flavored tobacco products manufacturers. For retailers and wholesalers, Output does not represent sales, but rather is similar to the accounting measure of gross margin. Simply put, Output in the case of retailing can be seen as total sales revenue minus the cost of goods sold. This is similar to the wholesale or retail markup on a product.



This economic impact study measures the flavored tobacco products industry's total tax contributions. The model includes information on income received by the Federal, state and local governments, and produces estimates for the following taxes at the Federal level: Corporate income; payroll, personal income, estate and gift, and excise taxes, customs duties; and fines, fees, etc. State and local tax revenues include estimates of: Corporate profits, property, sales, severance, estate and gift and personal income taxes; licenses and fees and certain payroll taxes.

In addition, the model includes data on federal and state excise taxes as well as state and local sales taxes paid by flavored tobacco product consumers.

The Effect of COVID-19 on the Model

While the data used in this model are derived from facilities and jobs as of 2022, the impact figures are subject to the effects of the COVID-19 pandemic, since there are lags in all data, including the employment figures included in the Data-Axle database. Some facilities reported as closed in the Data-Axle database may have subsequently opened and are yet to be updated.

In addition, to certain data lags, the IMPLAN input/output tables used in this model are from 2020, the height of the COVID-19 recession. Supplier and Induced wages, output and jobs may be impacted to some extent by this; however, the main factor used to calculate these multiplier effects are the direct job numbers entered into the model.