



20 October 2017

Socio-economic impact of the Coca-Cola System in Jordan

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1 Key messages

2 Methodology

3 The Coca-Cola System and the Jordanian economy

4 Socio-economic impact of the Coca-Cola System in 2016

5 Effects of hypothetical changes to the Jordanian tax regime

Key messages: The Coca Cola system in Jordan in 2016

COCA-COLA IS A LOCAL BUSINESS

- The System sells **18 million** unit cases of products locally through almost **16,000** outlets
- These beverages are **98%** locally produced in Jordan
- To produce these beverages, the System spends about JOD **24 million** on about **287** local suppliers



JOD 41 MILLION TOTAL INCOME CONTRIBUTION

- The System generates **JOD 5 million** incomes directly
- Indirectly, the System supports **JOD 14.5 million** upstream and is associated with **JOD 21.4 million** downstream
- The total contribution equals **0.15%** of Jordan's GDP
- Every **JOD 1** spent on Coca-Cola beverages leads to **JOD 0.67** of incomes in Jordan



OF THE TOTAL INCOMES, JOD 14 MILLION IS TAXES

- The system pays **JOD 1 million** in taxes and supports **JOD 14 million** taxes indirectly
- The total contribution equals **0.3%** of Jordan's tax income



4,076 JOBS ACROSS THE VALUE CHAIN

- The System employs **415** people in its production plant and offices
- The System supports **774** jobs upstream and is associated with **2,887** jobs downstream
- Every job in the System supports **9** jobs elsewhere



Key messages: Effects of three hypothetical tax policy changes in 2018



10% EXCISE TAX EXEMPTION FOR COCA COLA'S 185 ML PACK

- Based on the System's price and volume changes, the net effect for the government will be **JOD 0.5 million** as the decrease in excise tax will be offset by an increase of VAT and other taxes. Furthermore the private sector (households, firms) would gain **JOD 0.8 million** in incomes and an additional **72 jobs** would be supported.
- However, when volume changes are lower than estimated by the System, income and job effects could be negative, up to **JOD -0.6 million** in private sector incomes and a decrease in jobs supported up to **-59 jobs**.

RAISE OF EXCISE RATE TO 15%

- Based on the System's price and volume changes, government net tax revenues would decrease by **JOD -0.4 million**. Furthermore, the private sector would lose another **JOD -2.2 million** in incomes and **-388 jobs**.
- However, when volume changes are lower than estimated by the System, effects on government revenues will be positive (up to **JOD 1.4 million**). The private sector would still lose minimum **JOD -1 million** and **-215 jobs**.

RAISE OF EXCISE RATE TO 20%

- Based on the System's price and volume changes, government net tax revenues would increase by **JOD 1.8 million**. However this would come at a loss of **JOD -1.6 million** private sector incomes, and **-171 jobs**.
- However, when volume changes are lower than estimated by the System, net positive effects on government revenues will be larger (up to **JOD 3.4 million**). Again, this would come at a loss of minimal **JOD -0.7 million** of private sector incomes, and at least **-32 jobs**.

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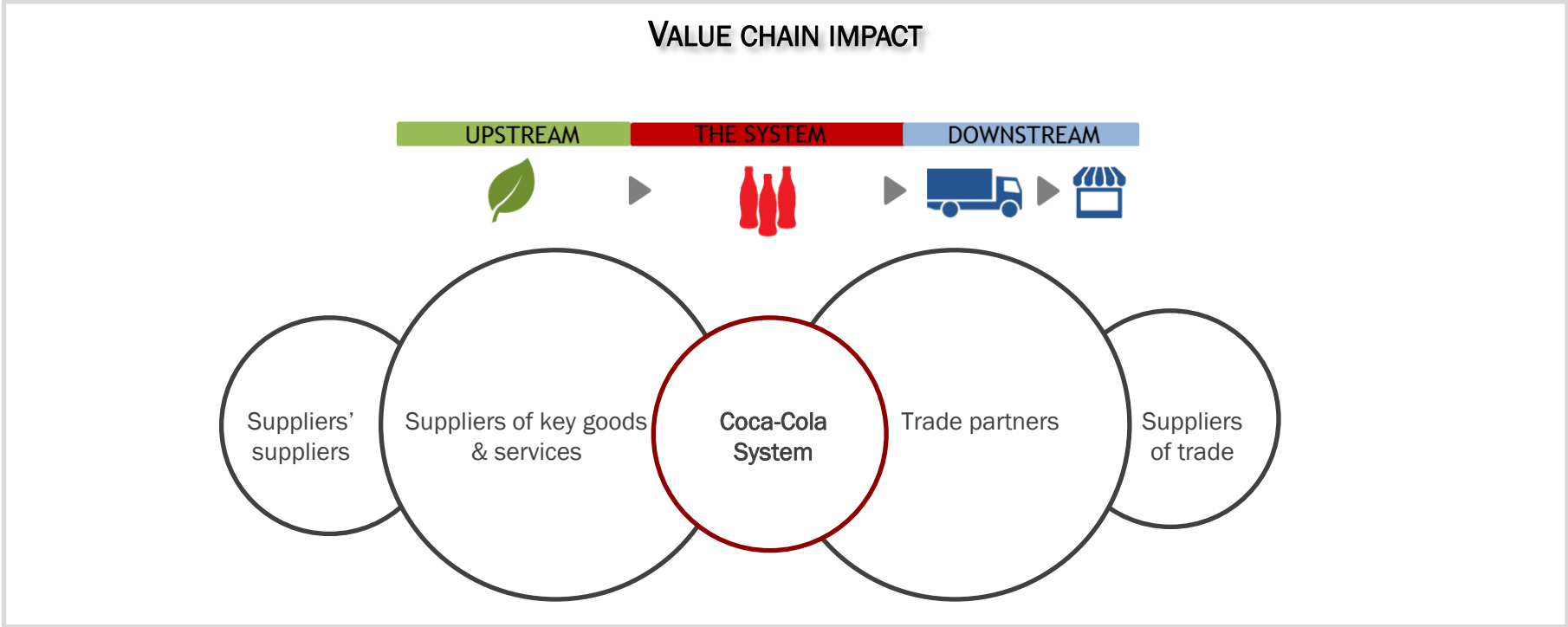
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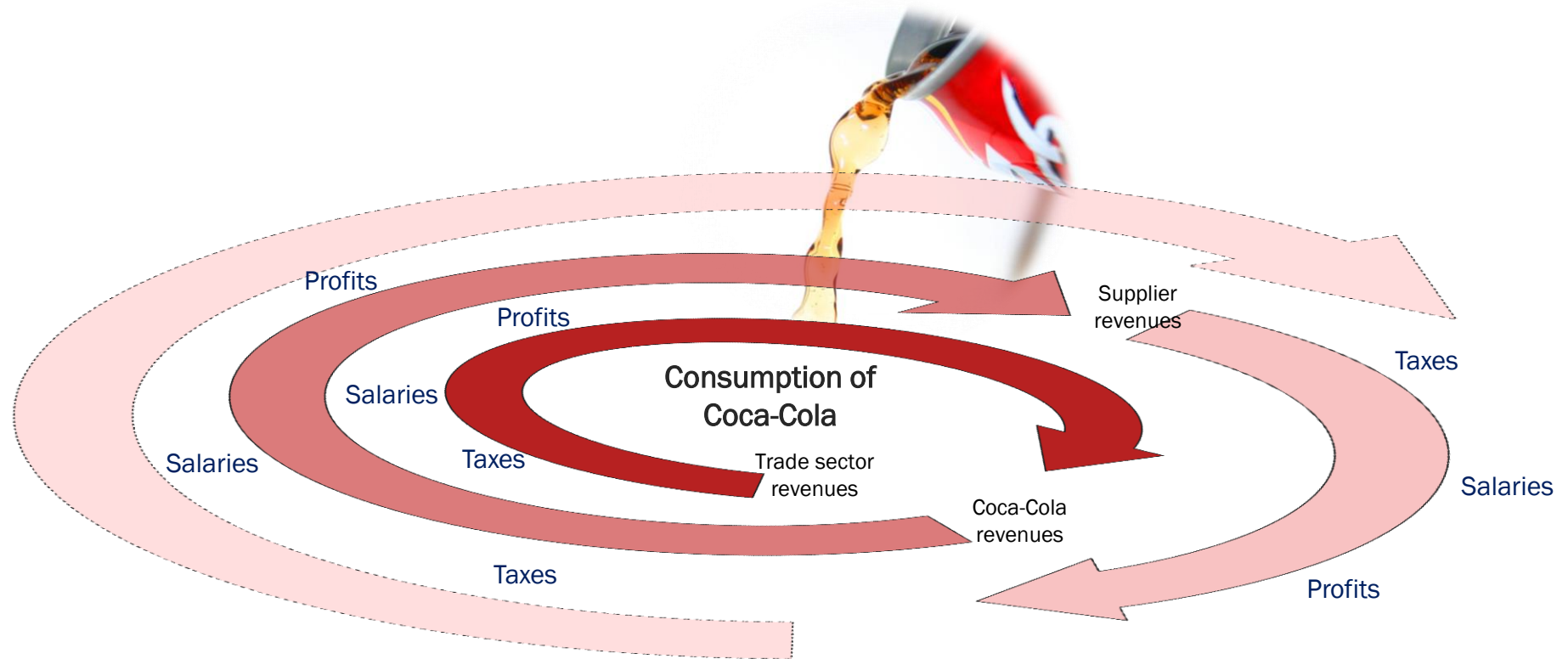
5 Effects of hypothetical changes to the Jordanian tax regime

The study quantifies the System's impact along its value chain

THE COCA-COLA SYSTEM IN JORDAN	CONTRIBUTION TO ECONOMY
 	 <p>Value added, comparable to Jordanian GDP Taxes, profits, salaries</p>  <p>Employment, comparable to Jordanian employment Persons employed</p>

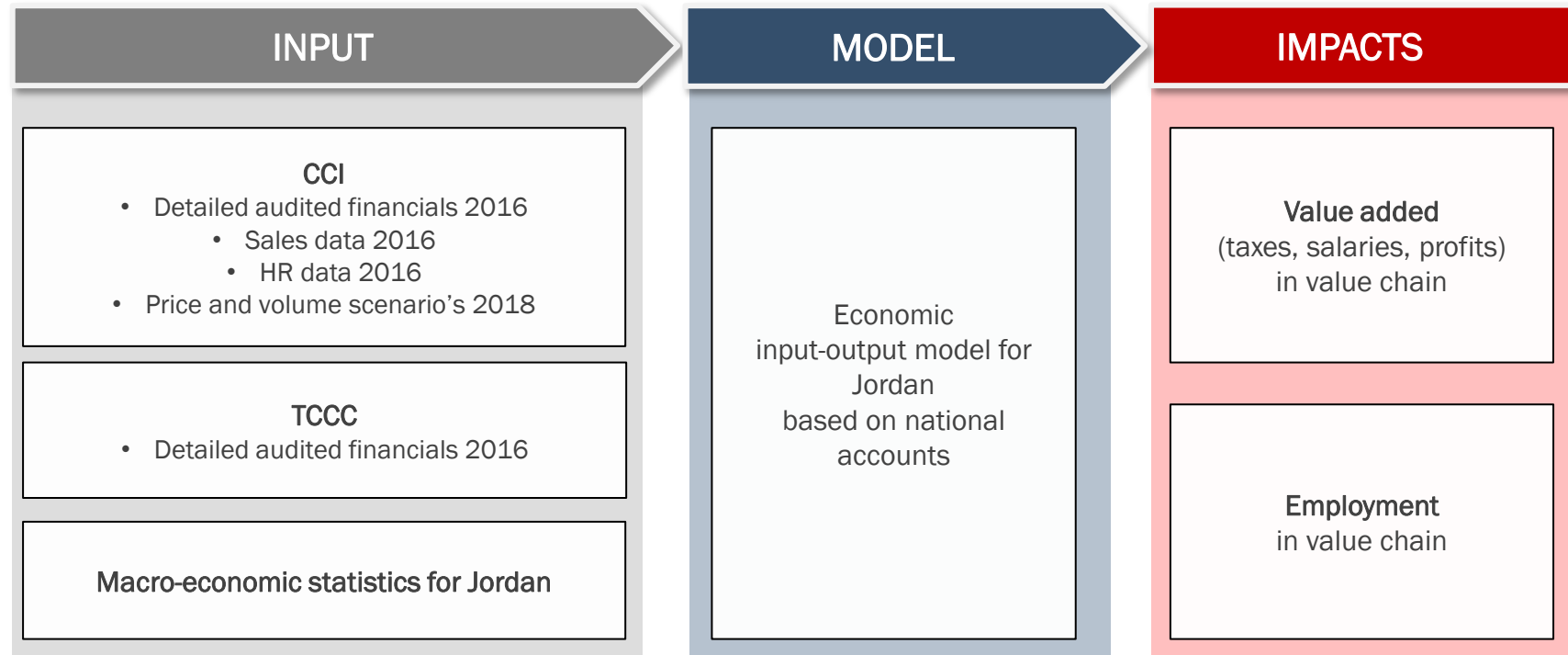


We quantify the System's impact by tracing money flows in the economy



In each round of spending, we estimate value added (salaries, taxes and profits) in Jordan and its equivalent in terms of supported jobs

We combine Coca-Cola financials and official statistical data to quantify results



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A snapshot of the Jordanian economy in 2016

The Jordanian economy in 2016..



Total population: 9.5 million



Total GDP: JOD 27.4 billion
GDP growth: 2.0%
GDP/capita: JOD 2,902



Total employment: 1.4 million Jordanians
Unemployment rate: 15.3%

..faces several challenges



Unemployment reached an historical high of 15.3% in 2016. Especially youth unemployment is a major challenge with 35.6% in 2016



Fiscal and external accounts deficits narrowed in 2016. Debt however remains elevated at about 96% of GDP



Jordan's economy remains sluggish as GDP growth slowed down from 2.7% in 2012 to 2.0% in 2016



Foreign direct investment decreased from 4.9% of GDP in 2015 to 3.4%

The food & beverage sector is Jordan's largest manufacturing sector



- Total food & beverage: **JOD 1,180 million** value added (21% of total manufacturing GDP)
- Non-alcoholic beverages: **JOD 236 million** value added (4.5% of total manufacturing GDP)



- Total food & beverage: **46,213** (22% of total manufacturing employment)
- Non-alcoholic beverages: **4,797 jobs** (2% of total manufacturing employment)

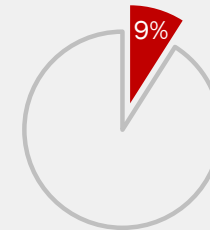
The Coca Cola system in Jordan



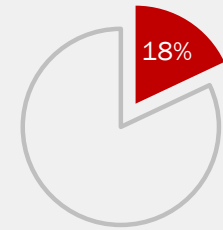
The Coca Cola System in Jordan in 2016..

- Producing in Jordan since 1993
- Based in Hizam, operating a production plant and 2 distribution centers across the country
- 17.8 million UC beverages sold locally & 0.8 million UC beverages exported; 98% is produced locally
- JOD 34 million CCI revenues and JOD 3.6 million TCCC finances
- JOD 24 million local procurement
- 415 fulltime employees
- JOD 4 million CAPEX investments

.. its share in the non-alcoholic beverage sector



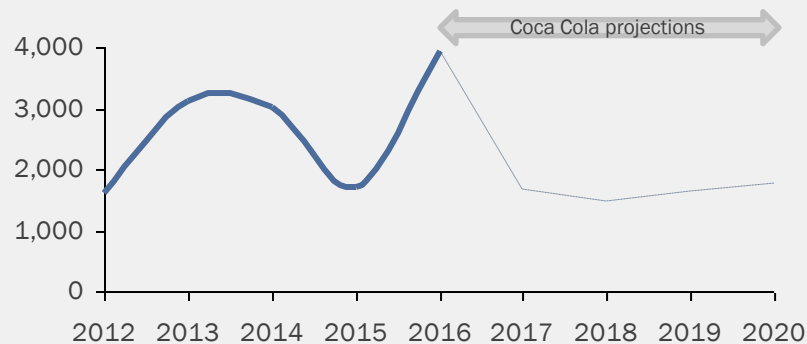
9% of Employees



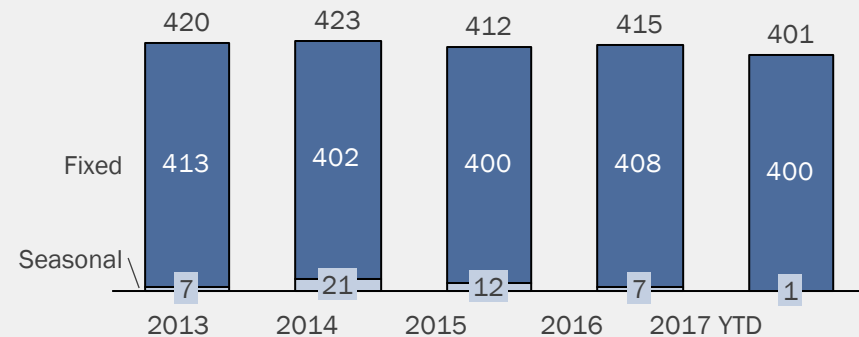
18% of Value Added

The Coca Cola System is a stable contributor to the Jordanian economy

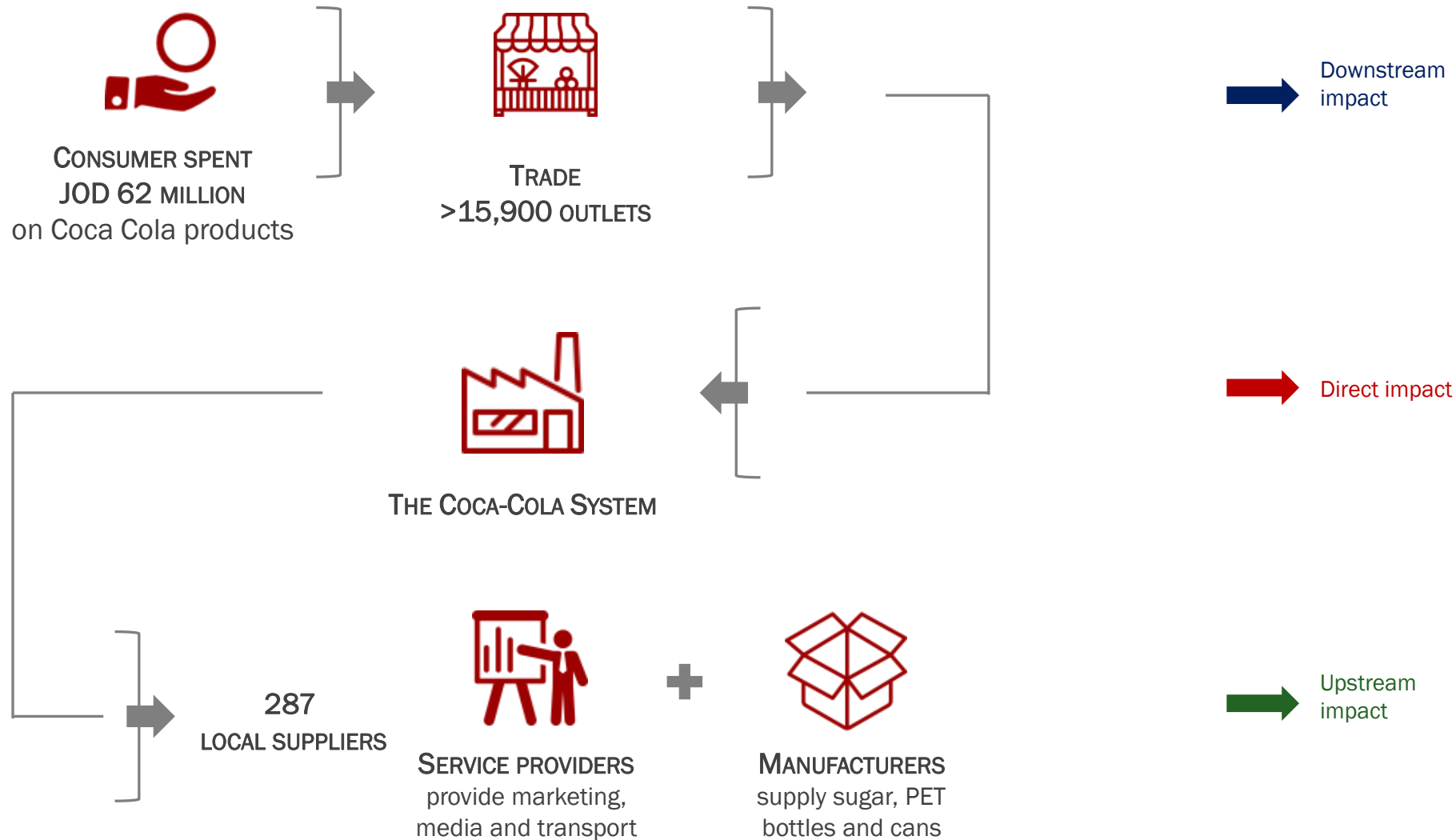
Continuous CAPEX investments
CAPEX in 000 JOD



Each year employing >400 people
Coca-Cola System employment in FTE



Consumers spent JOD 62 million on Coca-Cola beverages in Jordan, which rippled down through the economy



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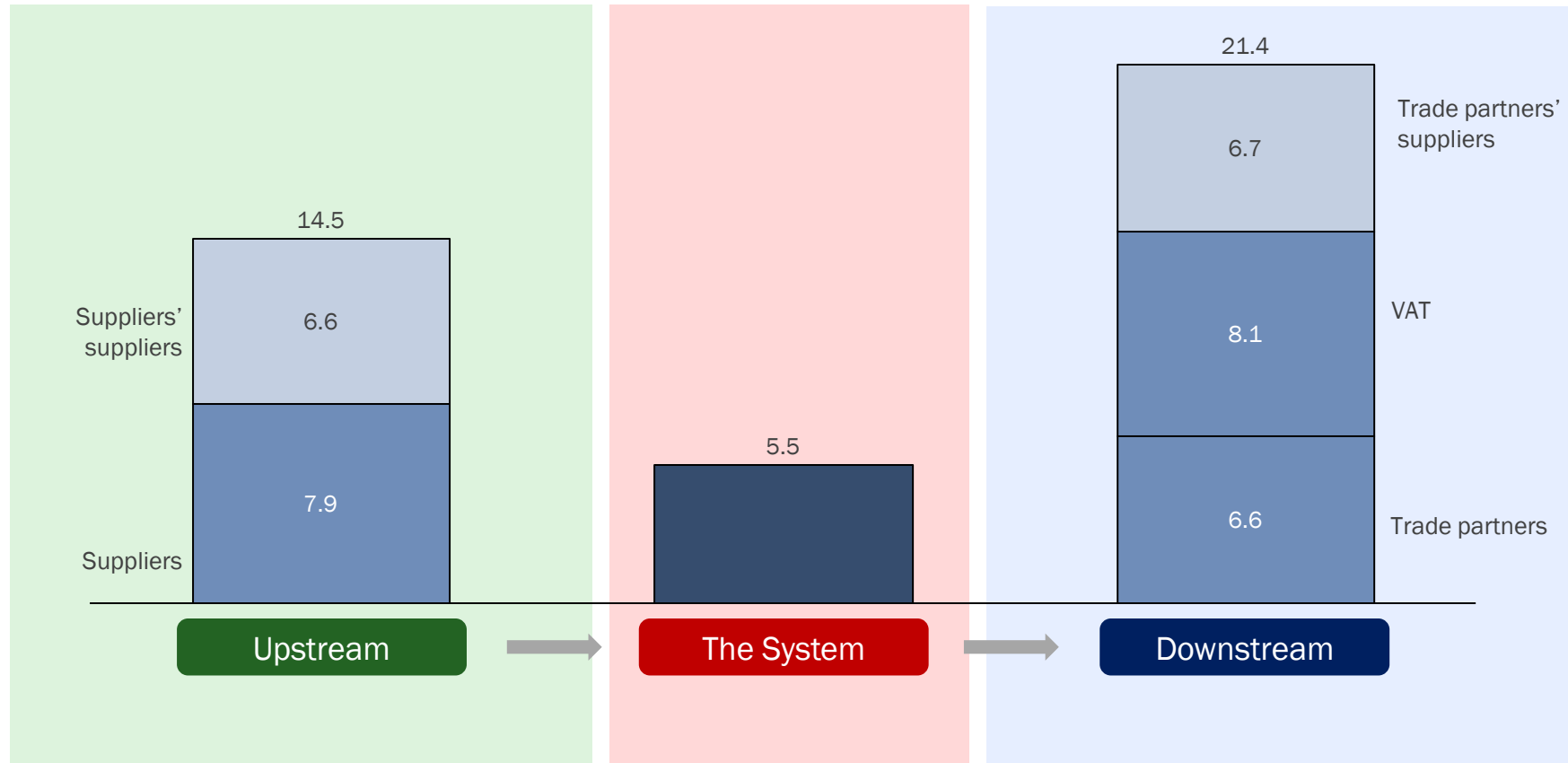
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In 2016 the System supported JOD 41 million in value added across its value chain

Total value added supported by the System in Jordan (JOD million)



JOD 5 m direct & JOD 36 m indirect = JOD 41 million

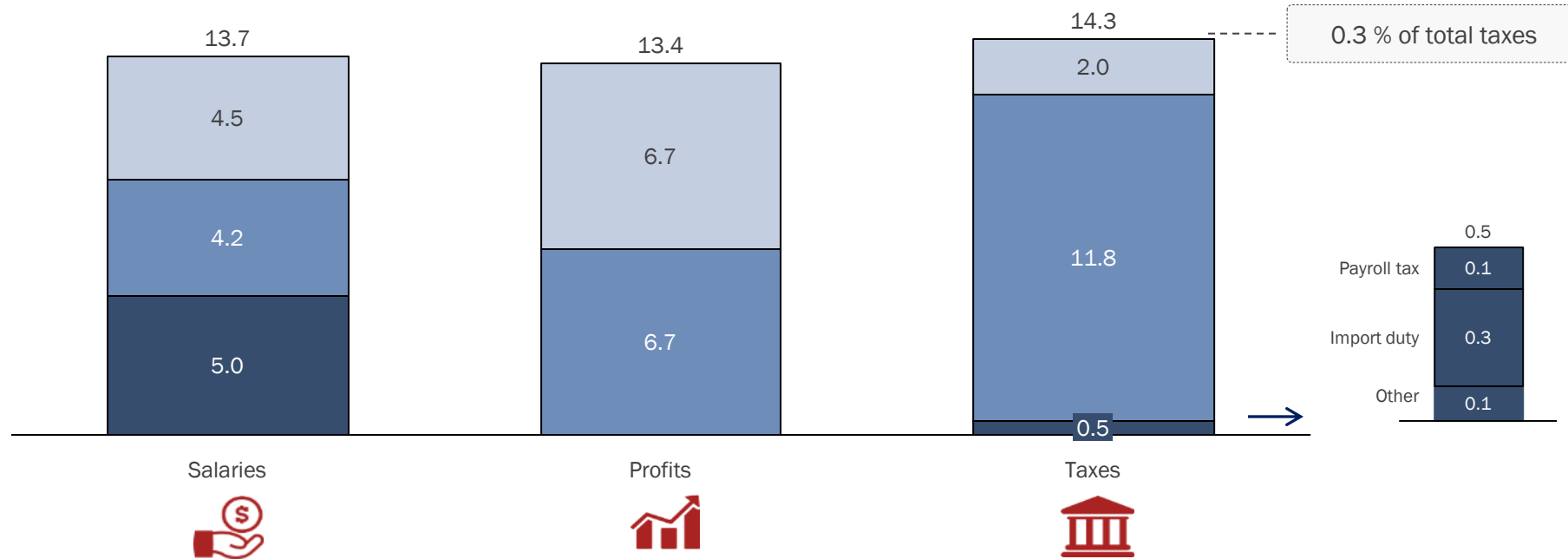
(0.15% of GDP)

Of every Dinar spent by consumers 67% stays in the local economy

Total supported value added is evenly distributed among households, private sector and government

Total value added supported by the Coca-Cola System in Jordan (JOD million)

- Suppliers' suppliers
- Suppliers and trade partners
- The Coca-Cola System

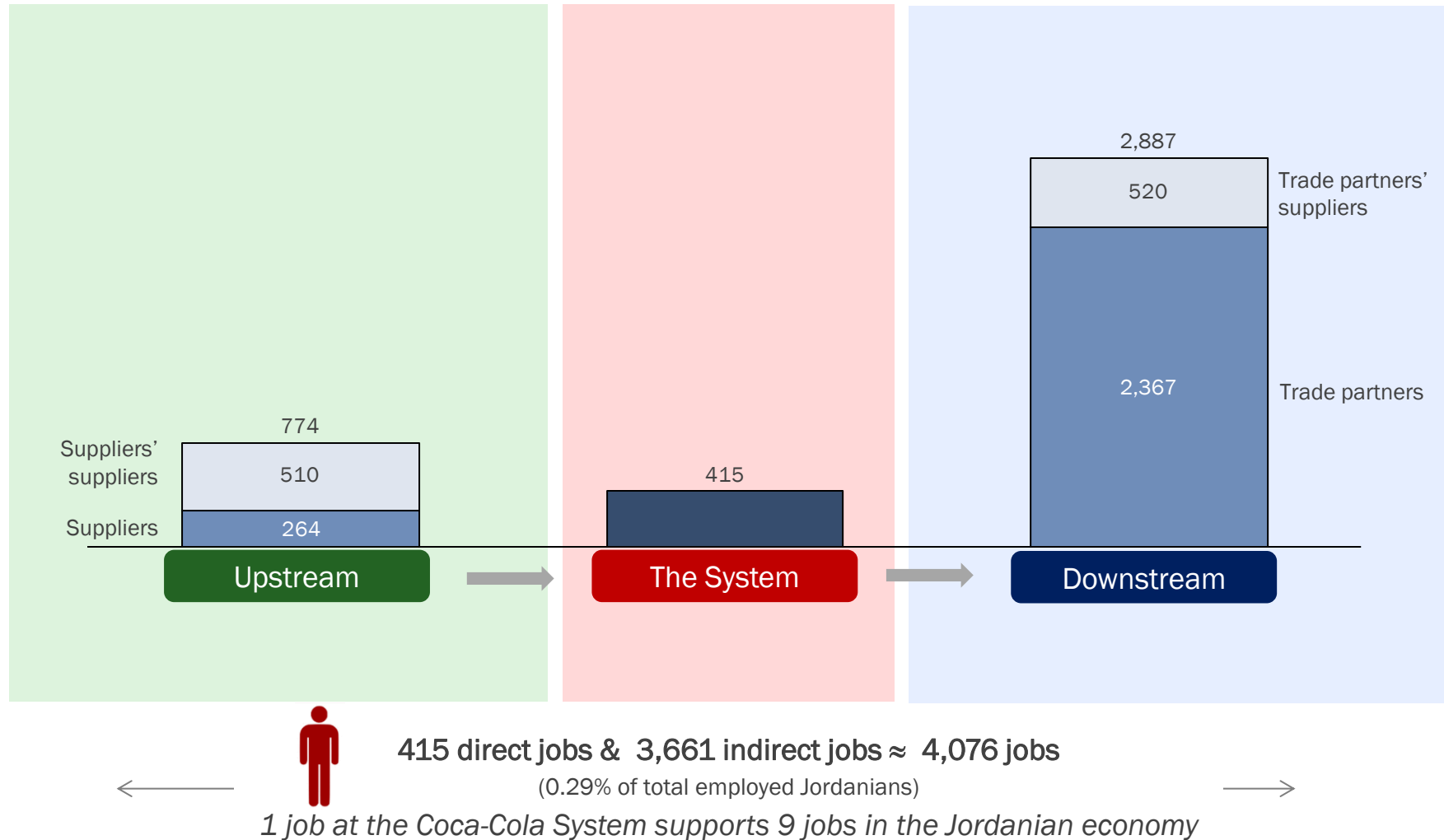


JOD 5 m direct & JOD 36 m indirect = JOD 41 million
 (0.15% of GDP)

Of every Dinar spent by consumers 67% stays in the local economy

In 2016 the System supported about 4,076 jobs across its value chain

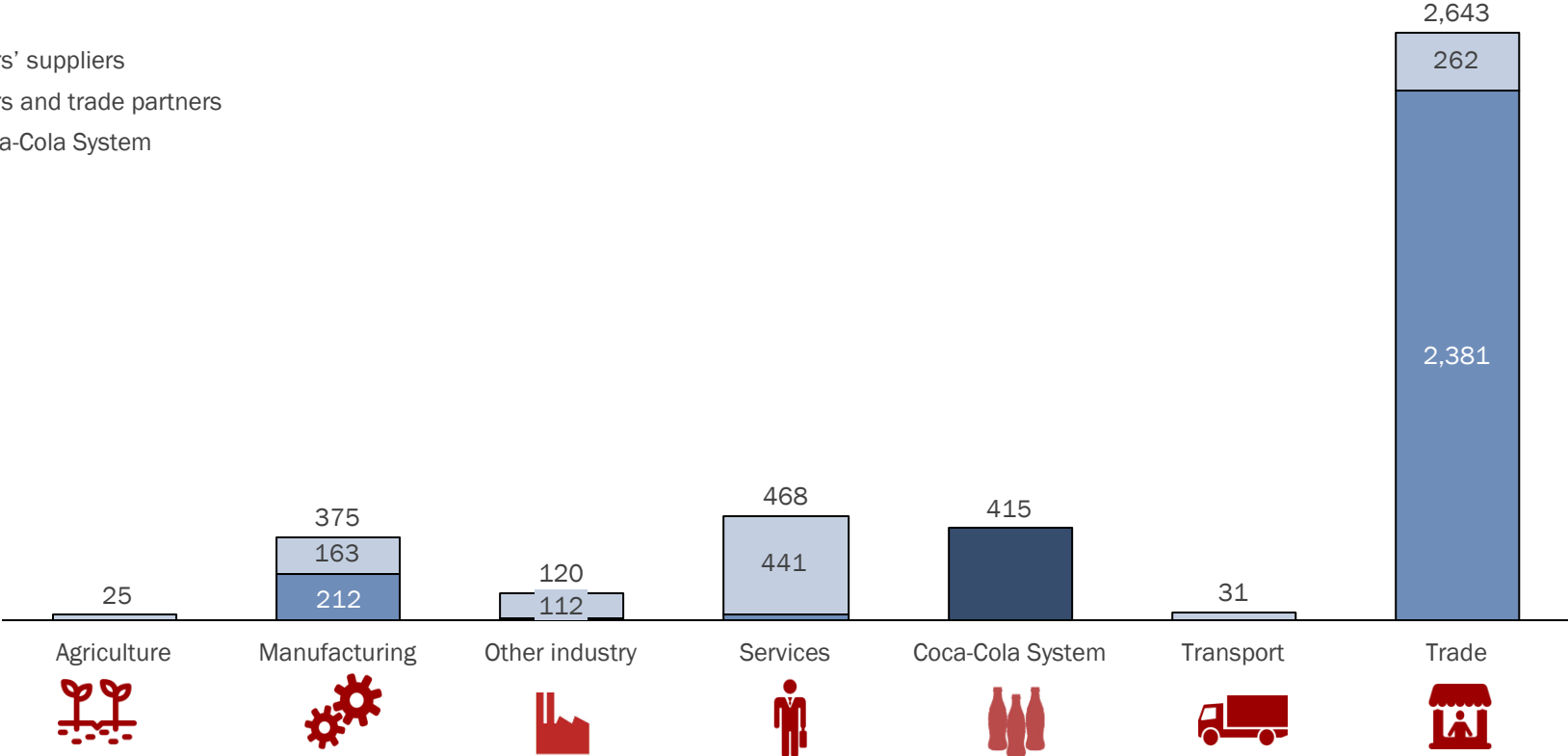
Total employment supported by the Coca-Cola System in Jordan



The Coca-Cola System is interlinked with many sectors

Total employment supported by the Coca-Cola System in Jordan

- Suppliers' suppliers
- Suppliers and trade partners
- The Coca-Cola System




415 direct jobs & 3,661 indirect jobs ≈ 4,076 jobs
 (0.29% of total employed Jordanians)

1 job at the Coca-Cola System supports 9 jobs in the Jordanian economy

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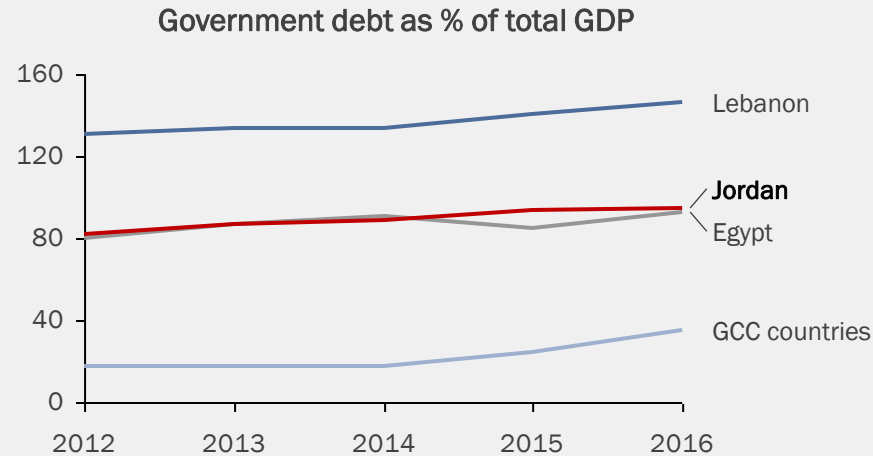
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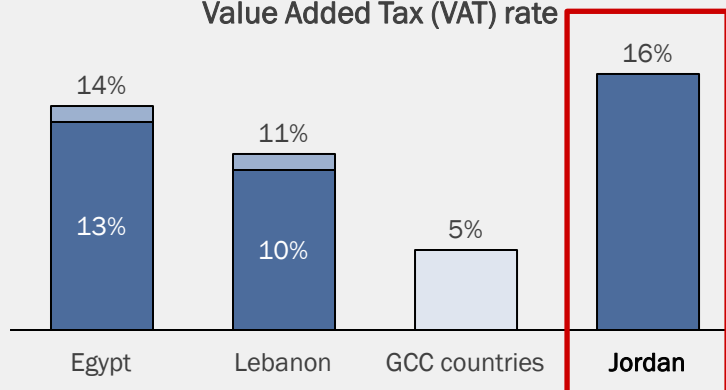
Background: sales taxes in the region went up following increasing debt-to-GDP ratio's

The region shows increasing debt-to-GDP ratio's

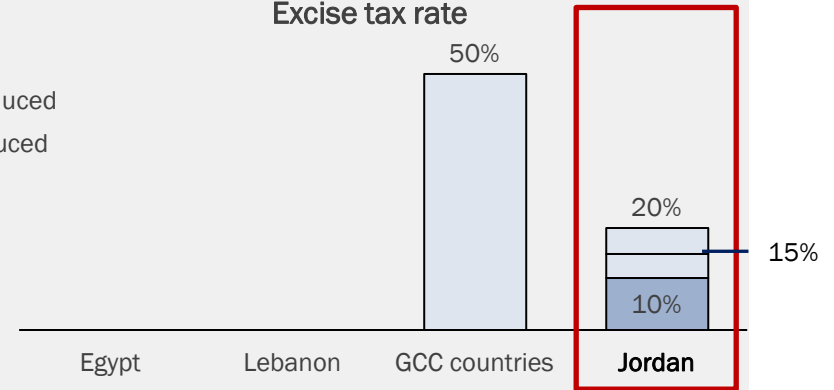


Governments are introducing new tax rates

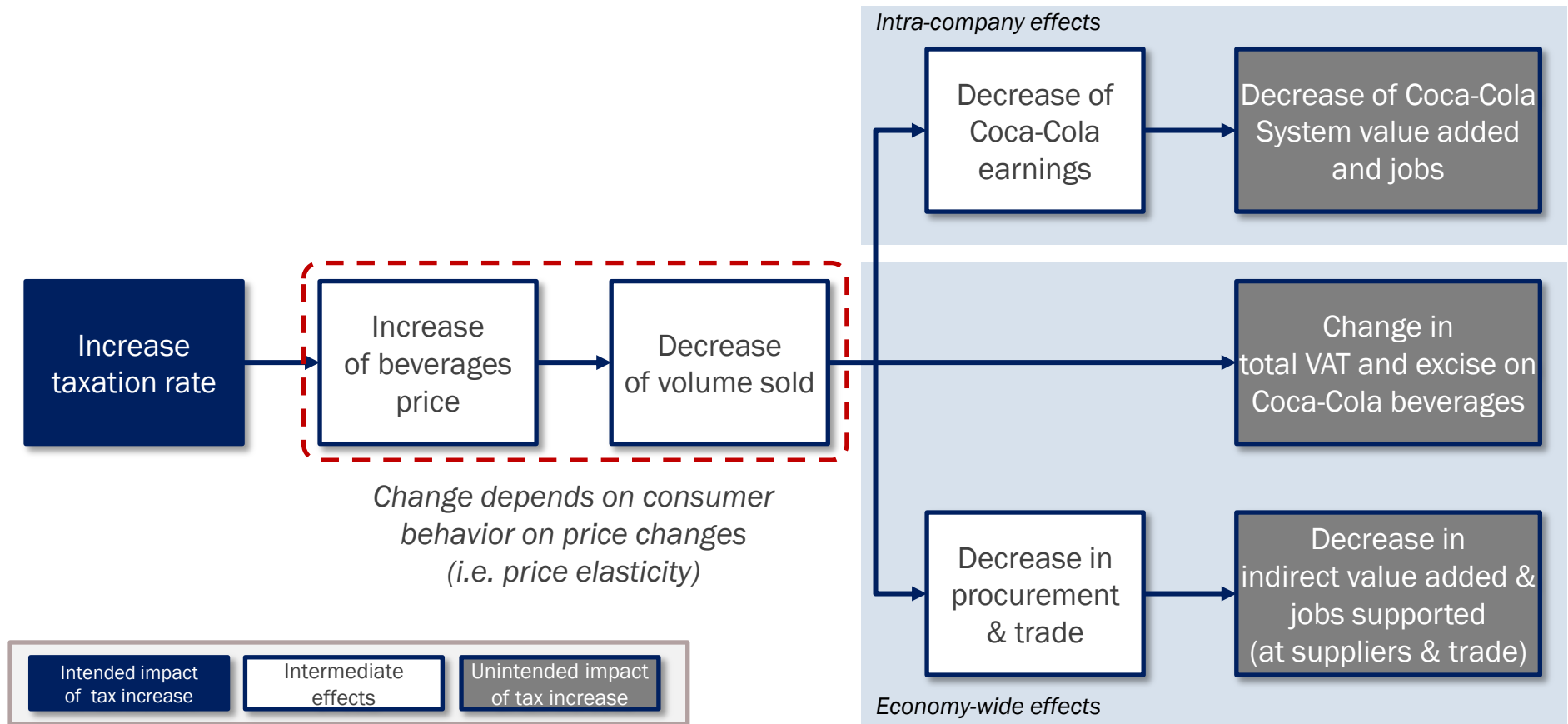
Value Added Tax (VAT) rate



Excise tax rate



Tax changes could have intended and unintended effects

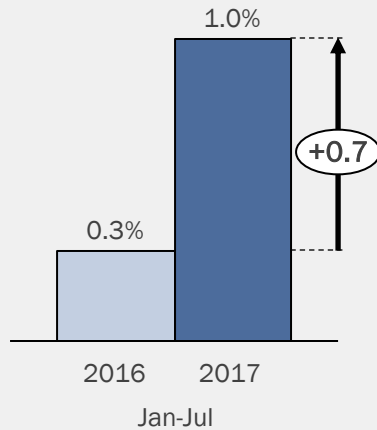


A decrease of Coca-Cola volumes affects the direct and indirect impacts of the Coca-Cola System. Apart from (partly) offsetting the anticipated increase of excise revenues, lower production volumes would cause the Coca-Cola System and partners to support fewer employees, pay less in salaries, produce lower profits and generate lower taxes (e.g VAT). Any excise gain for the government will be (partly) offset by lower non-excise tax revenues and would be accompanied by a loss of incomes and jobs in the private sector.

Since the introduction of the 10% excise tax in Jordan in Feb 2017 volumes in the soft drink industry have dropped

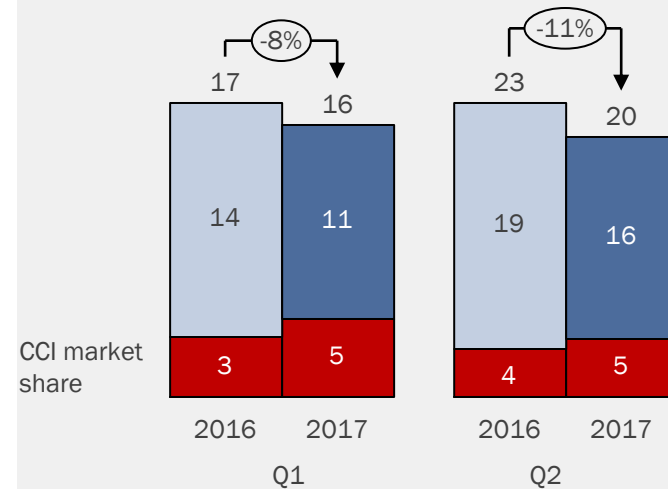
Prices increased by 0.7%..

Relative price change
as % of drinks and refreshments sector CPI 2010



.. and volumes decreased by 8-11%

Total volume
of non-alcoholic ready to drinks sector in million UC



In this study we look at three hypothetical tax policy changes in 2018, compared to the 2018 baseline

2018 Baseline based on current situation (10% excise rate on sparkling beverages)

CCI projections based on results that followed the 10% excise tax introduction in 2017

**Scenario 1: Exemption from
10% excise tax for Coca
Cola's 185 ML pack**

**Scenario 2: Raise of excise
rate from 10% to 15%**

**Scenario 3: Raise of excise
rate from 10% to 20%**

Compared to the 2016 Socio-Economic Impact Analysis, the results of tax scenarios are more widely open to interpretation. They are based on projections of 'what might happen' instead of 'what already happened'. The tax scenarios provide guidance on the pathways through which changes in tax policies cause changes in the broader economy, along with initial quantitative estimates of those impacts.

The three scenarios will be based on the following assumptions

SECTOR'S RESPONSE TO THE TAX CHANGE

- The System has estimated how a change in excise costs will be transferred to other partners in the value chain, i.e. trade partners (lower discounts) and consumers (higher prices).

CONSUMER'S RESPONSE TO PRICE CHANGES (PRICE ELASTICITIES)

- Price elasticities have been estimated by the System's sales managers per region, taking into account regional differences in consumer prices and preferences, as well as price changes by other players in the sector. The System based its assumptions on evidence of what happened after the 10% excise tax was introduced in February 2017. The price elasticities used by the Coca-Cola System are higher than indicated by academic research, which points to elasticities for soft drinks ranging from -0.75 to -1 (indicating that a price increase of 1% will lead to a drop in volumes of 0.75% to 1%). Next to results based on Coca-Cola's estimates, we therefore also show results for lower price elasticities of -0.75 and 0-1.

TIMING OF EFFECTS

- While some effects (e.g. drop in volume following a price increase) will be immediate, other effects could have a delayed occurrence (e.g. job losses). This scenario shows all effects at once.

SCOPE

- Although tax changes impact all beverage producers and their value chains, the study covers the effects related to the Coca-Cola System's value chain only (representing 23% of the total sparkling beverage market). It focuses on the economic effects and concentrates on the Coca-Cola System's sparkling beverages. Hence, effects of a possible shift of household purchases to other products, and potential health and societal benefits associated with the reduced consumption of Coca-Cola products are beyond the scope of the study.

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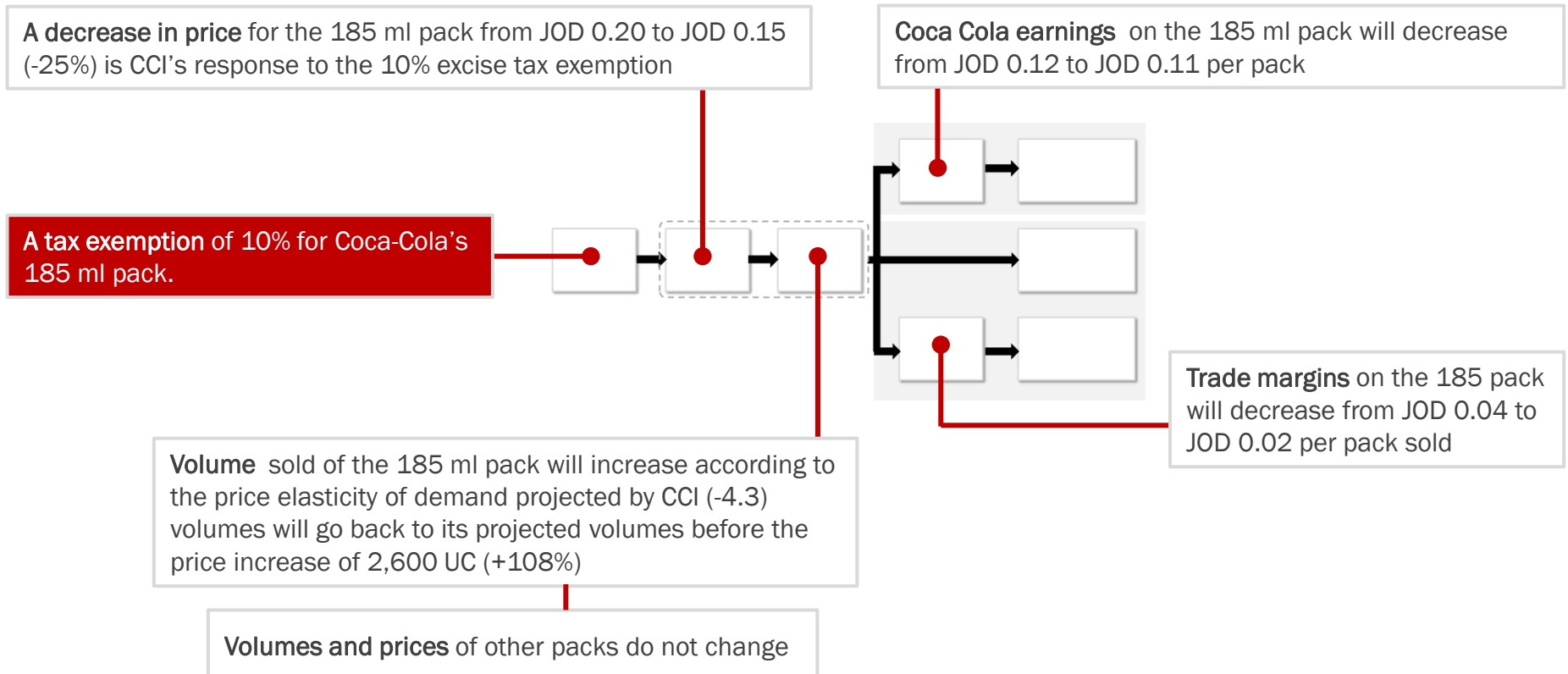
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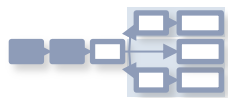
Scenario 1: assumptions

After the excise tax introduction of 10% in 2017, CCI raised the price of its 185 ml pack. Coca-Cola argues its 185 pack is one of the few products offered in the low-end market, targeting consumers with a low purchasing power. It claims that due to the price increase, **almost 600,000 consumers are lost** as they cannot afford the Coca-Cola products any more. In case the 185 pack would be exempted from the excise tax, Coca Cola would set the price and retail price of its 185 ml pack at the original level of before the tax introduction.



A price reduction on Coca Cola's 185 ml pack leads to an increase in sales volumes and Coca Cola revenues

Estimates based on Coca-Cola's price elasticity in red



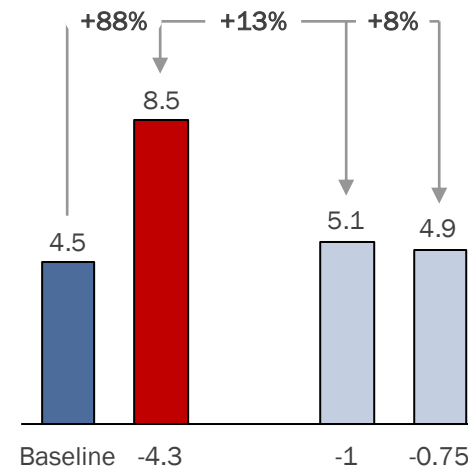
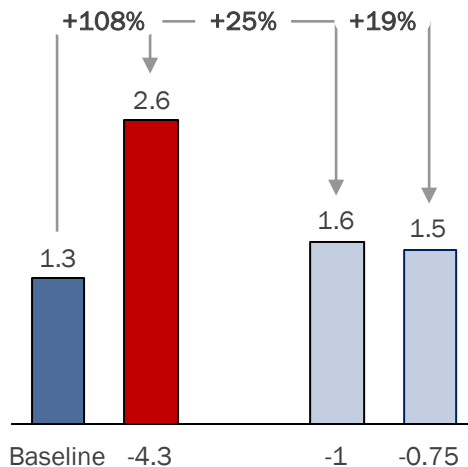
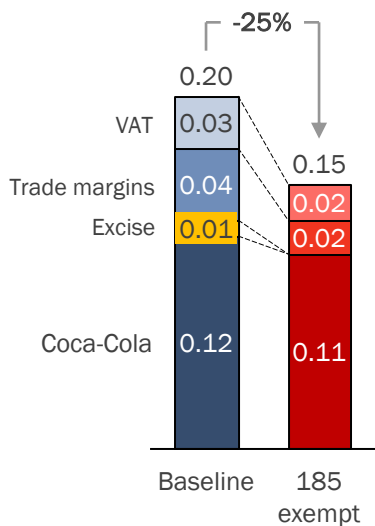
CSD PRICE DECREASE
-25%



INCREASE OF VOLUMES



INCREASE OF COCA-COLA
EARNINGS



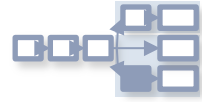
CSD consumer price of CCI's 185ml pack in JOD

Total local sales volumes 185 ml pack in million UC

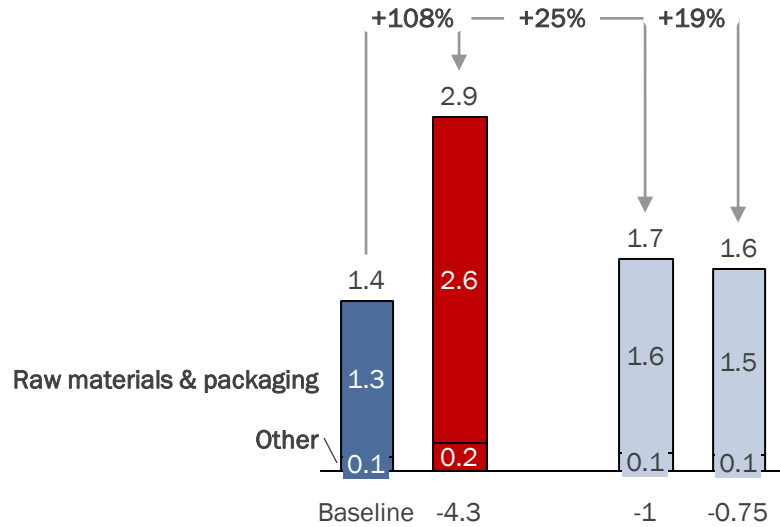
Total local sales revenues 185ml pack in million JOD
(excluding excise)

And subsequently to an increase in revenues of suppliers and trade partners

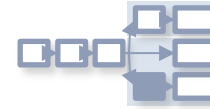
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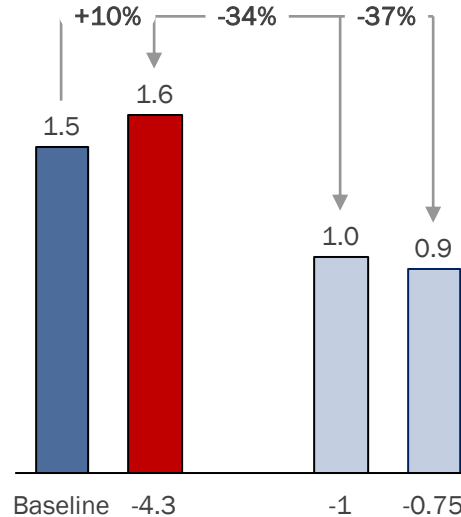
INCREASE OF SUPPLIER EARNINGS



Total supplier revenues related to 185 ml pack in million JOD

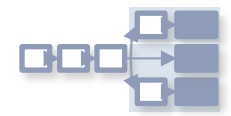


INCREASE OF TRADE EARNINGS



Total trade margins related to 185 ml pack in million JOD

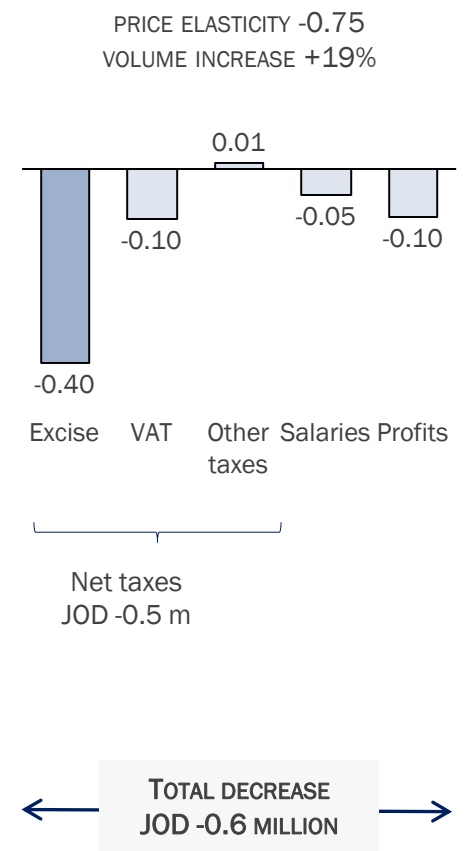
HOWEVER, WHEN CONSUMERS ARE LESS SENSITIVE TO PRICES, THE VOLUME INCREASE IS TOO LITTLE TO OFFSET THE DECREASE IN TRADE MARGIN PER UC



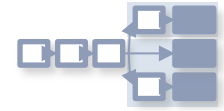
The reduction of government excise earnings is offset by an increase of other tax revenues...

Estimates based on Coca-Cola's price elasticity in red

HOWEVER, WHEN PRICE CHANGES HAVE LESS EFFECT ON VOLUMES, EFFECTS ON GOVERNMENT REVENUES AND PRIVATE SECTOR INCOME WILL BE NEGATIVE...



The figures represent the share of Coca Cola's 185 ml pack only.

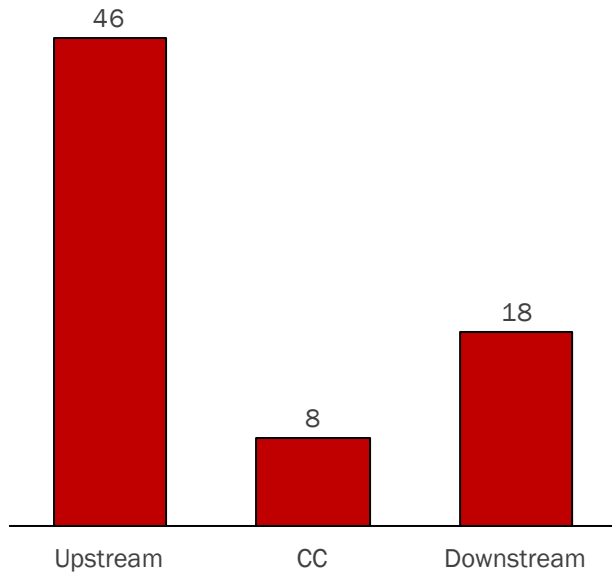


... while employment supported increases

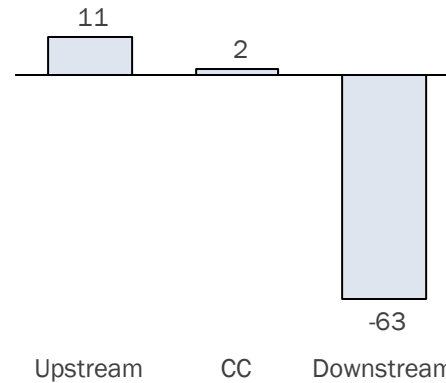
Estimates based on Coca-Cola's price elasticity in red

HOWEVER, WHEN PRICE CHANGES HAVE LESS EFFECT ON VOLUMES, EFFECTS ON JOBS WILL BE NEGATIVE...

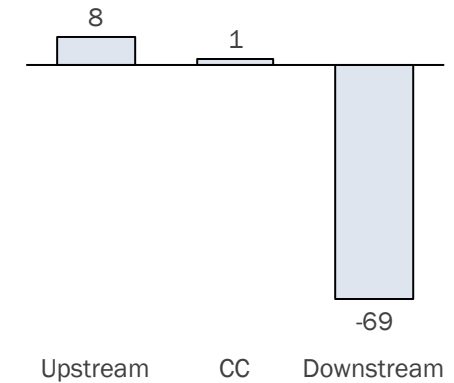
PRICE ELASTICITY -4.3
VOLUME INCREASE +108%



PRICE ELASTICITY -1
VOLUME INCREASE +25%



PRICE ELASTICITY -0.75
VOLUME INCREASE +19%



DOWNSTREAM JOBS ARE NEGATIVE AS VOLUME EFFECTS ARE OFFSET BY LOWER TRADE MARGINS

← TOTAL JOBS INCREASE +72 →

← TOTAL JOB DECREASE -50 →

← TOTAL JOB DECREASE -59 →

The figures represent the share of Coca Cola's 185 ml pack only.

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CCI projections based on results that followed the 10% excise tax introduction in 2017

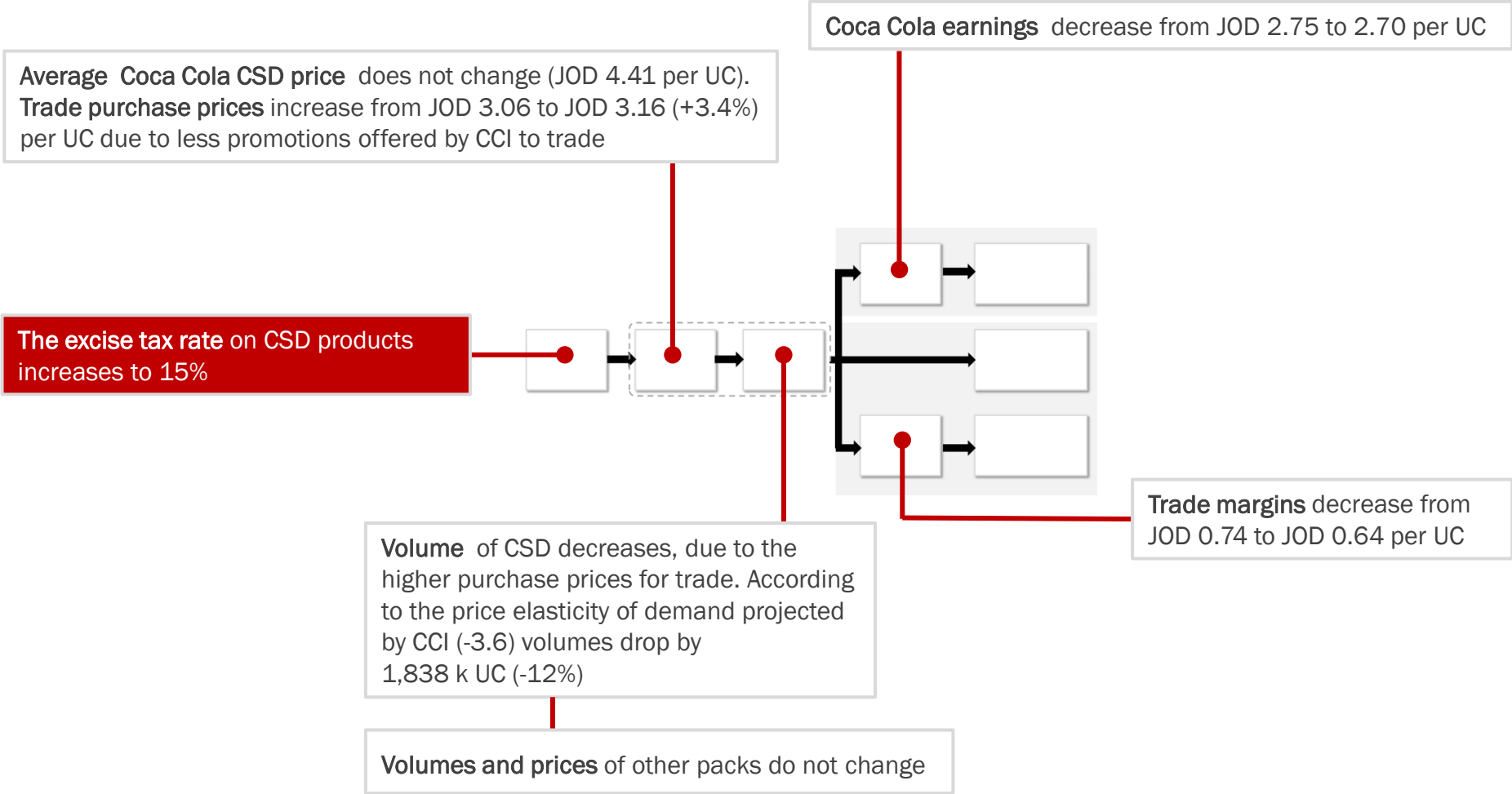
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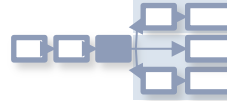
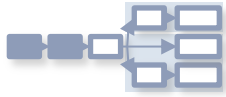
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Scenario 2: key assumptions



The higher purchasing prices of Coca Cola CSDs for trade will lead to a drop of volumes and Coca Cola earnings

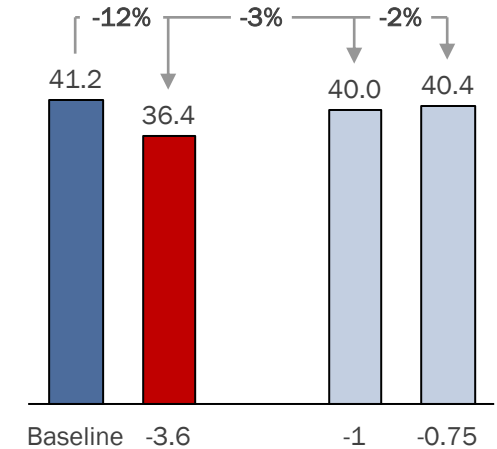
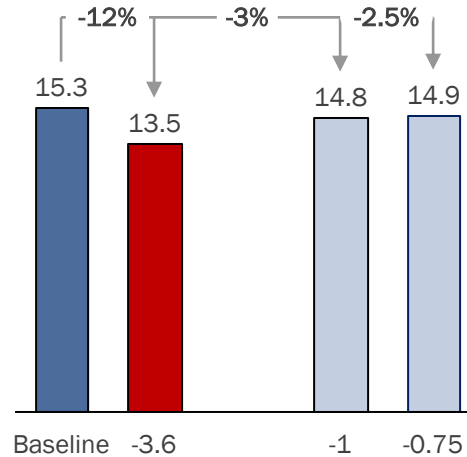
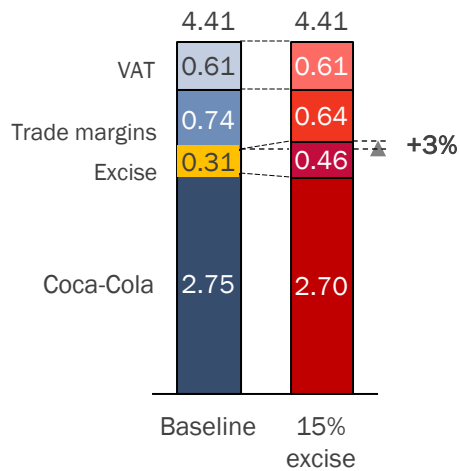
Estimates based on Coca-Cola's price elasticity in red



TRADE PURCHASING
PRICE INCREASE
+3%

DECREASE OF VOLUMES

DECREASE OF COCA-COLA
EARNINGS



Average CSD consumer price in JOD per UC

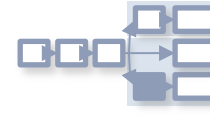
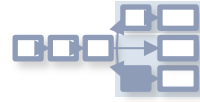
Total local sales volumes CSDs in million UC

Total local sales revenues CSDs in million JOD
(excluding excise)

And subsequently to a decrease in revenues of suppliers and trade partners

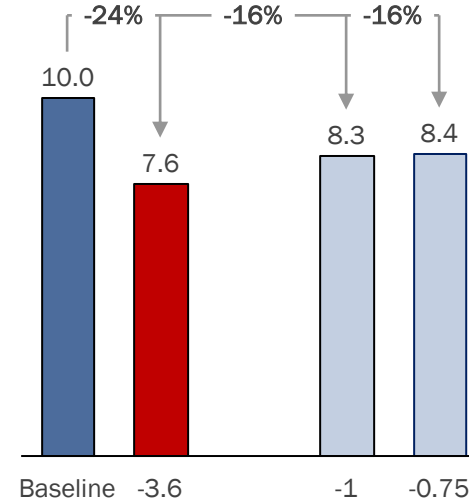
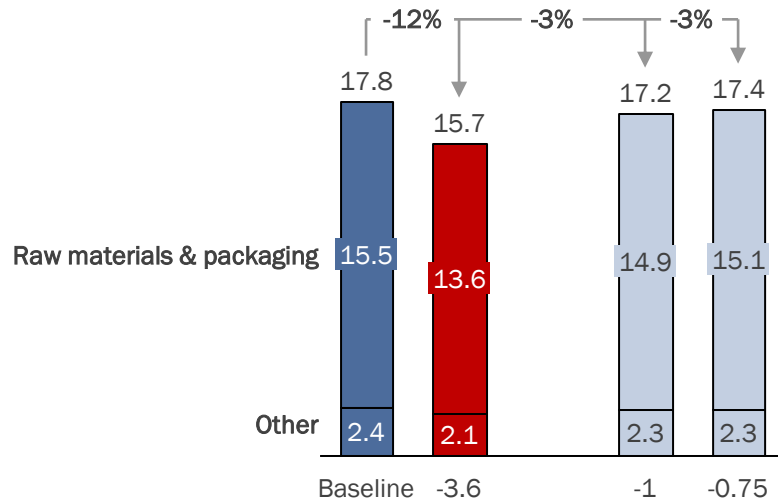
10% TO
15%

Estimates based on Coca-Cola's price elasticity in red



DECREASE OF SUPPLIER EARNINGS

DECREASE OF TRADE EARNINGS



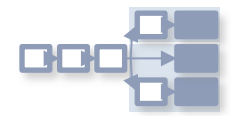
Total supplier revenues related to CSDs in million JOD

Total trade margins related to CSDs in million JOD

The figures represent the share of Coca Cola's CSDs only (not taking into account any sales of water and juices).

Government excise earnings are offset by a loss of other taxes and incomes for the private sector...

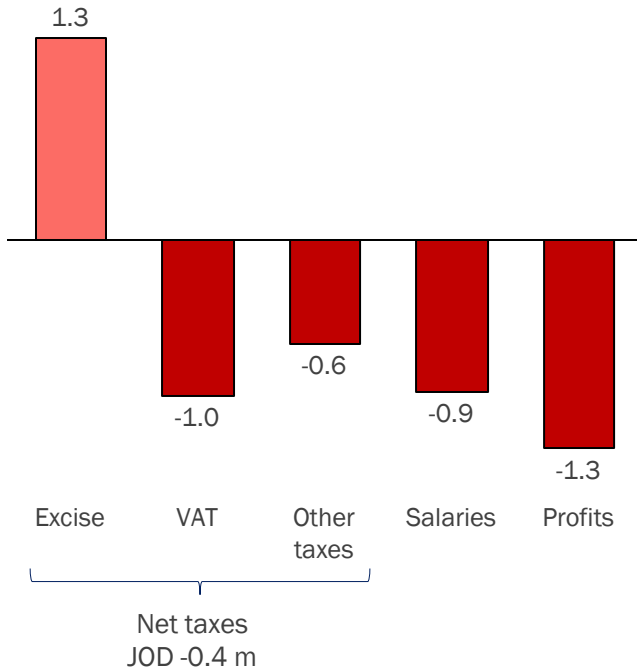
10% TO
15%



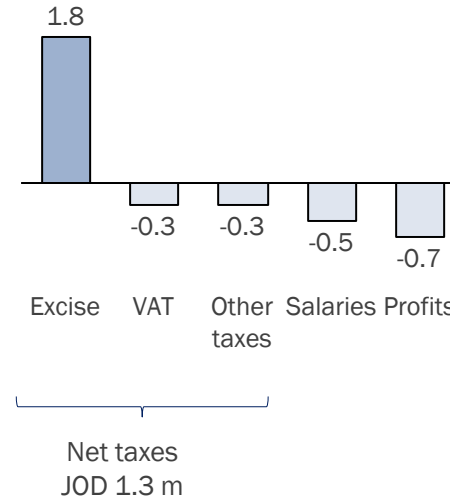
Estimates based on Coca-Cola's price elasticity in red

HOWEVER, WHEN PRICE CHANGES HAVE LESS EFFECT ON VOLUMES, THE NET EFFECTS ON GOVERNMENT REVENUES WILL BE POSITIVE...

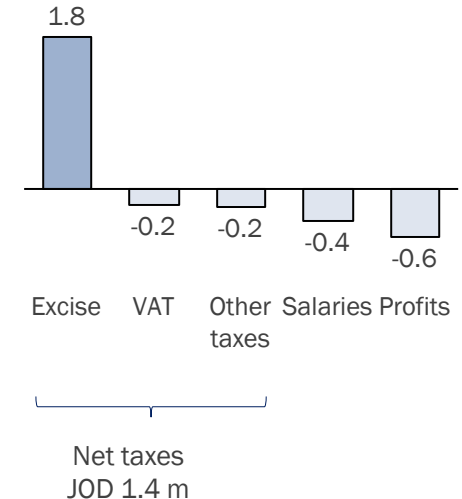
PRICE ELASTICITY -3.6
VOLUME DECREASE -12%



PRICE ELASTICITY -1
VOLUME DECREASE -3%



PRICE ELASTICITY -0.75
VOLUME DECREASE -3%

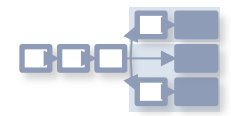


← TOTAL DECREASE JOD -2.6 MILLION →

← TOTAL INCREASE JOD 0.2 MILLION →

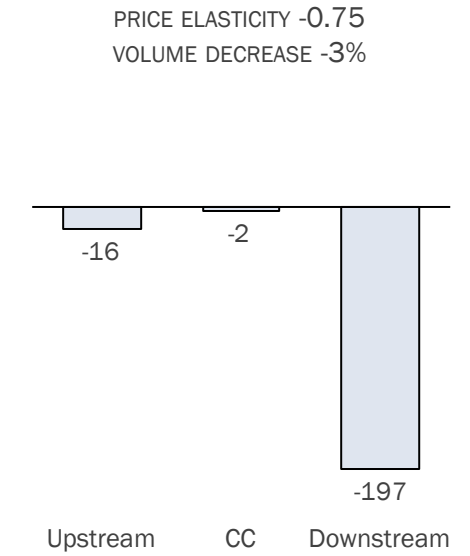
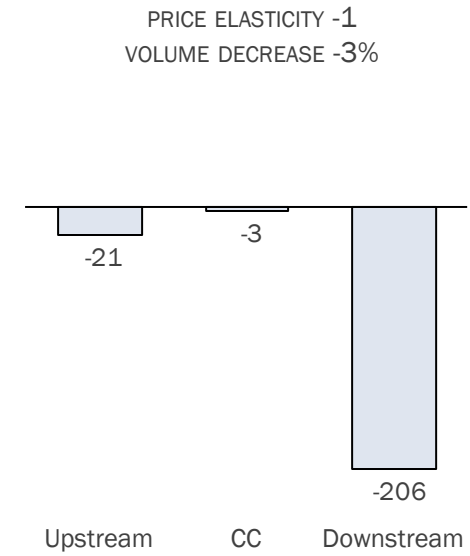
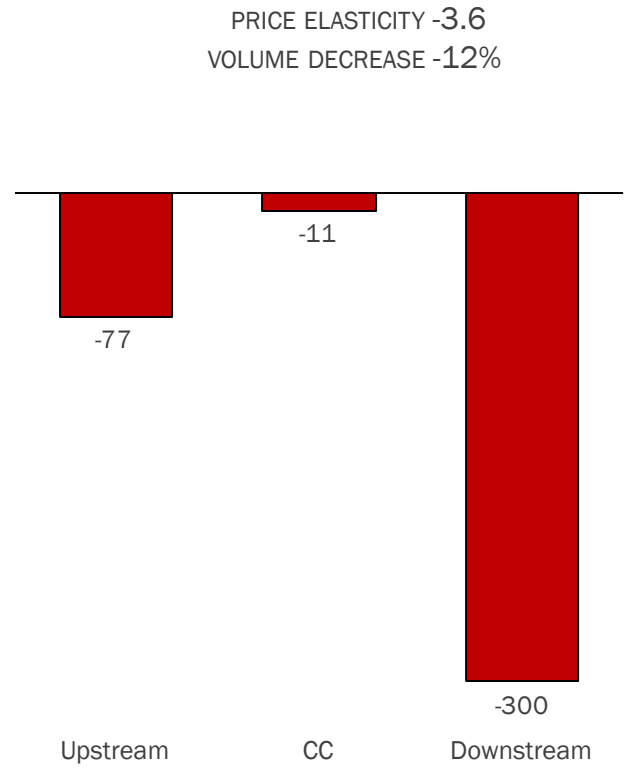
← TOTAL INCREASE JOD 0.4 MILLION →

The figures represent the share of Coca Cola's CSDs only (not taking into account any sales of water and juices). The reported changes are based on a comparison with the 2018 baseline scenario.

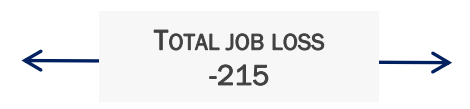
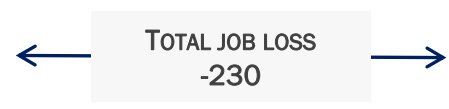
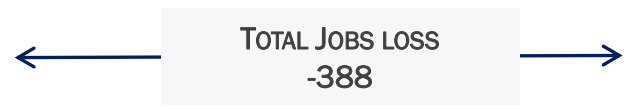


... and jobs supported will decrease

Estimates based on Coca-Cola's price elasticity in red



LARGE DROP IN DOWNSTREAM JOBS DUE TO TRADE MARGIN DECREASE ON TOP OF VOLUME DROP



The figures represent the share of Coca Cola's CSDs only (not taking into account any sales of water and juices).
The reported changes are based on a comparison with the 2018 baseline scenario.

In this study we look at three hypothetical tax policy changes in 2018, compared to the 2018 baseline

2018 Baseline based on current situation (10% excise rate on sparkling beverages)

CCI projections based on results that followed the 10% excise tax introduction in 2017

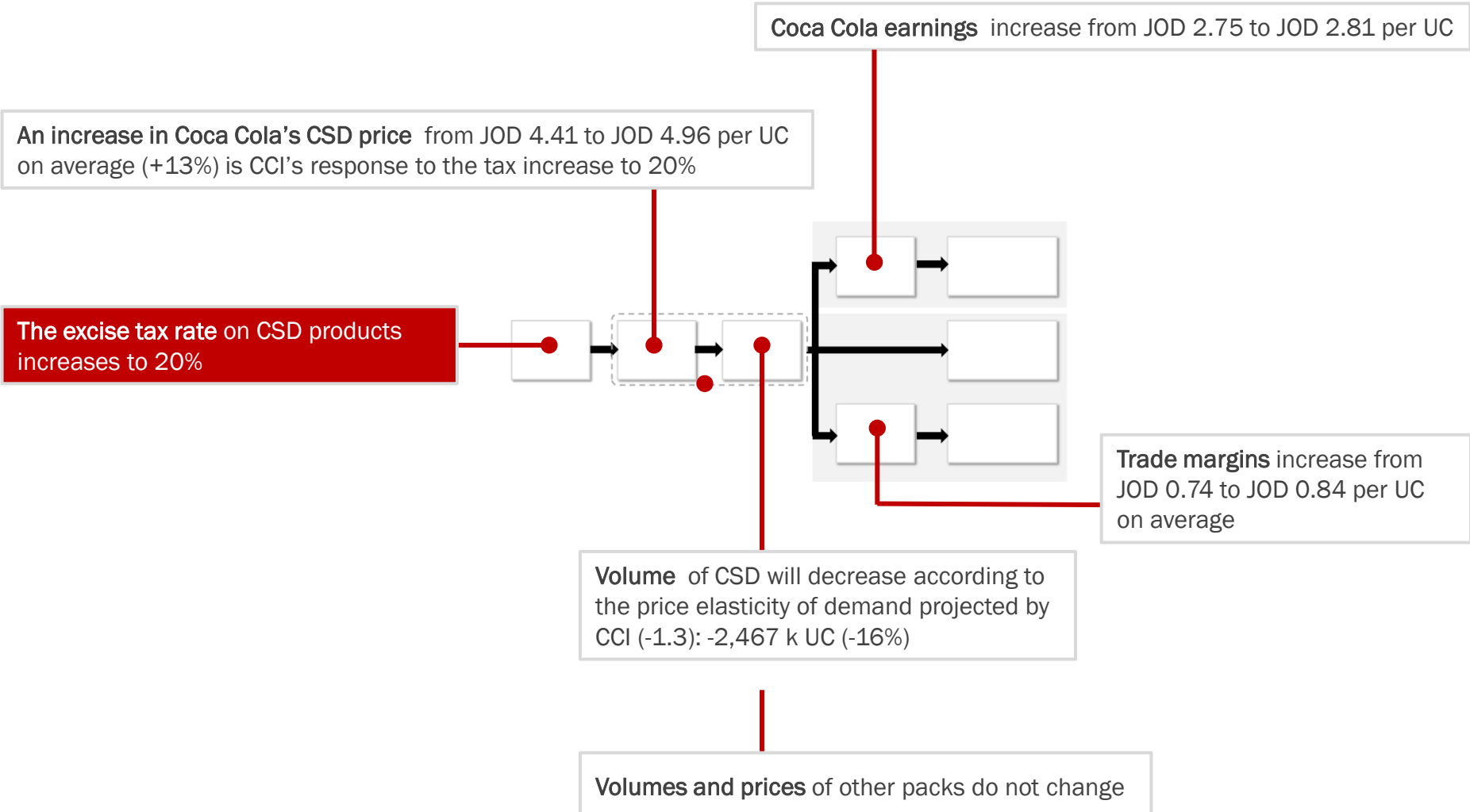
Scenario 1: 10% excise tax exemption for Coca Cola's 185 ML pack

Scenario 2: Raise of excise rate from 10% to 15%

Scenario 3: Raise of excise rate from 10% to 20%

Compared to the 2016 Socio-Economic Impact Analysis, the results of tax scenarios are more widely open to interpretation. They are based on projections of 'what might happen' instead of 'what already happened'. The tax scenarios provide guidance on the pathways through which changes in tax policies cause changes in the broader economy, along with initial quantitative estimates of those impacts.

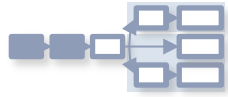
Scenario 3: assumptions



A price increase of Coca Cola's CSD consumer prices leads to a decrease in sales volumes and Coca Cola revenues

10% TO
20%

Estimates based on Coca-Cola's price elasticity in red



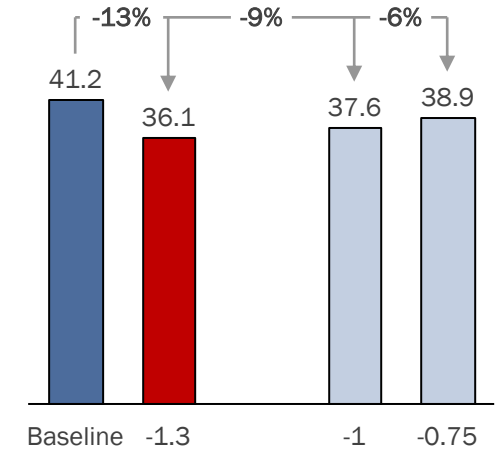
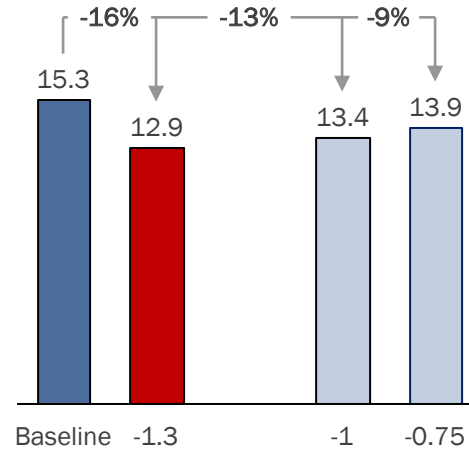
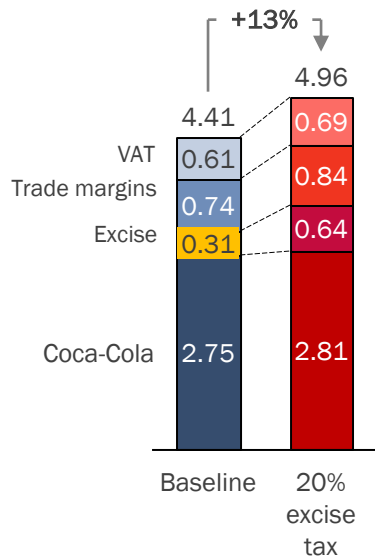
INCREASE CSD PRICE



DECREASE OF VOLUMES



DECREASE OF COCA-COLA EARNINGS



Average CSD consumer price in JOD per UC

Total local sales volumes CSDs in million UC

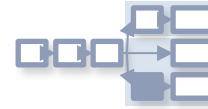
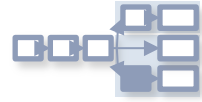
Total local sales revenues CSDs in million JOD (excluding excise)

Local sales volumes and revenues figures represent the share of Coca Cola's CSDs only (not taking into account any sales of water and juices)

And subsequently to a decrease in revenues of suppliers and trade partners

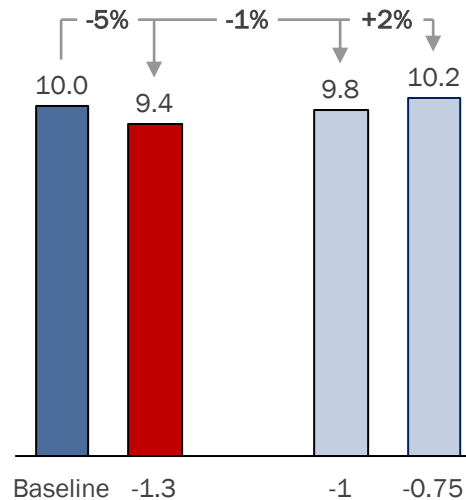
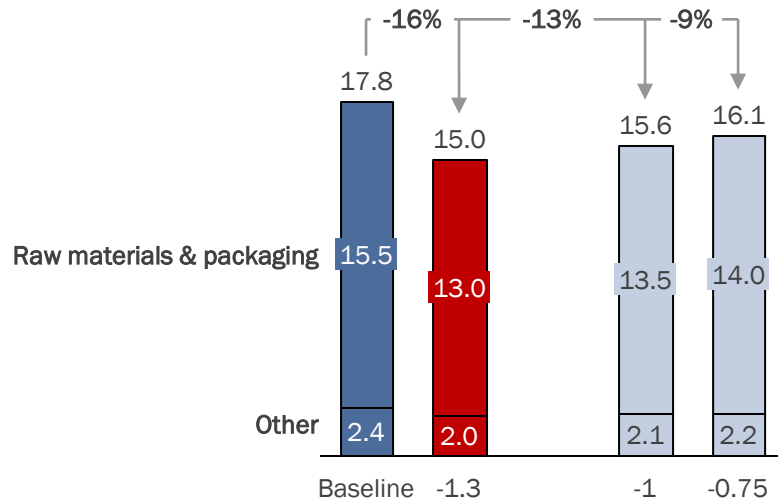
10% TO
20%

Estimates based on Coca-Cola's price elasticity in red



DECREASE OF SUPPLIER EARNINGS

CHANGE OF TRADE EARNINGS



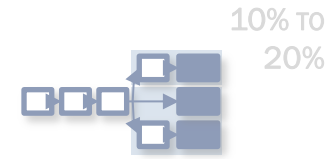
HOWEVER, WHEN CONSUMERS ARE LESS SENSITIVE TO PRICES, THE VOLUME DECREASE WILL BE OFFSET BY THE INCREASE IN TRADE MARGIN PER UC

Total supplier revenues related to CSDs in million JOD

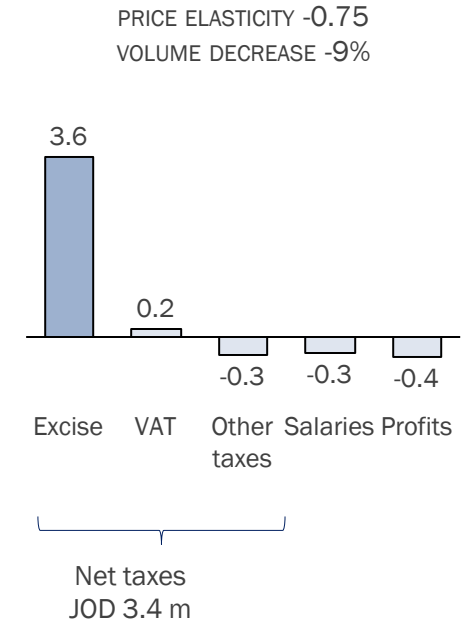
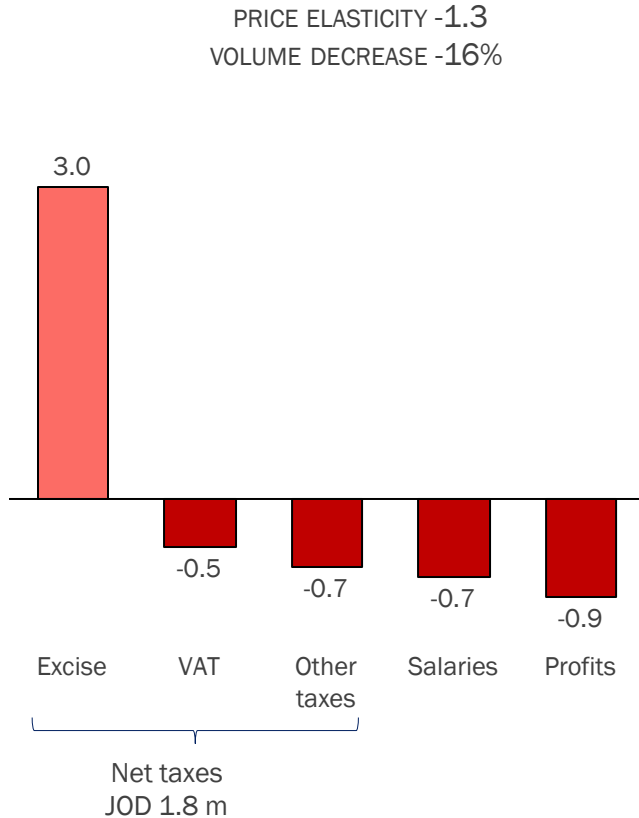
Total trade margins related to CSDs in million JOD

The figures represent the share of Coca Cola's CSDs only (not taking into account any sales of water and juices).

Government earnings are partly offset by a loss of other taxes and incomes for the private sector...



Estimates based on Coca-Cola's price elasticity in red

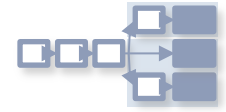


← TOTAL INCREASE JOD 0.2 MILLION →

← TOTAL INCREASE JOD 1.5 MILLION →

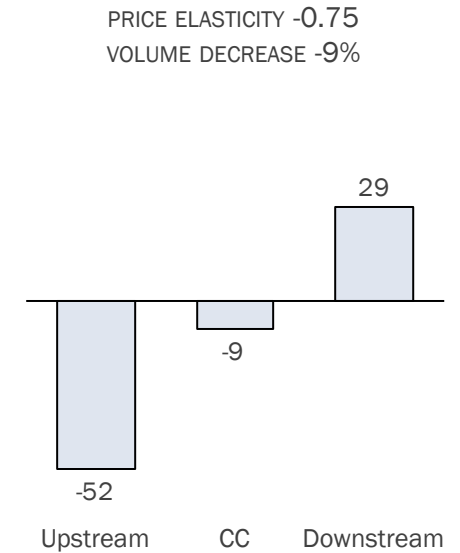
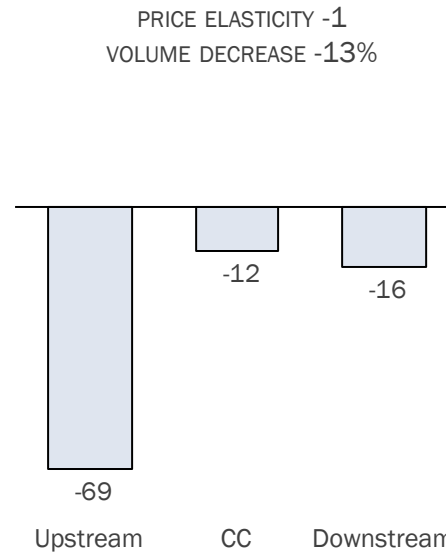
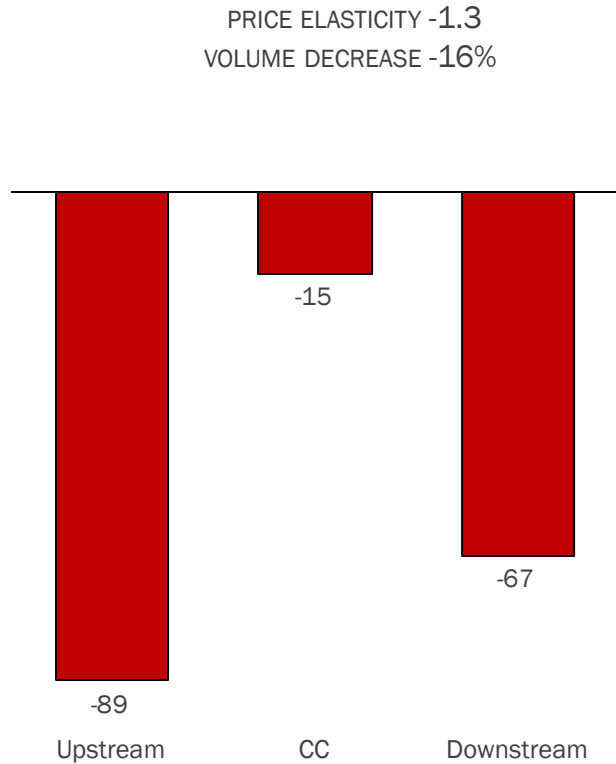
← TOTAL INCREASE JOD 2.7 MILLION →

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The reported changes are based on a comparison with the 2018 baseline scenario.

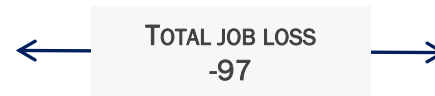


... and jobs supported will decrease

Estimates based on Coca-Cola's price elasticity in red



DOWNSTREAM JOBS ARE POSITIVE S
VOLUME EFFECTS ARE OFFSET BY HIGHER
TRADE MARGINS



The figures represent the share of Coca Cola's CSDs only (not taking into account any sales of water and juices).
The reported changes are based on a comparison with the 2018 baseline scenario.

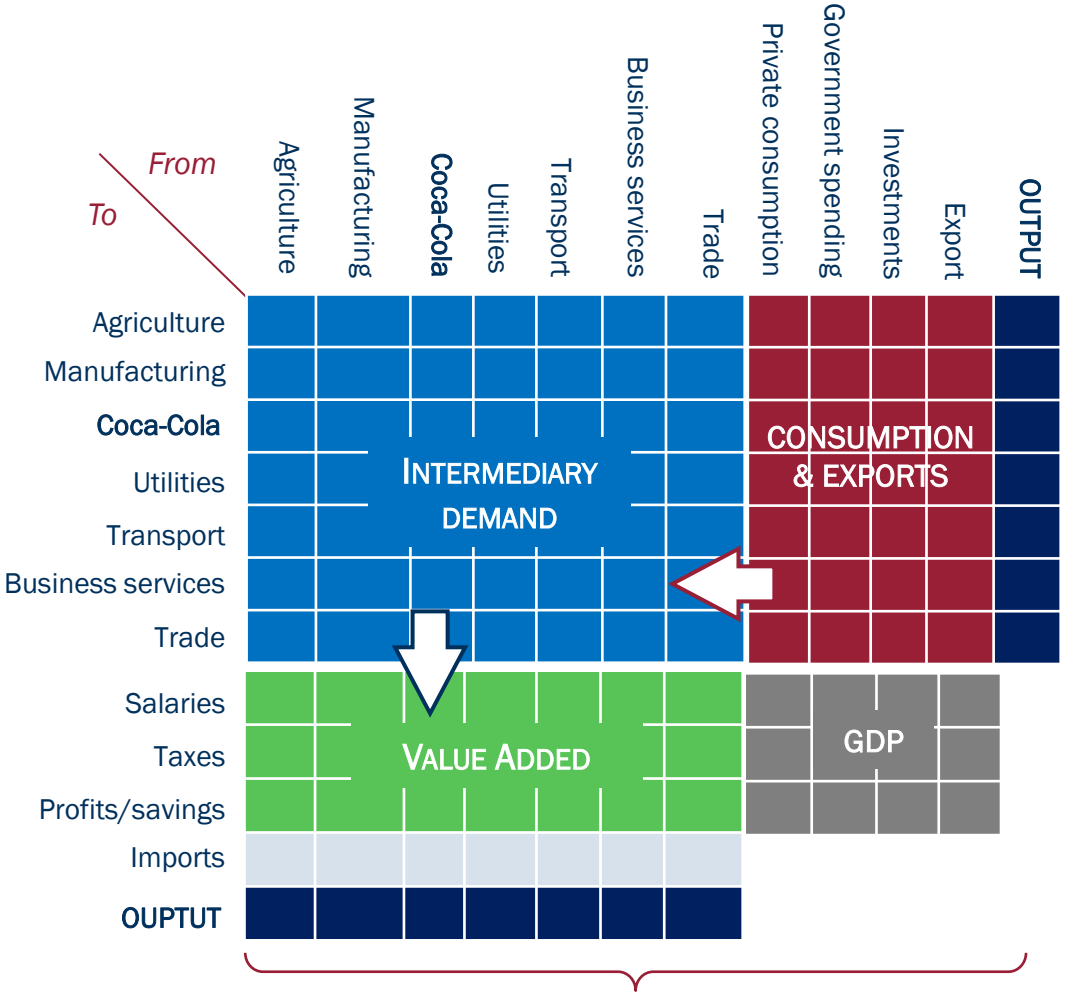
Appendix

1 Methodology

Methodology description

- The socio-economic impact assessment conducted the Coca-Cola System in Jordan quantifies the company's contribution to the local economy in terms of related employment and incomes;
 - basis is the so-called 'input-output' methodology which was developed by the Nobel Prize winning economist Wassily Leontief and is commonly used by economists worldwide for this type of analysis;
 - it relies on audited corporate and official government data;
 - the underlying idea is to trace money through an economy depicting how the output of one industry serves as an input of another;
 - this can be done based on a statistical representation of an economy (input-output table), which describes the financial flows of all economic transactions that take place within an economy;
 - the total consumption of Coca-Cola products (monetary value) is then driven through the model of the local economy to show the amount of jobs and income contribution related to this consumption, also indicating in what sectors those benefits arise;
 - the method distinguishes direct (at Coca-Cola), indirect (on suppliers & trade partners), and induced (on the economy more generally) impacts.
-

The Jordanian Social Accounting Matrix is the heart of the methodology



Columns indicate how money is being spent

Rows indicate how money is being earned

CONSUMPTION & EXPORTS

of company outputs lead to



TRANSFERS

of money between sectors leading to



INCOMES

for households, governments and companies

A high-speed photograph of a single water droplet hitting a surface, creating a series of concentric ripples that spread outwards. The droplet is captured at the moment of impact, with a small crown-like shape at its base. The background is a soft, out-of-focus light gray.

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