



Impact of Merging between Digital Platforms

A Case Study of Tokopedia and Gojek



OUTLINE



**Introduction
and Study Aims**



**The Impact of Tokopedia-
Gojek Coexistence on District-
Level Economic Performances**



**The Contribution of
Tokopedia-Gojek Merger on
the National Economy**



**The IPO of Tokopedia and
Gojek Merger**

BACKGROUND

-  The merger of two unicorn companies, **Gojek and Tokopedia**, will create an Indonesian internet behemoth that will dominate **the sectors of ride-hailing, digital payments, online shopping, and delivery.**
-  The merger of these two unicorn startups in Indonesia is expected to generate a valuation of up to **USD40 billion** or equivalent to **IDR560 trillion*** (Bloomberg Asia, 2021).
-  Following the merger, it is expected that Tokopedia and Gojek will expand their businesses by **listing initial shares (IPO)** on the Indonesian and United States (US) stock exchanges.
-  E-commerce applications and transportation services are expected to have a **significant impact on the overall economy.**



*around Rp14.000/ USD

OBJECTIVE

General Objective:

Fulfill the need for impact research on the impact of e-commerce on the economy to provide better information to relevant stakeholders.

The analysis in this study will focus on value creation after the merger of Tokopedia and Gojek.



Specific Objective:



Estimating the impact of the Tokopedia-Gojek coexistence on the economy of districts and cities



Calculating the contribution of the merger of Tokopedia and Gojek to the National economy



Identifying the impact of the IPO of merger between Tokopedia and Gojek

The Impact of Tokopedia-Gojek Coexistence on District-Level Economic Performances



ECONOMETRICS ESTIMATION METHOD (1)

Estimation methods used in estimating the macroeconomic impacts of Gojek-Tokopedia coexistence (2010-2019):

1

Two-way Fixed Effects (TWFE) with Group-Time Average Treatment on Treated (ATT) Estimator
(Sant'Anna & Callaway, 2020)

The optimal approach to measure the dynamic impact during pre- and post-Tokopedia entry

2

Instrumental-Variables (IV)
The optimal approach to estimate the impacts of Gojek-Tokopedia coexistence on **savings account ownership** and **digital entrepreneurs**.

Estimation methods used to test for the robustness of the analysis:

1

Two-way Fixed Effects DiD

The common/simple method of estimating average impacts throughout 2010-2019

2

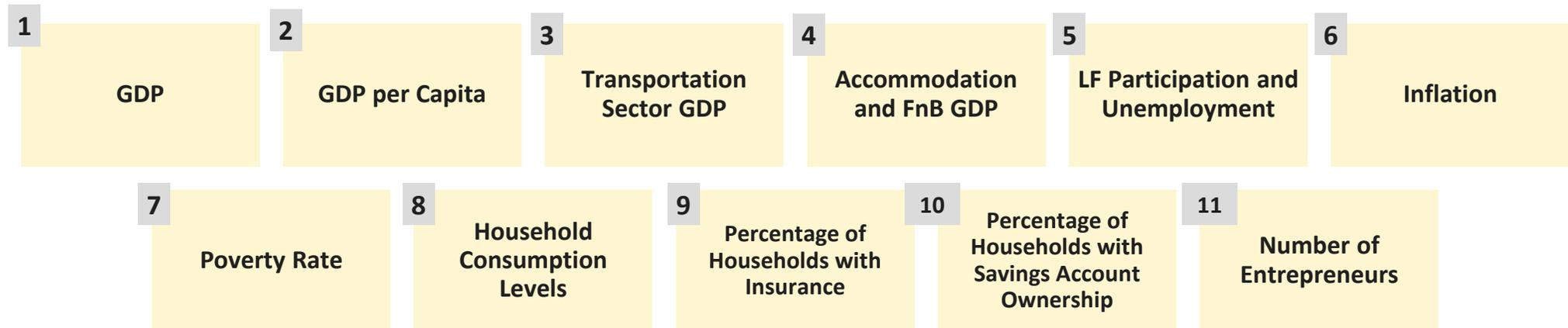
Two-way Fixed Effects Event Study

To investigate the dynamic impacts during pre- and post-Tokopedia entry

ECONOMETRICS ESTIMATION METHOD (2)

 The main variable used in the econometric analysis is the **dummy variable indicating the coexistence of Gojek and Tokopedia** – not “intensity of presence”

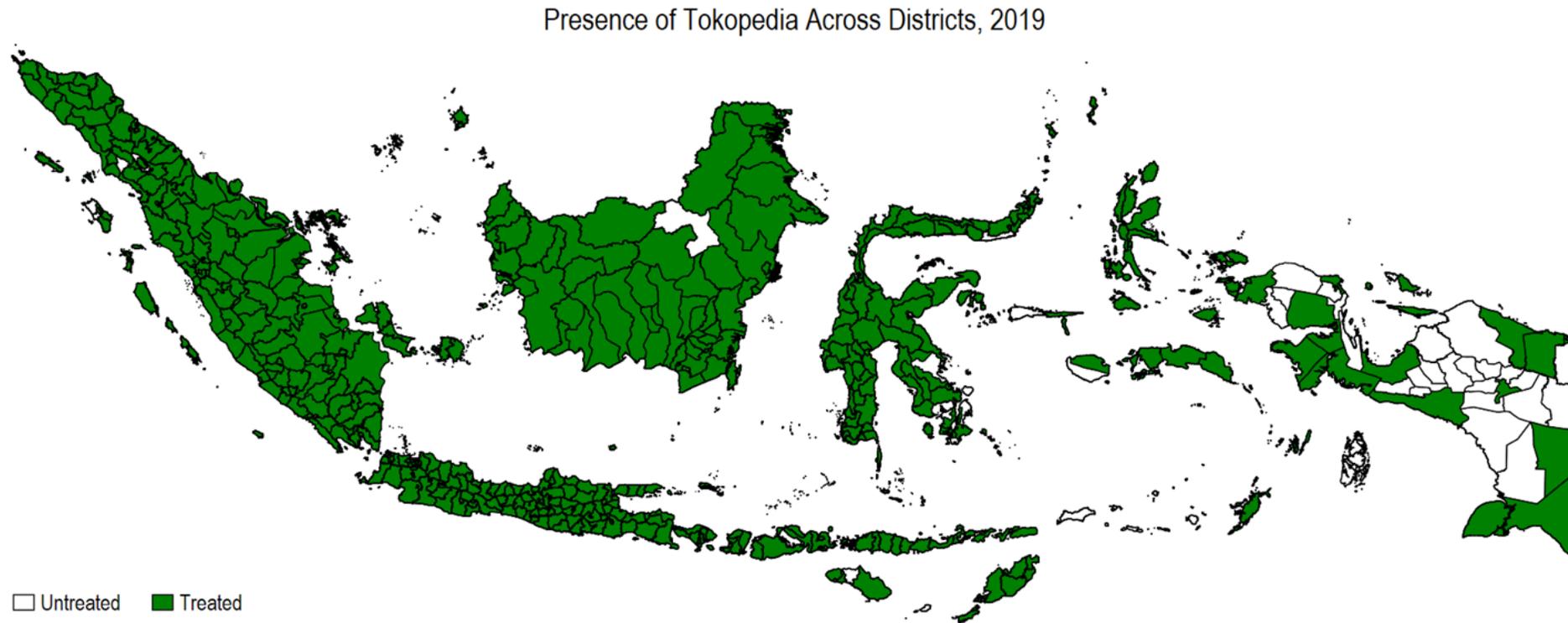
 The researchers investigate the impacts of the coexistence on several key macroeconomic indicators:



 Data used in all four model is macroeconomic data that is aggregated at the district level throughout the period 2010-2019

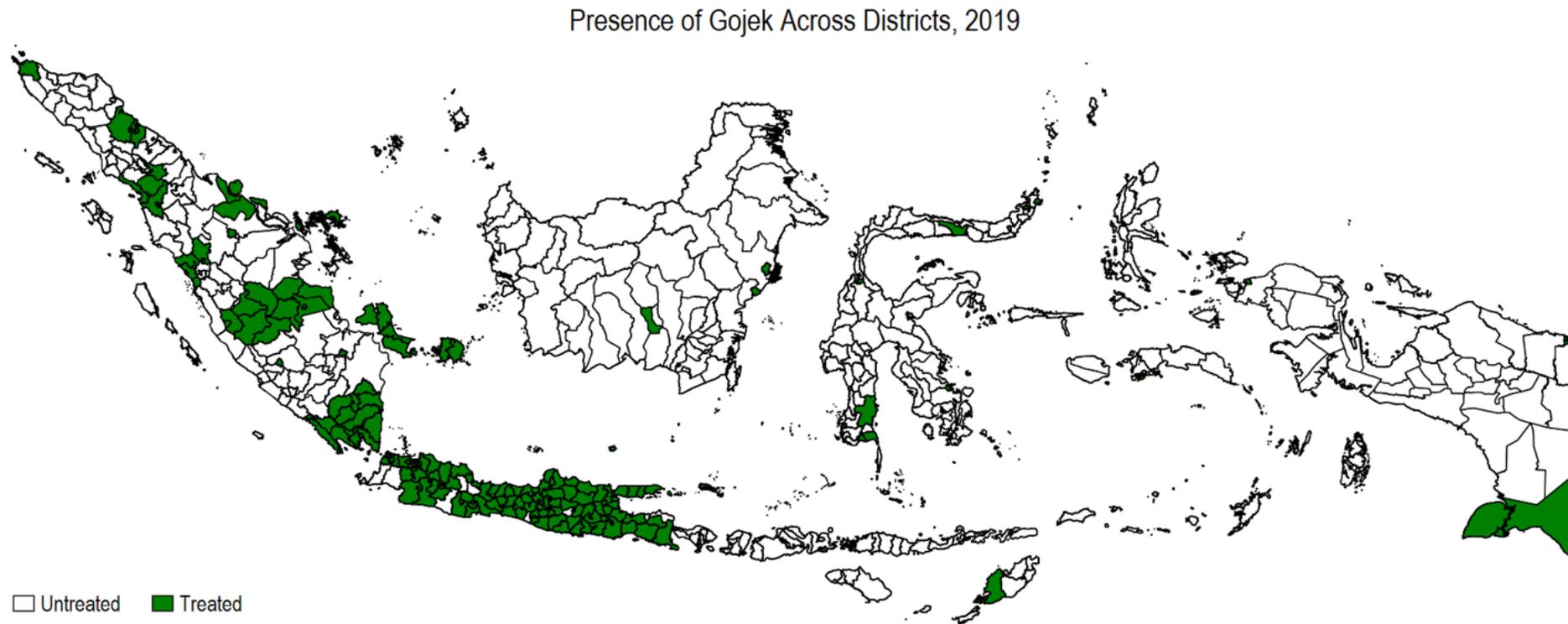
 The research team also provides assessment of non-causal relationship between COVID cases and the presence of Gojek-Tokopedia

GOJEK-TOKOPEDIA NATIONAL PENETRATION (1)



Source: LPEM-Tokopedia Study (2019)

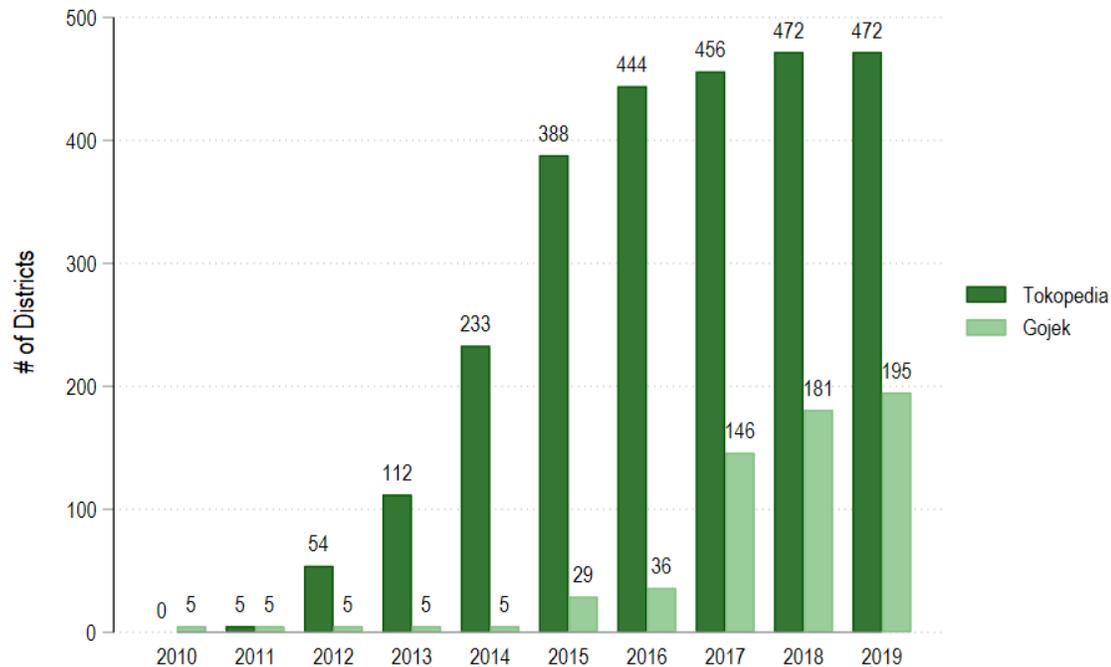
GOJEK-TOKOPEDIA NATIONAL PENETRATION (2)



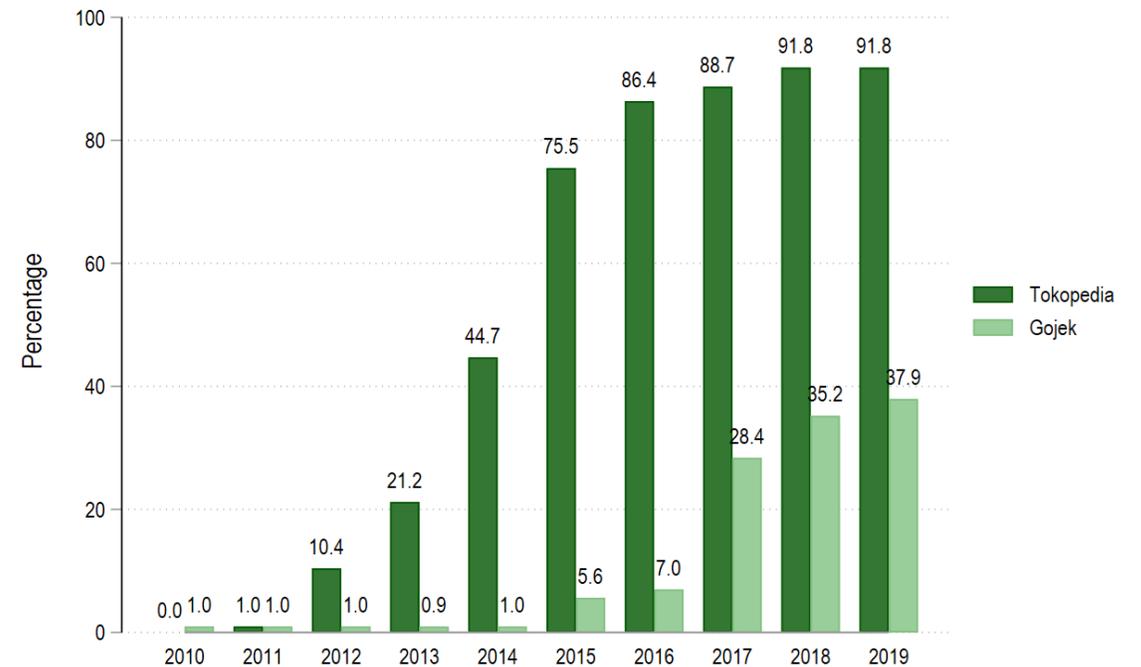
Source: Various news outlets and/or other media sources, compiled by the research team (2021)

GOJEK-TOKOPEDIA NATIONAL PENETRATION (3)

Number of Districts with Tokopedia and Gojek's Presence



Percentage of Districts with Tokopedia and Gojek's Presence



Source: Various news outlets and/or other media sources, compiled by the research team (2021)

The Impact of Gojek-Tokopedia Coexistence on Macroeconomic Outcomes

Unemployment Rates, Work Participation, Poverty Rates, Household Consumption, and Health Insurance (1)

	Group-Time ATT dan IV Estimates		
Variables	All Districts	Regencies	Cities
Unemployment Rates	0 p.p	0.002 p.p	-0.001 p.p
Employment to Population Ratio	0.003* p.p	0.002 p.p	0.0001 p.p
Poverty Rates	-0.244** p.p	-0.443** p.p	0.082 p.p
Household Consumption Levels	-0.002 p.p	-0.002 p.p	0.008 p.p

- **A strong and significant impact was seen on poverty rates:** throughout the period of 2010-2019, the presence of Gojek and Tokopedia has helped reduce poverty rates, especially among the regencies (by 0.443 p.p)
- On the other hand, we do not observe significant impacts on unemployment rates
- One conclusion that can be drawn is that **the coexistence of Gojek and Tokopedia has drawn workers from low-paying jobs to higher-paying ones**, but the coexistence has not drawn those who were previously unemployed

*, ** indicate significance at 5% and 1%, respectively



The limited impact is attributable to the fact that the Gojek-Tokopedia penetration might not have reached critical mass and network effects that are needed to generate substantial macroeconomic impacts. A merger between Gojek-Tokopedia might help augment the impact.

The Impact of Gojek-Tokopedia Coexistence on Macroeconomic Outcomes

Unemployment Rates, Work Participation, Poverty Rates, Household Consumption, and Health Insurance (2)

Variables	Group-Time ATT dan IV Estimates		
	All Districts	Regencies	Cities
Inflation	-0.002 p.p	-0.008 p.p	-0.006 p.p
Insurance Ownership (% of HH)	1.668 p.p	0.602 p.p	3.45* p.p
Number of Entrepreneurs	2,3%**	1%	3,3%*
Share of Digital Entrepreneurs†	0,22** p.p		
Share of Marketplace Entrepreneurs†	0,03** p.p		
Savings Account Ownership (% of HH) †	0,9** p.p	-	-

*, ** indicate significance at 5% and 1%, respectively

† estimation was implemented using the instrumental variables (IV) method

- The researchers found **that the Gojek-Tokopedia coexistence has not exerted impacts on inflation**; if any, the effects are negative, consistent with the digitalization effects observed in Cardona et al (2015), wherein they observed that the existence of digital platforms can contribute to reductions in price variability across regions
- Additionally, the Gojek-Tokopedia coexistence has been observed to increase the number of entrepreneurs, internet and marketplace entrepreneurs by 2.3%, 0.22 and 0.03 bps, respectively. We see that Gojek-Tokopedia has lowered entry barriers, and this has led many to become entrepreneurs
- Significant impacts are also seen on the increase in household insurance ownership rates, especially among cities (which saw the rates increase by 3.45 p.p)
- Although the broad macroeconomic implications of Gojek-Tokopedia coexistence are still rather limited, our study suggests evidences that the **impacts tend to augment over time**



The limited impact is attributable to the fact that the Gojek-Tokopedia penetration might not have reached critical mass and network effects that are needed to generate substantial macroeconomic impacts. A merger between Gojek-Tokopedia might help augment the impact.

The Impact of Gojek-Tokopedia Coexistence on Macroeconomic Outcomes

Gross Domestic Product (GDP)

Variables	Group-Time ATT dan IV Estimates		
	All Districts	Regencies	Cities
GDP	2.3%	2.8%	1.5%
GDP Per Capita	2.7%	3.4%	1.8%
Accommodation and FnB Sector GDP	2%	3.6%	-2.6%**
Transportation and Storage GDP	2.9%	3.9%	1.2%

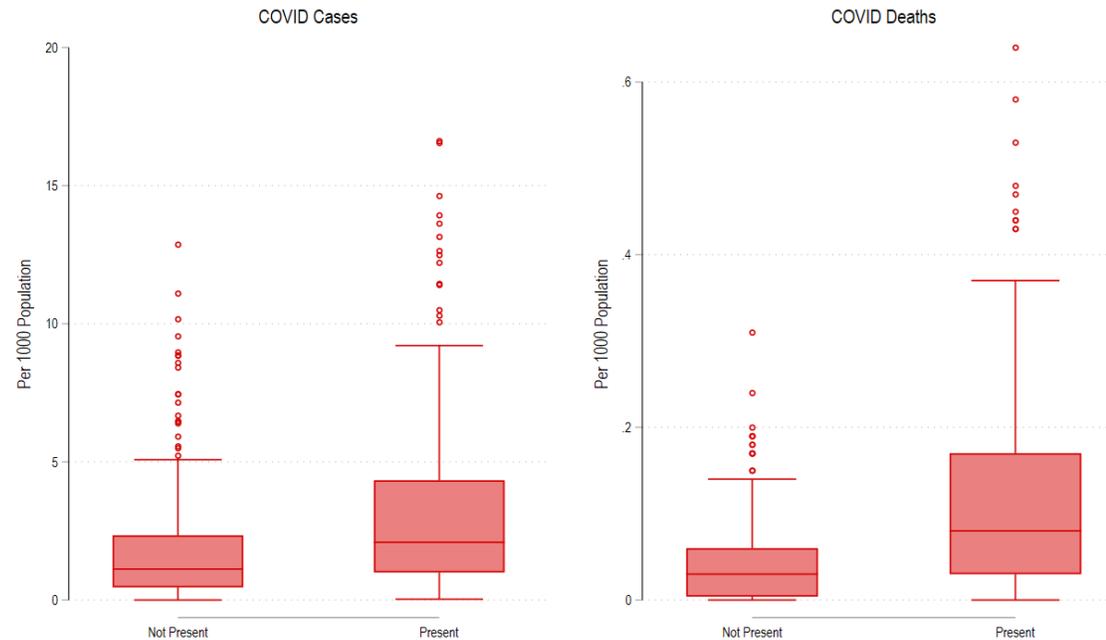
- The study has found that the impact of Gojek-Tokopedia coexistence on district GDP is still limited; the strongest impact is seen on GDP per capita and transportation / storage GDP
- The coexistence of Gojek-Tokopedia has reduced Accommodation and FnB GDP in cities, by 2,6%; it is arguable that Gojek-Tokopedia has diverted businesses to informal sectors. Hence, contributions from these informal sectors are not perfectly recorded

*, ** indicate significance at 5% and 1%, respectively

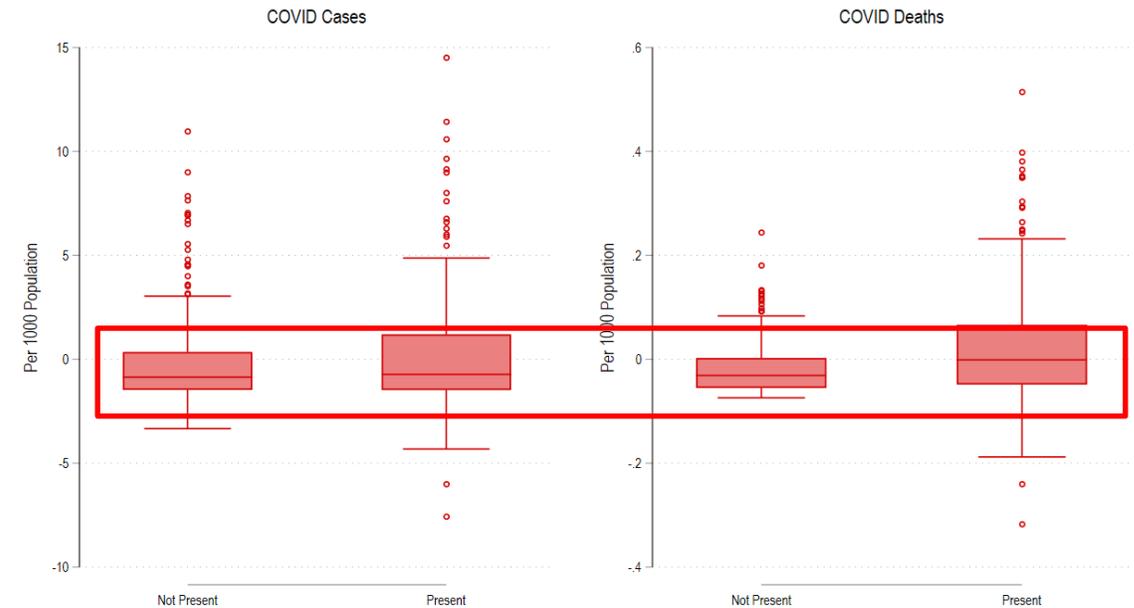
The average impact on district-level GDP is somewhat substantial if one considers the fact that Tokopedia and Gojek had operated in 195 districts/cities, or with an estimated GTV of around IDR 1.5B per districts/cities

THE ASSOCIATION BETWEEN GOJEK-TOKOPEDIA COEXISTENCE WITH COVID-19 SPREAD

COVID Cases and Deaths, by Gojek-Tokopedia Presence



COVID Density-Residual Cases and Deaths, by Gojek-Tokopedia Presence



Presence data are as of 2019. COVID cases and deaths data are at district level as of 31 December 2020, taken from Kawal COVID-19 website. Number of districts included in the above graphs is 501 districts.

Presence data are as of 2019. COVID cases and deaths data are at district level as of 31 December 2020, taken from Kawal COVID-19 website. The values reported in the graphs above are the number of cases/deaths that are unexplainable by population density (i.e. controlling for population density). Number of districts included in the above graphs is 501 districts.

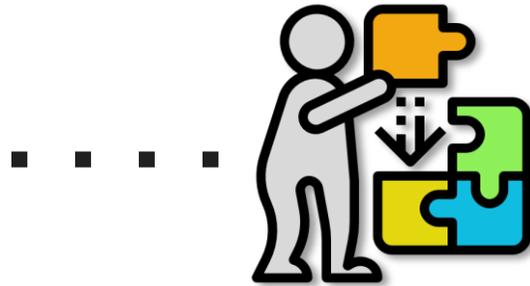


A simple regression analysis suggests that there is no strong relationship/association between the coexistence of Gojek-Tokopedia with the spread of COVID-19. The combined presence of Gojek-Tokopedia is not associated with lower/higher amount of COVID-19 cases. We argue that this lack of relationship is attributable to the social distancing measures enacted by the authorities.

The Contribution of Gojek-Tokopedia's Merger on the National Economy

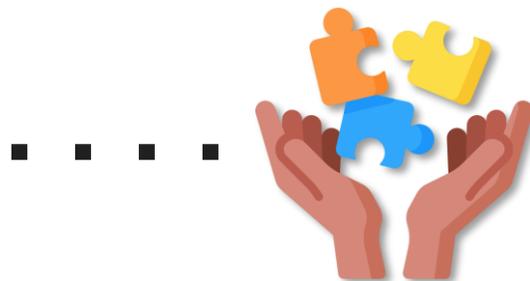


MERGER OF TOKOPEDIA AND GOJEK



Vertical Integration

- ▶ *Vertical integration increases efficiency at the new corporate entity level and lowers costs imposed on users*



Functional Integration

- ▶ *Functional integration increases efficiency at the merchant / partner user level and lowers production costs*

Source:

- Fan, J. P. H. and Goyal, V. K. (2006) 'On the patterns and wealth effects of vertical mergers', *Journal of Business*. doi: 10.1086/499141.
- Kim, H., Lee, D. and Ryu, M. H. (2018) 'An optimal strategic business model for small businesses using online platforms', *Sustainability (Switzerland)*. doi: 10.3390/su10030579.

INTEGRASI VERTIKAL

Scope Economies

- Savings originating from the joint production of different kinds of services
- Example: buying from Tokopedia and delivery with GoSend

Economies from Vertical Integration

Economies of scope originate from joining various production stages in the production of a single good or service in an industry characterised by several successive production stages

There are strong technological interdependencies between production and distribution stages

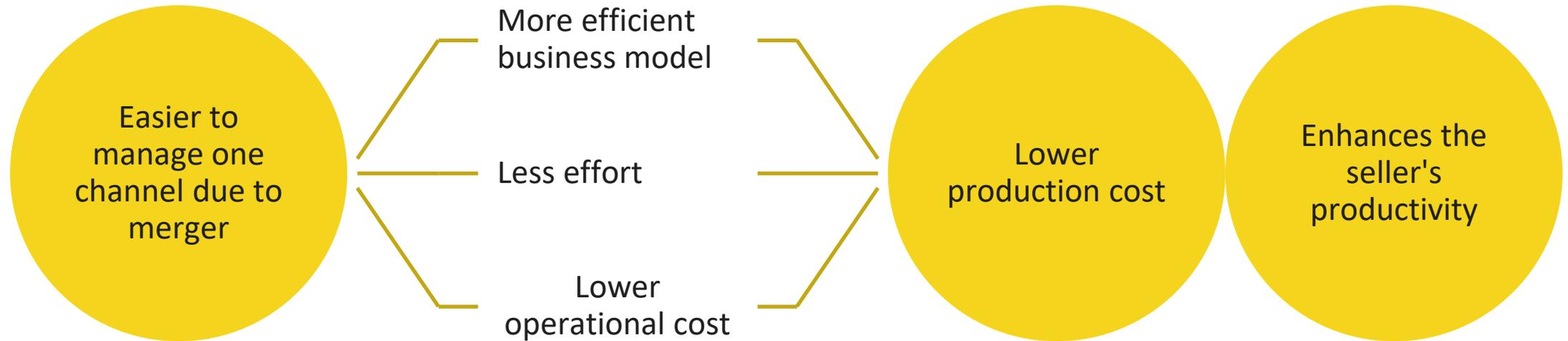
There are considerable needs for coordination and adaptation across stages

There could be diseconomies of scope from integration

- Happens with large institutions, where the provision of services is already too complex (for example, due to the network complexity) and where bureaucracy might be relevant



INTEGRASI FUNGSIONAL



- The integration and convenience offered by the new platform also could attracts conventional MSMEs to use online platforms and creates efficiency.
- The new platform also has an integrated community of users and partners (*pooling community*).

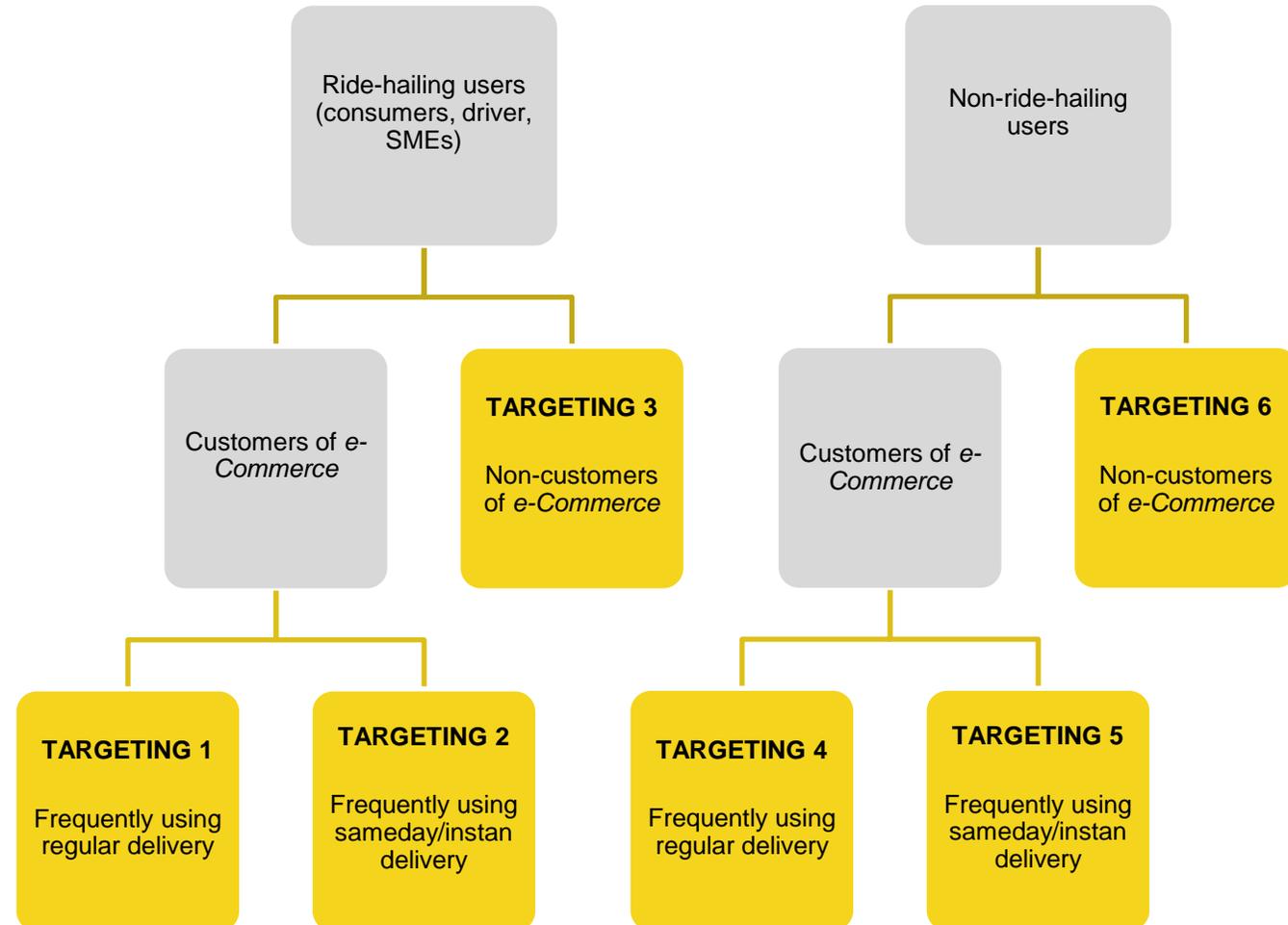
SURVEY

936

Respondents

Stratified Random Sampling

- ▶ Category of users
- ▶ Income groups
- ▶ Location (Java – Outside Java)



POTENTIAL VALUE CREATION OF MERGER

TARGETING 1: Ride-hailing users and customers of e-Commerce, frequently using a regular delivery

Increase in the number of new users using sameday delivery

Purchases increase as the number of new digital wallet users increases

Financial service revenue increases with the increase in digital wallet transactions

TARGETING 2: Ride-hailing users and customers of e-Commerce, frequently using instant/sameday delivery

Purchases increased due to lower sameday delivery costs and increased use of sameday delivery

Purchases increase as the number of new digital wallet users increases

Financial service revenue increases with the increase in digital wallet transactions

TARGETING 3: Ride-hailing users, but non-customers of e-Commerce

Increase in the number of new users using sameday delivery

Purchases increase as the number of new digital wallet users increases

Financial service revenue increases with the increase in digital wallet transactions

Purchases increase as the number of new merchants increases

TARGETING 4: Non-ride-hailing users, but customers of e-Commerce, frequently using a regular delivery

Increase in the number of new users using sameday delivery

Purchases increase as the number of new ride-hailing users increases

Purchases increase as the number of new digital wallet users increases

Financial service revenue increases with the increase in digital wallet transactions

TARGETING 5: Non-ride-hailing users, but customers of e-Commerce, frequently using instant/sameday delivery

Purchases increased due to lower sameday delivery costs and increased use of sameday delivery

Purchases increase as the number of new ride-hailing users increases

Purchases increase as the number of new digital wallet users increases

Financial service revenue increases with the increase in digital wallet transactions

TARGETING 6: Non-ride-hailing users and non-customers of e-Commerce

Increase in the number of new users using sameday delivery

Purchases increase as the number of new digital wallet users increases

Financial service revenue increases with the increase in digital wallet transactions

Purchases increase as the number of new merchants increases

SURVEY RESULTS

The potential additional transactions as well as the number of new users and merchants due to the merger between Tokopedia and GOJEK:



1,3 million transactions

Increase in Tokopedia's user transactions

20,4 million transactions

Increase in Tokopedia's user delivery transactions with instant/same day delivery

2 million transactions

Increase in GOJEK's user transactions

3,9 million users

GOJEK's new users

9,1 million users

Tokopedia's new users

15,2 million users

E-wallet's new users

589 thousand merchants

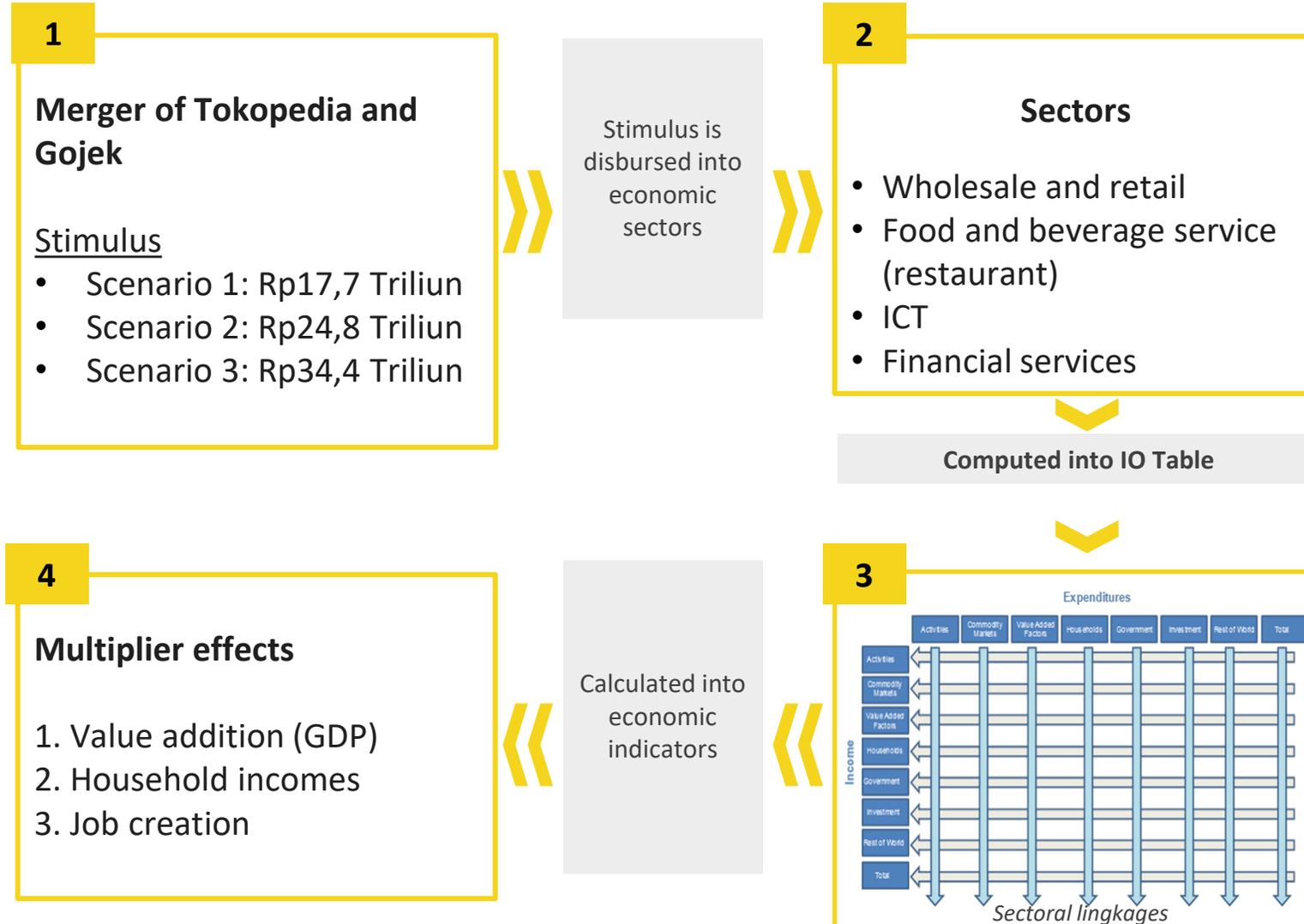
Tokopedia's new merchant



Stimulus of the potential contribution from the Tokopedia-GOJEK merger on the Indonesian economy

	Scenario I	Scenario II	Scenario III
Average amount of Tokopedia and GOJEK new users' transaction value (% to existing users' transaction value)	15%	30%	50%
Potential additional transactions or Stimulus (IDR trillion)	17,7	24,8	34,4

DISBURSING OF STIMULUS IN INPUT-OUTPUT TABLE



TOKOPEDIA-GOJEK MERGER'S CONTRIBUTION ON INDONESIAN ECONOMY

	Scenario I	Scenario II	Scenario III
 Contribution to GDP (Rp Triliun)	20,6	28,8	39,8
 Nominal GDP in 2019 (Rp Triliun)	15.832	15.832	15.832
 Share to GDP (%)	0,1%	0,2%	0,3%
 Job Creation (thousand)	200,8	280,1	385,9
 Household Income Creation (Rp Triliun)	6,3	8,8	12,2

SUMMARY

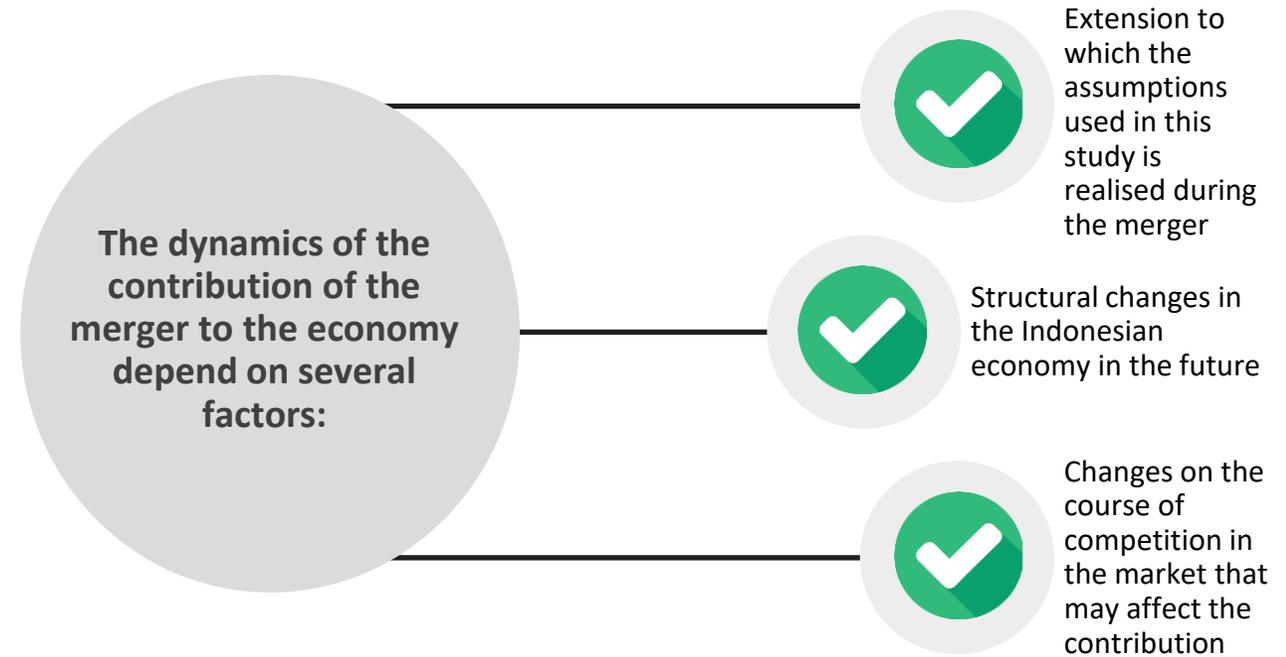
Contribution of the merger of Tokopedia and Gojek to the national economy

Results of survey shows the value creation of almost all Tokopedia and Gojek's business lines from the merger.	There is potential stimulus of IDR 17-34 trillion to the economy from the merger of Tokopedia and GOJEK.
<i>The merger is expected to contribute to Indonesia's national GDP at around 0,1-0,3% of GDP.</i>	The pre-merger contribution of Tokopedia was 1.1% (LPEM FEB UI, 2019) and Gojek was 0.7%* (LD FEB UI, 2019) to the national GDP or a total of 1.8% of the national GDP.
The moderate 0.2% contribution from the merger of Tokopedia and Gojek became an additional 10% of the contribution of the two pre-mergers..	The merger between Tokopedia and GOJEK would provide an overall contribution at around 1.9-2.1% of GDP.

**Gojek's contribution or overall added value to the national economy in 2019 is IDR 104.6 Trillion (Gojek's output in the economy is around IDR 152 Trillion)

LIMITATION OF ANALYSIS

The Input-Output model is a static model in the sense that it portrays the contribution of the merger at one point in time.



The IPO of Merger between Gojek and Tokopedia



COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE INCLUDED IN IDXTECHNO (1)

No.	Company	Listing Board	Listing Date	Subsector	Notes
1	PT Anabatic Technologies Tbk. (ATIC)	Main Board	08 Jul 2015	Software and ICT Services Sector	
2	PT Cashlez Worldwide Indonesia Tbk. (CASH)	Acceleration Board	04 May 2020	Software and ICT Services Sector	
3	PT DCI Indonesia Tbk. (DCII)	Development Board	06 Jan 2021	Software and ICT Services Sector	
4	PT Distribusi Voucher Nusantara Tbk. (DIVA)	Development Board	27 Nov 2018	Software and ICT Services Sector	
5	PT Digital Mediatama Maxima Tbk. (DMMX)	Development Board	21 Oct 2019	Software and ICT Services Sector	Startup
6	PT Indointernet Tbk. (EDGE)	Development Board	08 Feb 2021	Software and ICT Services Sector	
7	PT Envy Technologies Indonesia Tbk. (ENVY)	Development Board	08 Jul 2019	Software and ICT Services Sector	
8	PT Galva Technologies Tbk. (GLVA)	Development Board	23 Dec 2019	Hardware and Technology Tools	Startup
9	PT Hensel Davest Indonesia Tbk. (HDIT)	Main Board	12 Jul 2019	Software and ICT Services Sector	
10	PT Kioson Komersial Indonesia Tbk. (KIOS)	Development Board	05 Oct 2017	Software and ICT Services Sector	Startup



COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE INCLUDED IN IDXTECHNO (2)

No.	Company	Listing Board	Listing Date	Subsector	Notes
11	PT Limas Indonesia Makmur Tbk. (LMAS)	Development Board	28 Dec 2001	Software and ICT Services Sector	
12	PT Sentral Mitra Informatika Tbk. (LUCK)	Development Board	28 Nov 2018	Hardware and Technology Tools	
13	PT M Cash Integrasi Tbk. (MCAS)	Main Board	01 Nov 2017	Software and ICT Services Sector	Startup
14	PT Multipolar Technology Tbk. (MLPT)	Main Board	08 Jul 2013	Software and ICT Services Sector	
15	PT Metrodata Electronics Tbk. (MTDL)	Main Board	09 Apr 1990	Hardware and Technology Tools	
16	PT NFC Indonesia Tbk. (NFCX)	Development Board	12 Jul 2018	Software and ICT Services Sector	Startup
17	PT Tourindo Guide Indonesia Tbk. (PGJO)	Acceleration Board	08 Jan 2020	Hardware and Technology Tools	Startup
18	PT Sat Nusapersada Tbk. (PTSN)	Main Board	08 Nov 2007	Hardware and Technology Tools	
19	PT Northcliff Citranusa Indonesia Tbk. (SKYB)	Development Board	07 Jul 2010	Software and ICT Services Sector	
20	PT Indosterling Technomedia Tbk. (TECH)	Development Board	04 Jun 2020	Software and ICT Services Sector	Startup
21	PT Zyrexindo Mandiri Buana Tbk. (ZYRX)	Development Board	30 Mar 2021	Hardware and Technology Tools	



IF MERGER OF GOJEK AND TOKOPEDIA TO DO IPO IN OTHER COUNTRIES*

Assumption:

Indicator	Tokopedia	Gojek
Revenue	USD15 million per year	USD8 million per year
Valuation	USD7 billion	USD10 billion
Market capitalization	USD35-40	

Indonesia	Singapore	Malaysia	US-Nasdaq	US-NYSE	China	Australia	Hong Kong**
Development board	Main board	Main board	Global Select Market	Not qualified	STAR Market	Qualified	Not qualified

 * Based on financial requirements. Other requirement, such as appointment of local resident management may apply.

** Due to nonacceptable overseas jurisdiction

DETAILS ON IPO OF MERGER BETWEEN GOJEK AND TOKOPEDIA IN OTHER COUNTRIES

Country	Notes
 Indonesia	Not eligible for Main Board due to profit and net tangible assets requirements.
 Singapore	Meet the Criteria 3 for Main Board: positive operating revenue (actual or pro forma) in the latest completed financial year.
 Malaysia	Meet the Market Capitalization Test for Main Board: a total market capitalisation of at least RM500 million upon listing and incorporated and generated operating revenue for at least one full FY prior to submission.
 US-Nasdaq	Meet the Standard 1 Earnings for Global Select Market: Pretax earnings: <ul style="list-style-type: none"> • Aggregate in prior three fiscal years > \$11 million; and • Each of the prior three fiscal years > \$0; and • Each of the two most recent fiscal years > \$2.2 million.
 US-NYSE	Does not meet any Financial Standards for Non-US Companies
 China	Meet Criteria 2 for Star Market: market capitalization of no less than RMB 1.5 billion
 Australia	Meet Asset test: A\$15 million market capitalisation
 Hongkong	Not qualified because Indonesia is not in the acceptable overseas jurisdiction to list in Hong Kong.

IPO OF SEVERAL TECHNOLOGY COMPANIES



We consider technology companies to be **successful** after IPO, such as **Facebook, Alibaba, and Sea** and technology companies that became **unsuccessful** IPO, such as **Lyft, Uber, and WeWork**.



General factors for technology companies to have a successful IPO:

- Good management and more adaptable.
- Live up the hype (when stock prices overvalued) and defy investor's expectation towards stock performance (lowering it).
- Major support from venture capital as a cash cushion for the company.



General causes of failure IPO:

- Miscommunication of companies' real condition to the investor.
- Stay private too long, resulting in a high valuation that the public market can't keep up.
- Company's performance does not meet investors' expectation.
- Corporate governance is unprepared for almost unlimited public scrutiny.
- Lack of preparation, while IPO required the establishment of good governance that undertaken long before IPO.

WHAT CAN WE LEARN FROM FACEBOOK, ALIBABA, AND SEA?



Profit, revenue, market capitalization, and active users of the company **grow** considerably high after its IPO.

These companies are more **active** to **expand their business** by investment or acquisition.



Employees who owned company's stock before IPO, they **become millionaires** and flexibly buy or sell the stock.

Allow for **innovation** with its nearly unlimited raised capital.



The Impact of IPO in Investment Climate

CASE STUDY: GOOGLE DAN STAR MARKET



- In **2004**, Google went public, **putting an end to a four year lull in technology offerings** following Dot-com bubble.
- Google's filing for public offerings **may provide a boost for other technology companies seeking to raise public funds**. More than two dozen high-tech companies filed for IPO in that same year.
 - It demonstrates the **impressive growth** for which technology companies generally have the potential.
 - It serves as a **public statement that enticed investors** back to the technology sector.



- Established in **July 2019** with an aim to help the growing number of **China's technology and innovation enterprises to raise funds** in the domestic capital market
- It has **accommodative listing requirements**, including allowing the listing of companies that are not yet profitable, less focused on assets, cash flow and net income, a market value of no less than RMB1 billion, a differentiated voting right structure, and A pilot registration mechanism to streamline the listing process
- Achievement:
 - Just over a year of its establishment, **200 new companies have joined STAR Market**
 - The amount of **foreign investment** in the Star Market has **surged** from 270 million yuan at the end of 2019 to 5.64 billion yuan at the end of November 2020
 - Has remained **resilient** in the face of the Covid-19 outbreak.

BENEFIT DAN CHALLENGE OF MERGER DAN IPO

BENEFIT

Merger

- Technology and talent assimilation
- Expanding customer base
- Increasing/ diversifying products or service;
- Gain entry to a new demographic/ geographic area
- Lower operational costs
- Efficiency



IPO

- Unlimited source of capital to support business expansion
- Improve corporate image
- Implementation of good corporate governance
- Tax incentives
- Investment spillover from domestic and foreign investors



CHALLENGE

Merger

- Integration
- High growth expectation
- Retaining key talent
- Noncompliance with Anti-Monopoly Law



IPO

- Maintain post-IPO performance
- Maintain control of the founders with the current stock classification model
- Stricter rules, e.g. financial audits
- Macroeconomic volatility



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