



# 2023 Southeast Asia Internet Report

*Southeast Asia's Moment*

# CONTINUITY OF OUR REPORTS: WE ARE NOW IN ‘SEASON FOUR’



## Season 1: November 2019 Report SE Asia’s Golden Age



### What We Shared:

Eight specific, numerical predictions for Southeast Asia’s next 10 years, 2019-2029

- The Golden Age
- The Bonsai Tree
- The IPO ‘Time Machine’
- \$400bn of incremental value creation
- 70% of winners will be multi-country platforms
- Talent recycling
- The Series C/D funding gap for \$20-100m checks

## Season 2: February 2021 Report Resilience and Recovery



### Highlights:

- Holding ourselves accountable: how are our 2019 predictions turning out?
- The Rule of 25: When Should Companies Go Public?
- The Cargo and the Rails: How Emerging Market Tech Ecosystems Evolve
- The Tragedy of COVID-19: Southeast Asia Through the Crisis
- Industrial Transformation in EdTech, Auto, Travel, Health

## Season 3: 2022 Report Recovery and Rebound



### Highlights:

- Holding ourselves accountable: how are our 2019 predictions turning out?
- Southeast Asia’s Persistent Series C/D Gap for \$20-100m Checks, Indonesia vs. Rest of SE Asia Divergence
- Global Case Studies: How Rising Prosperity Goes Hand in Hand with Tech Value Creation
- \$1.2 trillion of Southeast Asian Tech Market Cap: A Prediction for 2031

## Season 4: 2023 Report Southeast Asia’s Moment



### Highlights:

- As always, holding ourselves accountable: how are our 2019 predictions turning out?
- Where are we in the Macro Cycle?
- The Case for Allocating Capital to Southeast Asia
- Talent Flows in SE Asia’s Tech Ecosystem
- How Value Creation in Tech is Radically Different by Region
- Around the World in 47 Charts: The Curious Relationship between GDP Growth and Value Creation

*Southeast Asia's Moment*

## **The Case for Southeast Asia in a Global Portfolio**

*Plan vs. Actual*

### **Revisiting Our Predictions from 2019**

*You are What You Eat*

### **Talent Flows in Southeast Asia's Innovation Ecosystem**

*The Elephant in the Room*

### **Where Are We in the Macro Cycle? When will IPOs Return?**

*Around the World in 47 Charts*

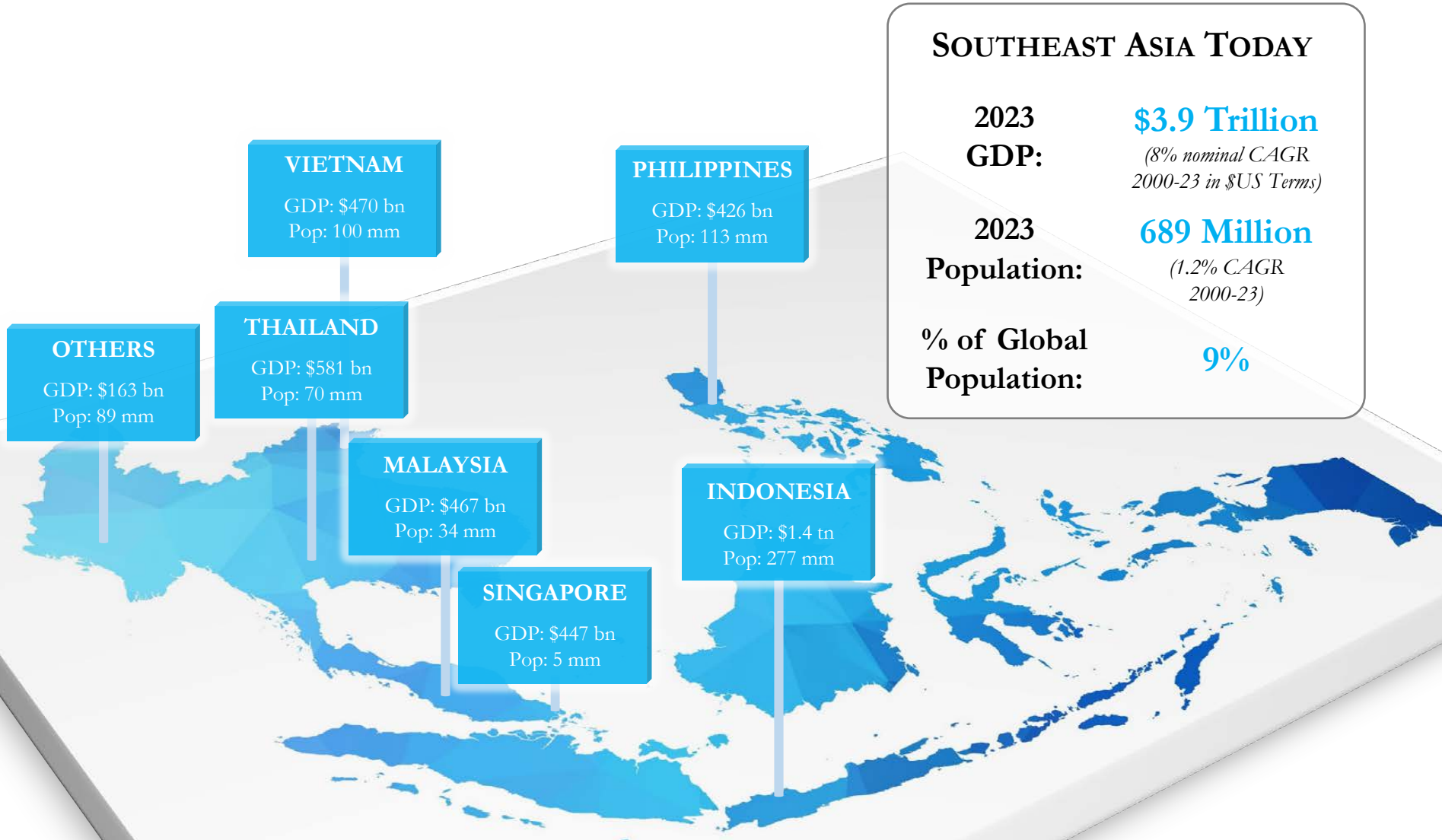
### **Where and When Does GDP Growth Actually Lead to Value Creation?**

*To Each Their Own*

### **Regional Specialization in Building TMT Equity Value**

*A Few Final Thoughts for the 2020s-2030s*

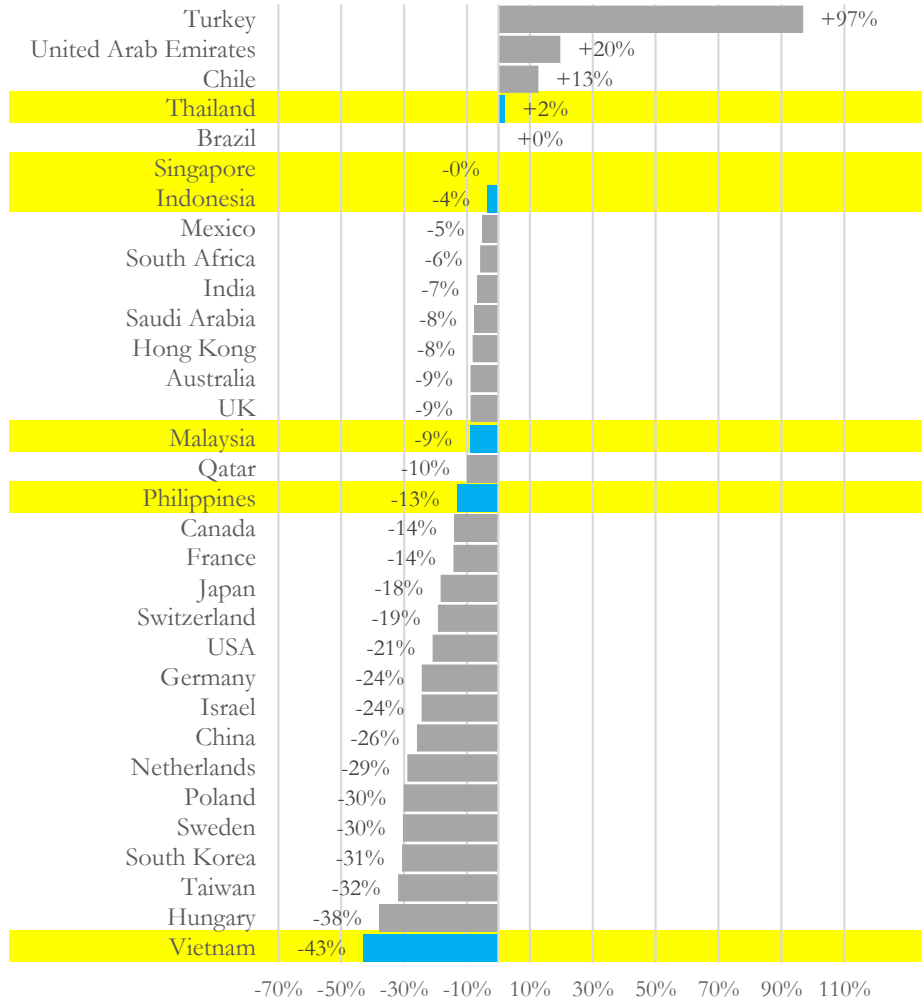
# SOUTHEAST ASIA: ASIA'S NEXT CHAPTER OF GROWTH



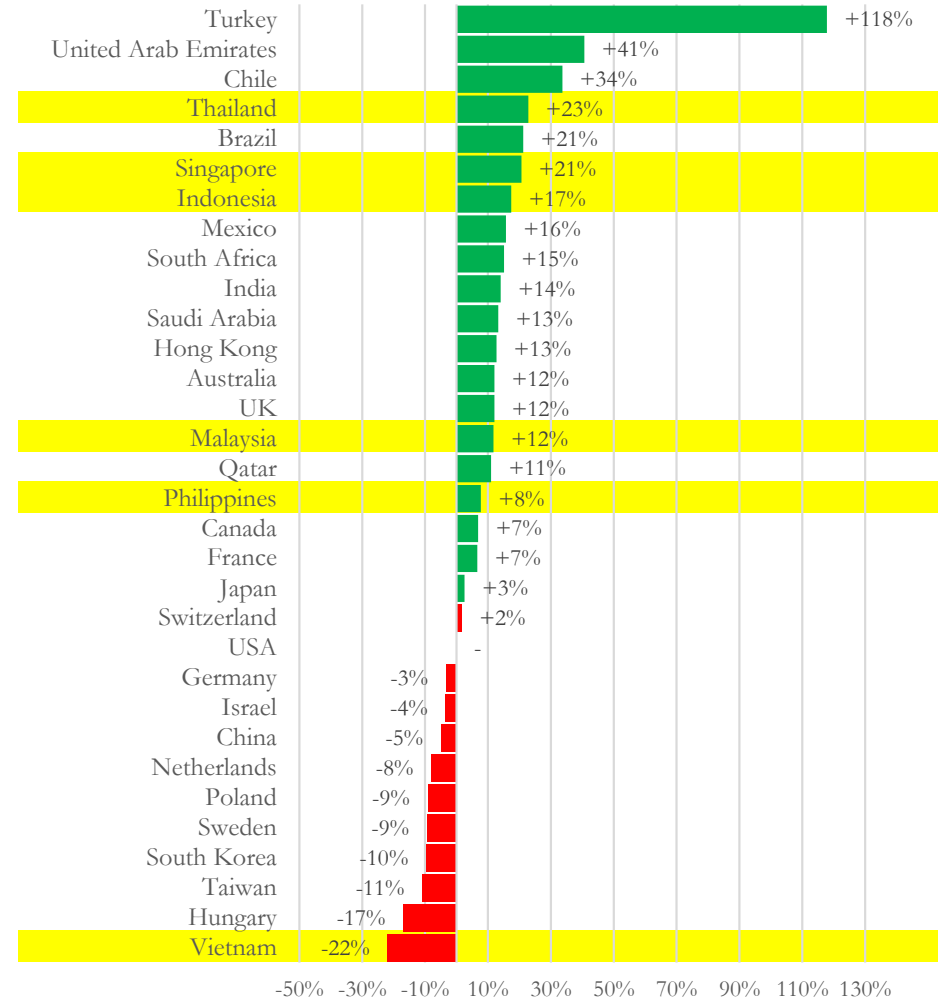


# MOST SOUTHEAST ASIAN COUNTRIES HAVE OUTPERFORMED THE U.S. MARKETS IN A VOLATILE YEAR FOR EQUITIES

**Country Equity Returns FY 2022**  
*U.S. Dollar Terms*



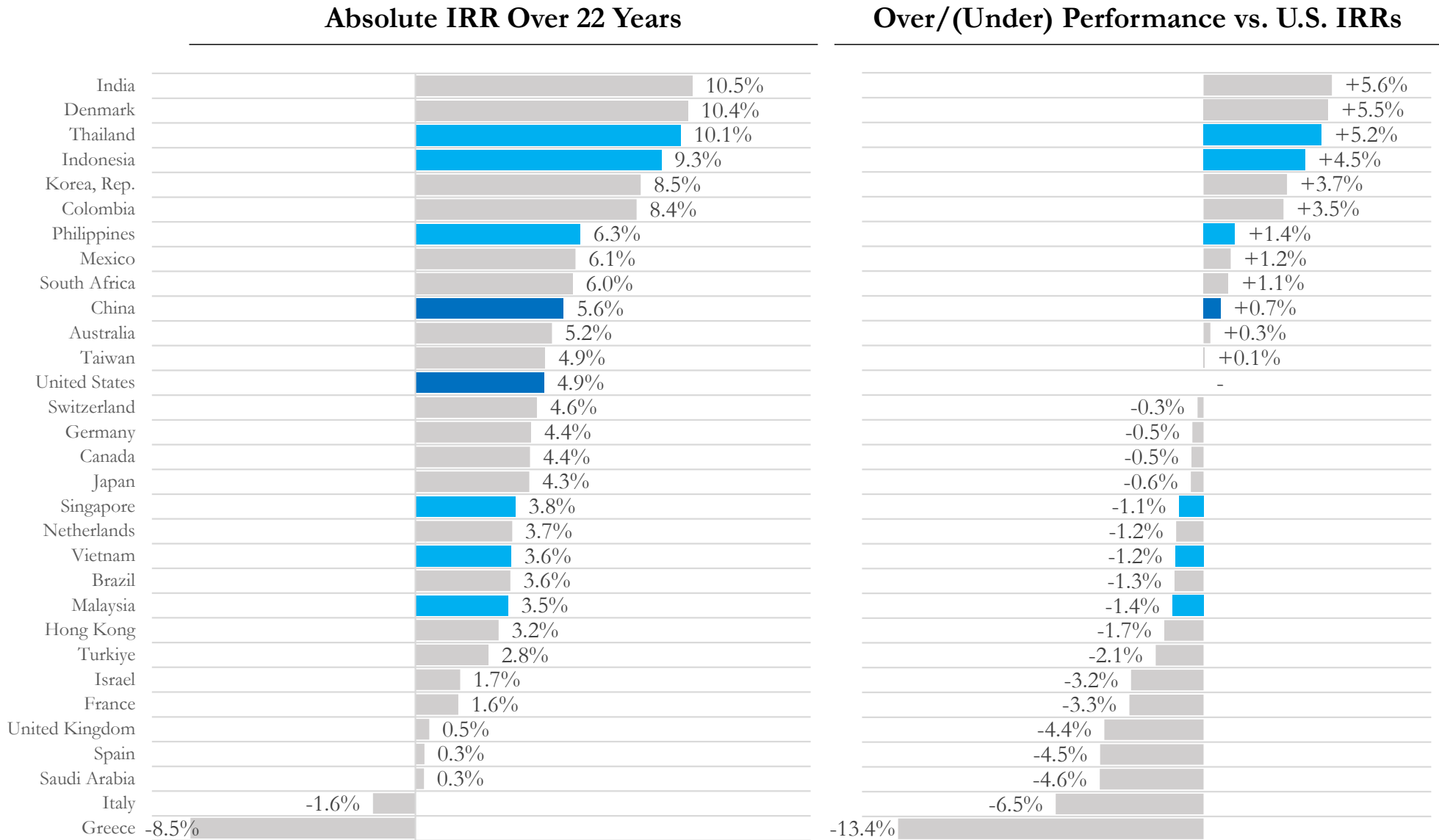
**Alpha to U.S. Index FY 2022**  
*U.S. Dollar Terms*



Source: Bloomberg Large-Mid Price Return indices for all countries except for Vietnam, which is the MSCI Vietnam Index

# THIS WAS NOT A ONE-OFF EVENT; OVER 22 YEARS, HALF OF SOUTHEAST ASIA'S COUNTRIES HAVE OUTPERFORMED THE U.S.

2000-2022 Data, \$US Terms; G2 Highlighted in Dark Blue, Southeast Asia in Light Blue



Source: World Bank, Bloomberg, Asia Partners Analysis

# MOREOVER, SOUTHEAST ASIAN COUNTRIES HAVE PROVIDED A VERY ATTRACTIVE DIVERSIFICATION BENEFIT TO U.S. EQUITIES

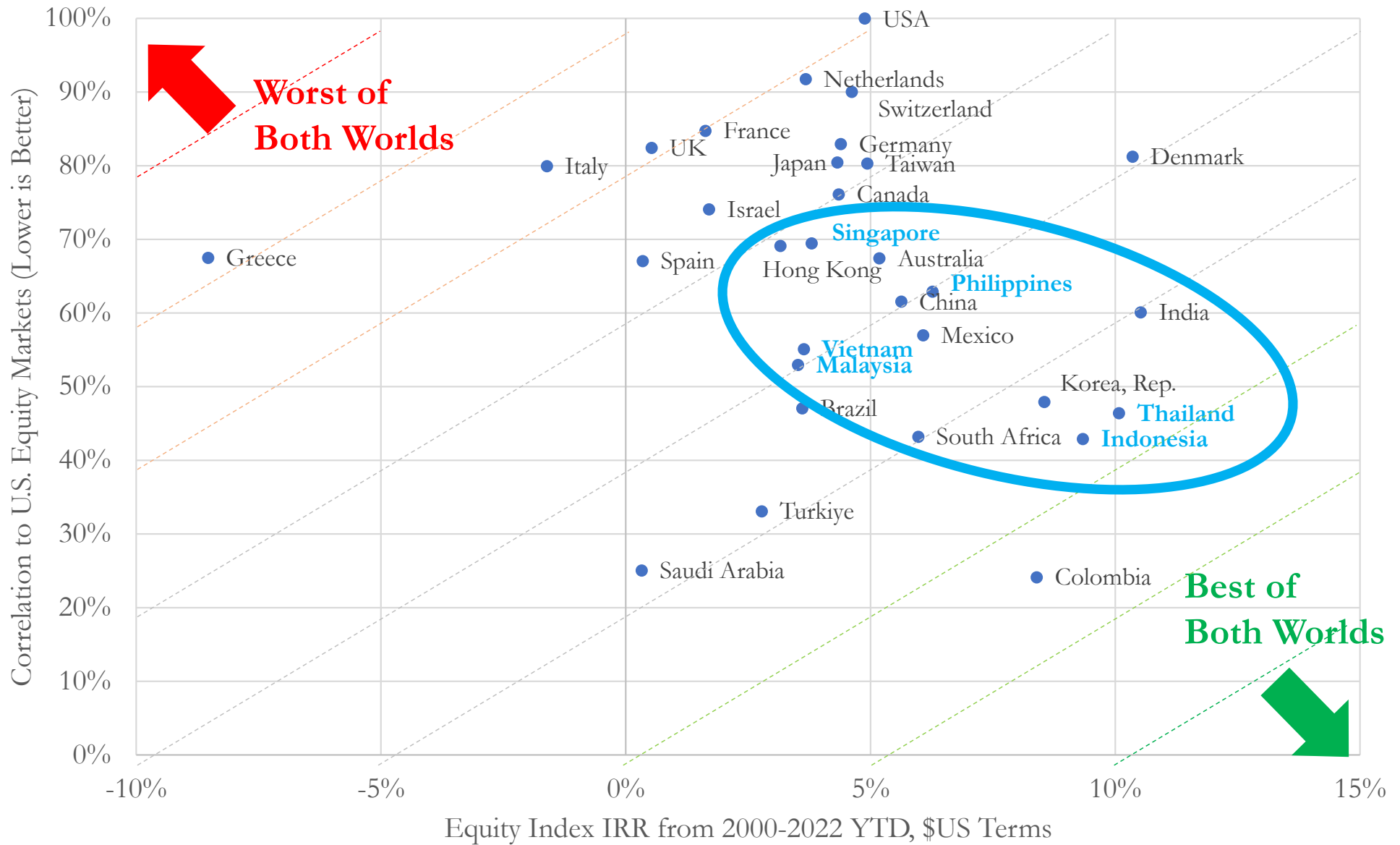
## Correlation of Equity Returns to U.S. Equities, 2001-2022

*U.S. Dollar Terms; G2 Highlighted in Dark Blue, Southeast Asia in Light Blue*



Source: World Bank, Bloomberg, Asia Partners Analysis

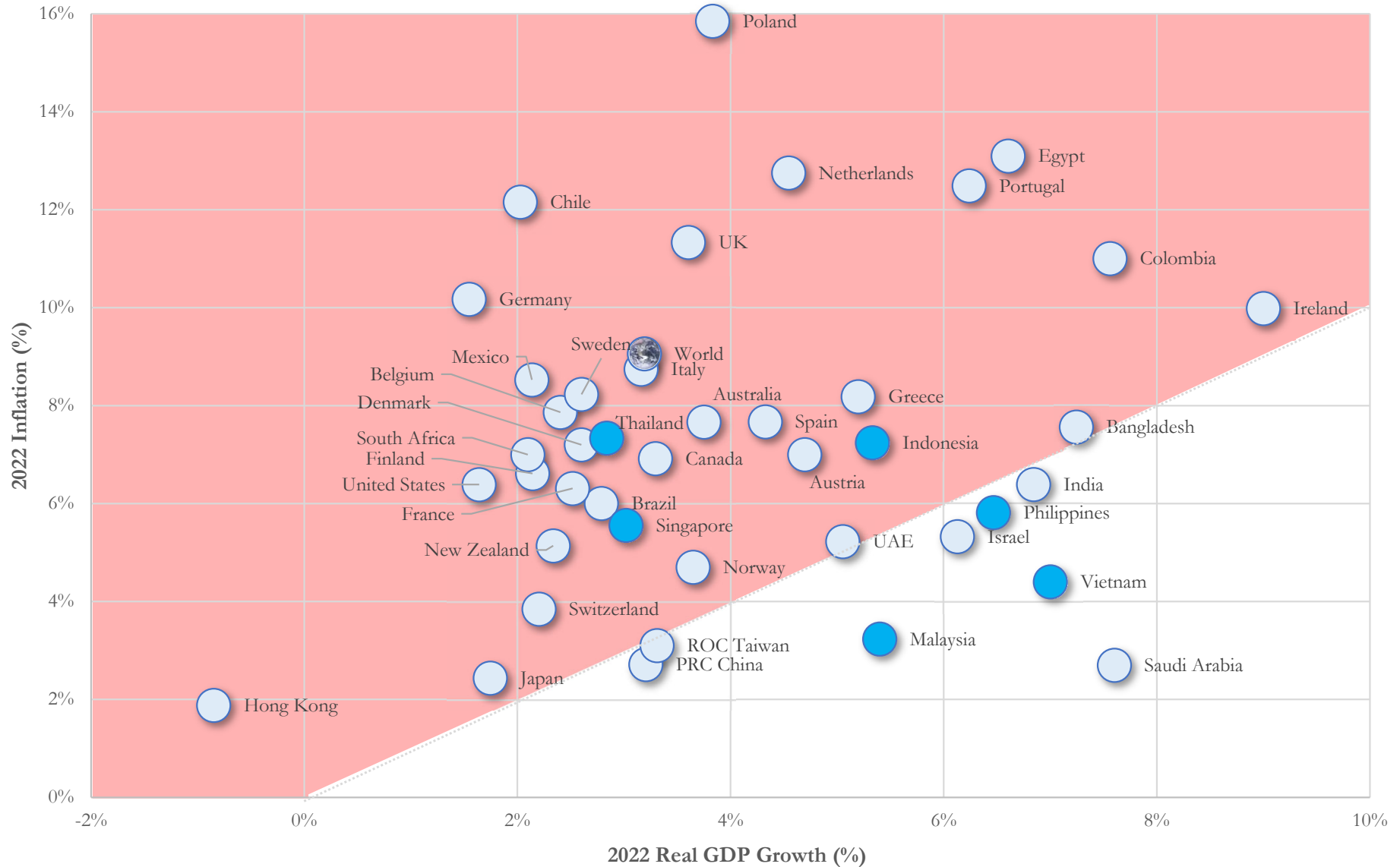
# SYNTHESIZING THESE TOGETHER: WHERE HAVE THERE BEEN ATTRACTIVE RETURNS AND A LOW CORRELATION TO THE U.S.?



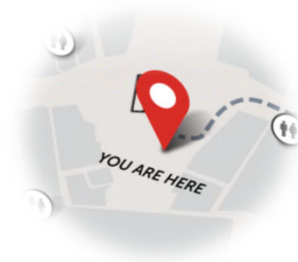
Source: World Bank, Bloomberg, Asia Partners Analysis

# IN A WORLD OF STAGFLATION, THREE OUT OF SIX SE ASIAN COUNTRIES HAD HIGHER GDP GROWTH THAN INFLATION IN '22

2022 Real GDP growth < 2022 Inflation in Red



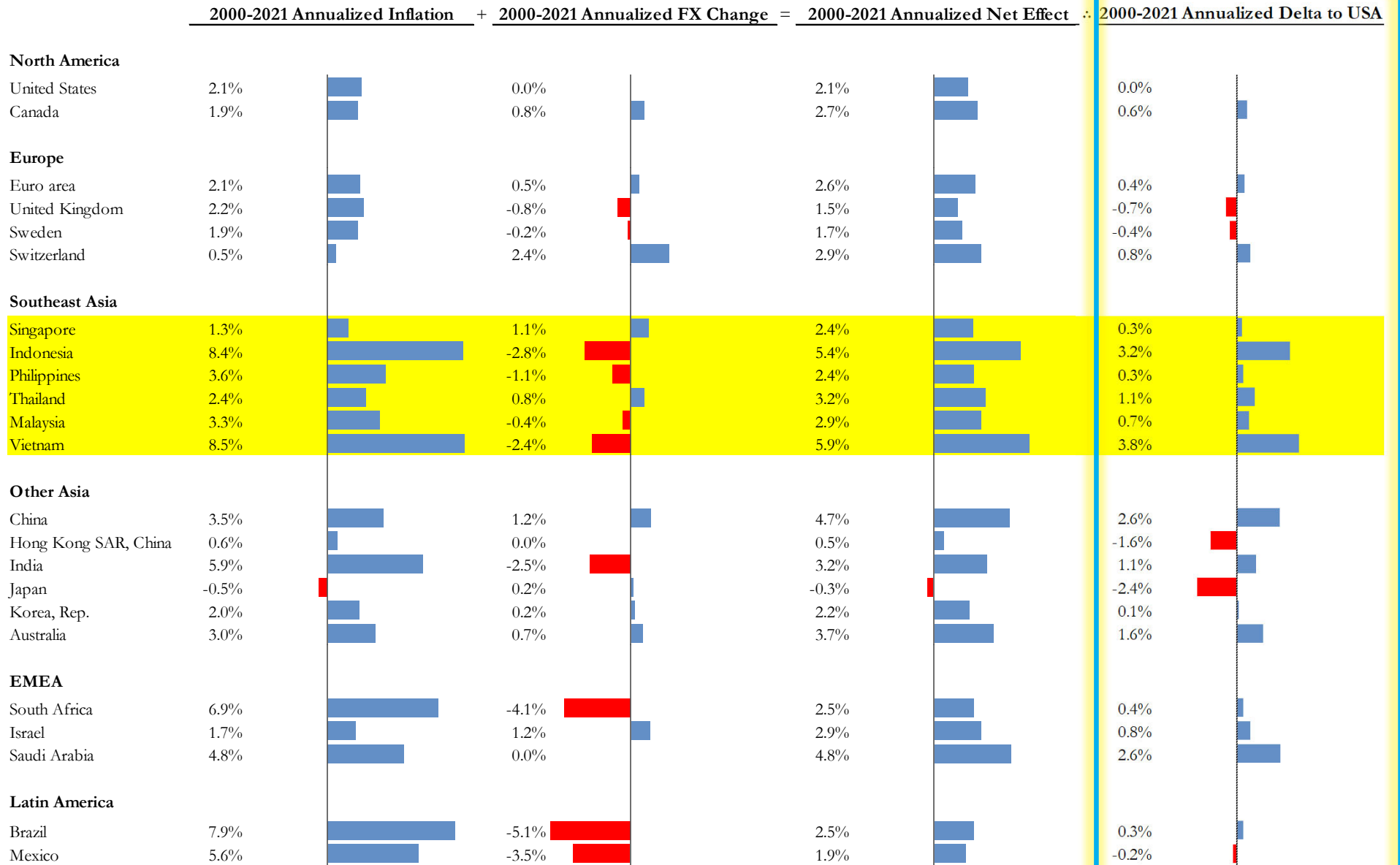
Source: IMF, WEO October 2022 Global Forecast, Asia Partners Analysis



# But what about FX risk?

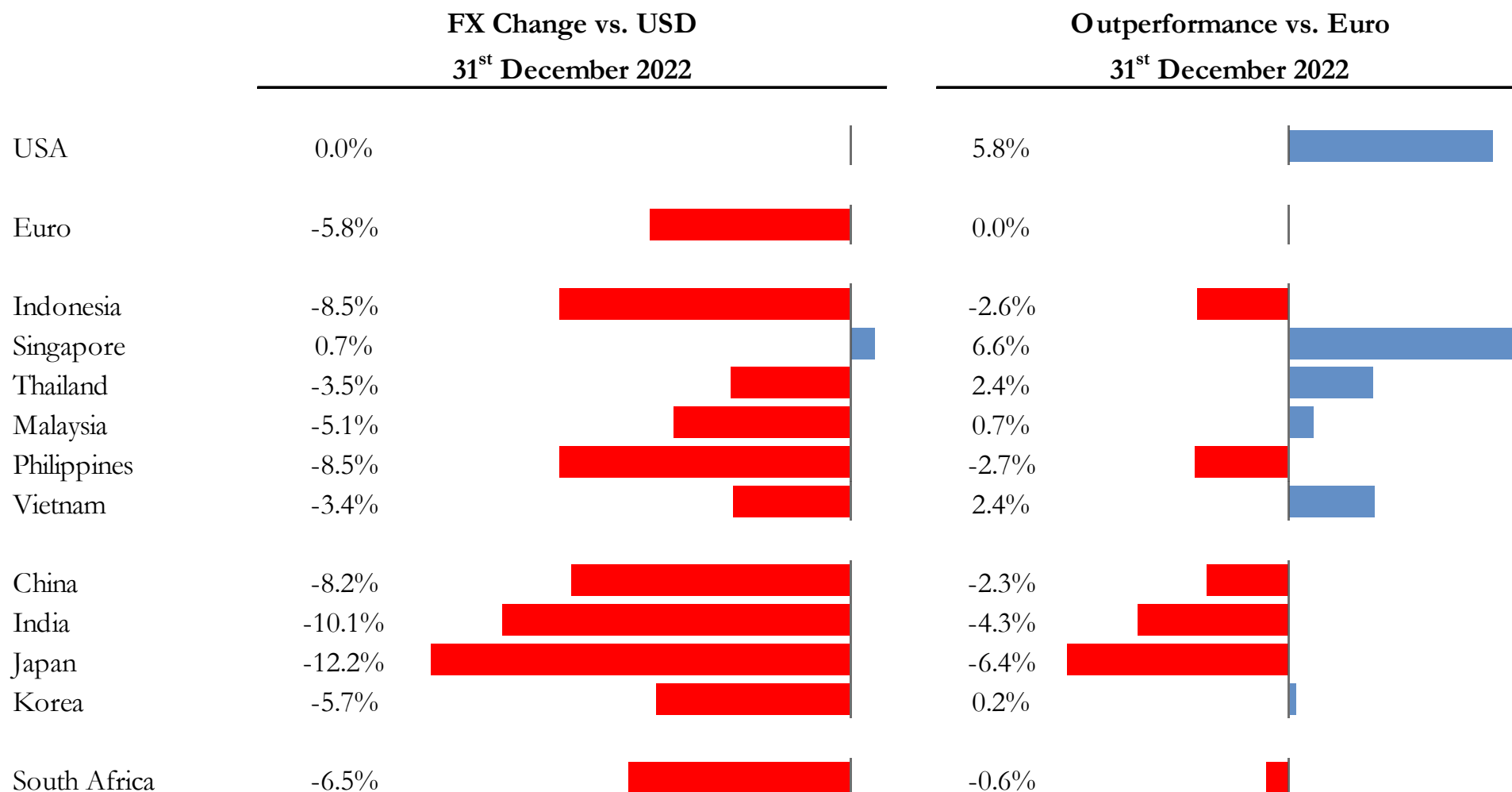


# IMPORTANT NOT TO LOOK AT FX IN ISOLATION, BUT INSTEAD THE *NET* EFFECT OF LOCAL INFLATION AND FX

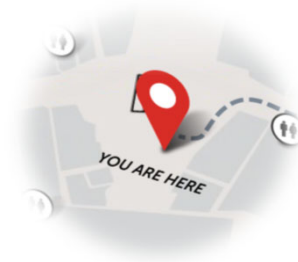


Source: World Bank, Asia Partners Analysis; Inflation based on GDP deflator

# 2022 DATA: FOR U.S. DOLLAR INVESTORS, MUCH OF THE WORLD IS CURRENTLY 'ON SALE' FROM AN FX PERSPECTIVE



Source: Bloomberg

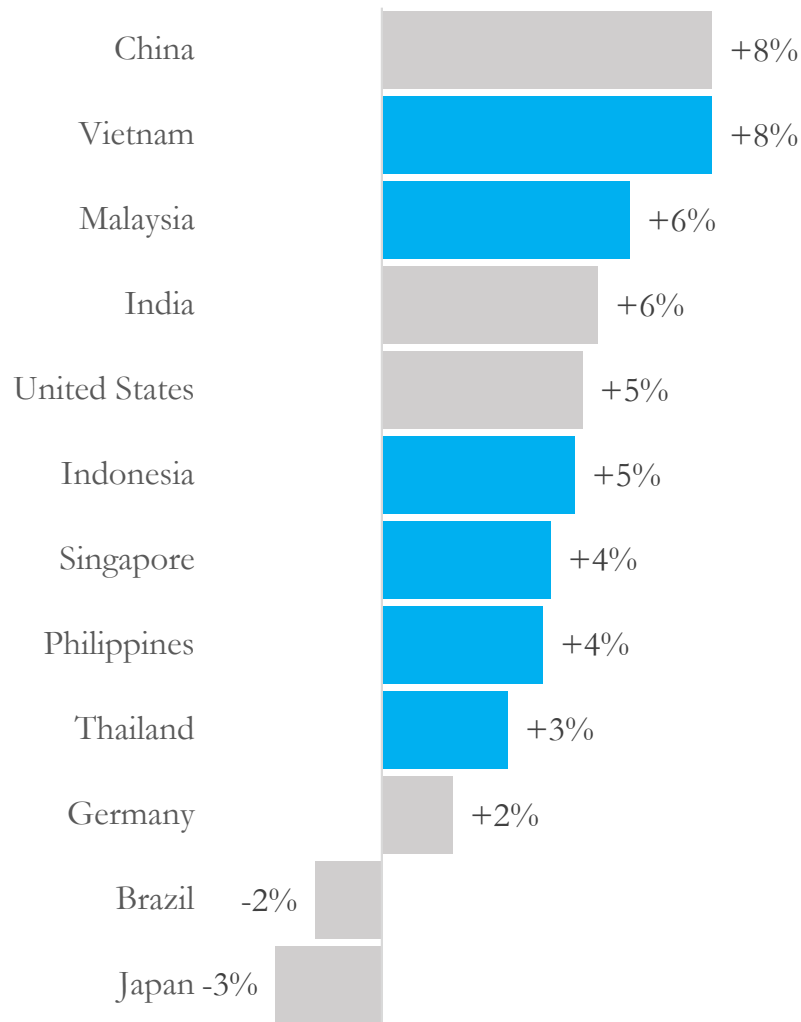


# Southeast Asia as a driver of global growth in the 2020s

# SOUTHEAST ASIA WILL DRIVE ASIA'S GROWTH IN THE 2020s

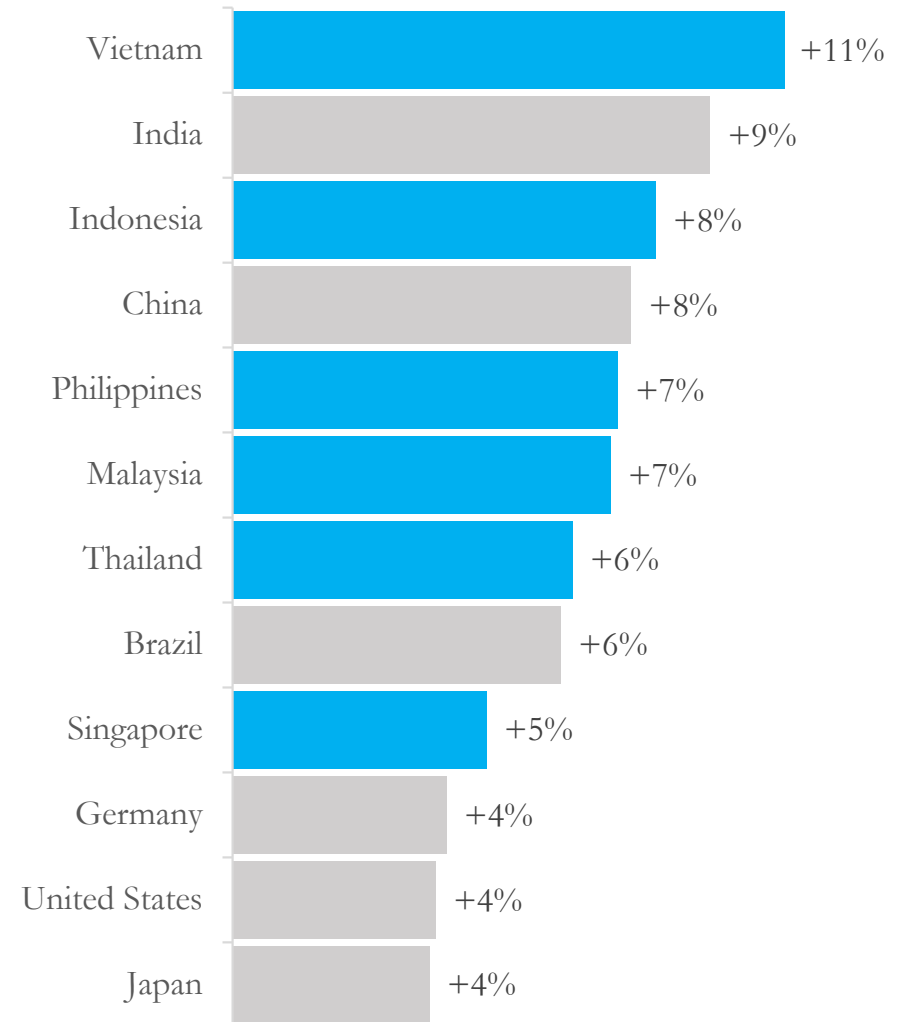
## Nominal GDP growth in *last* 5 years

*U.S. Dollar Terms, 2017-2022*



## Nominal GDP growth in *next* 5 years

*U.S. Dollar Terms, 2022-2027*

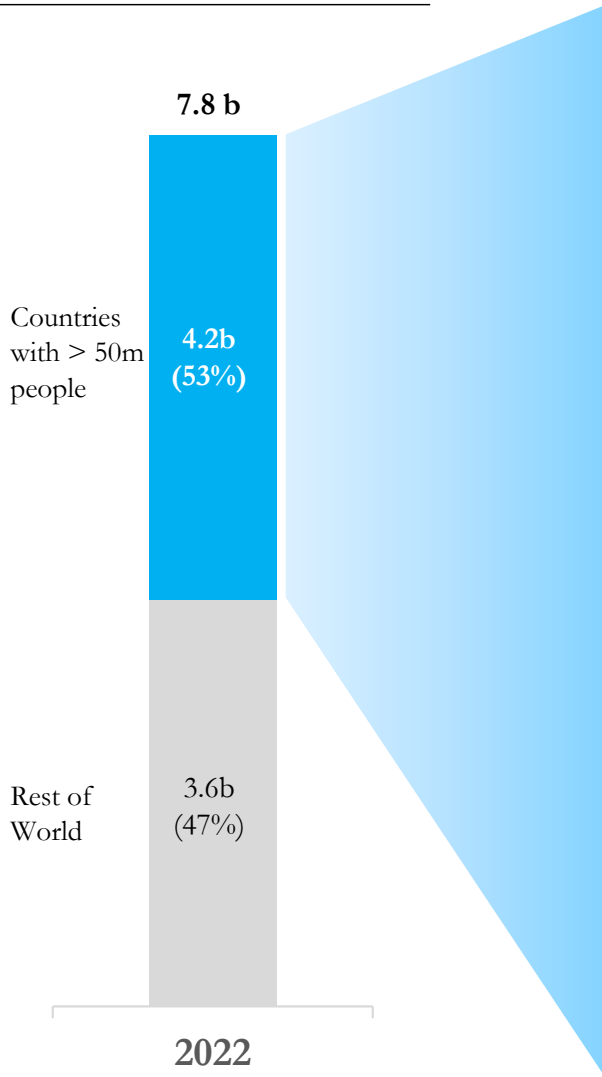


Source: IMF WEO October 2022

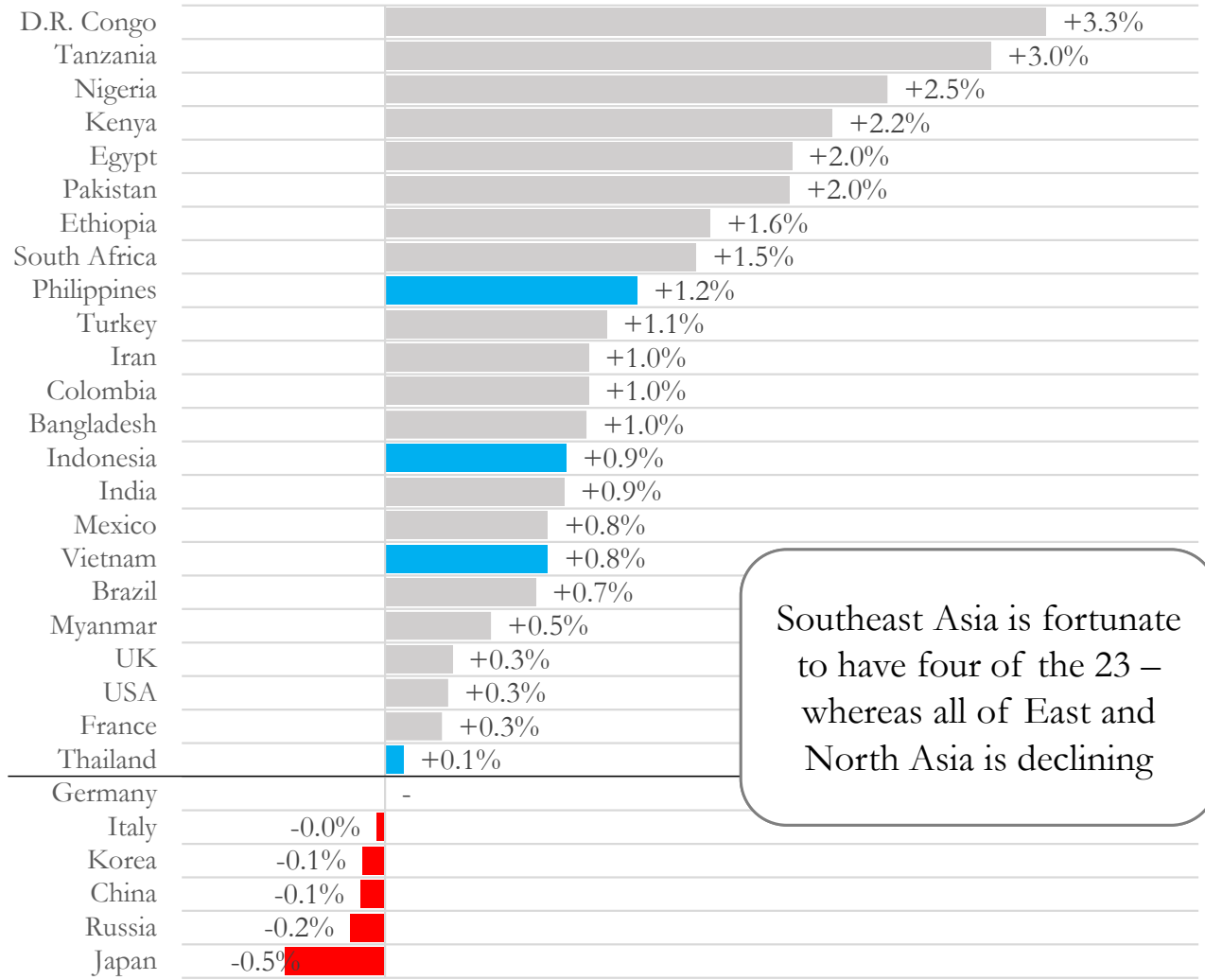
# DEMOGRAPHICS ARE DESTINY: HALF THE WORLD'S POPULATION LIVES IN 29 COUNTRIES, AND ONLY 23 OF THEM ARE GROWING

2022-2027; Countries with > 50m population in 2022, East Asia Highlighted in Dark Blue, Southeast Asia in Light Blue

## 2022 Global Population



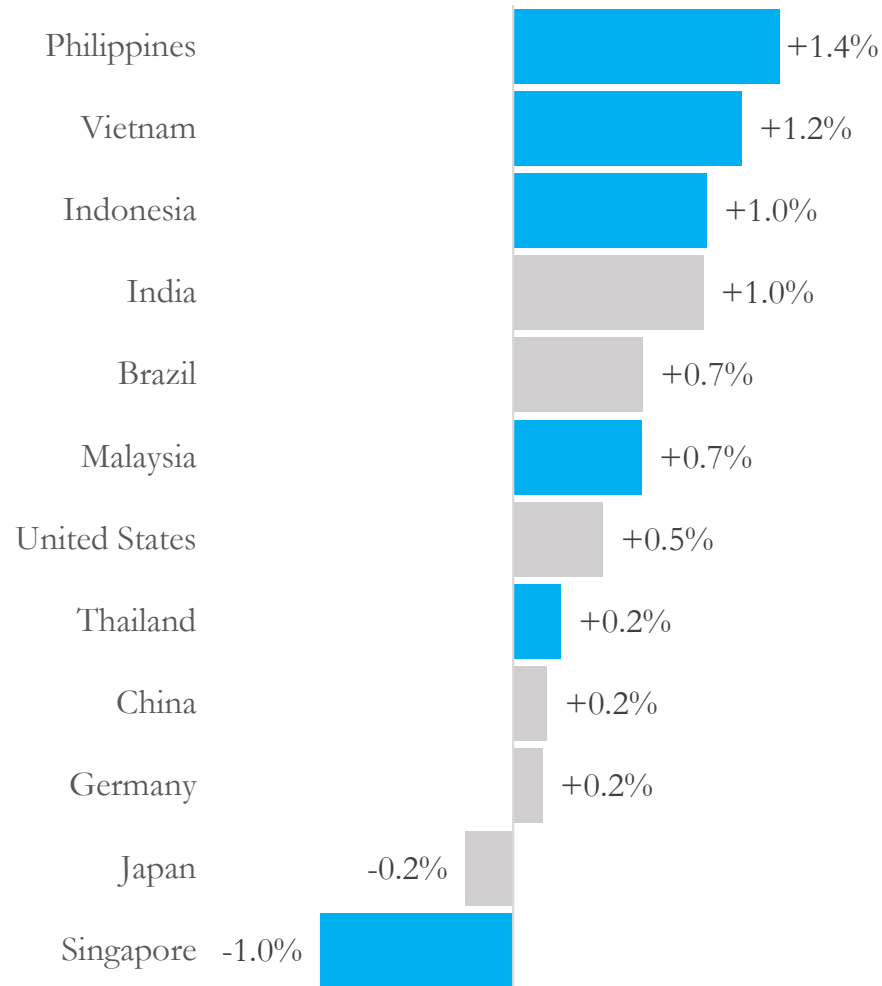
## Next 5 Years Population Growth (CAGR)



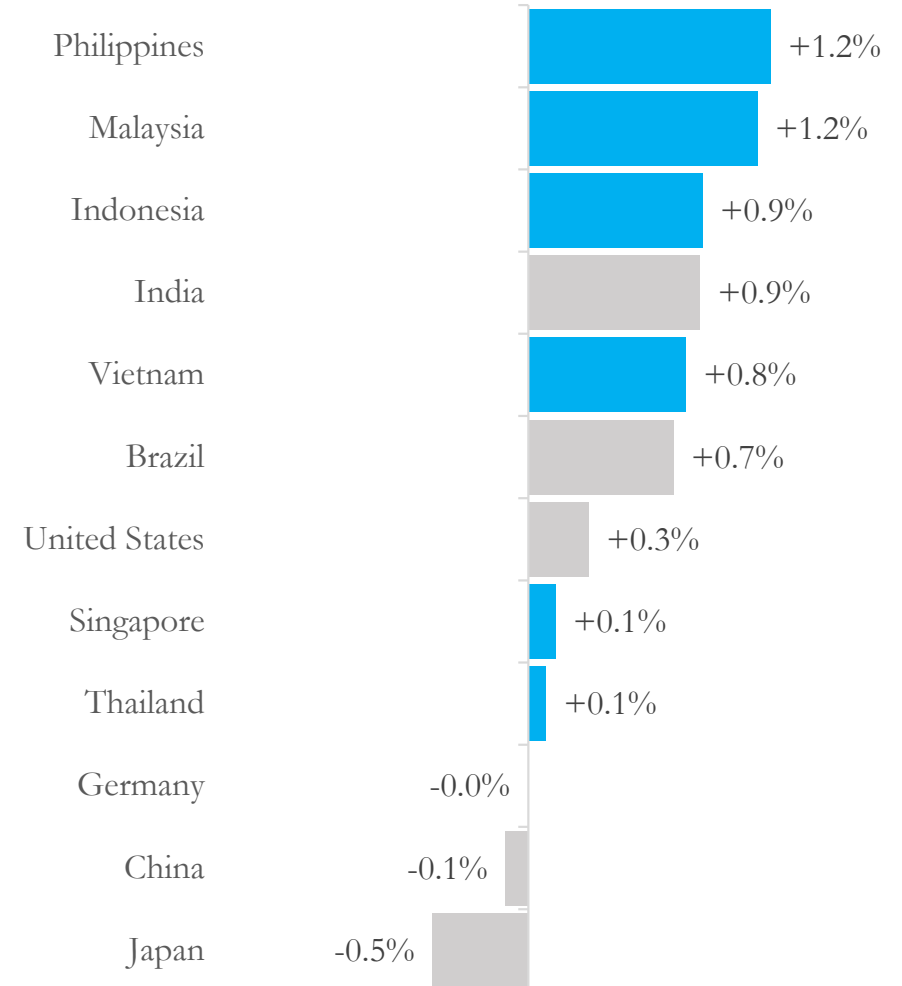
Southeast Asia is fortunate to have four of the 23 – whereas all of East and North Asia is declining

# AND THE SAME APPLIES TO ASIA'S DEMOGRAPHICS IN THE 2020s

**Population growth in *last* 5 years**  
2017-2022



**Population growth in *next* 5 years**  
2022-2027

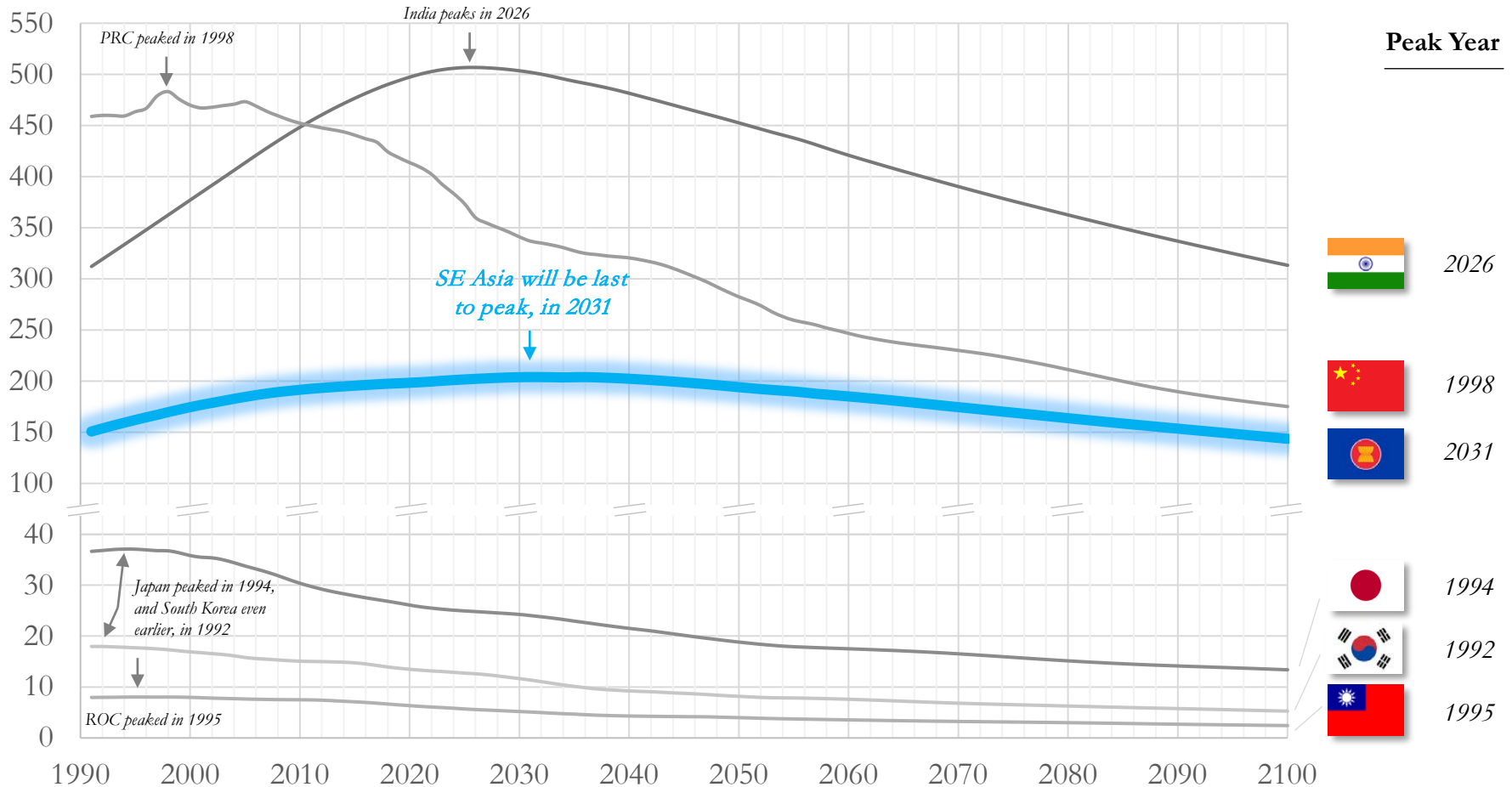


Source: IMF WEO October 2022



# THIS IS EVEN MORE PRONOUNCED IF WE LOOK AT SPECIFICALLY THE NUMBER OF 15-35 YEAR OLDS OVER TIME

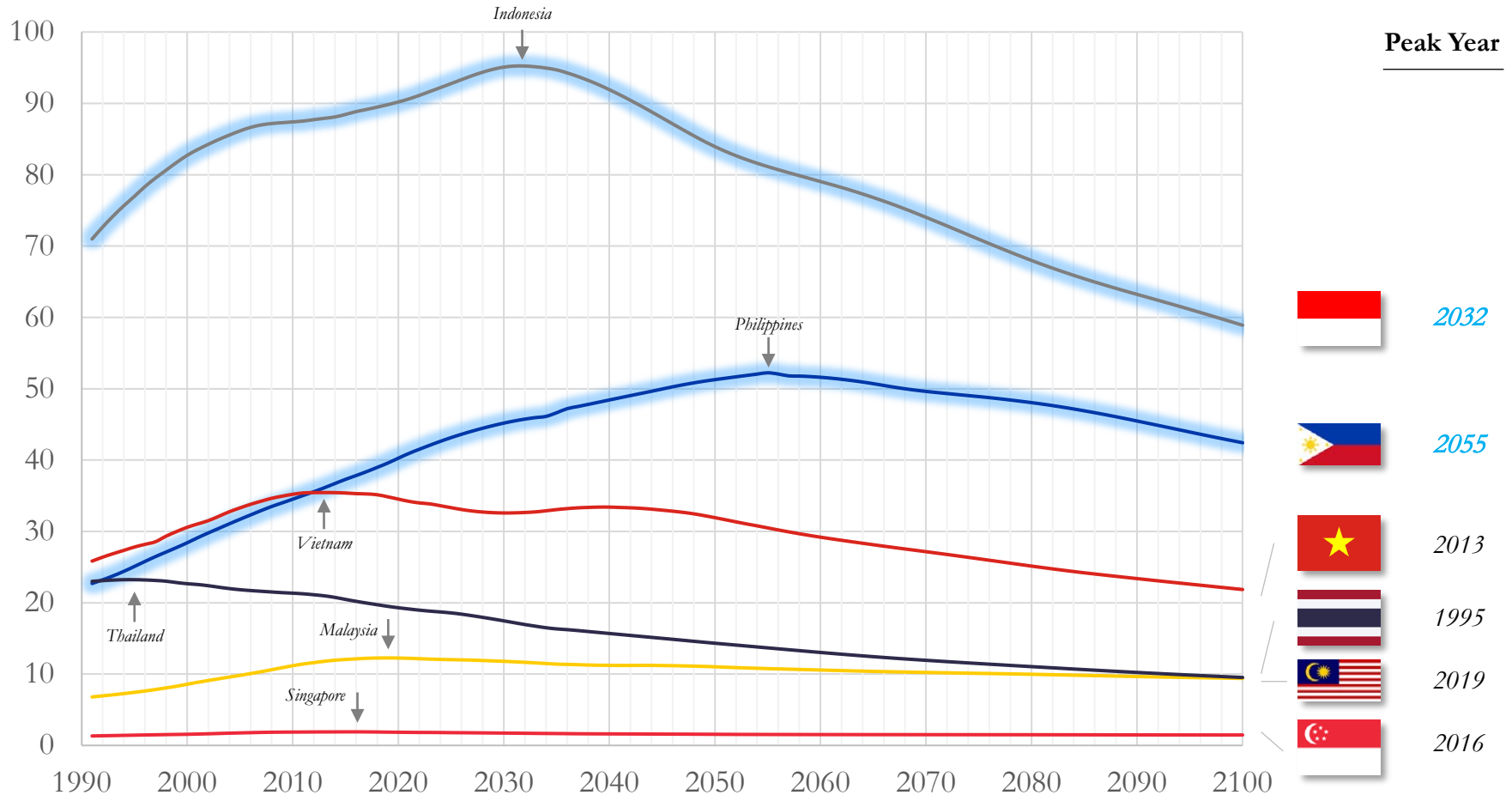
## 15-35 Year Old Population by Region 1991-2100 Forecast, Millions



Source: U.S. Census International Database (Dec 2020 Update)

# WITHIN SE ASIA, THERE IS A DIVERSITY OF DEMOGRAPHICS, WITH THE PHILIPPINES AND INDONESIA DRIVING GROWTH

**15-35 Year Old Population by Country Within Southeast Asia**  
*1991-2100 Forecast, Millions*



Source: U.S. Census International Database (Dec 2020 Update)

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- 1 **Southeast Asia is entering a golden age of rising affluence** that has been associated with large tech company formation in PRC, Korea, and Japan in the past
- 2 The region's opportunities and unique complexity creates true **home court advantage** for local platforms
- 3 We predict **20+ more billion-dollar value tech companies** from Southeast Asia by 2029
- 4 At least **half of these 20 companies will pursue IPOs** over the next decade
- 5 New and existing tech companies in Southeast Asia will create an additional **\$400 billion of incremental equity value by 2029**
- 6 We think **70% of the winners will be regional platforms** and **30% will be Indonesia-focused platforms**
- 7 There are **28,000 graduates of first-generation companies, of whom 1,200 are already next generation founders**; regional winners will emerge from this group
- 8 While the Series A/B ecosystem has strengthened, there is an acute **Series C/D gap in the market for \$20-100 million checks**; Southeast Asia is **ready for growth equity**

# ACCOUNTABILITY: ACTUALS VS. FORECAST

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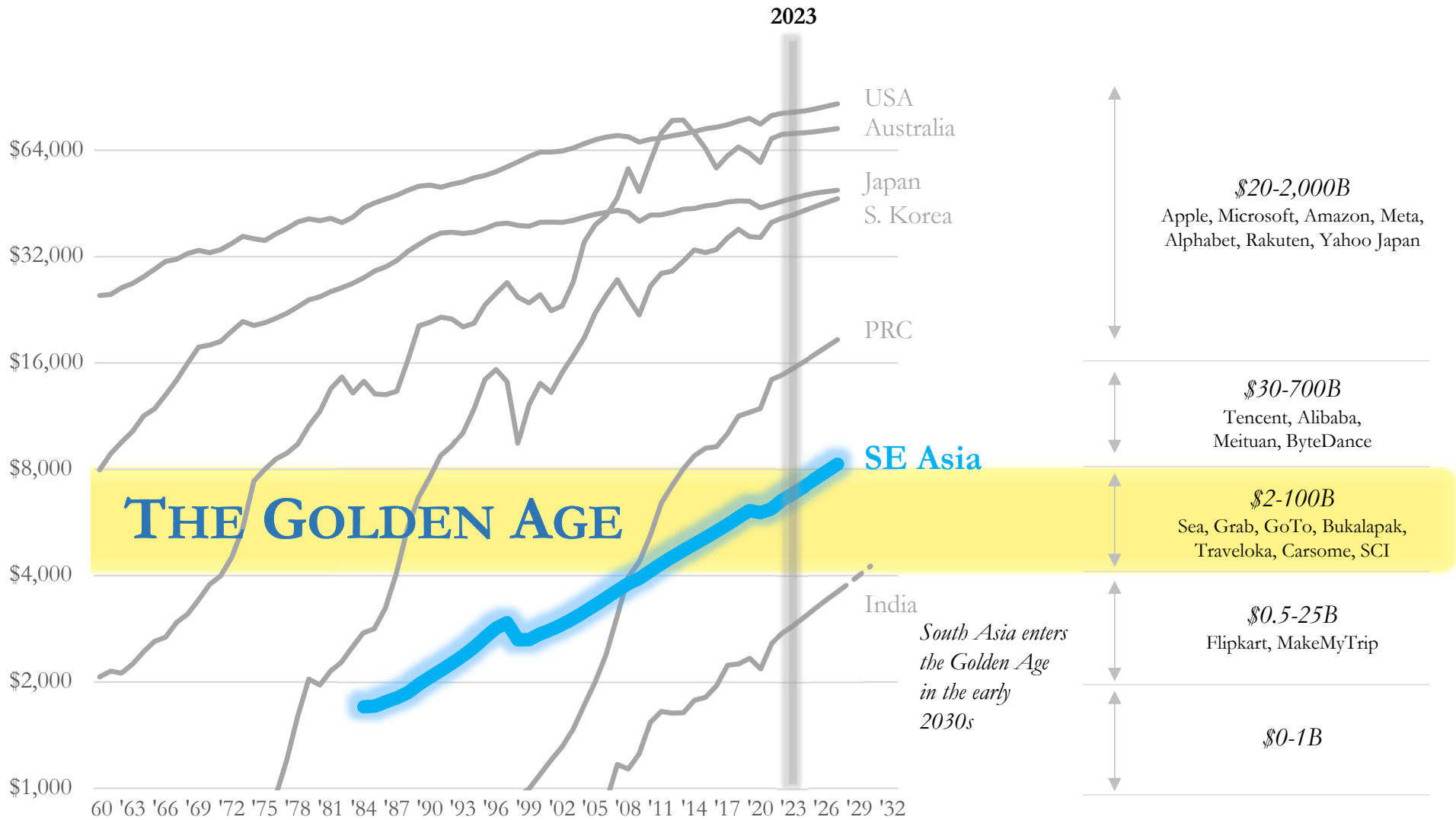


# SOUTHEAST ASIA IS IN THE 'GOLDEN AGE' OF PER CAPITA INCOME



**GDP per Capita in Real, Inflation-Adjusted Terms**  
*Expressed in Constant 2022 U.S. Dollars*

**Value of Tech Companies**  
*\$ billions*



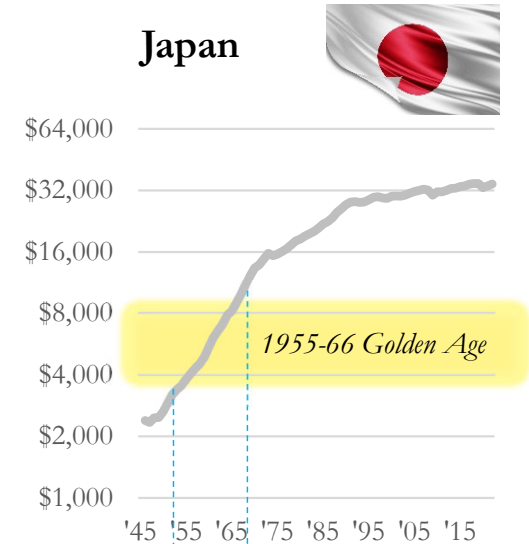
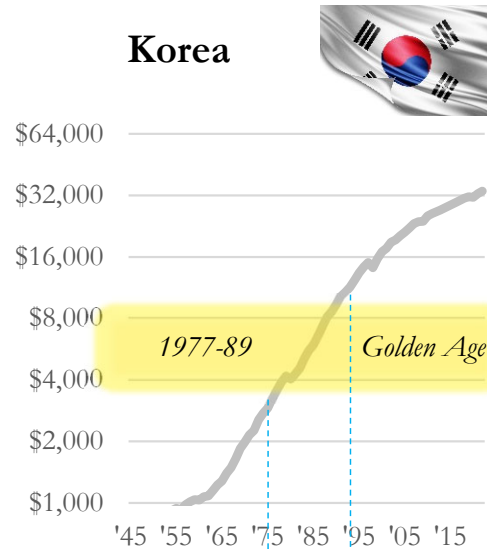
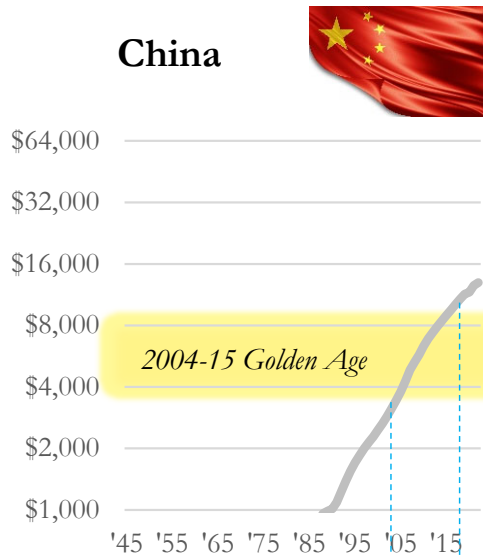
Source: IMF, World Bank, Asia Partners Analysis



# THREE POWERFUL PRECEDENTS: A CONSISTENT PATTERN OF VALUE CREATION ACROSS 75 YEARS OF RISING MIDDLE CLASSES

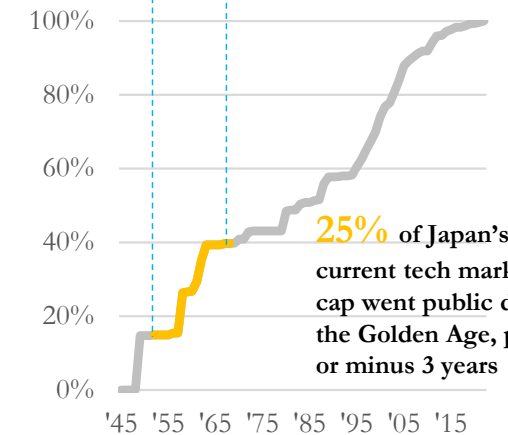
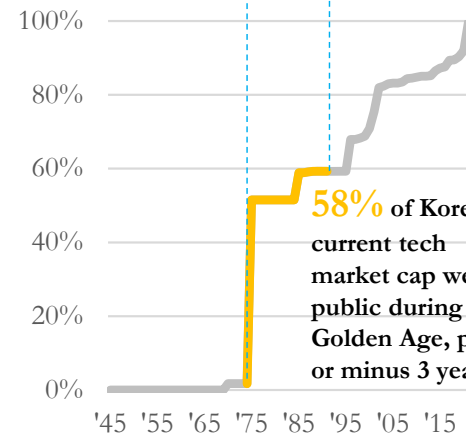
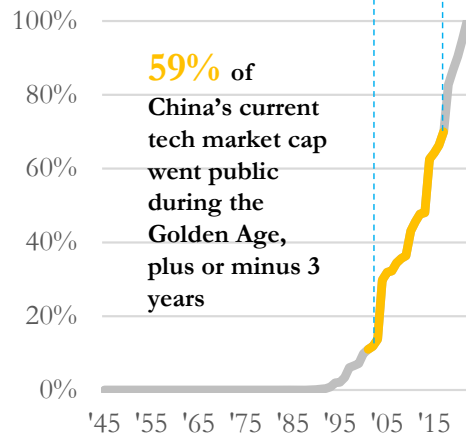
## Rising Middle Class: Real GDP Per Capita Across the Decades

*Inflation Adjusted in 2022 Dollars (Log Scale)*



## Today's Winners: When Did the Country's Current Tech Market Cap Go Public?

*Percentage of Current Tech Market Cap, by IPO Year (Cumulative)*



## The Prize: Current Total Tech Market Cap (Jan 2023)

**\$3.14 Trillion**

**\$0.6 Trillion**

**\$1.0 Trillion**

Source: Asia Partners analysis drawing upon data from IMF; World Bank, Bloomberg, Tokyo Stock Exchange, Angus Maddison Project Database; market cap excludes telcos/cable TV

# WHY? BECAUSE DISCRETIONARY INCOME RISES RAPIDLY LEADING UP TO AND THROUGH THE GOLDEN AGE

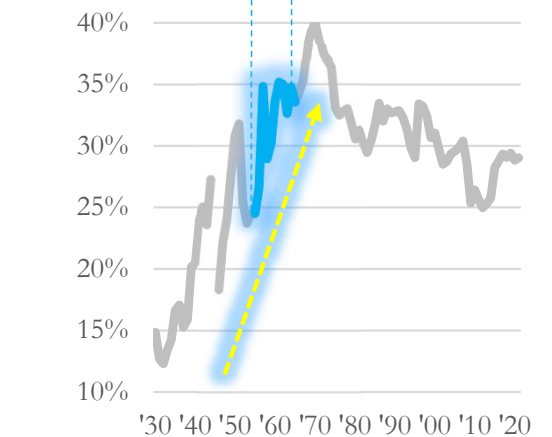
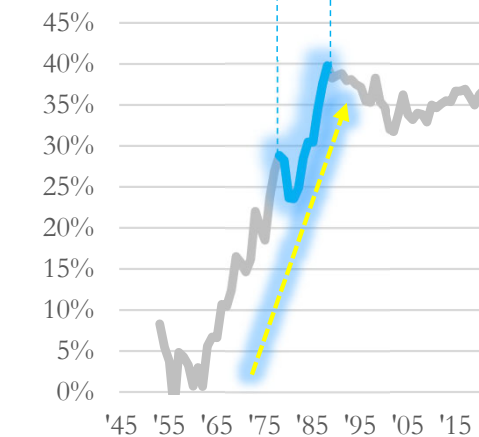
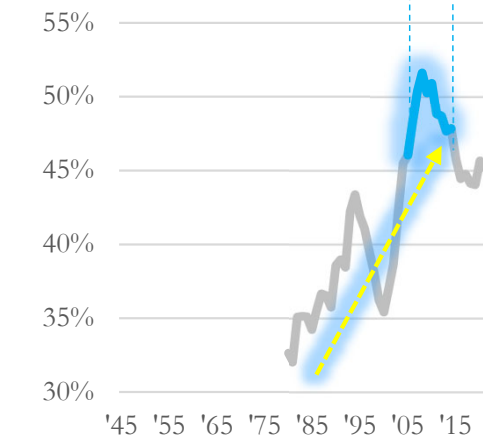
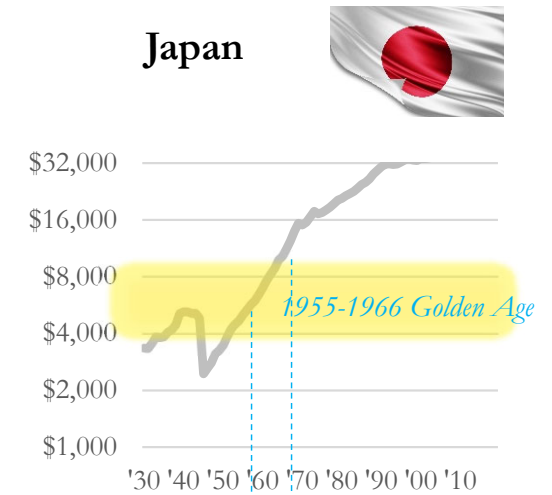
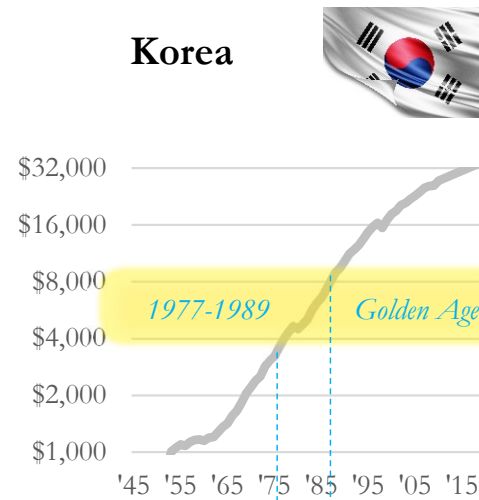
Gross Saving Rates as a Percentage of GDP, as a Proxy for Discretionary Income (Income After Necessities)  
*China, Korea, and Japan Historical Case Studies of Rising Affluence*

**Timing of Golden Ages (\$4,000-\$8,000 of GDP/capita)**

*Inflation Adjusted in 2022 Dollars (Log Scale)*

**Proxy for Discretionary Income**

*Gross Savings Rate, as Percentage of GDP*



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# THERE ARE 3 KINDS OF INTERNET BUSINESS MODELS GLOBALLY, OF WHICH 'CAT 3' IS MOST RELEVANT TO SE ASIA

## 3. Local Network Effects

*(e.g., Sea, Grab, GoTo, Mercado Libre, Carsome, Traveloka, Bukalapak)*

## 1. Global Network Effects

*(e.g., Google, Facebook, Amazon Web Services, Microsoft, TikTok)*

## 2. Unique Local Winners

*(e.g. Baidu)*



**A meaningful portion of EM internet market cap comes from Category 3**

# CAT3 MODELS REMAIN DEEPLY RELEVANT FOR SE ASIA

Proven Model	Bonsai	Global Inspirations	Local Exemplar (Founding Date)	Years of Best Practices to Adopt
<b>Online Advertising:</b> Affiliate Marketing	Cat 3	<ul style="list-style-type: none"> <li>Ebates (Rakuten Rewards) (1998)</li> </ul>	ShopBack (2014)	<ul style="list-style-type: none"> <li>16 years from USA</li> </ul>
<b>Local Services:</b> Food Delivery	Cat 3	<ul style="list-style-type: none"> <li>Meituan in PRC (2010)</li> <li>Doordash in USA (2013)</li> </ul>	FoodPanda (2012), Go-Food (2015), Grab Food (2018)	<ul style="list-style-type: none"> <li>5 years from PRC</li> </ul>
<b>Local Services:</b> Ride Sharing	Cat 3	<ul style="list-style-type: none"> <li>Uber in USA (2009)</li> </ul>	Go-Jek (2010), Grab (2012)	<ul style="list-style-type: none"> <li>1-3 years from USA</li> </ul>
<b>Online Health</b>	Cat 3	<ul style="list-style-type: none"> <li>Teladoc in USA (2002)</li> <li>Ping An Good Doctor (2014)</li> </ul>	Doctor Anywhere (2016), HaloDoc (2016)	<ul style="list-style-type: none"> <li>13-15 years from USA</li> <li>2-3 years from PRC</li> </ul>
<b>B2B eCommerce</b>	Cat 3	<ul style="list-style-type: none"> <li>IndiaMART (1996) in India</li> <li>1688.com (1999), and later Ling Shou Tong in PRC</li> </ul>	Mitra Bukalapak (2017), Gudangada (2019)	<ul style="list-style-type: none"> <li>20+ years from India</li> <li>15+ years from PRC</li> </ul>
<b>eCommerce Logistics</b>	Cat 3	<ul style="list-style-type: none"> <li>Baozun in PRC (2007)</li> <li>Cainiao (2013)</li> </ul>	SCI Commerce (2011), aCommerce (2013), Ninja Van (2014), J&T (2015)	<ul style="list-style-type: none"> <li>4-6 years from PRC</li> </ul>
<b>Payments</b>	Cat 3	<ul style="list-style-type: none"> <li>Alipay in PRC (2004)</li> <li>WeChat Pay (2013)</li> </ul>	SeaMoney (2014), GoPay (2016), GrabPay (2017)	<ul style="list-style-type: none"> <li>10+ years from PRC</li> </ul>
<b>Inventory B2C eCommerce</b>	Cat 3	<ul style="list-style-type: none"> <li>Amazon in USA (1994)</li> </ul>	Lazada (2012)	<ul style="list-style-type: none"> <li>18 years from USA</li> </ul>
<b>Online Real Estate</b>	Cat 3	<ul style="list-style-type: none"> <li>KE Holdings in PRC (2001)</li> <li>Zillow in USA (2004)</li> </ul>	PropertyGuru (2006)	<ul style="list-style-type: none"> <li>1-3 years from USA</li> </ul>
<b>Online Autos</b>	Cat 3	<ul style="list-style-type: none"> <li>Carvana in USA (2012)</li> <li>Auto1 in Europe (2012)</li> </ul>	Carsome (2015), Carro (2015), BeliMobilGue (2017)	<ul style="list-style-type: none"> <li>3-5 years from USA</li> </ul>
<b>Marketplace B2C eCommerce</b>	Cat 3	<ul style="list-style-type: none"> <li>eBay in USA (1995)</li> <li>Taobao in PRC (2003)</li> <li>MercadoLibre (2013)</li> </ul>	Tokopedia (2009), Shopee (2015)	<ul style="list-style-type: none"> <li>14 years from USA</li> <li>12 years from Japan</li> <li>6 years from PRC</li> </ul>
<b>Online Education</b>	Cat 3	<ul style="list-style-type: none"> <li>Chegg in USA (2005)</li> <li>Yuanfudao in PRC (2012)</li> </ul>	Ruangguru (2014), Snapask (2015)	<ul style="list-style-type: none"> <li>9 years from USA</li> </ul>
<b>Online Games</b>	Cat 3	<ul style="list-style-type: none"> <li>Tencent in PRC (2004)</li> <li>Steam in USA (2005)</li> </ul>	Garena/Sea (2009)	<ul style="list-style-type: none"> <li>5 years from PRC</li> </ul>
<b>Online Travel:</b> Affordable Hotel Marketplace	Cat 3	<ul style="list-style-type: none"> <li>OYO in India (2013)</li> </ul>	RedDoorz (2015)	<ul style="list-style-type: none"> <li>1-3 years from India</li> </ul>
<b>Online Travel:</b> Online Travel Agency	Cat 3	<ul style="list-style-type: none"> <li>Expedia in USA (1996)</li> <li>Ctrip in PRC (1999)</li> <li>Kayak in USA (2004)</li> </ul>	Agoda (1998), Traveloka (2012)	<ul style="list-style-type: none"> <li>2 years from USA</li> <li>1 year ahead of PRC</li> </ul>

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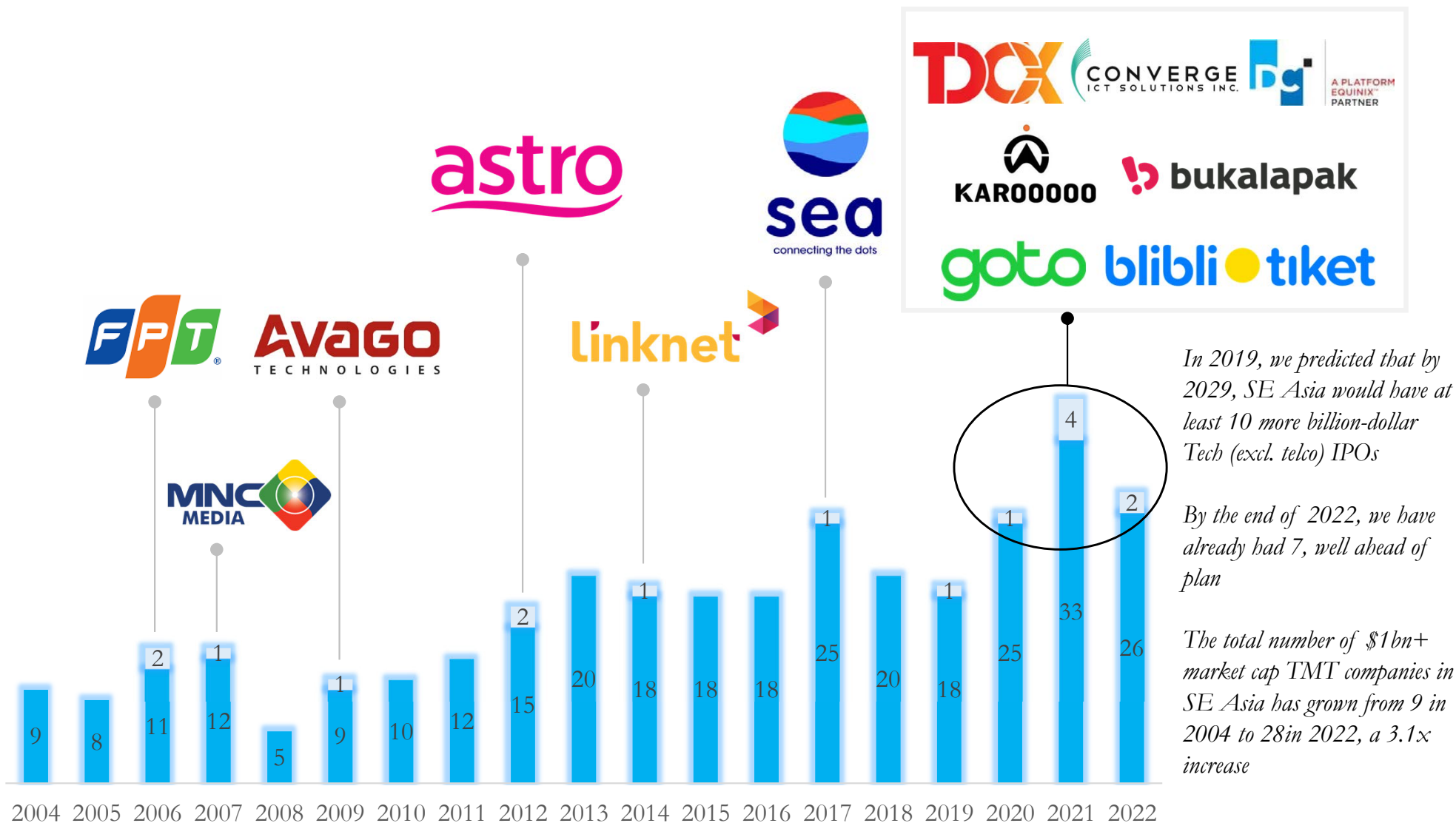
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- Ahead:  
7 new tech IPO since 2019



# WE HAVE SEEN 7 COMPANIES GO PUBLIC SINCE OUR PREDICTION IN 2019, AHEAD OF OUR TRAJECTORY OF ~10 BY 2029

Number of New Public Tech Companies (excl. Telcos) from Southeast Asia with >\$1bn Valuation since 2006

*Cumulative Number*



*In 2019, we predicted that by 2029, SE Asia would have at least 10 more billion-dollar Tech (excl. telco) IPOs*

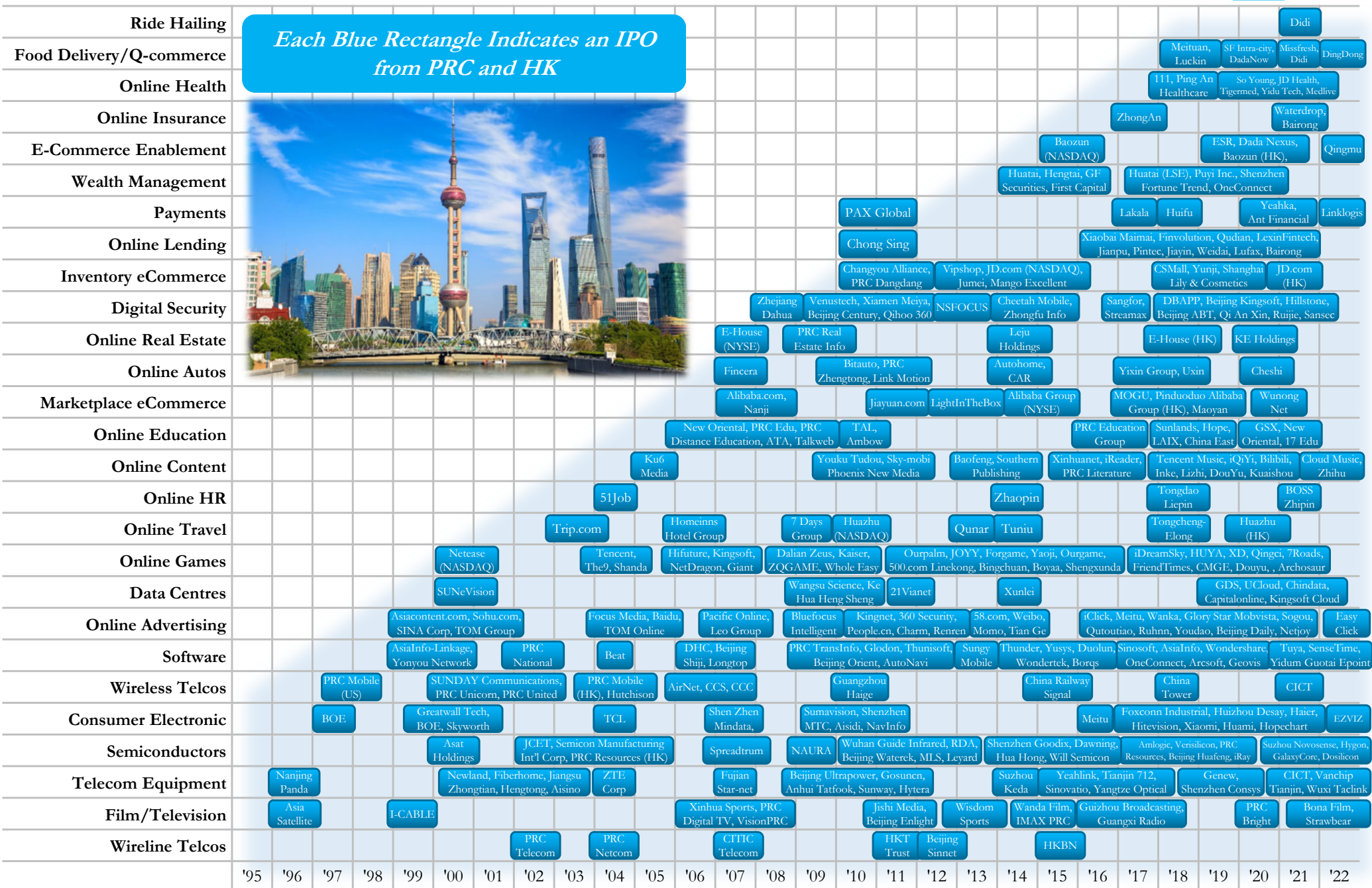
*By the end of 2022, we have already had 7, well ahead of plan*

*The total number of \$1bn+ market cap TMT companies in SE Asia has grown from 9 in 2004 to 28 in 2022, a 3.1x increase*

Source: Bloomberg for Southeast Asian IPO; S&P CapIQ

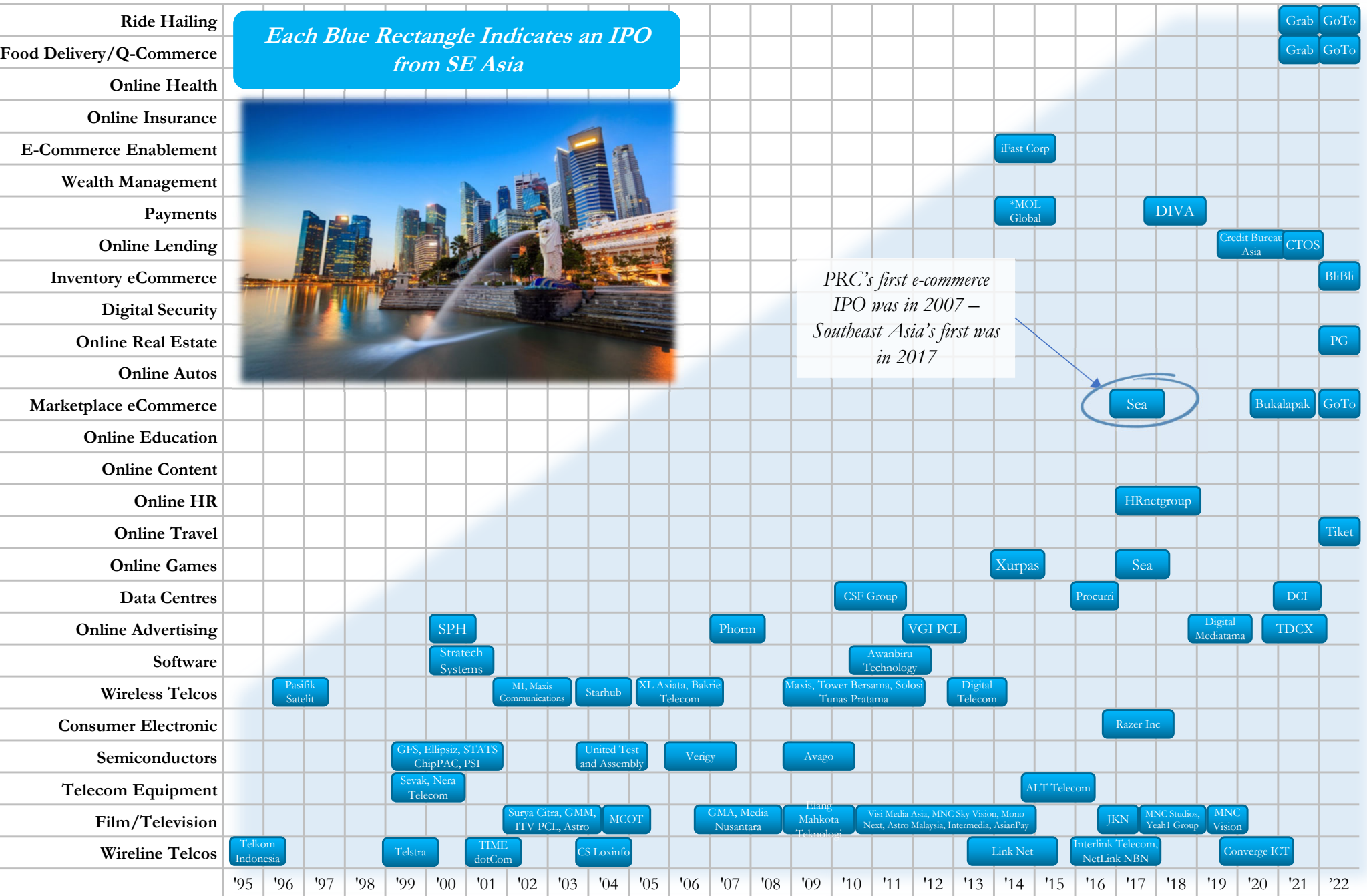
# CHINA'S PAST 25 YEARS OF IPOs ARE A ROADMAP FOR SE ASIA

*Each Blue Rectangle Indicates an IPO from PRC and HK*



Source: Bloomberg for Southeast Asian IPO Dates; S&P CapIQ

# BECAUSE SE ASIA'S IPO ROADMAP IS SHIFTED 10 YEARS IN TIME



Source: Bloomberg for Southeast Asian IPO Dates; S&P CapIQ



# OUR PORTFOLIO DIRECTLY MAPS AGAINST THE 'WHITE SPACE' ON THE PREVIOUS CHART

Ride Hailing						Grab	GoTo		
Food Delivery/Q-Commerce						Grab	GoTo		
Online Health								●	
Online Insurance								●	
E-Commerce Enablement								●	
Wealth Management									
Payments			DIVA						
Online Lending						Credit Bureau Asia	CTOS		
Inventory eCommerce								BliBli	
Digital Security									
Online Real Estate								PG	
Online Autos								●	
Marketplace eCommerce			Sea			Buka	GoTo	●	
Online Education								●	
Online Content									
Online HR			HRnetgroup						
Online Travel								Tiket	●
Online Games			Sea						
Data Centres			Procurri					DCI	
Online Advertising							Digital Mediatama		●
Software									
Wireless Telcos									
Consumer Electronic			Razer Inc						
Semiconductors									
Telecom Equipment									
Film/Television			JKN	MNC Studios, Yeah1 Group				MNC Vision	
Wireline Telcos			Interlink Telecom, NetLink NBN					Converge ICT	
	'16	'17	'18	'19	'20	'21	'22	Future	

**Southeast Asia "omnichannel" health startup Doctor Anywhere gets \$88M SGD**

Doctor Anywhere, a startup that takes an "omnichannel" approach to healthcare, announced today it has raised \$88 million SGD (about \$65.7 million USD) in Series C funding. The round was led by Asia Partners, with participation from Novo Holdings, Philips and OSK-SBI Partners. It also included retail investors EDBI, Square Peg, IHH Healthcare, Kamet Capital and Pavilion Capital.

**SC's Asia Partners leads \$38m funding in e-commerce enabler SCI Ecommerce**

Asia Partners has led an over \$550 million (\$38 million) funding round for SCI Ecommerce, which is planning a Nasdaq listing.

**Used car marketplace Carsome gets \$30 million Series D for its Southeast Asia growth plans**

Carsome, a used car marketplace, announced today it has raised \$30 million in Series D funding. The round was led by Asia Partners, with participation from Falcon Capital, Tiger Global, and others.

**Indonesian B2B marketplace GudangAda raises more than \$100M in new funding**

GudangAda, an Indonesian B2B marketplace, announced today it has raised more than \$100 million in a Series C financing round. The funding was led by Asia Partners and Falcon Capital.

**On-demand tutoring app Snapask gets \$35 million to expand in Southeast Asia**

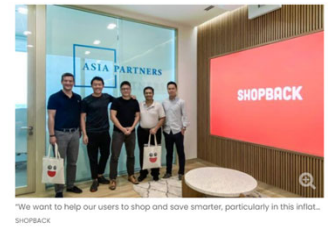
Snapask, an on-demand tutoring app, announced today it has raised \$35 million in Series B funding. The round was led by Asia Partners and Intervest.

**RedDoorz raises \$70M to expand its budget hotel network in Southeast Asia**

RedDoorz, a budget hotel network, announced today it has raised \$70 million in a Series C financing round. The funding was led by Asia Partners and saw participation from Asia Growth Fund.

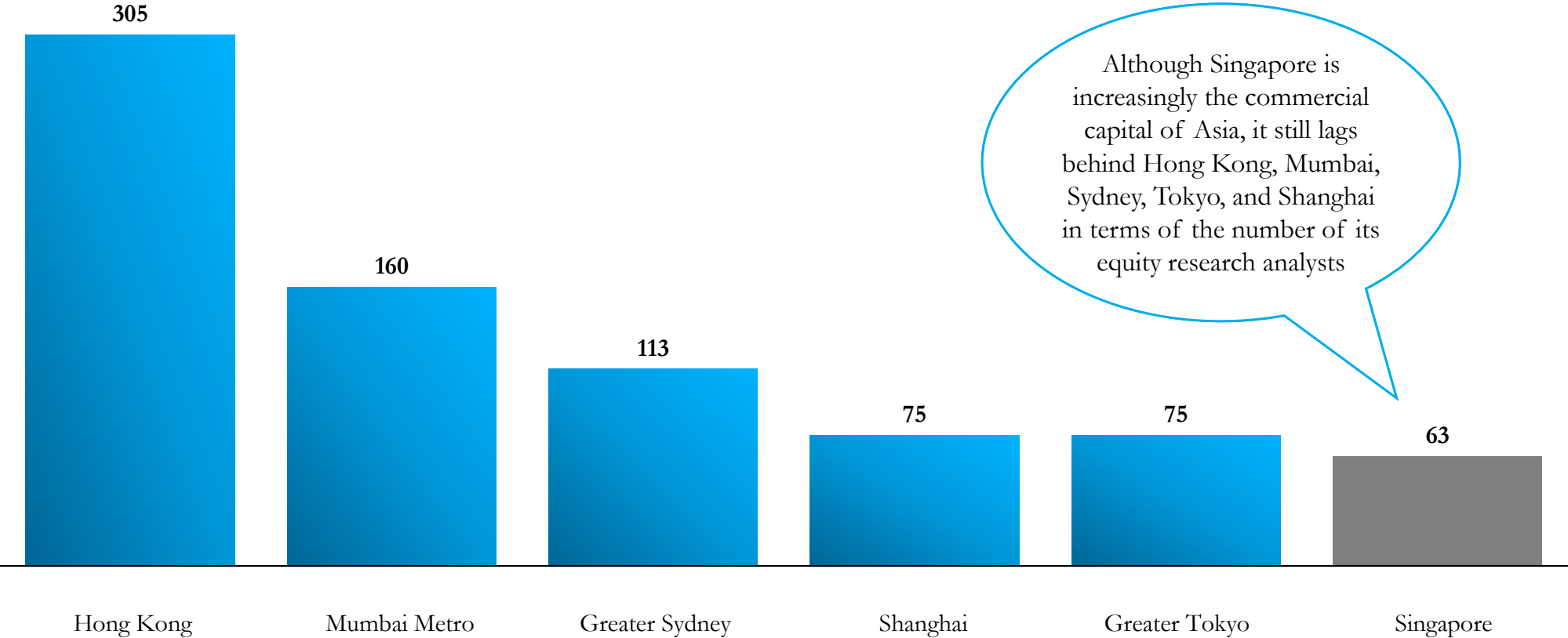
**Temasek-backed ShopBack raises US\$80m led by Asia Partners**

ShopBack, a Temasek-backed digital coupon platform, announced today it has raised US\$80 million in Series D funding. The round was led by Asia Partners.



# DESPITE THE POTENTIAL TO CREATE MORE PUBLIC COMPANIES, THERE IS A CHALLENGE: A SHORTAGE OF RESEARCH ANALYSTS

Number of Sell-Side Equity Research Analysts at Major Investment Banks<sup>1</sup> by City, All Sectors



(1) Includes J.P. Morgan, Goldman Sachs, BofA, Morgan Stanley, Citibank, UBS, Credit Suisse, Deutsche Bank, HSBC, Barclays, RBC, Wells Fargo, Jefferies, BNP Paribas, Mizuho, Lazard, Nomura, MUFG, Evercore, BMO, Cowen, CLSA  
Source: LinkedIn (January 2023), Asia Partners Analysis

# ACCOUNTABILITY: ACTUALS VS. FORECAST

- 1 Southeast Asia is entering a golden age of rising affluence that has been associated with large tech company formation in PRC, Korea, and Japan in the past ✓
  - 2 The region's opportunities and unique complexity creates true home court advantage for local platforms ✓
  - 3 We predict 20+ more billion-dollar value tech companies from Southeast Asia by 2029
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  - 5 New and existing tech companies in Southeast Asia will create an additional \$400 billion of incremental equity value by 2029
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  - 8 While the Series A/B ecosystem has strengthened, there is an acute Series C/D gap in the market for \$20-100 million checks; Southeast Asia is ready for growth equity
- Ahead:**  
7 new tech IPO since 2019
- Slightly Behind:**  
15% of the way there

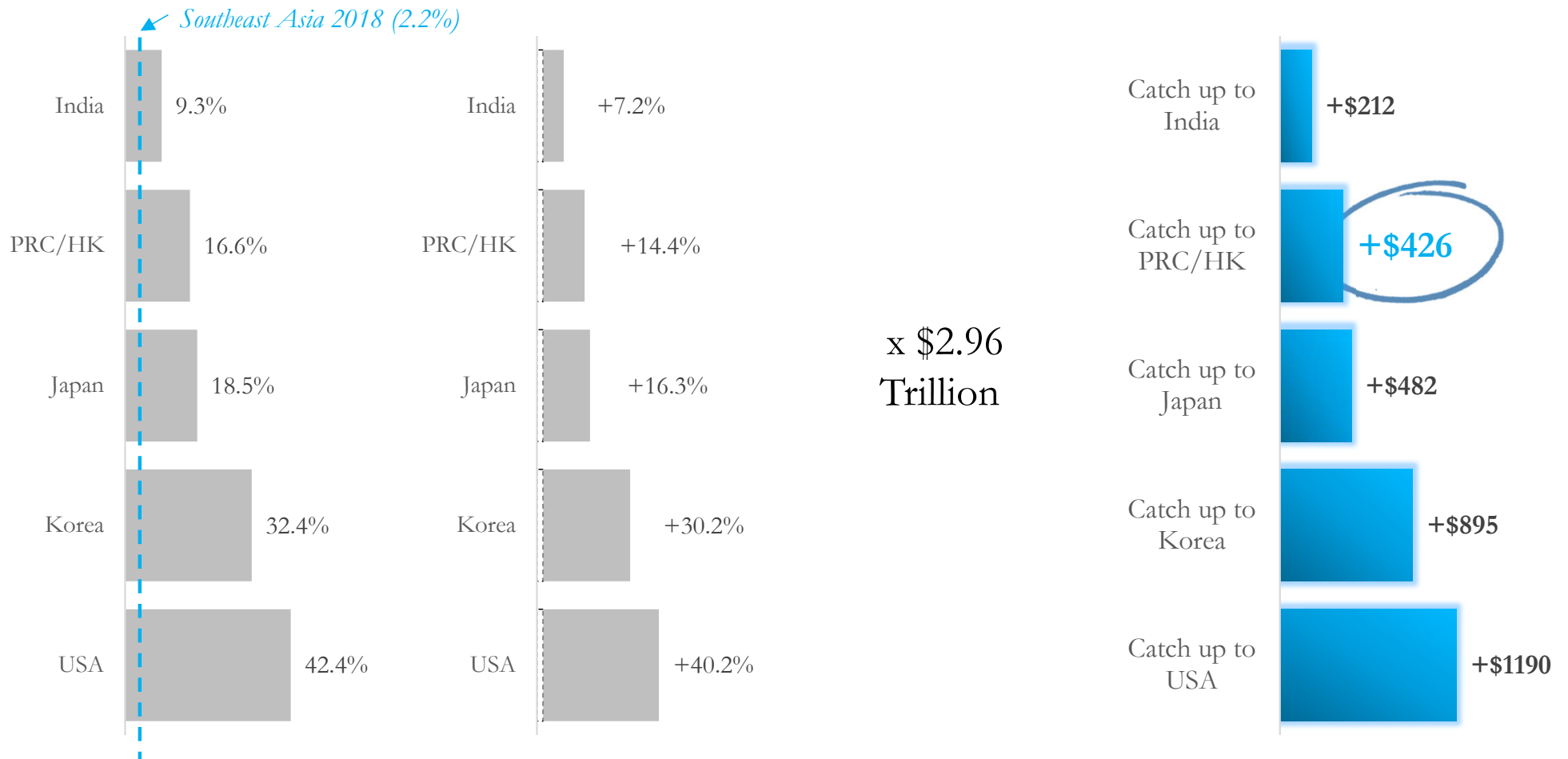
# PREVIOUS FORECAST: IN 2019 WE PREDICTED ~US\$425B MORE TECH MARKET CAP IN SE ASIA FROM 2019 TO 2029

**2018 Tech Market Cap  
Relative to GDP**  
*(Percent, Excluding Telcos)*

**Delta versus  
Southeast Asia**  
*(Percent of GDP)*

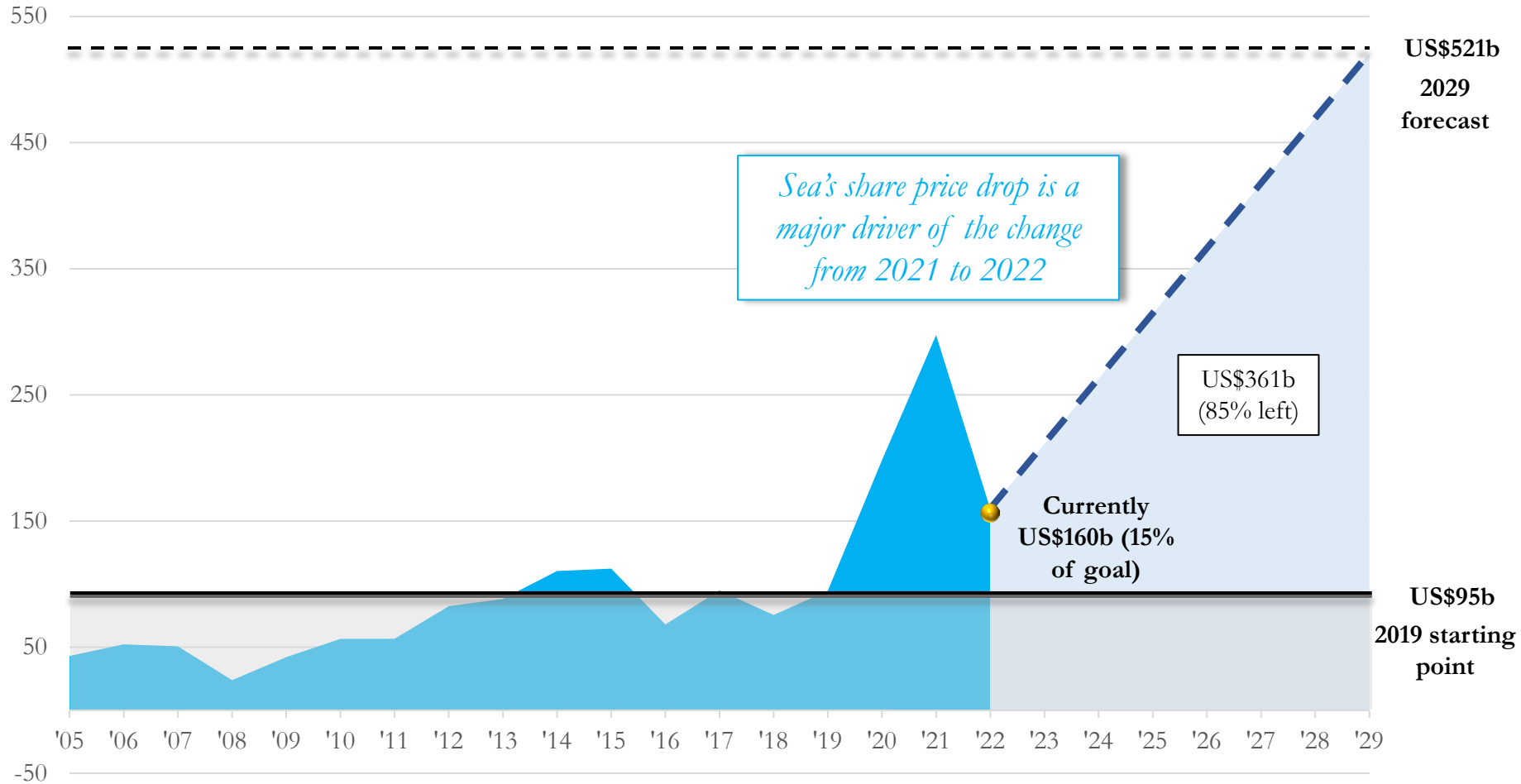
**Multiplied by:**  
**2018 SE Asia GDP**  
*(US\$t)*

**= Incremental Value  
Creation Potential**  
*(US\$b)*



# AFTER BEING AHEAD OF SCHEDULE IN LATE '21, WE ARE NOW SLIGHTLY BEHIND SCHEDULE IN DEC '22, WITH 7 YEARS TO GO

Total Southeast Asia Tech Market Cap, Excluding Telcos (US\$b)



Source: Bloomberg, Asia Partners Analysis  
 Note: Data as of December 2022



# ACCOUNTABILITY: ACTUALS VS. FORECAST

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- Ahead:**  
7 new tech IPO since 2019
- Slightly Behind:**  
15% of the way there

# REGIONAL NUANCE: THE SOUTHEAST ASIA CHESSBOARD

*Indonesia's strength is its domestic market*

Country	GDP US\$B	Population Millions	Relevant Technical Talent <sup>(a)</sup> Thousands	Number of Sizable IPOs Since 2016 <sup>(b)</sup>	Historical Examples of Scaling Across Southeast Asia
Indonesia	\$1,389	277	High	12	Medium
Thailand	\$581	70	Fewer	43	Medium
Malaysia	\$467	34	Medium	13	High
Singapore	\$447	5	High	33	High
Philippines	\$426	113	Medium	16	Medium
Vietnam	\$470	100	Medium-High	8	Medium

*Singapore and Malaysia's strength is their regional scalability*

(a) Number of LinkedIn profiles with Python or JavaScript as skills and Programmer, Developer, Software Developer, Web Developer, Software Engineer, or Java Engineer as Job Titles, November 2020 search; (b) Number of \$100M or larger IPOs from Country on any exchange from 2016 through December 2022.

Sources: IMF (2023 Forecasts), Bloomberg, LinkedIn, AP Assessment

# TWO FREQUENT STRATEGIES WE SEE IN THE MARKET... AND A THIRD EMERGING STRATEGY

Country	GDP <i>US\$b</i>	Population <i>Millions</i>	Relevant Technical Talent <sup>(a)</sup> <i>Thousands</i>	Number of Sizable IPOs Since 2016 <sup>(b)</sup>	Historical Examples of Scaling Across Southeast Asia
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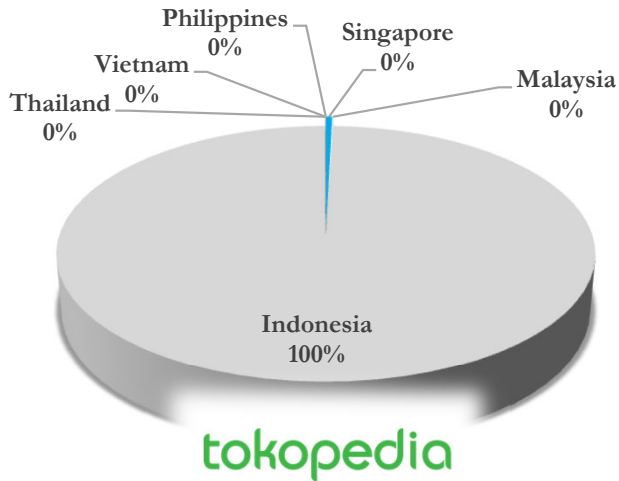
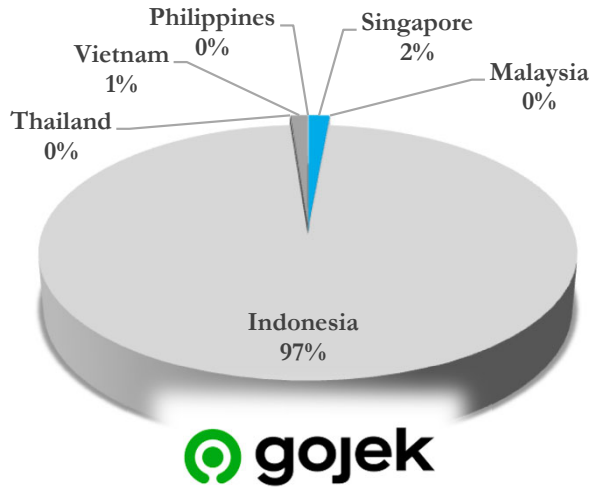
(a) Number of LinkedIn profiles with Python or JavaScript as skills and Programmer, Developer, Software Developer, Web Developer, Software Engineer, or Java Engineer as Job Titles, November 2020 search; (b) Number of \$100M or larger IPOs from Country on any exchange from 2016 through December 2022.

Sources: IMF (2023 Forecasts), Bloomberg, LinkedIn, AP Assessment

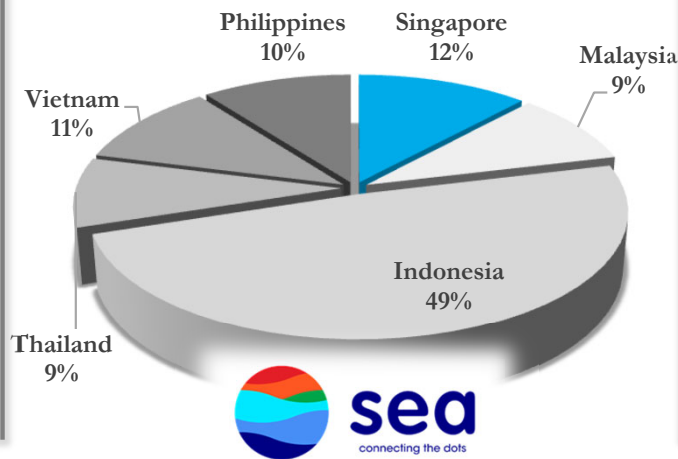
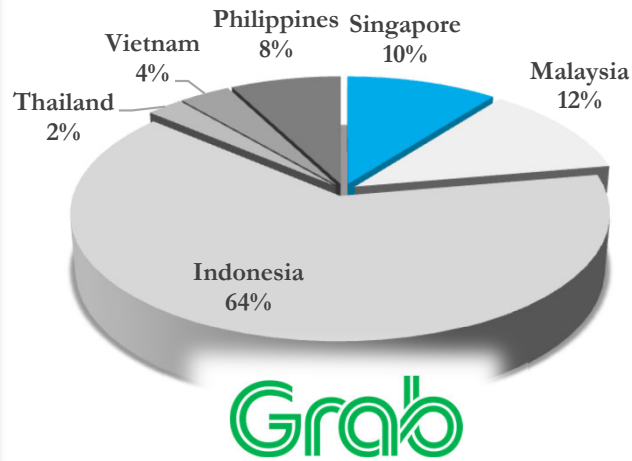
# 'STRATEGY 1' AND 'STRATEGY 2' IN PRACTICE

Current Southeast Asia employee mix listed on LinkedIn for each respective Company

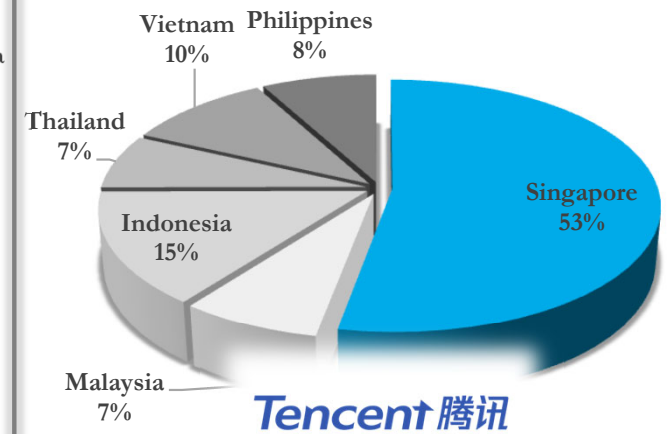
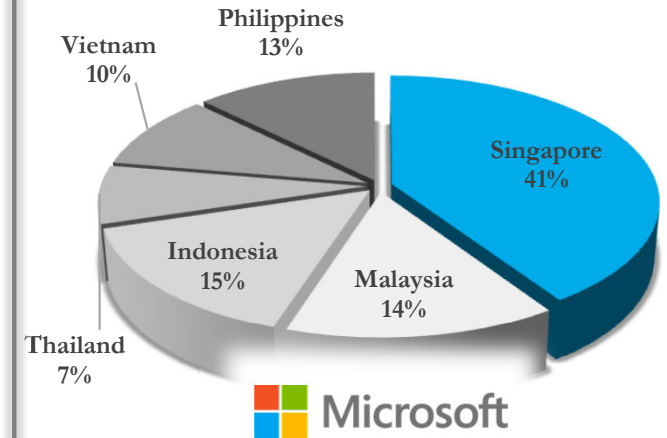
## 'STRATEGY 1'



## 'STRATEGY 2'

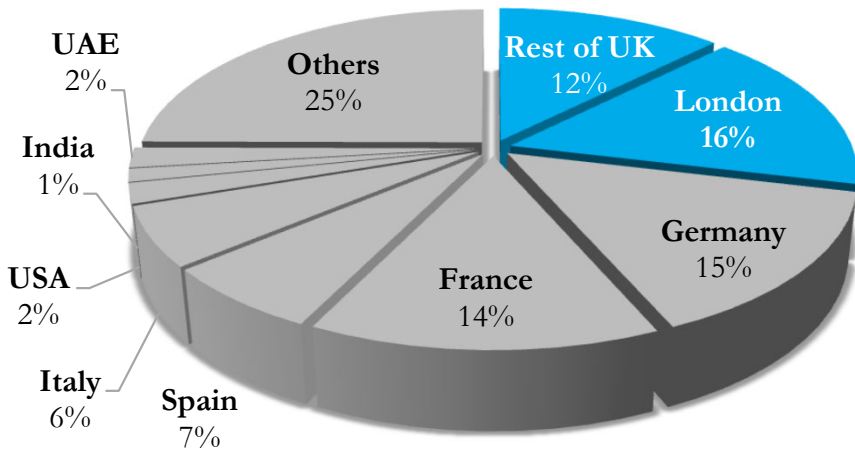


## LOCAL SUBS OF INT'L FIRMS

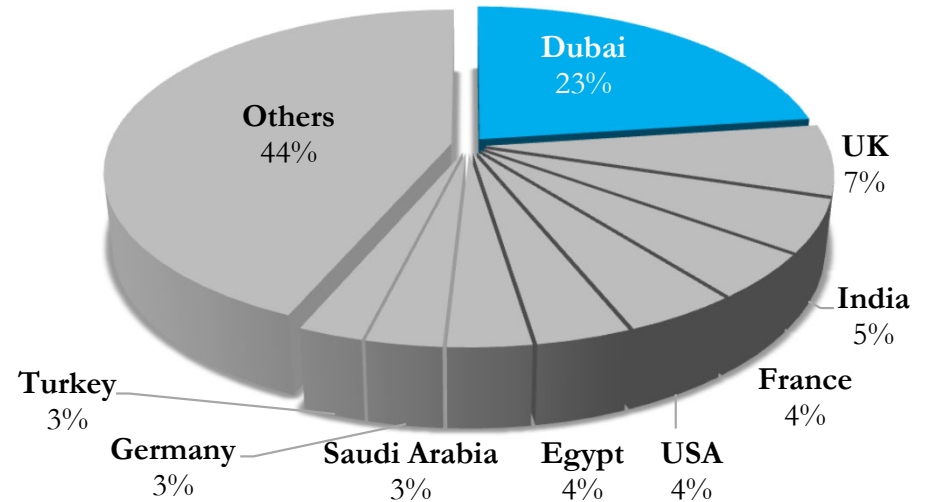


# REGIONS OF THE WORLD WITH MANY COUNTRIES OFTEN SELECT A DE-FACTO COMMERCIAL CAPITAL

Country of Residence for all LinkedIn Profiles with an either an 'Europe', 'European Union', or 'EMEA' in title (% of Global Total)



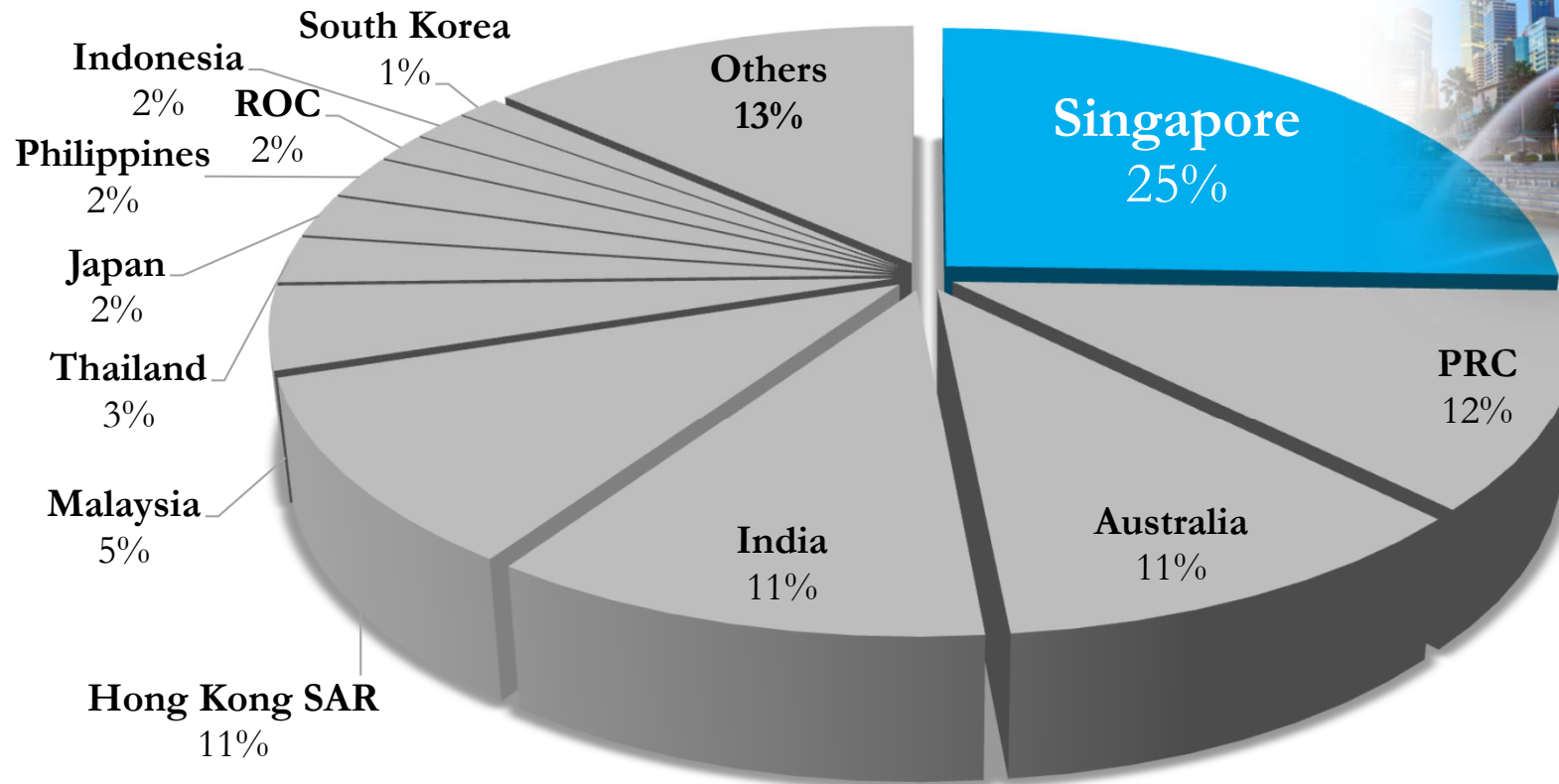
Country of Residence for all LinkedIn Profiles with an either an 'Middle East', 'MENA', 'Middle East and North Africa', 'Middle East North Africa', 'GCC' or 'Gulf Cooperation Council' in title (% of Global Total)



~29% of all Europe-wide roles sit in the UK, ~23% of all MENA-wide roles sit in Dubai

# THE SAME DYNAMIC IS MANIFESTING IN SOUTHEAST ASIA, AND ARGUABLY ASIA, WITH SINGAPORE AS THE COMMERCIAL CAPITAL

*Country of Residence for all LinkedIn Profiles with an either an 'Asia Pacific', 'Asia', or 'APAC' in title (% of Global Total)*

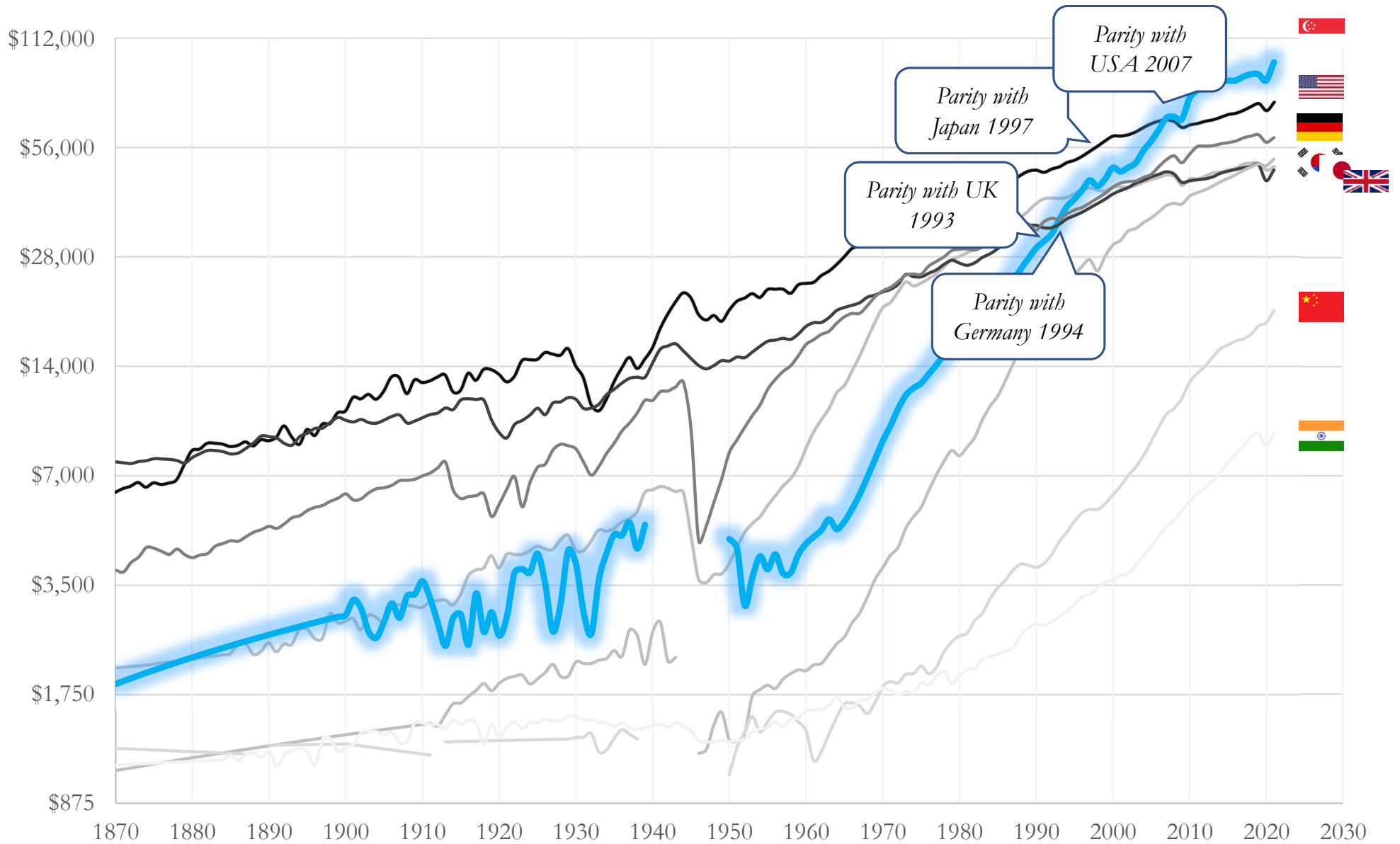


*~25% of all Asia-wide roles sit in Singapore, more than double the proportion of that in PRC or Hong Kong*



# SINGAPORE IS AN OVERNIGHT SUCCESS 100 YEARS IN THE MAKING

*Per Capita GDP in Inflation Adjusted Current U.S. Dollars, Log Scale*



Sources: World Bank, Angus Maddison, Robert Schiller

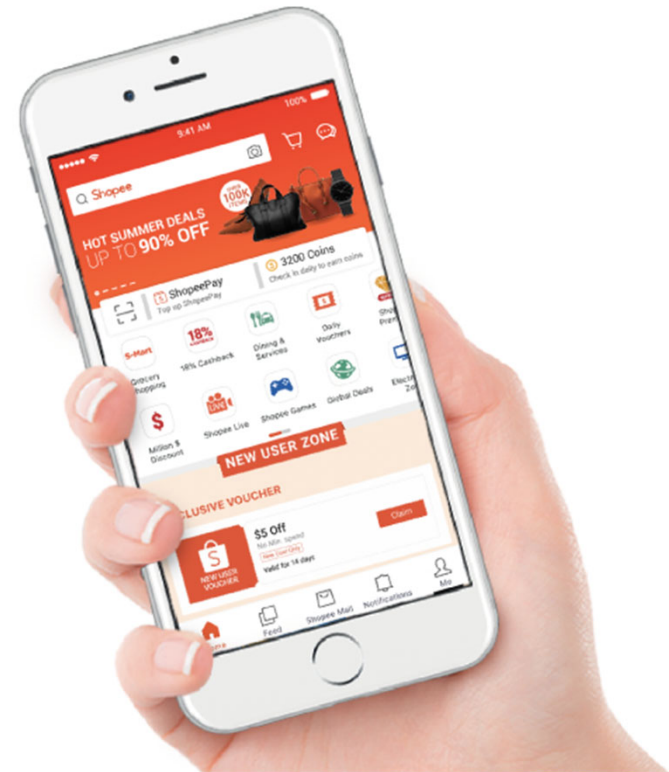
# SINGAPORE'S SUCCESS STEMS, IN PART, FROM CONSTANT RE-INVENTION ALONG THE VALUE CHAIN

From Manufacturing...

...to branded Internet services

*During the growth years of personal computers, Singapore produced 45-50% of the world's hard drives from 1986-96*

*Singapore is now home to a new generation of consumer internet platforms*



*Source: The Dynamics of HDD Industry Development in Singapore (Poh- Kam Wong, 1999)*

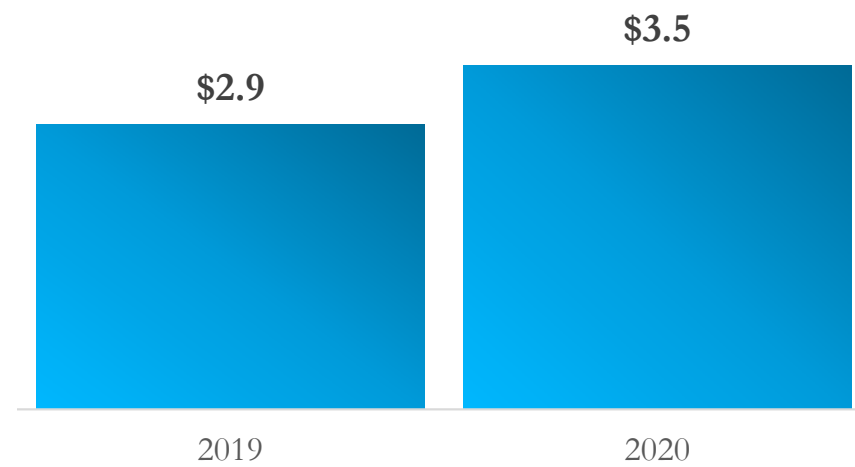
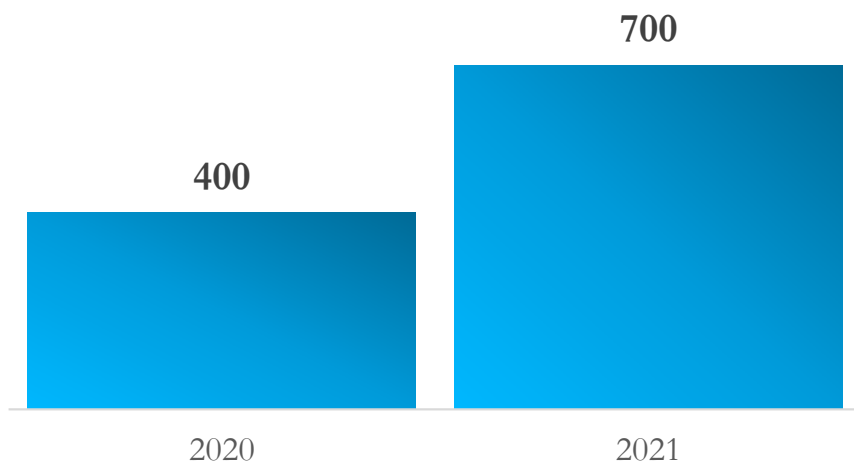


# AND IN PARALLEL, SINGAPORE IS BECOMING A MAJOR HUB FOR GLOBAL FAMILY OFFICES



Single Family Offices in Singapore

AUM in Singapore (\$US Trillion)











































Source: Monetary Authority of Singapore (MAS) estimates for number of SFOs; Singapore Management University for AUM

# ACCOUNTABILITY: ACTUALS VS. FORECAST

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- Ahead:**  
7 new tech IPO since 2019
- Slightly Behind:**  
15% of the way there

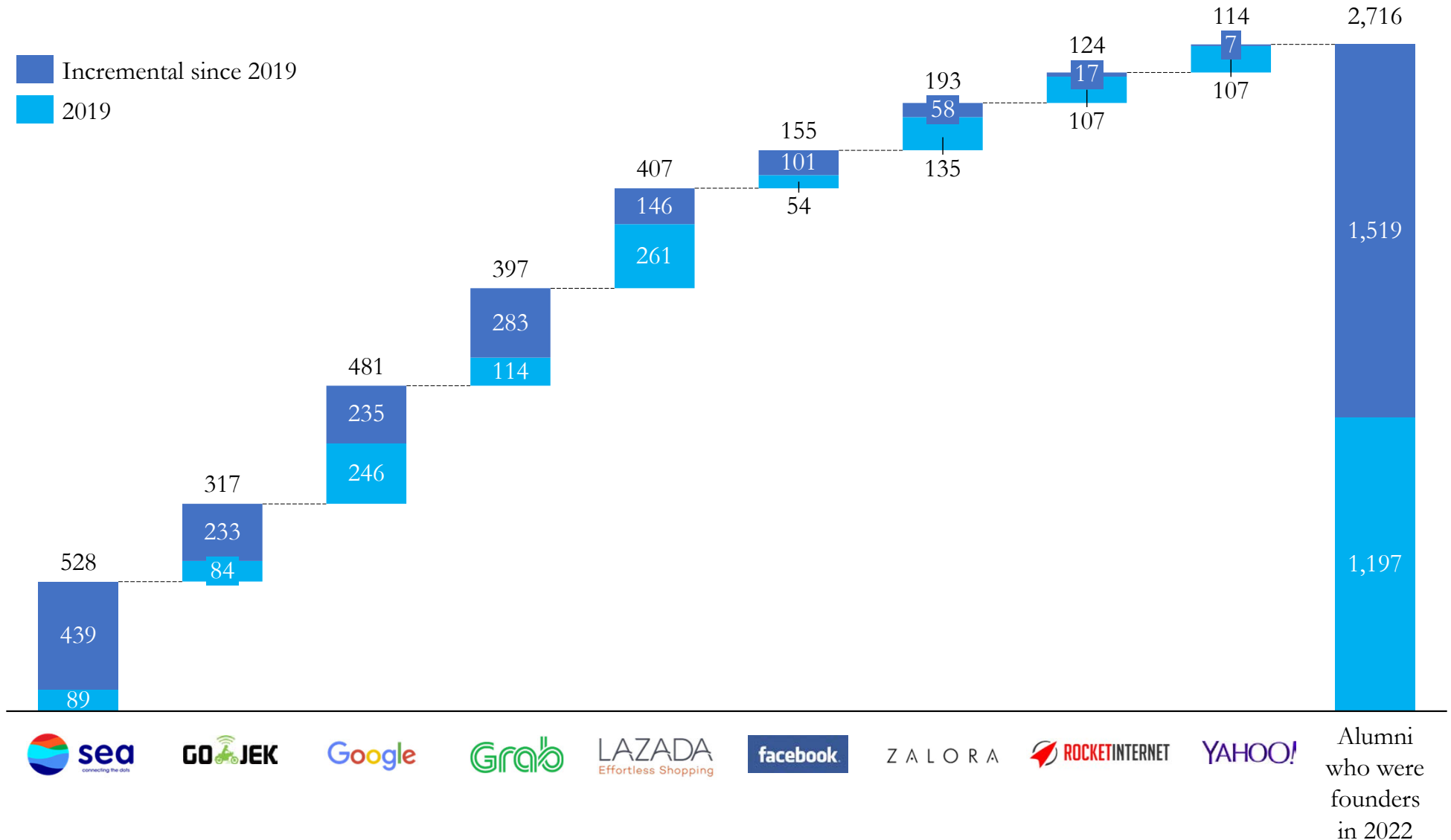
# BACK IN 2019, WE IDENTIFIED ‘ACADEMY’ COMPANIES WHOSE ALUMNI PRODUCED 1,197 FOUNDERS IN THE REGION



	‘Academy’ Companies	Alumni in SE Asia (2019)	Of Which: Founders of Companies (2019) <i>(Regardless of Company Size)</i>
	 facebook	 983	 54
	 Garena	 757	 21
	 GOJEK	 2,924	 84
	 Google	 3,625	 246
	 Grab	 4,862	 114
	 LAZADA <i>Effortless Shopping</i>	 6,548	 261
	 ROCKETINTERNET	 771	 107
	 Shopee	 3,281	 68
	 YAHOO!	 1,236	 107
	 Z A L O R A	 3,227	 135

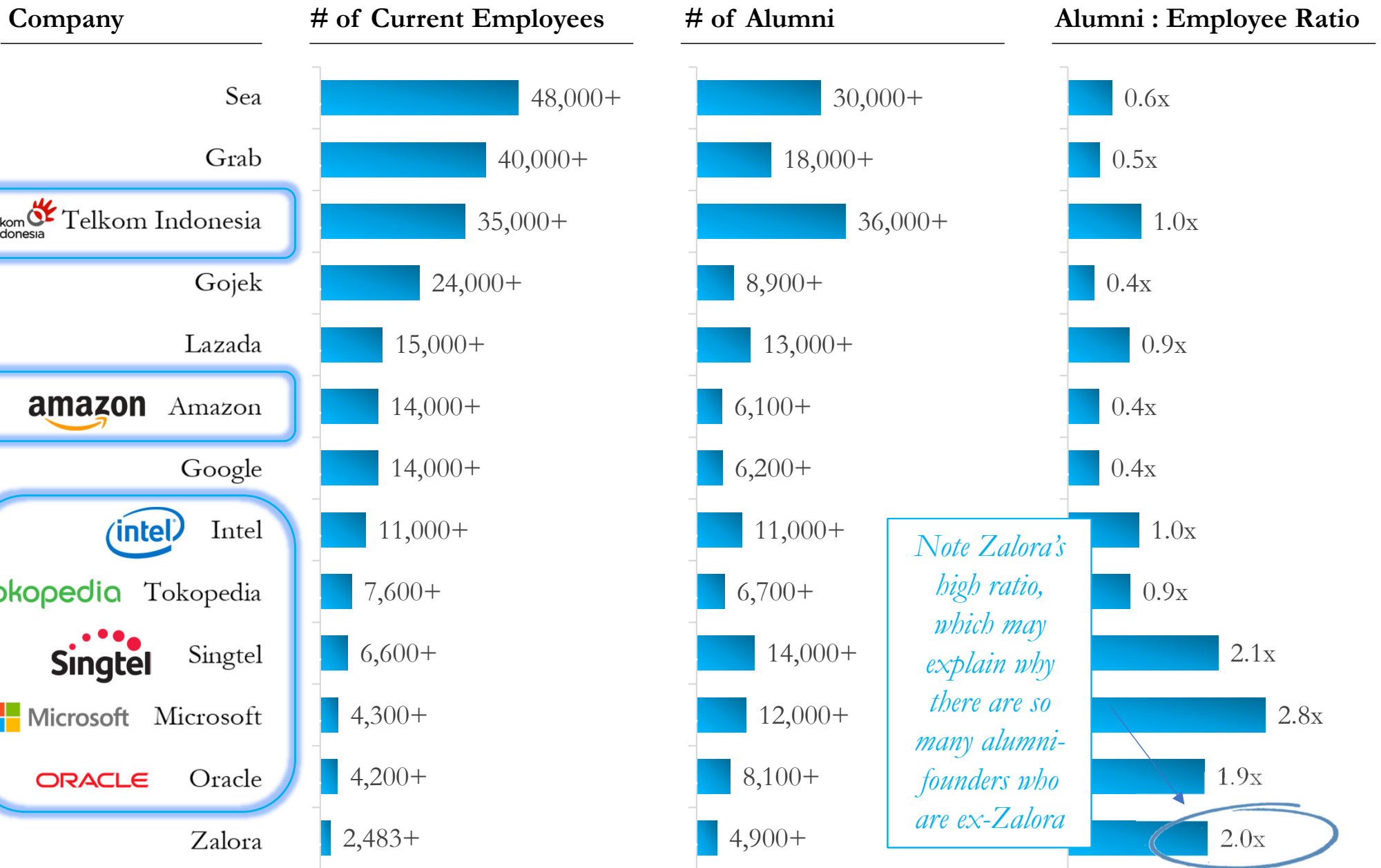
# HERE ARE THOSE SAME COMPANIES TODAY IN TERMS OF THEIR ALUMNI WHO ARE FOUNDERS OR CEOs OF COMPANIES IN SE ASIA

No. of Alumni from Facebook, Sea, Gojek, Google, Grab, Lazada, Rocket Internet, Yahoo!, and Zalora who are founders, co-founders, and CEOs (2019 versus 2022)



Source: LinkedIn as of December 2022, Asia Partners Analysis  
 Note: 2019 only looked at Founders

# AND BEYOND OUR 2019 EXAMPLES, THERE ARE MANY ADDITIONAL COMPANIES RECYCLING TALENT INTO THE ECOSYSTEM



*Note Zalora's high ratio, which may explain why there are so many alumni-founders who are ex-Zalora*

**ZALORA**



# AND OUT OF THOSE NEW COMPANIES IDENTIFIED, THEIR ALUMNI HAVE ADDED ALMOST 3,000 FOUNDERS OR CEOs INTO THE REGION

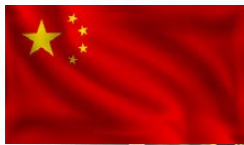


	'Academy' Companies	Alumni in SE Asia	Of Which: Founders, Co-Founders, and CEOs in Southeast Asia
	Telkom Indonesia	36,000+	902
	amazon	6,100+	203
	intel	11,000+	263
	tokopedia	6,700+	186
	Singtel	14,000+	290
	Microsoft	12,000+	714
	ORACLE	8,100+	395

# IN PARALLEL, THERE ARE NOW OVER 500+ FOUNDERS / CEOs FROM TOP CHINA UNIVERSITIES IN SOUTHEAST ASIA, 68% LOCATED IN SINGAPORE...

Talent in Southeast Asia Tech from Top 55 Universities in China

13,000+

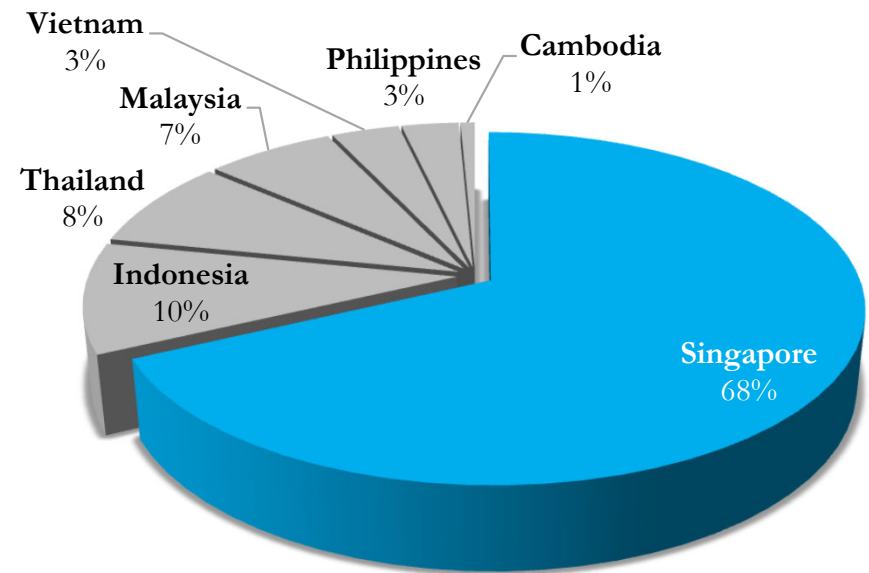


Of which: Co-Founders, Founders or CEOs  
*(Regardless of Company Size)*



557

Country of Residence for Co-Founders, Founders or CEOs from Top Universities in China  
*(% of Total)*



Source: LinkedIn as of January 2023, Asia Partners Analysis

Note: Screening of CEOs on LinkedIn includes the following filters – ‘Chief Executive Officer’, ‘Deputy Chief Executive Officer’, ‘Group Chief Executive Officer’, ‘Interim Chief Executive Officer’, ‘Principal Chief Executive Officer’, ‘Assistant Chief Executive’, ‘Acting Chief Executive Officer’, ‘Vice Chief Executive Officer’, ‘Joint Chief Executive Officer’

# THE NUMBER OF TALENTS FROM CHINA WHO ARE LEADING COMPANIES IN SOUTHEAST ASIA'S TECH INDUSTRY IS GROWING BY THE WEEK

*Number of Founders, Co-Founders, and CEOs in Southeast Asia's Tech Industry Who Studied at China's Top 55 Universities*



Source: LinkedIn as of January 15, 2023

Note: Screening of CEOs on LinkedIn includes the following filters – ‘Chief Executive Officer’, ‘Deputy Chief Executive Officer’, ‘Group Chief Executive Officer’, ‘Interim Chief Executive Officer’, ‘Principal Chief Executive Officer’, ‘Assistant Chief Executive’, ‘Acting Chief Executive Officer’, ‘Vice Chief Executive Officer’, ‘Joint Chief Executive Officer’



# IN PARALLEL, THERE ARE OVER 490 FOUNDERS / CEOs FROM INDIA'S TOP UNIVERSITIES NOW IN SOUTHEAST ASIA, 78% LOCATED IN SINGAPORE...

Talent in Southeast Asia Tech from Top Universities in India

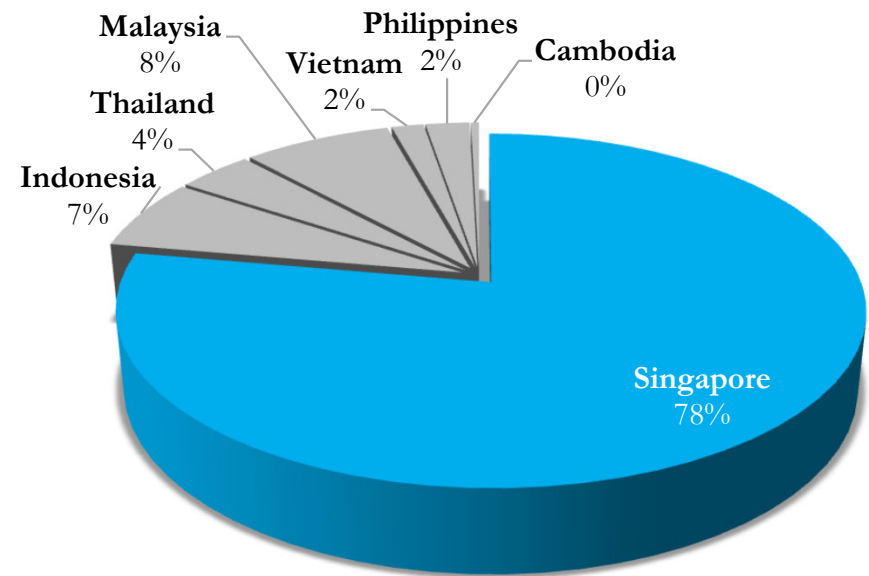
9,600+



Of which: Co-Founders, Founders or CEOs  
*(Regardless of Company Size)*

490

Country of Residence for Co-Founders, Founders or CEOs from Top Universities in India  
*(% of Total)*



Source: LinkedIn as of January 2023, Asia Partners Analysis

Note: Screening of CEOs on LinkedIn includes the following filters – ‘Chief Executive Officer’, ‘Deputy Chief Executive Officer’, ‘Group Chief Executive Officer’, ‘Interim Chief Executive Officer’, ‘Principal Chief Executive Officer’, ‘Assistant Chief Executive’, ‘Acting Chief Executive Officer’, ‘Vice Chief Executive Officer’, ‘Joint Chief Executive Officer’

# AND OVER 240 FOUNDERS / CEOs FROM KOREA'S TOP UNIVERSITIES IN SOUTHEAST ASIA, 38% LOCATED IN SINGAPORE AND 20% IN INDONESIA

Talent in Southeast Asia Tech from Top Universities in Korea

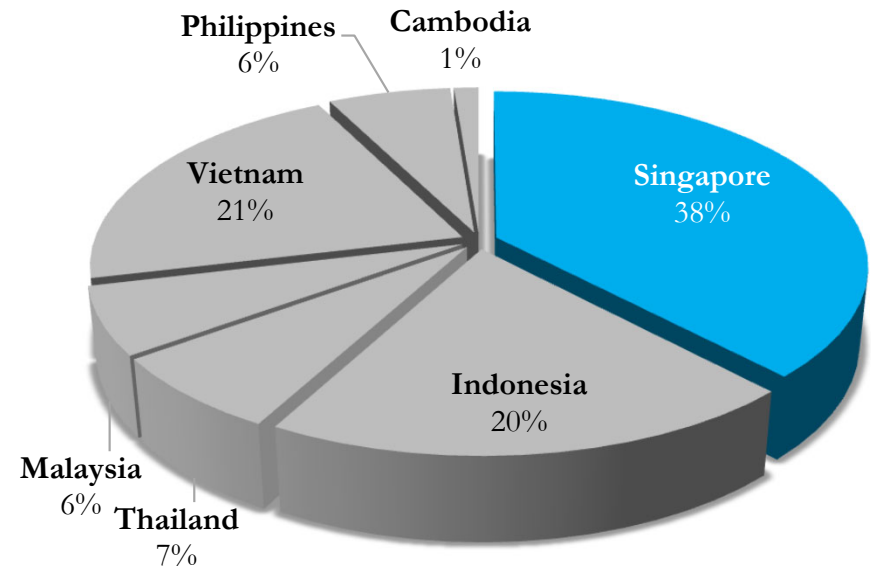
6,200+



Of which: Co-Founders, Founders or CEOs  
*(Regardless of Company Size)*

 240

Country of Residence for Co-Founders, Founders or CEOs from Top Universities in Korea  
*(% of Total)*



Source: LinkedIn as of January 2023, Asia Partners Analysis

Note: Screening of CEOs on LinkedIn includes the following filters – ‘Chief Executive Officer’, ‘Deputy Chief Executive Officer’, ‘Group Chief Executive Officer’, ‘Interim Chief Executive Officer’, ‘Principal Chief Executive Officer’, ‘Assistant Chief Executive’, ‘Acting Chief Executive Officer’, ‘Vice Chief Executive Officer’, ‘Joint Chief Executive Officer’

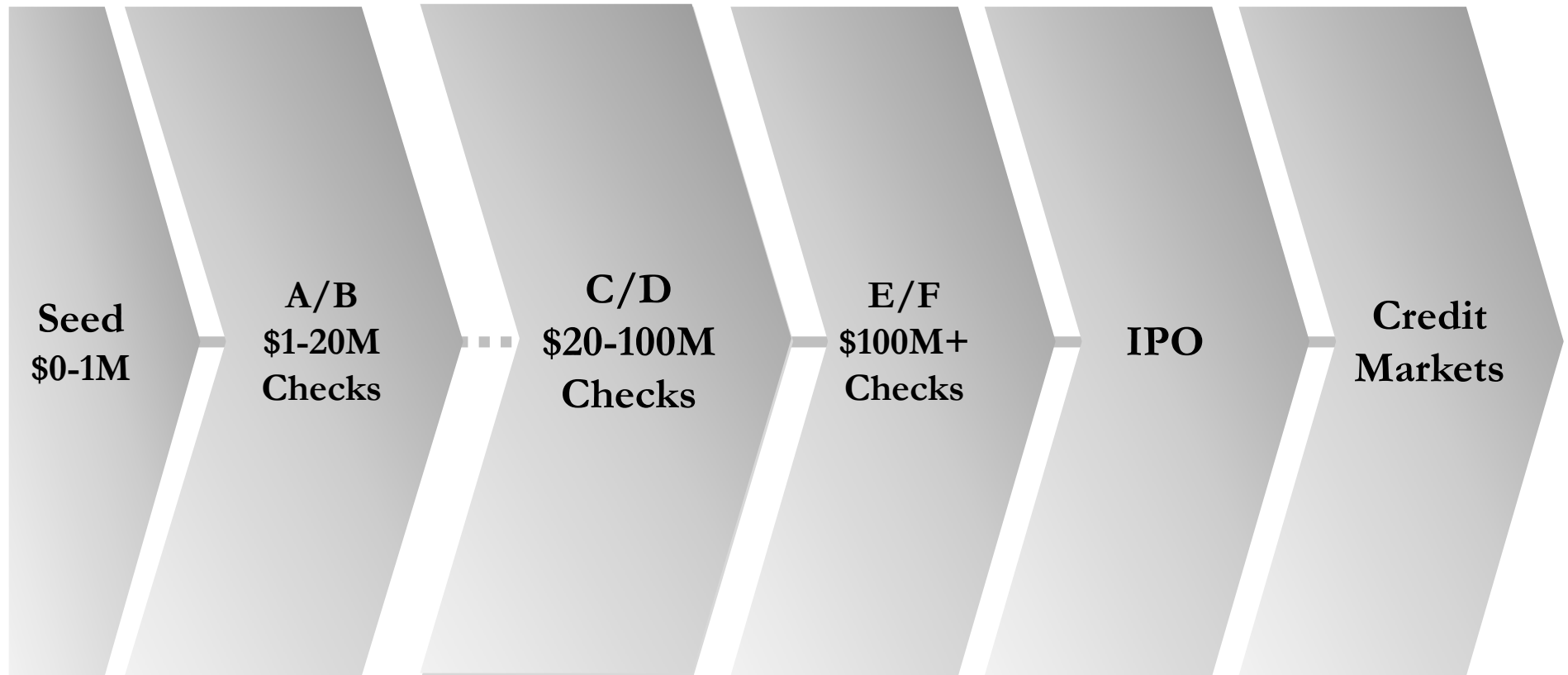
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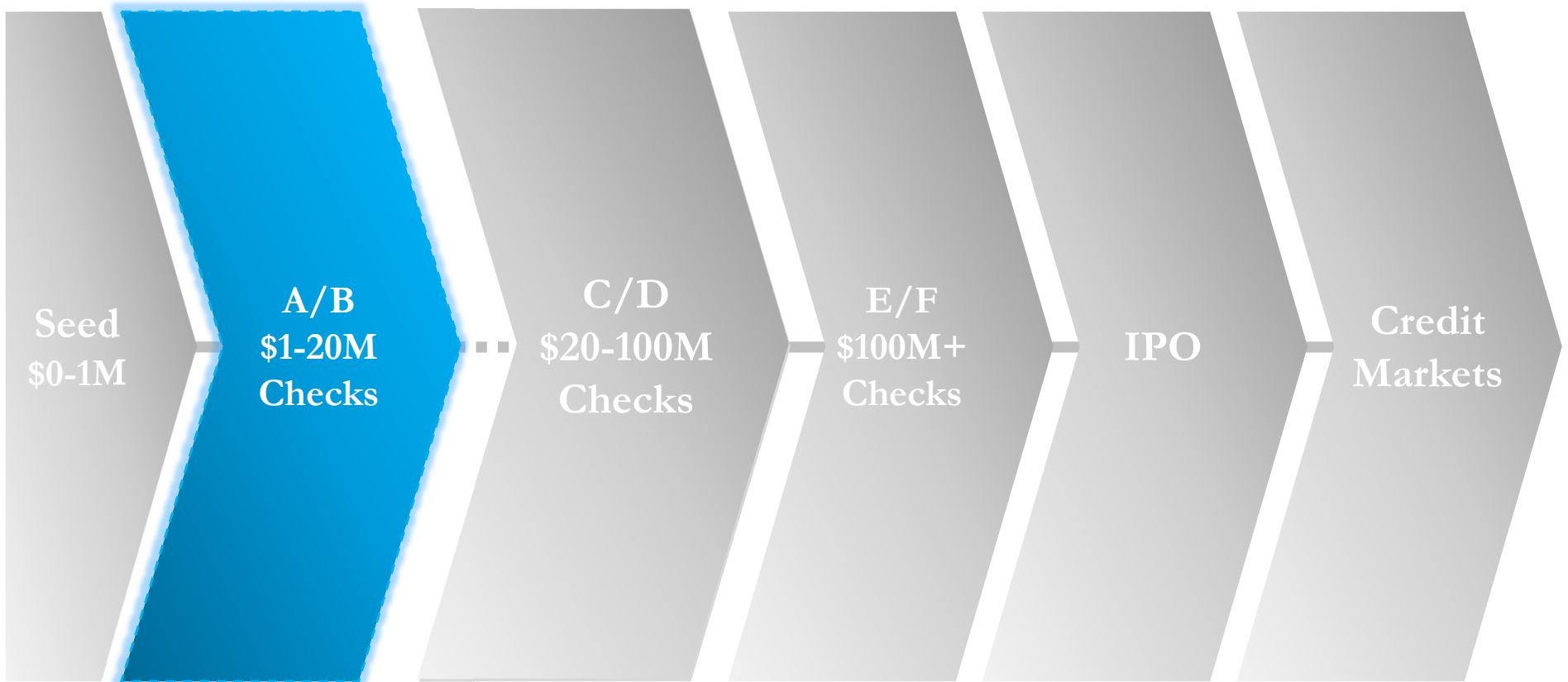
**Ahead:**  
7 new tech IPO  
since 2019

**Slightly Behind:**  
15% of the way  
there

# CAPITAL STAGE SEGMENTATION IN OUR MARKET

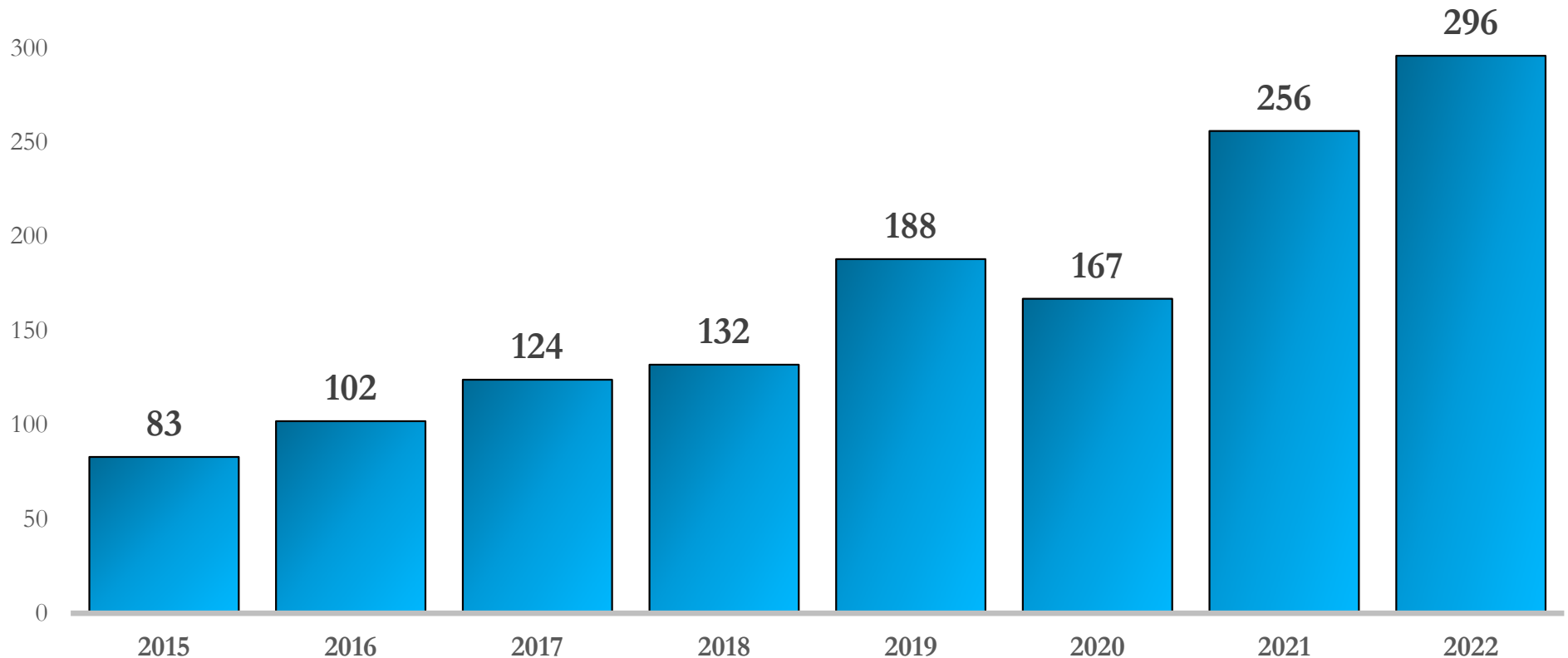


# FIRST LOOKING AT SERIES A/B \$1-20M CHECK SIZE...



# ROBUST AND GROWING UPSTREAM OPPORTUNITY SET GENERATED BY SERIES A/B INVESTORS IN SOUTHEAST ASIA

*Number of Upstream \$1-20M Round Size Technology or Technology-Related Investments in Southeast Asia*

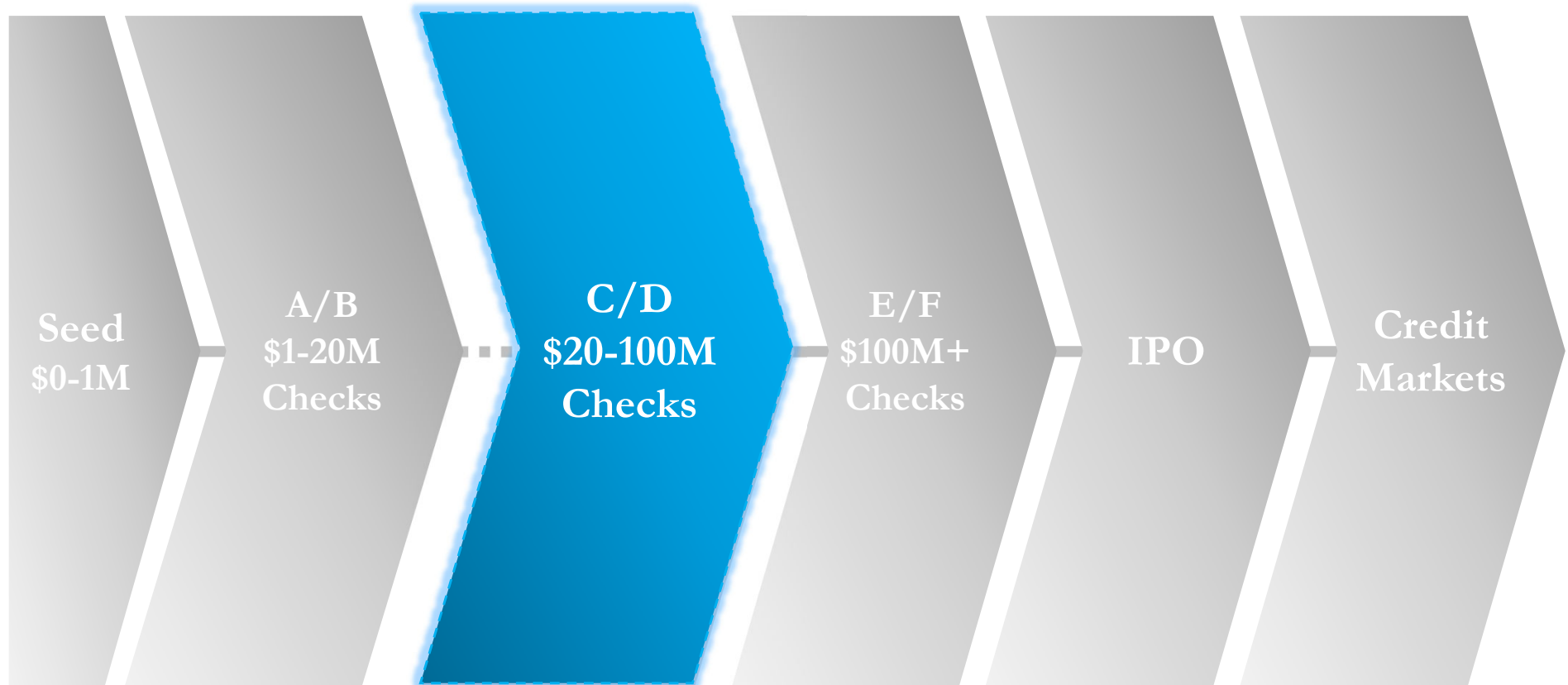


Over 900 upstream deals since 2019

*Source: AVCJ Southeast Asia Data, Asia Partners Analysis*

*Note: Includes technology and technology-related businesses, data as of December 31<sup>st</sup>, 2022*

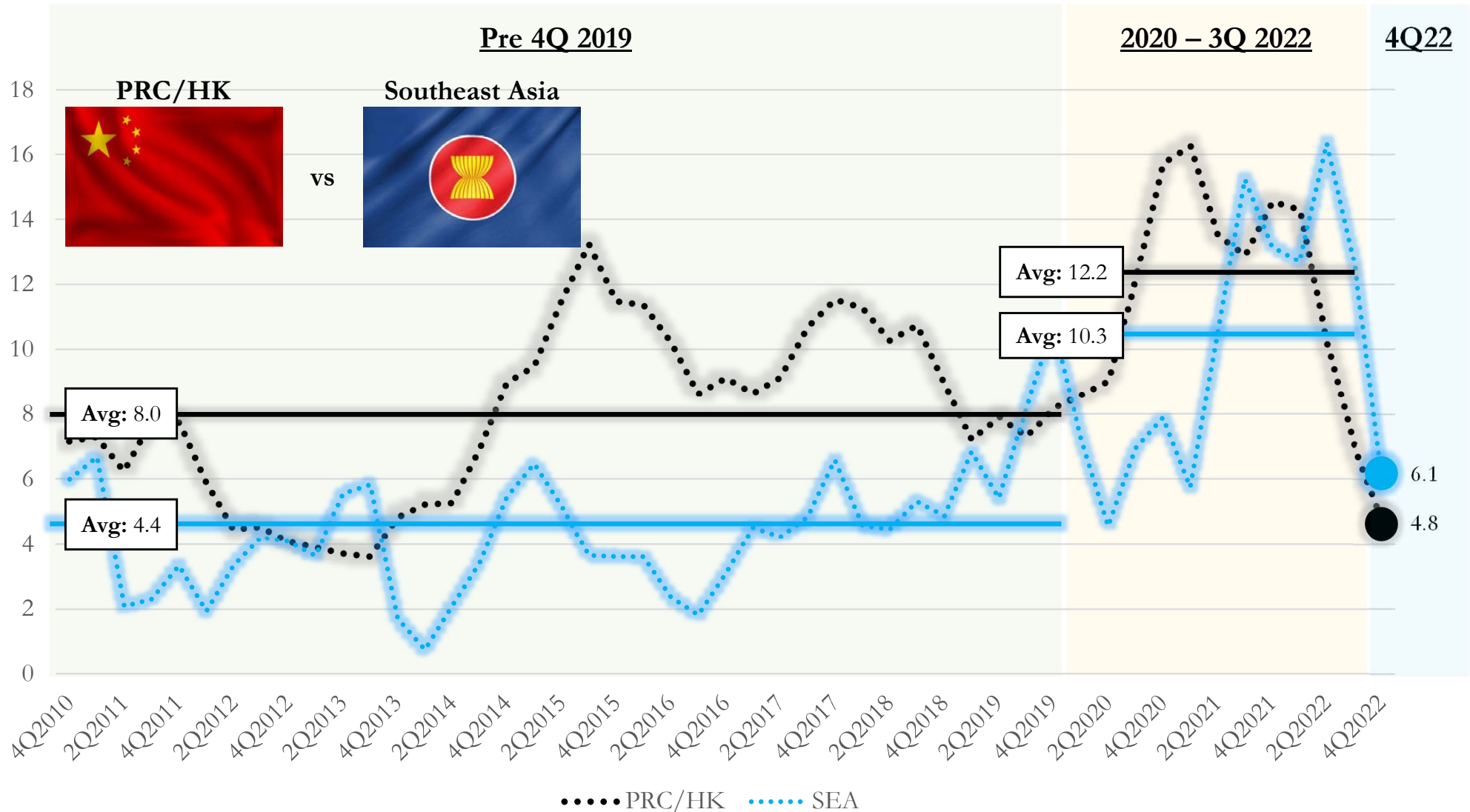
# NOW ZOOMING INTO THE SERIES C/D \$20-100M CHECK SIZE...





# SE ASIA WAS NOT IMMUNE FROM THE GLOBAL BUBBLE IN EQUITY MARKETS IN 2H '21; GOING FORWARD, COMPARISONS TO CHINA MAY BE HARDER TO DRAW

Dollar Value of US\$20-100M Deals Funded as a % of Nominal GDP by Quarter (bps)



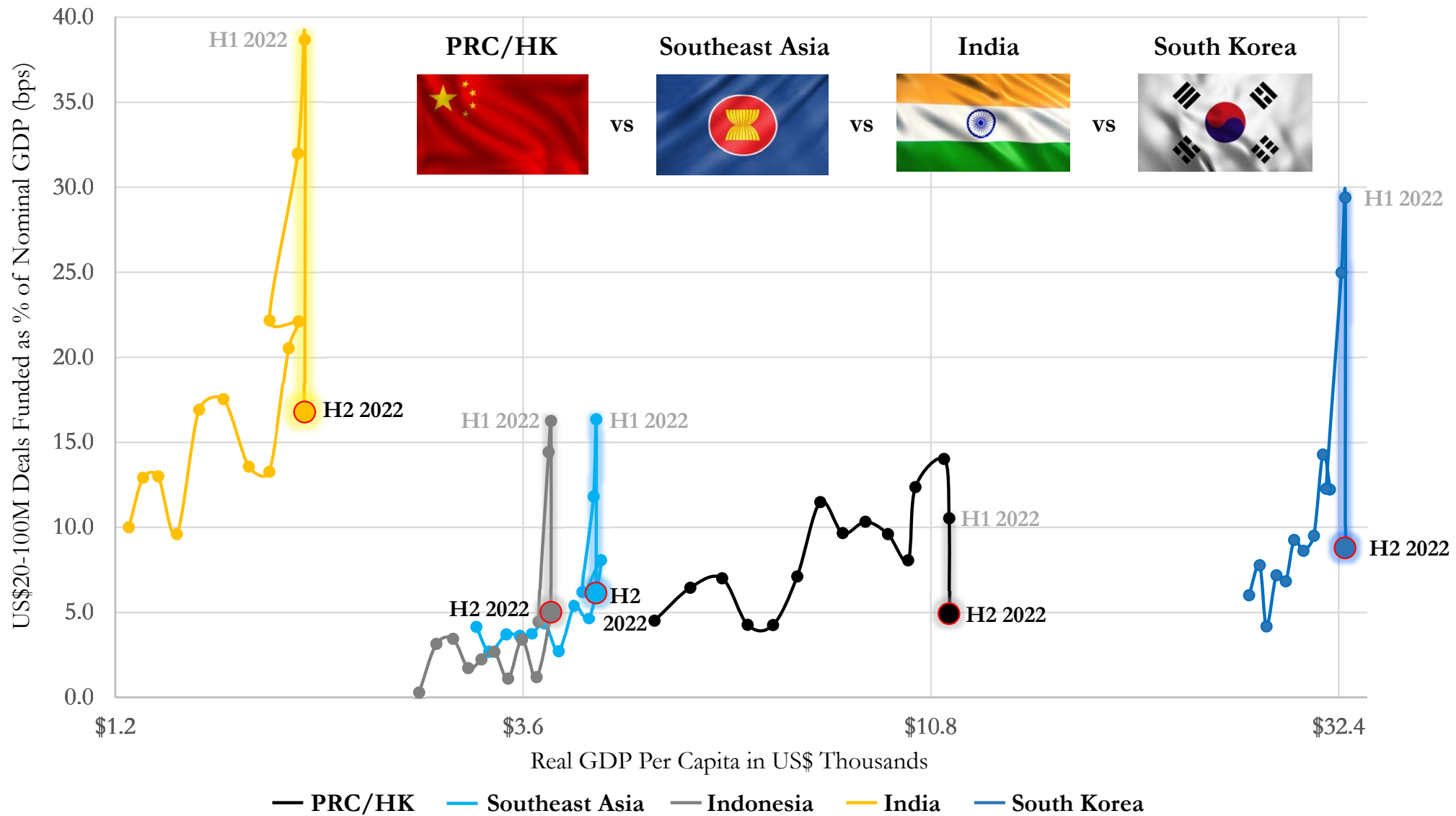
Source: AVCJ, Asia Partners Analysis; includes technology and technology-related businesses

Note: Updated as of December 31<sup>st</sup>, 2022, Data shown is trailing last 2 quarters rolling average



# THERE IS A GENTLE CORRELATION BETWEEN AFFLUENCE AND GROWTH EQUITY SUPPLY WITH INDIA ARGUABLY OVERSUPPLIED

Value of US\$20-100M Deals Funded as a % of Nominal GDP by Year (bps) vs. Real GDP Per Capita



Source: AVCJ, Asia Partners Analysis; includes technology and technology-related businesses

Note: Updated as of December 31<sup>st</sup>, 2022, GDP Per Capita at Constant 2015 Prices

# To understand the under or over supply of capital in Southeast Asia, we look at:

1

Benchmarking  
SE Asia to  
China and  
India

2

'Strategy 1' vs.  
'Strategy 2'

3

























Stage of  
Capital

4

Full Year 2022  
vs. Q4 2022

# UNDER-SUPPLY VS. OVER-SUPPLY RELATIVE TO CHINA

LTM as of Q4 2022 – Green = Good for Investors, Red = Good for Entrepreneurs

























<u>All of Southeast Asia</u>	<u>Strategy 1</u>	<u>Strategy 2</u>
 <p>SE Asia</p> <p><b>\$1-20M Checks</b></p> 	 <p>HQ: Indonesia</p> <p><b>\$1-20M Checks</b></p> 	 <p>HQ: SG, MY, VN,TH, PH</p> <p><b>\$1-20M Checks</b></p> 
 <p>SE Asia</p> <p><b>\$20-50M Checks</b></p> 	 <p>HQ: Indonesia</p> <p><b>\$20-50M Checks</b></p> 	 <p>HQ: SG, MY, VN,TH, PH</p> <p><b>\$20-50M Checks</b></p> 
 <p>SE Asia</p> <p><b>\$50-100M Checks</b></p> 	 <p>HQ: Indonesia</p> <p><b>\$50-100M Checks</b></p> 	 <p>HQ: SG, MY, VN,TH, PH</p> <p><b>\$50-100M Checks</b></p> 
 <p>SE Asia</p> <p><b>\$100M+ Checks</b></p> 	 <p>HQ: Indonesia</p> <p><b>\$100M+ Checks</b></p> 	 <p>HQ: SG, MY, VN,TH, PH</p> <p><b>\$100M+ Checks</b></p> 

Source: AVCJ, Asia Partners Analysis; includes technology and technology-related businesses

Note: Updated as of December 31<sup>st</sup>, 2022, China data is for P5Y

# UNDER-SUPPLY VS. OVER-SUPPLY RELATIVE TO CHINA

Q4 2022 Annualized – Green = Good for Investors, Red = Good for Entrepreneurs

























<u>All of Southeast Asia</u>	<u>Strategy 1</u>	<u>Strategy 2</u>
 <p>SE Asia</p> <p><b>\$1-20M Checks</b></p> 	 <p>HQ: Indonesia</p> <p><b>\$1-20M Checks</b></p> 	 <p>HQ: SG, MY, VN,TH, PH</p> <p><b>\$1-20M Checks</b></p> 
 <p>SE Asia</p> <p><b>\$20-50M Checks</b></p> 	 <p>HQ: Indonesia</p> <p><b>\$20-50M Checks</b></p> 	 <p>HQ: SG, MY, VN,TH, PH</p> <p><b>\$20-50M Checks</b></p> 
 <p>SE Asia</p> <p><b>\$50-100M Checks</b></p> 	 <p>HQ: Indonesia</p> <p><b>\$50-100M Checks</b></p> 	 <p>HQ: SG, MY, VN,TH, PH</p> <p><b>\$50-100M Checks</b></p> 
 <p>SE Asia</p> <p><b>\$100M+ Checks</b></p> 	 <p>HQ: Indonesia</p> <p><b>\$100M+ Checks</b></p> 	 <p>HQ: SG, MY, VN,TH, PH</p> <p><b>\$100M+ Checks</b></p> 

Source: AVCJ, Asia Partners Analysis; includes technology and technology-related businesses

Note: Updated as of December 31<sup>st</sup>, 2022, China data is for P5Y

# UNDER-SUPPLY VS. OVER-SUPPLY RELATIVE TO INDIA

LTM as of Q4 2022 – Green = Good for Investors, Red = Good for Entrepreneurs

























<u>All of Southeast Asia</u>	<u>Strategy 1</u>	<u>Strategy 2</u>
 <p>SE Asia</p> <p><b>\$1-20M Checks</b></p> 	 <p>HQ: Indonesia</p> <p><b>\$1-20M Checks</b></p> 	 <p>HQ: SG, MY, VN,TH, PH</p> <p><b>\$1-20M Checks</b></p> 
 <p>SE Asia</p> <p><b>\$20-50M Checks</b></p> 	 <p>HQ: Indonesia</p> <p><b>\$20-50M Checks</b></p> 	 <p>HQ: SG, MY, VN,TH, PH</p> <p><b>\$20-50M Checks</b></p> 
 <p>SE Asia</p> <p><b>\$50-100M Checks</b></p> 	 <p>HQ: Indonesia</p> <p><b>\$50-100M Checks</b></p> 	 <p>HQ: SG, MY, VN,TH, PH</p> <p><b>\$50-100M Checks</b></p> 
 <p>SE Asia</p> <p><b>\$100M+ Checks</b></p> 	 <p>HQ: Indonesia</p> <p><b>\$100M+ Checks</b></p> 	 <p>HQ: SG, MY, VN,TH, PH</p> <p><b>\$100M+ Checks</b></p> 

Source: AVCJ, Asia Partners Analysis; includes technology and technology-related businesses

Note: Updated as of December 31<sup>st</sup>, 2022, India data is for P5Y

# UNDER-SUPPLY VS. OVER-SUPPLY RELATIVE TO INDIA

Q4 2022 Annualized – Green = Good for Investors, Red = Good for Entrepreneurs

<u>All of Southeast Asia</u>	<u>Strategy 1</u>	<u>Strategy 2</u>
 <p>SE Asia</p> <p><b>\$1-20M Checks</b></p> 	 <p>HQ: Indonesia</p> <p><b>\$1-20M Checks</b></p> 	 <p>HQ: SG, MY, VN,TH, PH</p> <p><b>\$1-20M Checks</b></p> 
 <p>SE Asia</p> <p><b>\$20-50M Checks</b></p> 	 <p>HQ: Indonesia</p> <p><b>\$20-50M Checks</b></p> 	 <p>HQ: SG, MY, VN,TH, PH</p> <p><b>\$20-50M Checks</b></p> 
 <p>SE Asia</p> <p><b>\$50-100M Checks</b></p> 	 <p>HQ: Indonesia</p> <p><b>\$50-100M Checks</b></p> 	 <p>HQ: SG, MY, VN,TH, PH</p> <p><b>\$50-100M Checks</b></p> 
 <p>SE Asia</p> <p><b>\$100M+ Checks</b></p> 	 <p>HQ: Indonesia</p> <p><b>\$100M+ Checks</b></p> 	 <p>HQ: SG, MY, VN,TH, PH</p> <p><b>\$100M+ Checks</b></p> 

Source: AVCJ, Asia Partners Analysis; includes technology and technology-related businesses

Note: Updated as of December 31<sup>st</sup>, 2022, India data is for P5Y

*Southeast Asia's Moment*

**The Case for Southeast Asia in a Global Portfolio**

*Plan vs. Actual*

**Revisiting Our Predictions from 2019**

*You are What You Eat*

**Talent Flows in Southeast Asia's Innovation Ecosystem**

*The Elephant in the Room*

**Where Are We in the Macro Cycle? When will IPOs Return?**

*Around the World in 47 Charts*

**Where and When Does GDP Growth Actually Lead to Value Creation?**

*To Each Their Own*

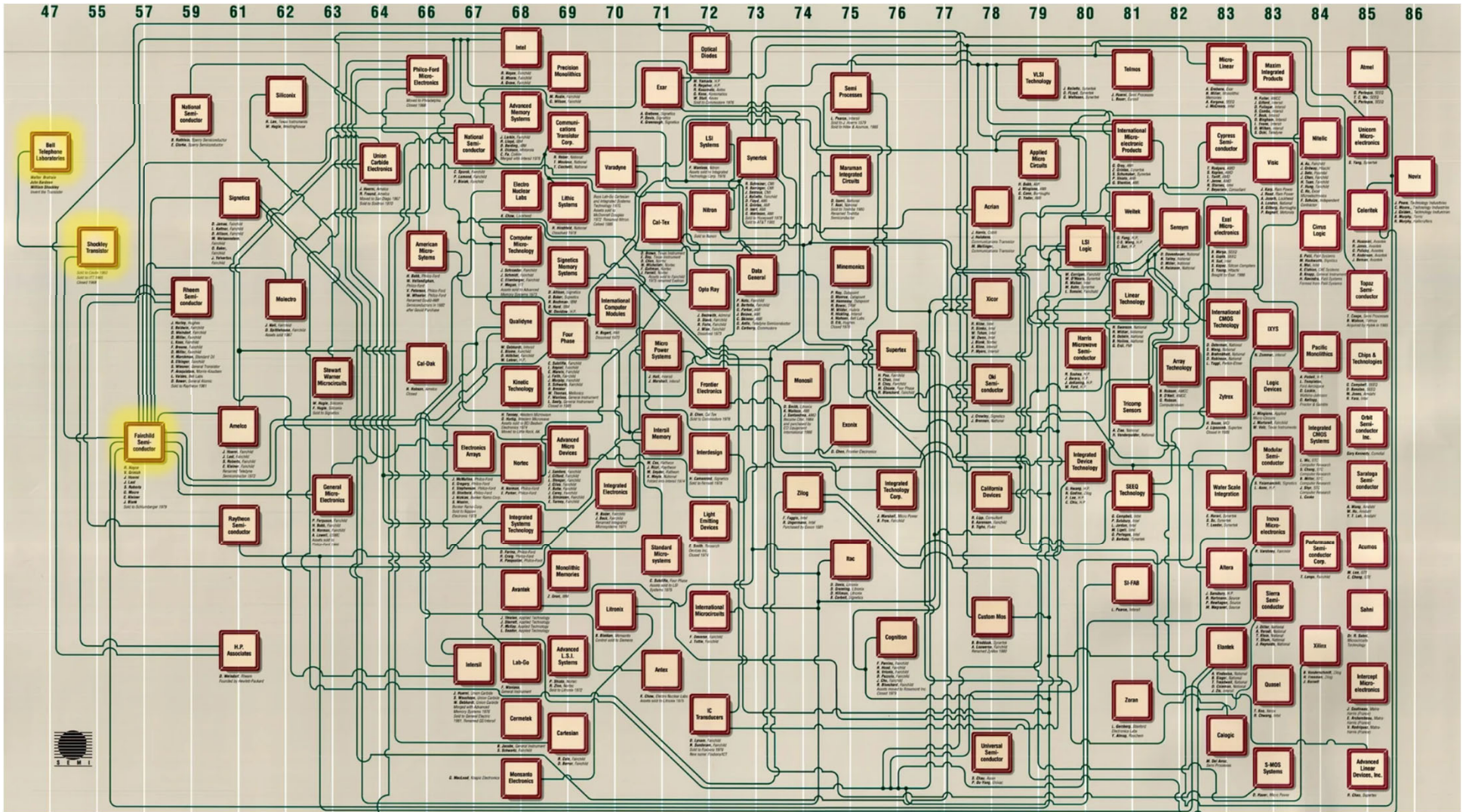
**Regional Specialization in Building TMT Equity Value**

*A Few Final Thoughts for the 2020s-2030s*



# INDUSTRIAL ECOSYSTEMS ARE OFTEN ANCHORED AROUND 'FAMILY TREES' OF COMPANIES

*Descendants of Bell Labs, Shockley Semiconductor, and Fairchild Semiconductor in Silicon Valley*



Source: Silicon Valley Genealogy Chart by Don Hoefler and Jack Yelverton, 1986, SEMI Posters

# SOMETHING SIMILAR IS HAPPENING IN SOUTHEAST ASIA, WITH MULTIPLE EQUIVALENTS OF THE 'PAYPAL MAFIA' FORMING

*Example of the 'Zalora Mafia' Across Southeast Asia*



HENRY CHAN AND JOEL LEONG



*Both overlapped at Zalora in 2013 before co-founding ShopBack in 2014*



NADIEM MAKARIM



*Co-founded predecessor of Gojeks in 2010, then rejoined from Zalora in 2012, app launched in 2015, went public 2022*



DIONE SONG



*With Zalora from 2012-2016, now CEO of omnichannel retailer Love, Bonito*



CHRIS FENG



*Joined Sea Ltd. from Zalora in 2014, founded Shopee within Sea in 2015, now largest e-commerce platform across SE Asia*



YEN VU



*Head of Marketing for Zalora in Vietnam from 2014-2016, now CEO of Vietnam's Be Group*



MAGNUS GRIMELAND



*With Zalora from 2013-2017, then founded startup incubator Antler in 2017*

# TO QUANTIFY THESE IMPORTANT PEOPLE DYNAMICS, WE LOOKED AT 38 REPRESENTATIVE COMPANIES ACROSS OUR ECOSYSTEM

## Global Tech Majors



## Pan-SE Asia Internet 1<sup>st</sup> Gen



## Indonesia Internet 1<sup>st</sup> Gen



## SE Asia 2<sup>nd</sup> Gen



## China's BAT 2.0



## Semiconductors



## Telcos



## Big 4 Accounting



## Management Co.



## IT Services



## Global FMCG



**What if we knew, for each of these companies, where their people came from, and where they go next?**

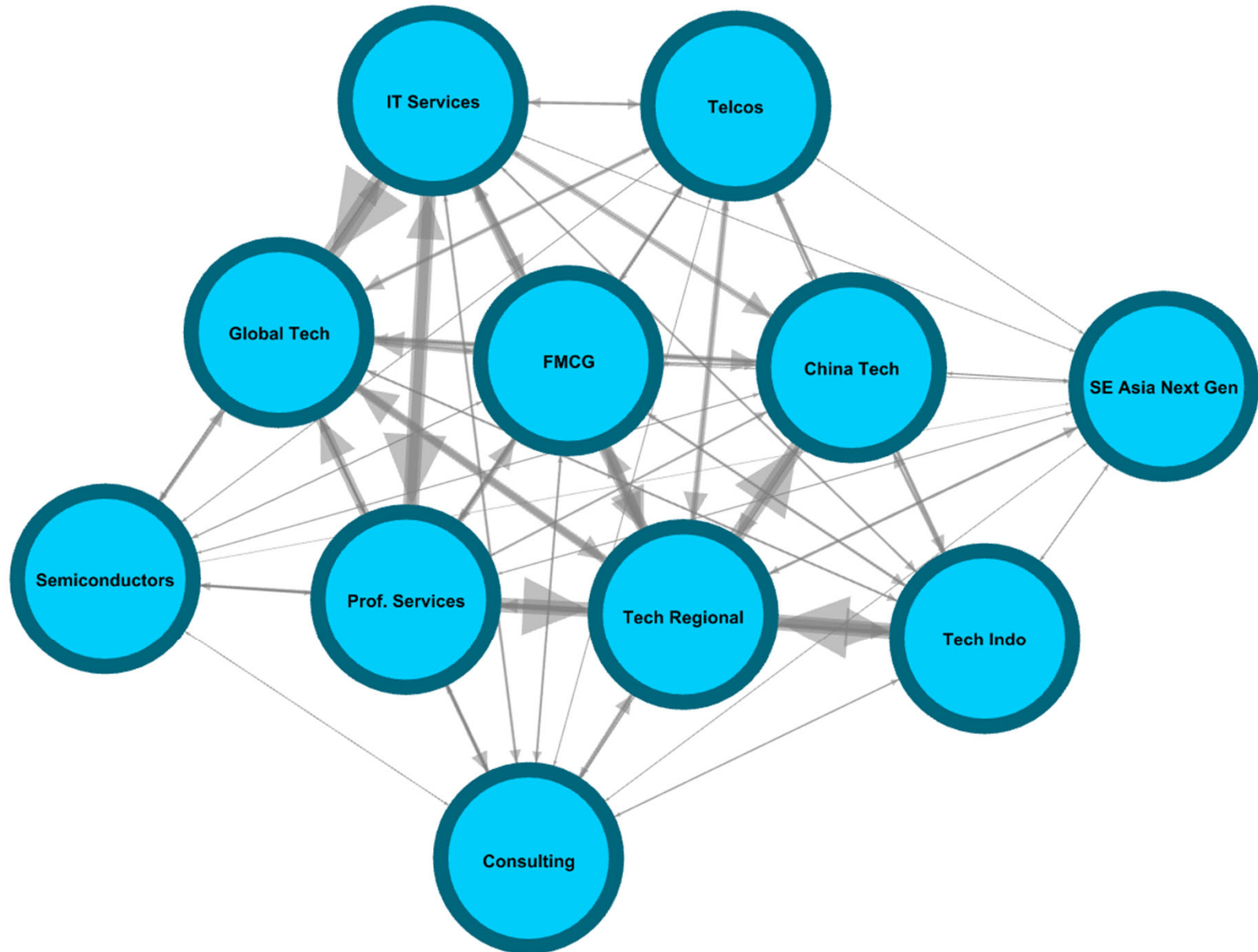
**What would it reveal about people dynamics in our ecosystem?**





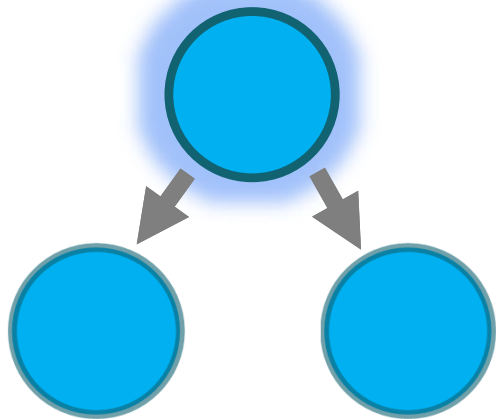
# WE CAN SEE THESE DYNAMICS IN ACTION IN OUR ECOSYSTEM

*Size and direction of arrow denotes how many people have migrated from one sector to the other. Proximity from one sector to another denotes how similar the sectors are in terms of talent make-up.*



1

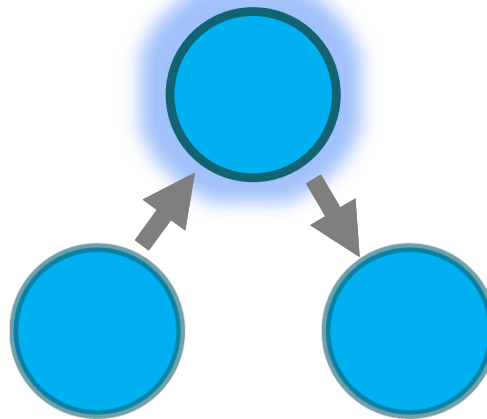
## “Talent Feeders”



*Provides a constant supply of well-qualified talent to other sectors in the ecosystem.*

2

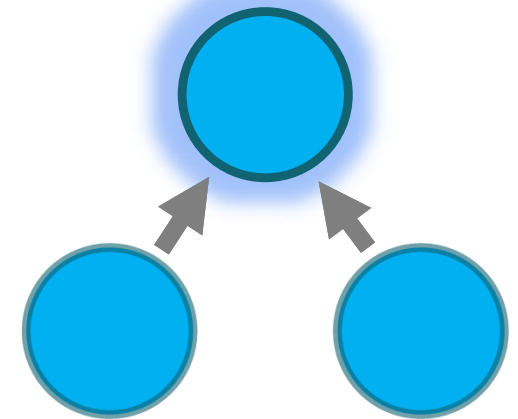
## “Respected Training Grounds”



*Attracts a lot of talent, but also loses talent to other sectors in the ecosystem.*

3

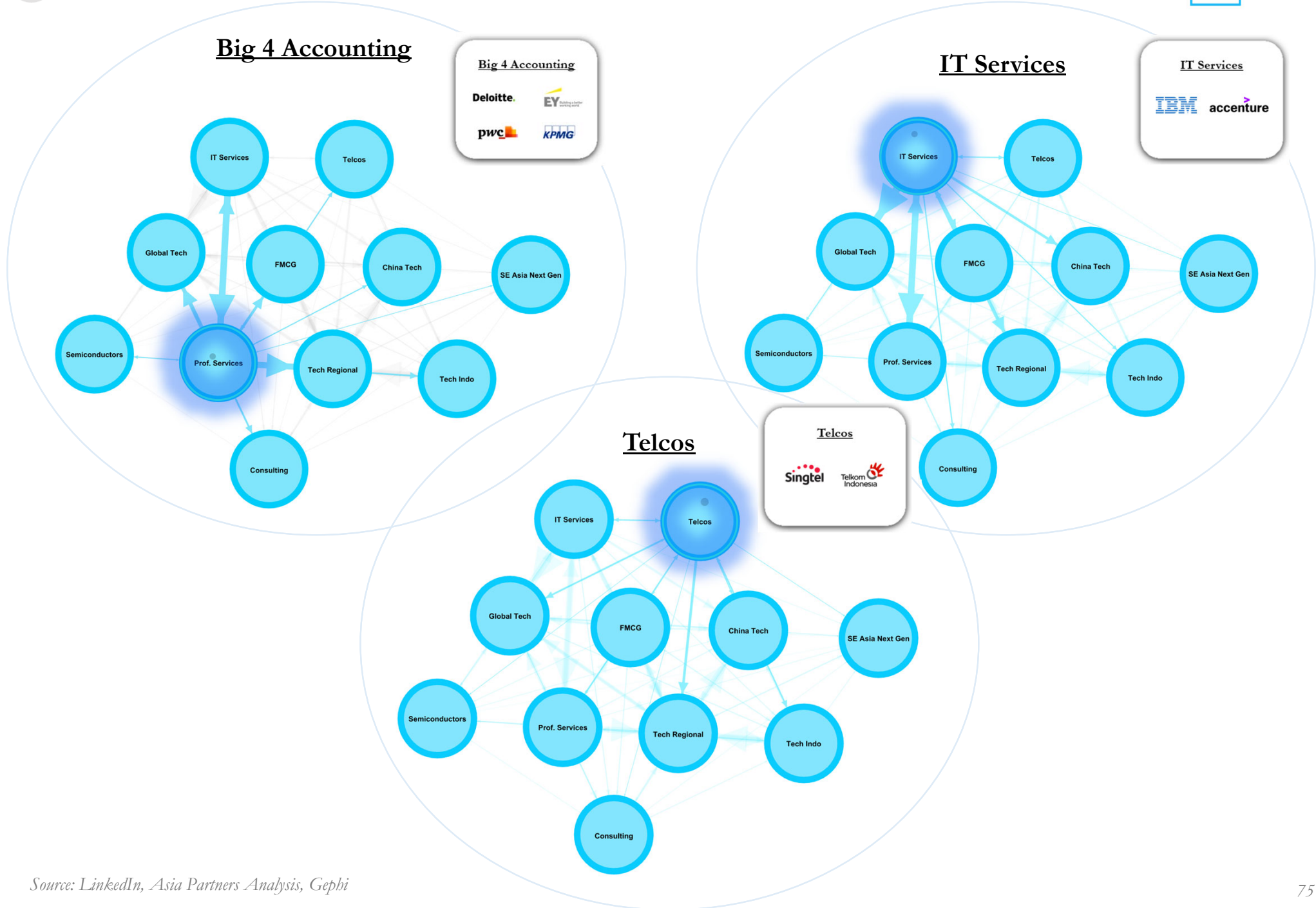
## “Talent Magnets”



*Mainly a magnet of talent, we have not seen them lose a lot of talent to other sectors in the ecosystem.*

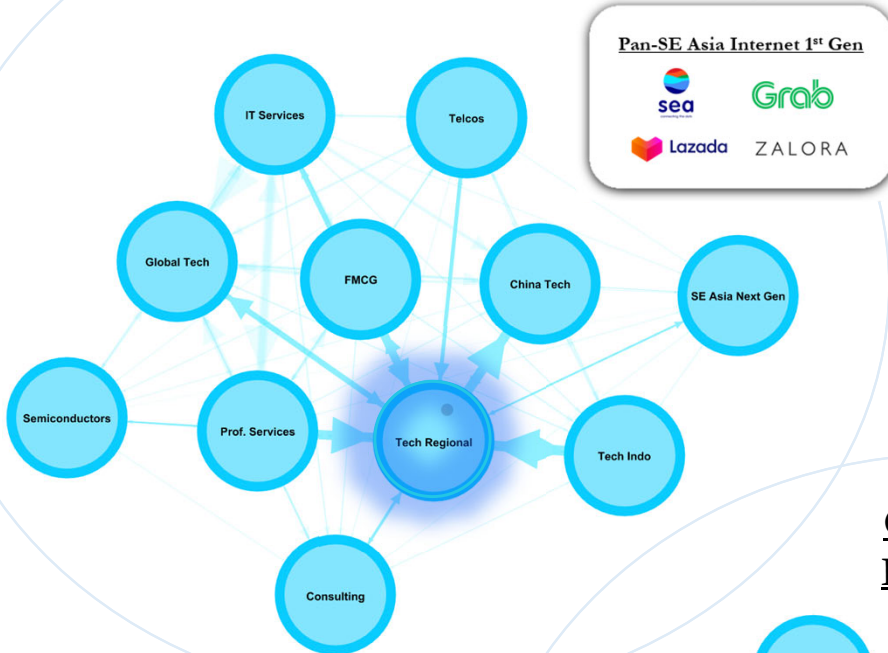


# 1 THE "TALENT FEEDERS" IN SE ASIA'S TALENT ECOSYSTEM

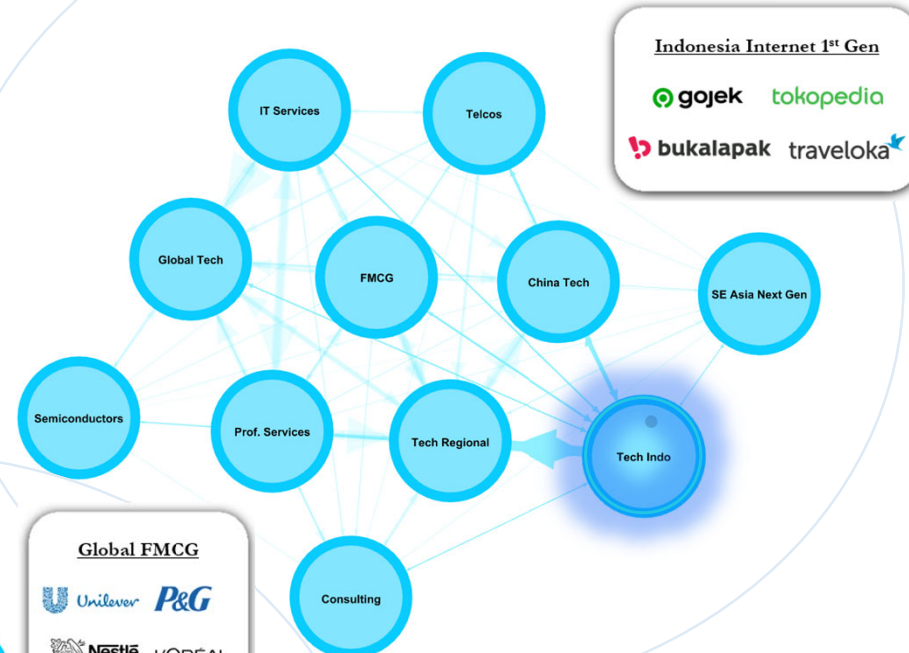


## 2 THE “TRAINING GROUNDS” IN SE ASIA’S TALENT ECOSYSTEM (1)

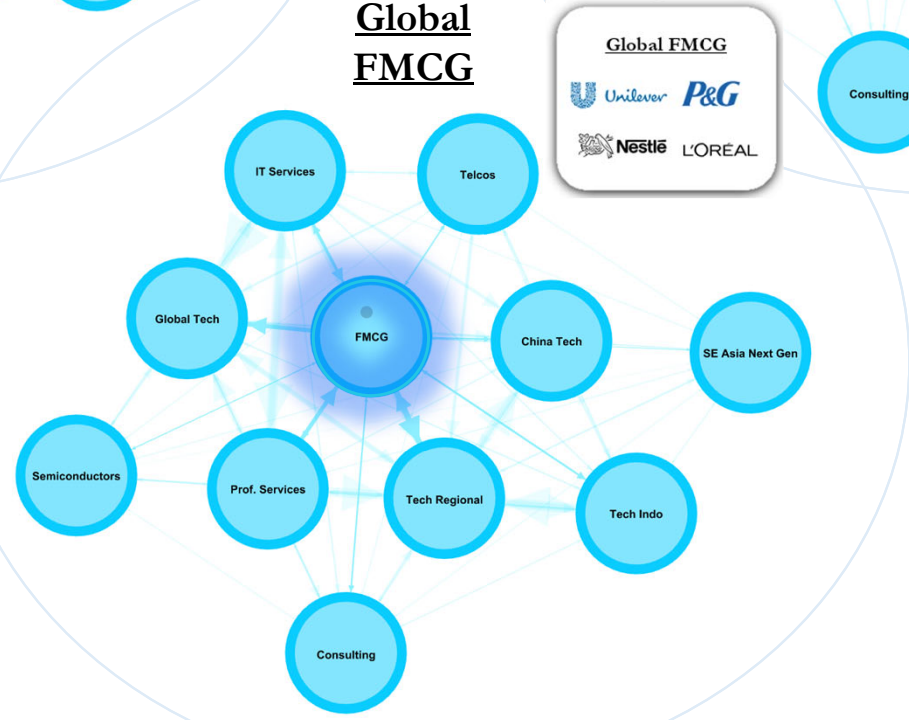
### Pan-SE Asia Internet 1<sup>st</sup> Gen



### Indonesia Internet 1<sup>st</sup> Gen



### Global FMCG



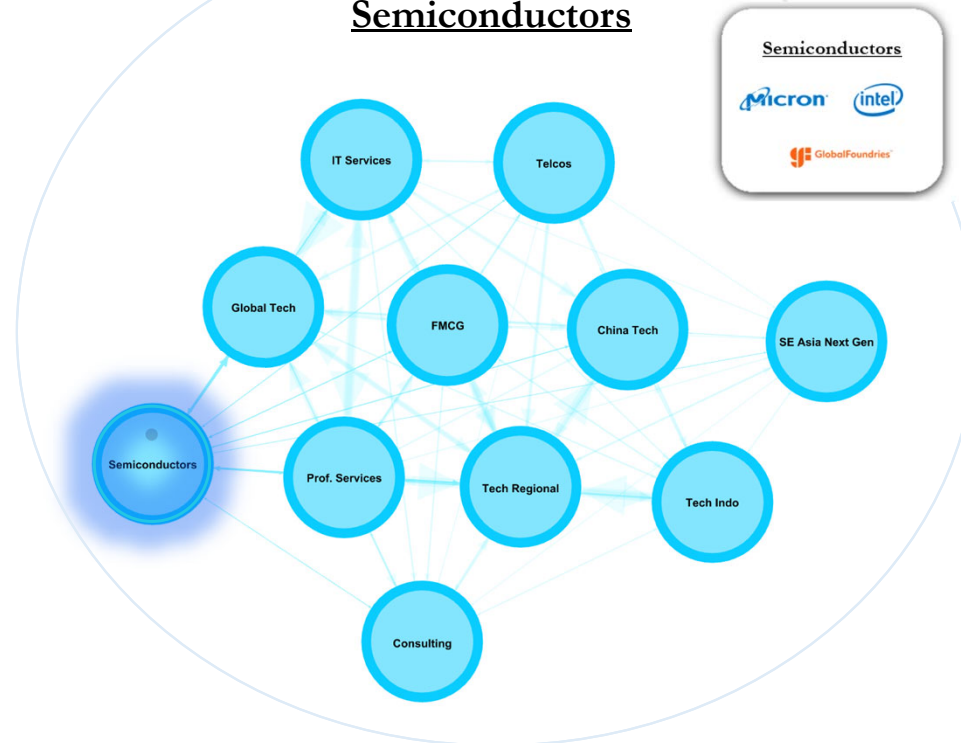
Source: LinkedIn, Asia Partners Analysis, Gephi

## 2 THE “TRAINING GROUNDS” IN SE ASIA’S TALENT ECOSYSTEM (2)

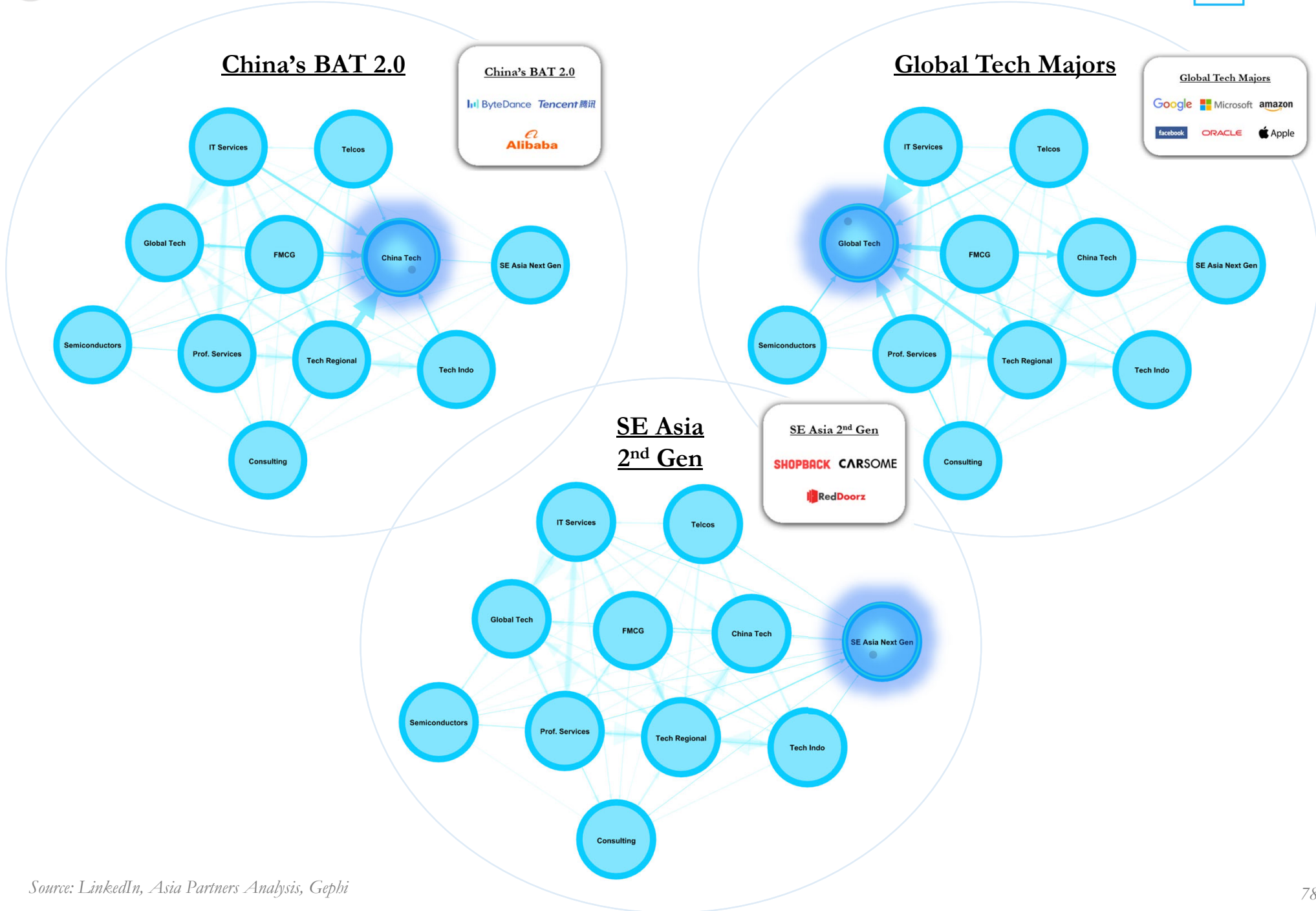
### Management Consulting



### Semiconductors



# 3 THE "TALENT MAGNETS" IN SE ASIA'S TALENT ECOSYSTEM

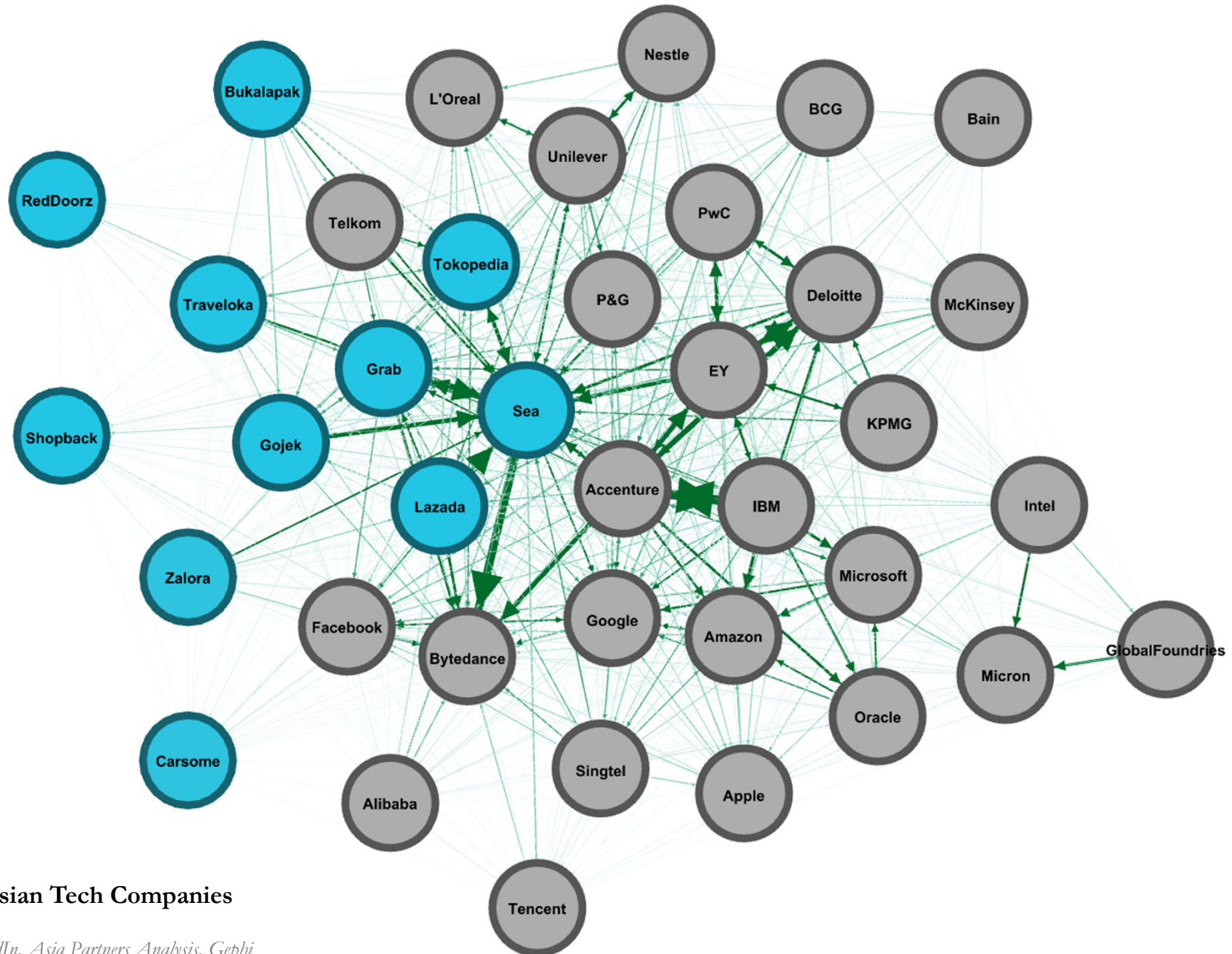


Source: LinkedIn, Asia Partners Analysis, Gephi



# THIS IS WHAT IT LOOKS LIKE AT AN INDIVIDUAL COMPANY LEVEL

*Size and direction of arrow denotes how many people have 'migrated' from one Company to the other. Proximity from one Company to the other denotes how 'similar' the Companies are in terms of talent make-up.*



# RECENT MIGRATION OF TALENT FROM SEA TO BYTEDANCE



Source: LinkedIn, Asia Partners Analysis, Gephi

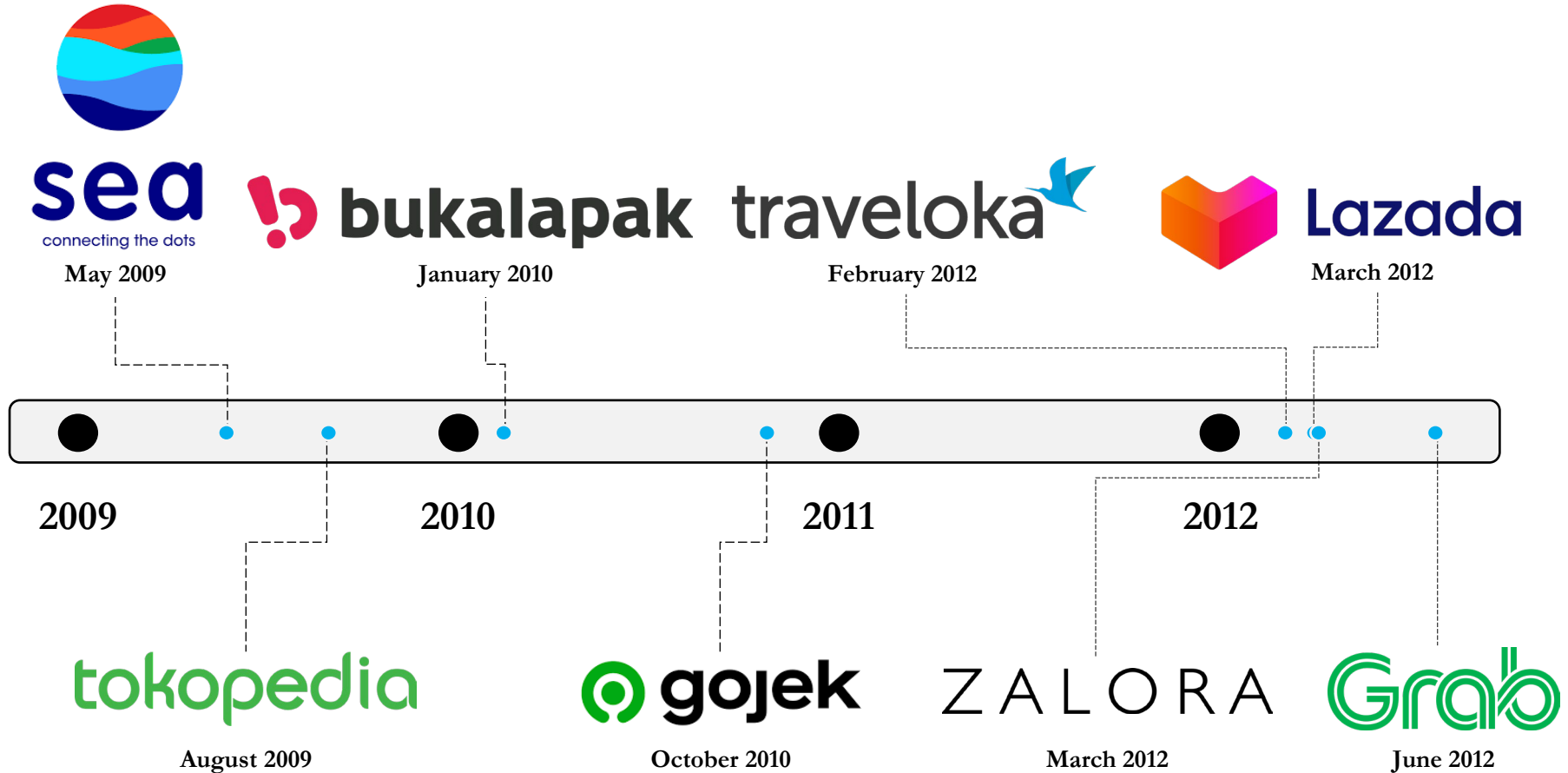
## HERE IS WHAT WE LEARNED, AT A HIGH LEVEL



- It's been over a decade since the **first generation** of internet companies in Southeast Asia were founded in a remarkably productive four-year period from 2009-2012, which saw the founding of Sea, Grab, Lazada, Zalora, Gojek, Tokopedia, Bukalapak, and Traveloka.
- We call these the '**Big 8**', and they fall into two natural groups – the four that are more regional in business operations and headcount (Sea, Grab, Lazada, and Zalora) and the four that are more Indonesia-centric (Gojek, Tokopedia, Bukalapak, and Traveloka)
- The Big 8 didn't have the benefit of an established community of internet companies from which to hire experienced talent. Much of their hiring was **right out of college**, with plenty of 'on the job' training. What lateral hires they could attract often came from outside of the internet industry – for example, Sea has over 1,000 current employees who used to work at the Big 4 accounting firms, and almost 500 from global FMCG firms like Unilever and P&G.
- When talent did come from the tech industry, it often came from a much **earlier generation of tech**: for example, over 400 of Sea's employees come from IBM or Accenture, almost 350 from Singtel or Telkom Indonesia, and over 100 from the semiconductor industry.



# THE 'FIRST GENERATION' OF INTERNET COMPANIES IN SOUTHEAST ASIA WERE FOUNDED BETWEEN 2009 – 2012



# WE CALL THESE THE 'BIG 8', AND THEY FALL INTO TWO NATURAL GROUPS



The four that are more regional in business operations and headcount...



Lazada

ZALORA



... and the four that are more Indonesia-centric



# THE BIG 8 DIDN'T HAVE THE BENEFIT OF AN ESTABLISHED COMMUNITY OF INTERNET CO'S FROM WHICH TO HIRE EXPERIENCED TALENT

*Count, alumni from vertical axis company who currently work at horizontal axis company*

Source: LinkedIn Recruiter

Destination Company:		Strategy 2 ASEAN Current Leaders				Strategy 1 ASEAN Current Leaders			
		Sea/ Garena/ Shopee/ Sea Money/ Shopee Pay	Grab	Lazada	Zalora	Gojek/ Gojek Tech	Tokopedia	Bukalapak	Traveloka
Google/YouTube/Alphabet	Current Gen Global Tech Companies	56	46	24	0	19	18	3	3
Microsoft	Current Gen Global Tech Companies	62	53	34	3	20	15	8	12
Amazon/AWS	Current Gen Global Tech Companies	76	42	29	2	8	12	0	7
Facebook/Meta/Instagram	Current Gen Global Tech Companies	28	24	8	1	5	4	0	1
Oracle	Current Gen Global Tech Companies	10	17	8	1	6	4	0	2
Apple	Current Gen Global Tech Companies	25	30	9	0	11	0	0	1
Bytedance/TikTok	China Tech Companies	135	34	21	2	11	13	0	2
Tencent/Riot Games	China Tech Companies	94	16	4	0	5	3	1	0
Alibaba/Taobao/Tmall	China Tech Companies	106	14	58	0	7	3	1	1
Sea/Garena/Shopee/Sea Money/ Shopee Pay	SE Asia Strategy 2 Current Gen	N/A	461	318	46	135	340	71	68
Grab	SE Asia Strategy 2 Current Gen	692	N/A	106	4	83	75	18	32
Lazada	SE Asia Strategy 2 Current Gen	717	170	N/A	29	76	98	26	19
Zalora	SE Asia Strategy 2 Current Gen	160	48	58	N/A	10	19	2	7
Gojek/Gojek Tech	SE Asia Strategy 1 Current Gen	520	104	39	3	N/A	104	44	34
Tokopedia	SE Asia Strategy 1 Current Gen	409	88	43	12	87	N/A	50	82
Bukalapak	SE Asia Strategy 1 Current Gen	167	37	14	4	71	81	N/A	35
Traveloka	SE Asia Strategy 1 Current Gen	220	88	21	3	54	77	30	N/A
Shopback	Southeast Asia Next Gen Tech	37	20	6	6	5	4	0	4
Carsome/iCar Asia	Southeast Asia Next Gen Tech	8	13	4	4	1	0	0	0
RedDoorz	Southeast Asia Next Gen Tech	45	6	0	0	6	6	0	12
Global Foundries	Semiconductors	16	6	6	0	1	0	0	0
Micron Technology	Semiconductors	69	15						
Intel	Semiconductors	30	16						
Singtel	Largest Regional Telcos	105	82						
Telkom/Telkom Indonesia/Telkomsel	Largest Regional Telcos	242	113						
Deloitte	Global Professional Services Firm	320	90						
EY	Global Professional Services Firm	430	120						
PwC	Global Professional Services Firm	210	62						
KPMG + KPMG US	Global Professional Services Firm	114	42						
Bain & Company	Consulting	34	16						
BCG	Consulting	99	5						
McKinsey	Consulting	86	13						
IBM	IT Services	116	110						
Accenture	IT Services	309	184						
Unilever	FMCG	209	91	109	4	47	55	17	12
P&G	FMCG	69	34	57	2	14	7	5	9
Nestle	FMCG	120	31	61	5	30	16	4	6
L'Oreal	FMCG	94	35	44	9	12	19	6	2

Much of their hiring was right out of college, with plenty of 'on the job' training. What lateral hires they could attract often came from outside of the internet industry.

For example, Sea has over 1,000 current employees who used to work at the Big 4 accounting firms, and almost 500 from global FMCG firms like Unilever and P&G

# WHEN TALENT DID COME FROM THE TECH INDUSTRY, IT OFTEN CAME FROM A MUCH EARLIER GENERATION OF TECH

*Count, alumni from vertical axis company who currently work at horizontal axis company*

Source: LinkedIn Recruiter

Destination Company:		Strategy 2 ASEAN Current Leaders				Strategy 1 ASEAN Current Leaders			
		Money	Grab	Lazada	Zalora	Tech	Tokopedia	Bukalapak	Traveloka
Google/YouTube/Alphabet	Current Gen Global Tech Companies	56	46	24	0	19	18	3	3
Microsoft	Current Gen Global Tech Companies	62	53	34	3	20	15	8	12
Amazon/AWS	Current Gen Global Tech Companies	76	42	29	2	8	12	0	7
Facebook/Meta/Instagram	Current Gen Global Tech Companies	28	24	8	1	5	4	0	1
Oracle	Current Gen Global Tech Companies	10	17	8	1	6	4	0	2
Apple	Current Gen Global Tech Companies	25	30	9	0	11	0	0	1
Bytedance/TikTok	China Tech Companies	135	34	21	2	11	13	0	2
Tencent/Riot Games	China Tech Companies	94	16	4	0	5	3	1	0
Alibaba/Taobao/Tmall	China Tech Companies	106	14	58	0	7	3	1	1
Sea/Garena/Shopee/Sea Money/Shopee Pay	SE Asia Strategy 2 Current Gen	N/A	461	318	46	135	340	71	68
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Bukalapak	SE Asia Strategy 1 Current Gen	167	37	14	4	71	81	N/A	35
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RedDoorz	Southeast Asia Next Gen Tech	45	6	0	0	6	6	0	12
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Micron Technology	Semiconductors	69	15	12	0	2	2	1	2
Intel	Semiconductors	30	16	6	0	0	0	0	2
Singtel	Largest Regional Telcos	105	82	33	0	0	0	0	2
Telkom/Telkom Indonesia/Telkomsel	Largest Regional Telcos	242	143	42	0	0	0	0	49
Deloitte	Global Professional Services Firm	320	90	43	0	0	0	0	25
EY	Global Professional Services Firm	430	120	94	0	0	0	0	39
PwC	Global Professional Services Firm	210	62	46	0	0	0	0	13
KPMG + KPMG US	Global Professional Services Firm	114	42	23	0	0	0	0	5
Bain & Company	Consulting	34	16	9	0	0	0	0	0
BCG	Consulting	99	50	24	0	0	0	0	7
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IBM	IT Services	116	110	37	9	25	13	8	14
Accenture	IT Services	309	184	72	13	37	56	14	37
Unilever	FMCG	209	91	109	4	47	55	17	12
P&G	FMCG	69	34	57	2	14	7	5	9
Nestle	FMCG	120	31	61	5	30	16	4	6
L'Oreal	FMCG	94	35	44	9	12	19	6	2

For example, over 400 of Sea's employees come from IBM or Accenture, almost 350 from Singtel or Telkom Indonesia, and over 100 from the semiconductor industry

- **Management consulting firms** were also popular sources of talent – Sea has almost 220 alumni of the Big 3 management consulting firms (Bain, BCG, and McKinsey), and Grab has over 100. BCG has been particularly ‘raided’ for talent, with departures for other players in the SE Asia innovation ecosystem equivalent to 46% of its current headcount.
- Naturally, with a limited talent base and rapid growth, the Big 8 have liberally **poached talent from each other** along the way. Sea currently has almost 3,000 people from other Big 8 firms, Grab almost 1,000, Tokopedia almost 800, Lazada almost 600, and Gojek more than 500.
- Although talent poaching has gone in multiple directions, we can see clear evidence of a **net flow of talent** from one company to another. Employees are the best on-the-ground venture capitalists of their own time and skill, and they are voting with their feet. Among the Big 8 first generation internet companies, **Sea** was by far the biggest net gainer of talent, with 399 net transfers from Lazada into Sea, 385 net transfers from Gojek into Sea, 231 from Grab into Sea, and 152 from Traveloka into Sea. **Grab** was also a magnet for talent, with 64 net transfers from Lazada to Grab and 56 net transfers from Traveloka to Grab.

# MANAGEMENT CONSULTING FIRMS WERE ALSO POPULAR SOURCES OF TALENT

*Count, alumni from vertical axis company who currently work at horizontal axis company*

Source: LinkedIn Recruiter

Destination Company:		Strategy 2 ASEAN Current Leaders				Strategy 1 ASEAN Current Leaders			
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Amazon/AWS	Current Gen Global Tech Companies	76	42	29	2	8	12	0	7
Facebook/Meta/Instagram	Current Gen Global Tech Companies	28	24	8	1	5	4	0	1
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Apple	Current Gen Global Tech Companies	25	30	9	0	11	0	0	1
Bytedance/TikTok	China Tech Companies	135	34	21	2	11	13	0	2
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Alibaba/Taobao/Tmall	China Tech Companies	106	14	58	0	7	3	1	1
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Tokopedia	SE Asia Strategy 1 Current Gen	409	88	43	12	87	N/A	50	82
Bukalapak	SE Asia Strategy 1 Current Gen	167	37	14	4	71	81	N/A	35
Traveloka	SE Asia Strategy 1 Current Gen	228	88	21	2	54	77	30	N/A
Shopback	Southeast Asia Next Gen Tech					5	4	0	4
Carsome/iCar Asia	Southeast Asia Next Gen Tech					1	0	0	0
RedDoorz	Southeast Asia Next Gen Tech					6	6	0	12
Global Foundries	Semiconductors					1	0	0	0
Micron Technology	Semiconductors					2	2	1	2
Intel	Semiconductors					4	2	0	2
Singtel	Largest Regional Telcos	103	82	33	2	5	3	0	2
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Deloitte	Global Professional Services Firm	320	90	43	11	40	35	10	25
EY	Global Professional Services Firm	430	120	94	12	45	49	28	39
PwC	Global Professional Services Firm	210	62	46	8	29	28	22	13
KPMG + KPMG US	Global Professional Services Firm	114	42	23	7	11	4	3	5
Bain & Company	Consulting	34	16	0	1	0	0	2	0
BCG	Consulting	99	50	2	2	20	19	7	
McKinsey	Consulting	86	43	2	2	10	2	4	
IBM	IT Services	116	110	37	9	25	13	8	14
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Sea has almost 220 alumni of the Big 3 management consulting firms (Bain, BCG, and McKinsey)

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# NATURALLY, WITH A LIMITED TALENT BASE AND RAPID GROWTH, THE BIG 8 HAVE LIBERALLY POACHED TALENT FROM EACH OTHER ALONG THE WAY

*Count, alumni from vertical axis company who currently work at horizontal axis company*

Source: LinkedIn Recruiter

Destination Company:		Strategy 2 ASEAN Current Leaders				Strategy 1 ASEAN Current Leaders			
		Money	Grab	Lazada	Zalora	Tech	Tokopedia	Bukalapak	Traveloka
Google/YouTube/Alphabet	Current Gen Global Tech Companies	56	46	24	0	19	18	3	3
Microsoft	Current Gen Global Tech Companies			34	3	20	15	8	12
Amazon/AWS	Current Gen Global Tech Companies			29	2	8	12	0	7
Facebook/Meta/Instagram	Current Gen Global Tech Companies			8	1	5	4	0	1
Oracle	Current Gen Global Tech Companies			8	1	6	4	0	2
Apple	Current Gen Global Tech Companies			9	0	11	0	0	1
Bytedance/TikTok	China Tech Companies	115	34	21	2	11	13	0	2
Tencent/Riot Games	China Tech Companies	91	16	4	0	5	3	1	0
Alibaba/Taobao/Tmall	China Tech Companies	116	14	58	0	7	3	1	1
Sea/Garena/Shopee/Sea Money/Shopee Pay	SE Asia Strategy 2 Current Gen	N/A	461	318	46	135	340	71	68
Grab	SE Asia Strategy 2 Current Gen	692	N/A	106	4	83	75	18	32
Lazada	SE Asia Strategy 2 Current Gen	717	170	N/A	29	76	98	26	19
Zalora	SE Asia Strategy 2 Current Gen	160	48	58	N/A	10	19	2	7
Gojek/Gojek Tech	SE Asia Strategy 1 Current Gen	520	104	39	3	N/A	104	44	34
Tokopedia	SE Asia Strategy 1 Current Gen	409	88	43	12	87	N/A	50	82
Bukalapak	SE Asia Strategy 1 Current Gen	167	37	14	4	71	81	N/A	35
Traveloka	SE Asia Strategy 1 Current Gen	220	88	21	3	54	77	30	N/A
Shopback	Southeast Asia Next Gen Tech	37	20	3	6	3	3	0	4
Carsome/iCar Asia	Southeast Asia Next Gen Tech	8	13	4	4	0	0	0	0
RedDoorz	Southeast Asia Next Gen Tech	45	6	0	0	0	6	0	12
Global Foundries	Semiconductors								0
Micron Technology	Semiconductors								2
Intel	Semiconductors								2
Singtel	Largest Regional Telcos								2
Telkom/Telkom Indonesia/Telkomsel	Largest Regional Telcos	242	113	42	7	81	144	50	49
Deloitte	Global Professional Services Firm	320	90	43	11	40	35	10	25
EY	Global Professional Services Firm	430	120	94	12	45	49	28	39
PwC	Global Professional Services Firm	210	62	46	8	29	28	22	13
KPMG + KPMG US	Global Professional Services Firm	114	42	23	7	11	4	3	5
Bain & Company	Consulting	34	16	9	1	2	0	2	0
BCG	Consulting	99	50	24	3	16	20	19	7
McKinsey	Consulting	86	43	20	4	13	10	2	4
IBM	IT Services	116	110	37	9	25	13	8	14
Accenture	IT Services	309	184	72	13	37	56	14	37
Unilever	FMCG	209	91	109	4	47	55	17	12
P&G	FMCG	69	34	57	2	14	7	5	9
Nestle	FMCG	120	31	61	5	30	16	4	6
L'Oreal	FMCG	94	35	44	9	12	19	6	2

Sea currently has almost 3,000 people from other Big 8 firms..

Grab almost 1,000

Lazada almost 600

Gojek more than 500

Tokopedia almost 800



# AMONG SOUTHEAST ASIAN TECH COMPANIES, SEA HAS HISTORICALLY BEEN THE LARGEST ‘TALENT MAGNET’

Net gain / (loss) relative to the Company specified on the Vertical Axis, Positive Means Horizontal Axis is Net Recipient of Talent, Southeast Asian tech companies only

				ZALORA				traveloka		CARSOME	
Sea	No Data	-231	-399	-114	-385	-69	-96	-152	13	10	-34
Grab	231	No Data	-64	-44	-21	-13	-19	-56	15	11	21
Lazada	399	64	No Data	-29	37	55	12	-2	21	21	5
Zalora	114	44	29	No Data	7	7	-2	4	19	4	2
Gojek	385	21	-37	-7	No Data	17	-27	-20	-1	7	5
Tokopedia	69	13	-55	-7	-17	No Data	-31	5	2	1	4
Bukalapak	96	19	-12	2	27	31	No Data	5	3	3	4
Traveloka	152	56	2	-4	20	-5	-5	No Data	0	4	-6
ShopBack	-13	-15	-21	-19	1	-2	-3	0	No Data	1	-2
Carsome	-10	-11	-21	-4	-7	-1	-3	-4	-1	No Data	-2
RedDoorz	34	-21	-5	-2	-5	-4	-4	6	2	2	No Data
<b>Net Total</b>	<b>1457</b>	<b>-61</b>	<b>-583</b>	<b>-228</b>	<b>-343</b>	<b>16</b>	<b>-178</b>	<b>-214</b>	<b>73</b>	<b>64</b>	<b>-3</b>

Sea has been a net attractor of talent virtually against every other tech Company in Southeast Asia

# ALTHOUGH TALENT POACHING HAS GONE IN MULTIPLE DIRECTIONS, WE CAN SEE CLEAR EVIDENCE OF A NET FLOW OF TALENT FROM ONE COMPANY TO ANOTHER

*Net change, positive means horizontal axis is a net recipient of talent from vertical axis company*

Source: LinkedIn Recruiter

Destination Company:

		Strategy 2 ASEAN Current Leaders				Strategy 1 ASEAN Current Leaders			
		Sea/ Garena/ Shopee/ Sea Money	Grab	Lazada	Zalora	Gojek/ Gojek Tech	Tokopedia	Bukalapak	Traveloka
Google/YouTube/Alphabet	Current Gen Global Tech Companies	88	12	35	-1	6	2	1	1
Microsoft	Current Gen Global Tech Companies	No Data	-231	-399	-114	-385	-69	-96	-152
Amazon/AWS	Current Gen Global Tech Companies	231	No Data	-64	-44	-21	-13	-19	-56
Facebook/Meta/Instagram	Current Gen Global Tech Companies	399	64	No Data	-29	37	55	12	-2
Oracle	Current Gen Global Tech Companies	114	44	29	No Data	7	7	-2	4
Apple	Current Gen Global Tech Companies	385	21	-37	-7	No Data	17	-27	-20
Bytedance/TikTok	China Tech Companies	69	13	-55	-7	-17	No Data	-31	5
Tencent/Riot Games	China Tech Companies	96	19	-12	2	27	31	No Data	5
Alibaba/Taobao/Tmall	China Tech Companies	152	56	2	-4	20	-5	-5	No Data
Sea/Garena/Shopee/Sea Money/Shopee Pay	SE Asia Strategy 2 Current Gen	-13	-15	-21	-19	1	-2	-3	0
Grab	SE Asia Strategy 2 Current Gen	-10	-11	-21	-4	-7	-1	-3	-4
Lazada	SE Asia Strategy 2 Current Gen								
Zalora	SE Asia Strategy 2 Current Gen								
Gojek/Gojek Tech	SE Asia Strategy 1 Current Gen								
Tokopedia	SE Asia Strategy 1 Current Gen								
Bukalapak	SE Asia Strategy 1 Current Gen								
Traveloka	SE Asia Strategy 1 Current Gen								
Shopback	Southeast Asia Next Gen Tech								
Carsome/iCar Asia	Southeast Asia Next Gen Tech								
RedDoorz	Southeast Asia Next Gen Tech								
Global Foundries	Semiconductors								
Micron Technology	Semiconductors								
Intel	Semiconductors								
Singtel	Largest Regional Telcos	80	71	30	1	5	3	0	1
Telkom/Telkom Indonesia/Telkomsel	Largest Regional Telcos	175	92	23	3	39	94	-20	29
Deloitte	Global Professional Services Firm	250	65	32	3	32	21	2	16
EY	Global Professional Services Firm	339	87	75	0	38	33	19	35
PwC	Global Professional Services Firm	173	54	45	5	27	25	21	13
KPMG + KPMG US	Global Professional Services Firm	104	37	21	6	11	3	3	5
Bain & Company	Consulting	23	7	8	1	0	-2	0	-3
BCG	Consulting	58	32	17	3	5	16	18	2
McKinsey	Consulting	56	19	9	0	4	8	0	-2
IBM	IT Services	102	105	31	8	23	10	7	13
Accenture	IT Services	167	116	35	-10	23	47	12	30
Unilever	FMCG	56	60	64	-6	30	26	9	3
P&G	FMCG	-18	27	41	-7	10	1	0	8
Nestle	FMCG	61	22	46	-3	27	11	2	1
L'Oreal	FMCG	-9	16	-38	-6	7	3	4	0

Employees are the best on-the-ground venture capitalists of their own time and skill, and they are voting with their feet. Among the 'Big 8', Sea was by far the biggest net gainer of talent, with 399 net transfers from Lazada into Sea, 385 net transfers from Gojek into Sea, 231 from Grab into Sea, and 152 from Traveloka into Sea

Grab was also a magnet for talent, with 64 net transfers from Lazada to Grab and 56 net transfers from Traveloka to Grab

- It's fascinating to see that a new generation of internet companies is now attracting talent from Sea. Remarkably, **ByteDance** (which owns TikTok), has taken a net 831 talents from Sea, by far the single greatest talent flow in the entire regional innovation ecosystem. In total, an equally remarkably 1,644 net talents have gone from the Big 8 to ByteDance. The ByteDance alumni, over time, will be very interesting to watch.
- The **next generation of internet companies** are also drawing talent from the Big 8. For example, there have been 72 net transfers from the Big 8 into **ShopBack**, and 61 net transfers from the Big 8 into **Carsome**.
- The **local offices of major U.S. technology companies** (e.g., Google, Microsoft, Amazon, Facebook, Oracle, Apple) do have meaningful talent flows to and from the Big 8. For example, the Big 8 are net sources of talent going to the internet companies Google, Facebook, and Amazon, but net recipients of talent from the software companies Microsoft and Oracle. This makes us excited to follow the new generation of software startups founded by Big 8 alumni in the future.

# UNSURPRISINGLY, BYTEDANCE IS THE LARGEST ‘TALENT MAGNET’ AMONGST NON-SOUTHEAST ASIAN-TECH COMPANIES

## SE ASIAN TECH COMPANIES MOST OFTEN **LOSE** TALENT TO...

Net gain / (loss) relative to the Company specified on the Vertical Axis, Positive Means Horizontal Axis is Net Recipient of Talent, Top 3 Companies only

				ZALORA				traveloka		CARSOME	
ByteDance	-831	-245	-265	-56	-59	-99	-39	-50	-23	-6	-7
Meta	-88	-74	-38	-11	-15	-6	-5	-14	-4	0	2
Google	-99	-46	-38	-20	-10	7	0	-18	2	3	0
Net Total	-1018	-365	-341	-87	-84	-98	-44	-82	-25	-3	-5

## SE ASIAN TECH COMPANIES MOST OFTEN **GAIN** TALENT FROM...

Net gain / (loss) relative to the Company specified on the Vertical Axis, Positive Means Horizontal Axis is Net Recipient of Talent, Top 3 Companies only

				ZALORA				traveloka		CARSOME	
EY	339	87	75	0	38	33	19	35	7	18	1
Telkom	175	92	23	3	39	94	-20	29	0	6	12
Deloitte	250	65	32	3	32	21	2	16	5	8	1
Net Total	764	244	130	6	109	148	1	80	12	32	14

# IT'S FASCINATING TO SEE THAT A NEW GENERATION OF INTERNET COMPANIES IS NOW ATTRACTING TALENT FROM THE EARLIER GENERATION

*Net change, positive means horizontal axis is a net recipient of talent from vertical axis company*

		BAT 2.0			Next Generation ASEAN		
Source: LinkedIn Recruiter		Bytedance/ TikTok	Tencent/ Riot Games	Alibaba/ Taobao/ Tmall	Shopback	Carsome/ iCar Asia	RedDoorz
Destination Company:							
Google/YouTube/Alphabet	Current Gen Global Tech Companies	84	0	-9	2	3	0
Microsoft	Current Gen						
Amazon/AWS	Current Gen						
Facebook/Meta/Instagram	Current Gen						
Oracle	Current Gen						
Apple	Current Gen						
Bytedance/TikTok	China Tech Companies	72	No Data	-9	1	1	
Tencent/Riot Games	China Tech Companies						
Alibaba/Taobao/Tmall	China Tech Companies	87	9	No Data	0	0	0
Sea/Garena/Shopee/Sea Money/Shopee Pay	SE Asia Strategy 2 Current Gen	831	-51	-88	13	10	-34
Grab	SE Asia Strategy 2 Current Gen	245	-7	-12	15	11	21
Lazada	SE Asia Strategy 2 Current Gen	265	2	-35	21	21	5
Zalora	SE Asia Strategy 2 Current Gen	56	1	1	19	4	2
Gojek/Gojek Tech	SE Asia Strategy 1 Current Gen	59	-2	-6	-1	7	5
Tokopedia	SE Asia Strategy 1 Current Gen	99	-3	-2	2	1	4
Bukalapak	SE Asia Strategy 1 Current Gen	39	-1	-1	3	3	4
Traveloka	SE Asia Strategy 1 Current Gen	50	0	-1	0	4	-6
Shopback	Southeast Asia Next Gen Tech	23	-1	0	No Data	1	2
Carsome/iCar Asia	Southeast Asia Next Gen Tech						
RedDoorz	Southeast Asia Next Gen Tech						
Global Foundries	Semiconductors						
Micron Technology	Semiconductors						
Intel	Semiconductors	8	3	2	0	4	0
Singtel	Largest Regional Telcos	93	9	6	13	1	0
Telkom/Telkom Indonesia/Telkomsel	Largest Regional Telcos	53	-1	-3	0	6	12
Deloitte	Global Professional Services Firm	39	11	6	5	8	1
EY	Global Professional Services Firm	63	13	4	7	18	1
PwC	Global Professional Services Firm	29	3	5	4	7	0
KPMG + KPMG US	Global Professional Services Firm	10	0	2	1	3	0
Bain & Company	Consulting	7	0	1	-1	0	0
BCG	Consulting	19	4	-1	-1	6	1
McKinsey	Consulting	22	2	-1	0	3	0
IBM	IT Services	66	12	17	9	9	0
Accenture	IT Services	482	7	6	1	10	-4
Unilever	FMCG	64	-1	1	-1	3	-1
P&G	FMCG	25	-1	5	2	3	0
Nestle	FMCG	29	1	4	0	0	1
L'Oreal	FMCG	48	-2	-2	0	2	0

Remarkably, ByteDance (which owns TikTok), has taken a net 831 talents from Sea, by far the single greatest talent flow in the entire regional innovation ecosystem...

In terms of home-grown next generation companies, there have been 72 net transfers from the Big 8 into ShopBack...

...in total, an equally remarkably 1,644 net talents have gone from the Big 8 to ByteDance.

... and 61 net transfers from the Big 8 into Carsome

# THE LOCAL OFFICES OF MAJOR U.S. TECHNOLOGY COMPANIES DO HAVE MEANINGFUL TALENT FLOWS FROM THE BIG 8

*Count, alumni from vertical axis company who currently work at horizontal axis company*

Source: LinkedIn Recruiter

		Global Tech Majors					
Destination Company:		Google/ YouTube	Microsoft	Amazon/ AWS	Facebook/ Meta/ Instagram	Oracle	Apple
Google/YouTube/Alphabet	Current Gen Global Tech Companies	N/A	70	98	167	15	33
Microsoft	Current Gen Global Tech Companies	222	N/A	256	117	90	62
Amazon/AWS	Current Gen Global Tech Companies	147	73	N/A	91	5	35
Facebook/Meta/Instagram	Current Gen Global Tech Companies	145	12	39	N/A	2	29
Oracle	Current Gen Global Tech Companies	115	169	160	25	N/A	19
Apple	Current Gen Global Tech Companies	59	33	66	54	5	N/A
Bytedance/TikTok	China Tech Companies	69	3	20	52	2	14
Tencent/Riot Games	China Tech Companies	6	4	4	0	0	2
Alibaba/Taobao/Tmall	China Tech Companies	21	12	15	13	2	1
Sea/Garena/Shopee/Sea Money/Shopee Pay	SE Asia Strategy 2 Current Gen	155	22	92	116	8	43
Grab	SE Asia Strategy 2 Current Gen	92	6	53	98	5	28
Lazada	SE Asia Strategy 2 Current Gen	62	9	48	46	0	21
Zalora	SE Asia Strategy 2 Current Gen	20	3	8	12	3	10
Gojek/GoJek Tech	SE Asia Strategy 1 Current Gen	29	2	8			
Tokopedia	SE Asia Strategy 1 Current Gen	11	2	7			
Bukalapak	SE Asia Strategy 1 Current Gen	3	2	0			
Traveloka	SE Asia Strategy 1 Current Gen	21	2	5			
Shopee	Southeast Asia Next Gen Tech	4	2	5			
Carsome/iCar Asia	Southeast Asia Next Gen Tech	2	0	1			
RedDoorz	Southeast Asia Next Gen Tech	0	1	0			
Global Foundries	Semiconductors	6	4	13			
Micron Technology	Semiconductors	20	3	16			
Intel	Semiconductors	29	56	37			
Singtel	Largest Regional Telcos	52	44	83			
Telkom/Telkom Indonesia/Telkomsel	Largest Regional Telcos	39	7	8			
Deloitte	Global Professional Services Firm	92	45	78	65	33	40
EY	Global Professional Services Firm	90	49	86	56	26	32
PwC	Global Professional Services Firm	62	43	49	28	21	29
KPMG + KPMG US	Global Professional Services Firm	25	18	24	13	7	12
Bain & Company	Consulting	23	1	3	5	0	4
BCG	Consulting	45	6	15	4	2	1
McKinsey	Consulting	68	11	16	25	2	9
IBM	IT Services	157	287	346	59	253	54
Accenture	IT Services	145	125	241	77	276	61
Unilever	FMCG	78	13	48	53	6	30
P&G	FMCG	104	31	45	36	4	43
Nestle	FMCG	26	4	25	18	5	12
L'Oreal	FMCG	43	4	19	18	7	15

But in general, they are far more likely to hire from **each other** or from **older generation global tech** rather than to draw upon the local, on-the-ground, expertise of the Big 8. We believe this is a mistake – or, conversely, a source of competitive advantage for the Big 8.



# THE BIG 8 HAS A UNIQUE RELATIONSHIP WITH THE GLOBAL TECH MAJORS

*Net change, positive means horizontal axis is a net recipient of talent from vertical axis company*

Source: LinkedIn Recruiter

Destination Company:

Global Tech Majors						
	Google/ YouTube	Microsoft	Amazon/ AWS	Facebook/ Meta/ Instagram	Oracle	Apple
Google/YouTube/Alphabet	No Data	-152	-49	22	-100	-26
Microsoft	152					29
Amazon/AWS	49					31
Facebook/Meta/Instagram	-22					25
Oracle	10					14
Apple	26					Data
Bytedance/TikTok	-84					-30
Tencent/Riot Games	0					-3
Alibaba/Taobao/Tmall	9	-11	10	11	-3	-6
Sea/Garena/Shopee/Sea Money/Shopee Pay	99	-40	16	88	-2	18
Grab	46	-47	11	74	-12	-2
Lazada	38	-25	19	38	-8	12
Zalora	20	0	6	11	2	10
Gojek/Gojek Tech	10	-18	0	15	-6	-8
Tokopedia	-7	-13	-5	6	-4	0
Bukalapak	0	-6	0	5	1	0
Traveloka	18	-10	1	14	-2	2
Shopback	-2	1	1	4	0	0
Carsome/iCar Asia	-3					0
RedDoorz	0					1
Global Foundries	5					13
Micron Technology	18					13
Intel	27					43
Singtel	50	22	75	51	9	45
Telkom/Telkom Indonesia/Telkomsel	32	-16			0	2
Deloitte	84	26			-20	37
EY	87	18			-2	27
PwC	62	41	46	27	13	29
KPMG + KPMG US	23	11	23	13	3	12
Bain & Company						
BCG						
McKinsey						
IBM						
Accenture						
Unilever						
P&G						
Nestle						
L'Oreal						
	38	-3	17	14	6	11

The Big 8 are net sources of talent going to the internet companies Google, Amazon, and Facebook...

... but net recipients of talent from the software companies, Microsoft and Oracle.

This makes us excited to follow the new generation of software start-ups founded by Big 8 alumni in the future – but that's a whole other topic of conversation.

- The **global FMCG players** have been active recruiters of Big 8 talent. There are over 300 alumni of the Big 8 at Unilever in Southeast Asia, almost 250 at L'Oréal, over 130 at P&G, and over 100 at Nestle. The majority of this is due to ecommerce hiring for brand.com and channel initiatives at these FMCG majors (e.g., from Shopee, Tokopedia, et al), but not all – for example, these four companies have hired almost 100 people from Grab and Gojek, which began as ride sharing companies. But on a net basis, they are still net sources of talent for the Big 8, having lost a net 448 people. The interesting exceptions are the Lazada to L'Oréal corridor, which has seen a net transfer of 38 people to L'Oréal, and the Sea to P&G corridor, which has seen a net transfer of 18 people to P&G.
- Overall, the impact of **Tencent and Alibaba** is quite muted in our region. Instead of being magnets for talent, as one might expect based on their overall market caps, they have often been net sources of talent for the Big 8. Tencent, for example, has transferred a net 61 people to the Big 8 (largely Sea), and Alibaba has transferred a net 144 (largely Sea and Lazada). Some of this might be an artifact of our data collection, as we look at the global employees of each source company but only local Southeast Asian hiring by target companies, but we believe the point still stands.

# THE GLOBAL FMCG PLAYERS HAVE BEEN QUITE ACTIVE RECRUITERS OF BIG 8 TALENT

*Middle bar = Count, alumni from vertical axis company who currently work at horizontal axis company | Right bar = Net change, positive means horizontal axis is a net recipient of talent from vertical axis company*

Source: LinkedIn Recruiter

Destination Company: Unilever P&G Nestle L'Oreal

		Unilever	P&G	Nestle	L'Oreal
Google/YouTube/Alphabet	Current Gen Global Tech Companies	0	7	2	5
Microsoft	Current Gen Global Tech Companies	0	0	0	0
Amazon/AWS	Current Gen Global Tech Companies	0	0	0	0
Facebook/Meta/Instagram	Current Gen Global Tech Companies	0	0	0	0
Oracle	Current Gen Global Tech Companies	0	0	0	0
Apple	Current Gen Global Tech Companies	0	0	0	0
Bytedance/TikTok	China Tech Companies	0	0	0	0
Tencent/Riot Games	China Tech Companies	0	0	0	0
Alibaba/Taobao/Tmall	China Tech Companies	0	0	0	4
Sea/Garena/Shopee/Sea Money/Shopee Pay	SE Asia Strategy 2 Current Gen	153	87	59	103
Grab	SE Asia Strategy 2 Current Gen	31	7	9	19
Lazada	SE Asia Strategy 2 Current Gen	45	16	15	82
Zalora	SE Asia Strategy 2 Current Gen	10	9	8	15
Gojek/Gojek Tech	SE Asia Strategy 1 Current Gen	17	4	3	5
Tokopedia	SE Asia Strategy 1 Current Gen	29	6	5	16
Bukalapak	SE Asia Strategy 1 Current Gen	8	5	2	2
Traveloka	SE Asia Strategy 1 Current Gen	9	1	5	2
Shopback	Southeast Asia Next Gen Tech	3	1	1	1
Carsome/iCar Asia	Southeast Asia Next Gen Tech	0	0	0	0
RedDoorz	Southeast Asia Next Gen Tech	2	0	0	0
Global Foundries	Semiconductors	0	3	1	1
Micron Technology	Semiconductors	2	13	1	0
Intel	Semiconductors	8	13	10	4
Singtel	Largest Regional Telcos	6	17	6	4
Telkom/Telkom Indonesia/Telkomsel	Largest Regional Telcos	32	5	14	5
Deloitte	Global Professional Services Firm	60	42	35	30
EY	Global Professional Services Firm	86	85	51	64
PwC	Global Professional Services Firm	57	44	21	31
KPMG + KPMG US	Global Professional Services Firm	16	16	10	12
Bain & Company	Consulting	1	2	0	1
BCG	Consulting	12	12	8	7
McKinsey	Consulting	12	15	3	0
IBM	IT Services	36	74	71	15
Accenture	IT Services	56	106	71	34
Unilever	FMCG	N/A	141	251	176
P&G	FMCG	91	N/A	56	74
Nestle	FMCG	211	67	N/A	84
L'Oreal	FMCG	128	60	45	N/A

There are over 300 alumni of the Big 8 at Unilever in Southeast Asia, almost 250 at L'Oreal, over 130 at P&G, and over 100 at Nestle...

Global FMCG

Unilever P&G Nestle L'Oreal

	Unilever	P&G	Nestle	L'Oreal
	-60	-67	-24	-20
	-1	18	-61	2
	-56	18	-22	9
	-60	-27	-46	-16
	-64	-41	-27	38
	6	7	3	6
	-30	-10	-27	-7
	-26	-1	-11	-3
	-9	0	-2	-4
	-3	-8	1	0
	1	-2	0	0

...but on a net basis, they are still net sources of talent for the Big 8, having lost a net of 448 people in total

The interesting exceptions are the Sea to P&G corridor, which has seen a net transfer of 18 people to P&G, and the Lazada to L'Oreal corridor, which has seen a net transfer of 38 people

-11	-10	-4	-6
-20	-21	1	-1
-20	-6	-6	-5
23	42	59	13
-7	33	12	18
No Data	50	40	48
-50	No Data	-11	14
-40	11	No Data	39
-48	-14	-39	No Data

# OVERALL, THE IMPACT OF TENCENT AND ALIBABA IS QUITE MUTED IN OUR REGION

*Net change, positive means horizontal axis is a net recipient of talent from vertical axis company*

		BAT 2.0			Strategy 2 ASEAN Current Leaders			Strategy 1 ASEAN Current Leaders			
Destination Company:		Tencent/ Riot Games	Alibaba/ Taobao/ Tmall	Sea/ Garena/ Shopee/ Sea Money	Grab	Lazada	Zalora	Gojek/ Gojek Tech	Tokopedia	Bukalapak	Traveloka
Google/YouTube/Alphabet	Current Gen Global Tech Companies	0	-9	-99	-46	-38	-20	-10	7	0	-18
Microsoft	Current Gen Global Tech Companies				47	25	0	18	13	6	10
Amazon/AWS	Current Gen Global Tech Companies				-11	-19	-6	0	5	0	2
Facebook/Meta/Instagram	Current Gen Global Tech Companies				-74	-38	-11	-15	-6	-5	-14
Oracle	Current Gen Global Tech Companies				12	8	-2	6	4	-1	2
Apple	Current Gen Global Tech Companies				2	-12	-10	8	0	0	-2
Bytedance/TikTok	China Tech Companies				-245	-265	-56	-59	-99	-39	-50
Tencent/Riot Games	China Tech Companies	No Data	-9	51	7	-2	-1	2	3	1	0
Alibaba/Taobao/Tmall	China Tech Companies	9	No Data	88	12	35	-1	6	2	1	1
Sea/Garena/Shopee/Sea Money/Shopee Pay	SE Asia Strategy 2 Current Gen	-51	-88	No Data	-231	-399	-114	-385	-69	-96	-152
Grab	SE Asia Strategy 2 Current Gen	-7	-12	231	No Data	-64	-44	-21	-13	-19	-56
Lazada	SE Asia Strategy 2 Current Gen	2	-35	399	64	No Data	-29	37	55	12	-2
Zalora	SE Asia Strategy 2 Current Gen	1	1	114	44	29	No Data	7	7	-2	4
Gojek/Gojek Tech	SE Asia Strategy 1 Current Gen	-2	-6	385	21	-37	-7	No Data	17	-27	-20
Tokopedia	SE Asia Strategy 1 Current Gen	-3	-2	69	13	-55	-7	-17	No Data	-31	5
Bukalapak	SE Asia Strategy 1 Current Gen	-1	-1	96	19	-12	2	27	31	No Data	5
Traveloka	SE Asia Strategy 1 Current Gen	0	-1	152	56	2	-4	20	-5	-5	No Data
Shopback	Southeast Asia Next Gen Tech	-1	0	-25	-15	-21	-19	1	-2	-3	0
Carsome/iCar Asia	Southeast Asia Next Gen Tech					-21	-4	-7	-1	-3	-4
RedDoorz	Southeast Asia Next Gen Tech					-5	-2	-5	-4	-4	6
Global Foundries	Semiconductors					6	0	1	0	0	0
Micron Technology	Semiconductors					10	0	1	2	1	2
Intel	Semiconductors					6	0	4	2	-1	2
Singtel	Largest Regional Telcos					30	1	5	3	0	1
Telkom/Telkom Indonesia/Telkomsel	Largest Regional Telcos					23	3	39	94	-20	29
Deloitte	Global Professional Services Firm					32	3	32	21	2	16
EY	Global Professional Services Firm	13	4	339	87	75	0	38	33	19	35
PwC	Global Professional Services Firm	3	5	173	54	45	5	27	25	21	13
KPMG + KPMG US	Global Professional Services Firm	0	2	104	37	21	6	11	3	3	5
Bain & Company	Consulting	0	1	23	7	8	1	0	-2	0	-3
BCG	Consulting	4	-1	58	32	17	3	5	16	18	2
McKinsey	Consulting	2	-1	56	19	9	0	4	8	0	-2
IBM	IT Services	12	17	102	105	31	8	23	10	7	13
Accenture	IT Services	7	6	167	116	35	-10	23	47	12	30
Unilever	FMCG	-1	1	56	60	64	-6	30	26	9	3
P&G	FMCG	-1	5	-18	27	41	-7	10	1	0	8
Nestle	FMCG	1	4	61	22	46	-3	27	11	2	1
L'Oreal	FMCG	-2	-2	-9	16	-38	-6	7	3	4	0

Instead of being magnets for talent, they have often been net sources of talent for the Big 8

Tencent, for example, has transferred a net 61 people to the Big 8 (largely Sea)...

...and Alibaba has transferred a net 144 (largely Sea and Lazada).

- As an aside, it's interesting to see how both the evolution of their business models and the massive poaching from the Big 8 has **caused the major consulting firms to evolve their hiring**. Bain, BCG, and McKinsey have collectively lost a net 279 people to the Big 8 first generation internet companies – a small number compared to the net 831 who have gone from Sea to ByteDance, but large compared to their sizes in Southeast Asia. Perhaps in part to replenish their talent, and in part because their work is increasingly operational and implementation-oriented, the three consulting majors have hired a net 186 people from IBM and Accenture, a net 109 alumni from Unilever/P&G/Nestle/L'Oréal, and a net 317 from the Big 4 accounting firms. They, of course, poach from each other as well, with modest net flows from McKinsey and BCG to Bain, and an even smaller net flow from BCG to McKinsey.
- **Singtel and Telkom Indonesia** have lost a net 626 people to the Big 8. The key exception is a tribe of 70 Bukalapak alums who have followed Bukalapak's co-founder to Telkom Indonesia, for a net transfer of 20 people to Telkom from Bukalapak.

# TELCO COMPANIES ARE ALSO INTERESTING SOURCES OF TALENT FOR THE BIG 8

*Middle bar = Count, alumni from vertical axis company who currently work at horizontal axis company | Right bar = Net change, positive means horizontal axis is a net recipient of talent from vertical axis company*

Source: LinkedIn Recruiter

Destination Company:

		Singtel	Telkom Indonesia/ Telkomsel
Google/YouTube/Alphabet	Current Gen Global Tech Companies	2	7
Microsoft	Current Gen Global Tech Companies	22	23
Amazon/AWS	Current Gen Global Tech Companies	8	4
Facebook/Meta/Instagram	Current Gen Global Tech Companies	3	2
Oracle	Current Gen Global Tech Companies	20	3
Apple	Current Gen Global Tech Companies	10	3
Bytedance/TikTok	China Tech Companies	1	4
Tencent/Riot Games	China Tech Companies	0	2
Alibaba/Taobao/Tmall	China Tech Companies	0	3
Sea/Garena/Shopee/Sea Money/Shopee Pay	SE Asia Strategy 2 Current Gen	25	67
Grab	SE Asia Strategy 2 Current Gen	11	21
Lazada	SE Asia Strategy 2 Current Gen	3	19
Zalora	SE Asia Strategy 2 Current Gen	1	4
Gojek/GoJek Tech	SE Asia Strategy 1 Current Gen	0	42
Tokopedia	SE Asia Strategy 1 Current Gen	0	50
Bukalapak	SE Asia Strategy 1 Current Gen	0	70
Traveloka	SE Asia Strategy 1 Current Gen	1	20
Shopback	Southeast Asia Next Gen Tech	1	1
Carsome/iCar Asia	Southeast Asia Next Gen Tech	1	0
RedDoorz	Southeast Asia Next Gen Tech		
Global Foundries	Semiconductors		
Micron Technology	Semiconductors		
Intel	Semiconductors		
Singtel	Largest Regional Telcos		
Telkom/Telkom Indonesia/Telkomsel	Largest Regional Telcos		
Deloitte	Global Professional Services Firm		
EY	Global Professional Services Firm		
PwC	Global Professional Services Firm		
KPMG + KPMG US	Global Professional Services Firm	29	17
Bain & Company	Consulting	21	3
BCG	Consulting	1	0
McKinsey	Consulting	1	3
IBM	IT Services	6	6
Accenture	IT Services	89	13
Unilever	FMCG	87	37
P&G	FMCG	11	38
Nestle	FMCG	7	6
L'Oreal	FMCG	7	15
		6	7

Telcos		Telcos	
Singtel	Telkom Indonesia/ Telkomsel	Singtel	Telkom Indonesia/ Telkomsel
-50	-32	-50	-32
-22	16	-22	16
-9	1	-9	1
-6	3	-6	3
-80	-175	-80	-175
-71	-92	-71	-92
-30	-23	-30	-23
-1	-3	-1	-3
-5	-39	-5	-39
-3	-94	-3	-94
0	20	0	20
-1	-29	-1	-29
15	0	15	0
-1	-6	-1	-6
29	17	29	17
20	10	20	10
20	1	20	1
-2	-1	-2	-1
-1	0	-1	0
-1	2	-1	2
51	-1	51	-1
-13	-22	-13	-22
5	6	5	6
-10	1	-10	1
1	1	1	1
2	2	2	2

Singtel and Telkom Indonesia have lost a net 626 people to the Big 8...

...the key exception is a tribe of 70 Bukalapak alums who have followed Bukalapak's Co-Founder to Telkom Indonesia, for a net transfer of 20 people to Telkom from Bukalapak



- As noted earlier, **the Zalora alumni base** is hugely influential in Southeast Asia. Part of why is the sheer size of it: there are 4,900 Zalora alums compared to just under 2,500 still with the Company, a 2:1 ratio. (In contrast, Sea's ratio is 0.6x and Grab's 0.5x). Zalora alums co-founded Shopee (Sea's home-grown ecommerce division), ShopBack, and Gojek, for example. There will be more in the future.
- Our **homogeneity index** looks at the extent to which two companies are similar, looking at the gross bidirectional flows between each relative to their combined current employee size.
  - On that basis, Deloitte and EY are the two most similar companies in our innovation ecosystem, followed by Deloitte and PwC. Looking at the Big 8, the most similar companies are Lazada and Sea, followed by Traveloka and Tokopedia, followed by Grab and Sea.
  - On the other end of the spectrum, the two members of the Big 8 with the least talent overlap are Gojek and Zalora – and this despite the fact that 28% of Zalora's current employees (according to LinkedIn) are in Indonesia and the also relevant fact that Gojek co-founder Nadiem Makarim was the former MD of Zalora Indonesia.

# ANOTHER WAY TO LOOK AT TALENT-FLOWS BETWEEN COMPANIES IS THROUGH OUR HOMOGENEITY INDEX...

*Homogeneity Index: the higher the index is, the higher the gross talent flows are between two different Companies (Normalized to Max = 100)*

	Semiconductors			Telcos		Big 4 Accounting Firms				Management Consulting			IT Services			Global FMCG		
Source: LinkedIn Recruiter	Global pany:	Micron Foundries	Intel Technology	Singtel	Telkom Indonesia/Telkomsel	Deloitte	EY	PwC	KPMG / KPMG US	Bain & Company	BCG	McKinsey	IBM	Accenture	Unilever	P&G	Nestle	L'Oreal
Google/YouTube/Alphabet	1	2	3	6	2	9	6	7	3	5	8	11	12	6	7	12	2	6
Microsoft	1	2	13	13	2	9	8	11	7	2	6	7	42	9	3	9	1	3
Amazon/AWS	2	2	4	10	1	8	7	6	3	1	4	3	27	10	5	5	2	3
Facebook/Meta/Instagram	1	3	2	11	1	9	5	6	3	3	5	9	7	3	7	7	1	6
Oracle	2	1	3	10	0	12	5	7	3	2	1	2	40	15	1	2	0	2
Apple	2	3	5	7	0	4	3	4	2	1	0	2	5	3	3	6	1	3
Bytedance/TikTok	1	3	1	13	3	5	5	5	2	1	5	4	6	18	7	4	2	10
Tencent/Riot Games	1	2	1	2	0	2	1	1	0	0	6	2	2	1	0	2	0	3
Alibaba/Taobao/Tmall	2	1	1	2	0	1	1	2	1	1	2	4	3	1	0	1	0	3
Sea/Garena/Shopee/Sea Money/Shopee Pay	1	3	1	5	8	15	17	10	5	2	6	5	5	10	13	6	6	8
Grab	0	2	1	4	4	5	6	3	2	1	4	4	5	6	5	2	1	3
Lazada	1	1	1	4	3	5	7	5	3	1	4	4	3	4	12	7	4	15
Zalora	0	0	1	1	1	3	2	3	3	1	2	5	1	1	2	3	1	9
Gojek/Gojek Tech	0	0	0	0	5	3	3	2	1	0	2	2	2	1	4	1	2	1
Tokopedia	0	0	0	0	10	6	5	5	1	1	6	3	2	2	9	2	2	7
Bukalapak	0	0	0	0	7	3	4	7	1	3	11	2	1	1	3	2	1	3
Traveloka	0	0	0	0	4	4	4	4	1	2	6	5	2	2	3	2	1	1
Shopback	0	0	0	0	1	1	1	1	1	2	3	6	1	1	1	1	0	1
Carsome/iCar Asia	0	0	0	0	2	2	2	2	0	0	4	2	1	1	0	1	0	1
RedDoorz	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Global Foundries	0	0	0	0	1	1	1	1	0	0	2	0	4	1	0	1	0	0
Micron Technology	70	0	0	0	2	2	2	0	1	5	3	1	1	1	3	1	1	1
Intel	13	0	0	0	4	0	0	0	0	1	5	3	2	2	2	2	1	1
Singtel	2	4	2	1	1	7	7	7	5	1	1	4	13	7	2	4	1	2
Telkom/Telkom Indonesia/Telkomsel	0	0	0	1	1	3	3	1	0	0	0	1	1	2	3	1	1	1
Deloitte	1	2	4	7	3	100	100	70	38	4	16	12	28	31	9	7	4	6
EY	1	2	4	7	3	100	69	69	40	4	8	6	26	25	8	10	5	7
PwC	2	2	3	7	1	70	69	50	50	9	20	14	12	7	8	9	2	8
KPMG + KPMG US	1	2	2	5	0	38	40	50	50	5	12	5	5	4	3	4	1	4
Bain & Company	0	0	0	1	0	4	4	9	5	5	50	38	1	2	2	4	0	4
BCG	2	1	0	1	0	16	8	20	12	50	57	57	2	4	7	12	1	7
McKinsey	0	5	1	4	1	12	6	14	5	38	57	57	4	4	7	9	1	2
IBM	4	3	5	13	1	28	26	12	5	1	2	4	4	73	4	11	5	2
Accenture	1	1	3	7	2	31	25	7	4	2	4	4	73	73	4	7	4	2
Unilever	0	1	2	2	3	9	8	8	3	2	7	7	4	4	26	28	41	4
P&G	1	3	2	4	1	7	10	9	4	4	12	9	11	7	26	9	28	28
Nestle	0	1	2	1	1	4	5	2	1	0	1	1	5	4	28	9	11	11
L'Oreal	0	1	1	2	1	6	7	8	4	4	7	2	2	2	41	28	11	11

On that basis, Deloitte and EY are the two most similar companies in our innovation ecosystem...  
 ...followed by Deloitte and PwC

# ...CONTINUED FOR THE REMAINING SECTORS

*Homogeneity Index: the higher the index is, the higher the gross talent flows are between two different Companies (Normalized to Max = 100)*

Source: LinkedIn Recruiter	Global Tech Majors						BAT 2.0		Strategy 2 ASEAN Current Leaders					Strategy 1 ASEAN Current Leaders			Next Generation ASEAN			
	Google/YouTube	Microsoft	Amazon/AWS	Facebook/Meta/Instagram	Oracle	Apple	Bytedance/TikTok	Tencent/Riot Games	Alibaba/Taobao/Tmall	Sea/Garena/Shopee/Sea Money	Grab	Lazada	Zalora	Gojek/Gojek Tech	Tokopedia	Bukalapak	Traveloka	Shopee	Carsome/iCar Asia	RedDoorz
Google/YouTube/Alphabet		35	19	36	16	8	20	2	5	8	6	7	3	3	3	1	3	2	1	0
Microsoft	35		40	30	67	12	10	6								3	4	1	1	0
Amazon/AWS	19	40		15	20	8	7	1								0	2	1	1	0
Facebook/Meta/Instagram	36	30	15		6	10	29	4								1	4	4	0	1
Oracle	16	67	20	6		3	3	1								0	1	0	0	0
Apple	8	12	8	10	3		6	1								0	1	0	0	0
Bytedance/TikTok	20	10	7	29	3	6		15								7	9	6	1	2
Tencent/Riot Games	2	6	1	4	1	1	15									1	0	1	2	1
Alibaba/Taobao/Tmall	5	13	3	5	3	1	15	13								0	0	2	1	0
Sea/Garena/Shopee/Sea Money/Shopee Pay	8	4	6	6	1	2	42	6	6	29	36	9	20	30	10	12	4	1	3	
Grab	6	3	4	6	1	2	14	1	1	29	11	3	6	8	3	6	3	2	2	
Lazada	7	5	6	6	1	2	27	1	11	36	11	11	7	14	5	5	5	4	1	
Zalora	3	2	1	4	1	1	11	1	1	9	3	11	1	7	3	4	22	6	1	
Gojek/Gojek Tech	3	2	1	2	0	1	5	1	1	20	6	7	1	13	9	7	1	1	1	
Tokopedia	3	3	2	2	1	0	16	1	1	30	8	14	7	13	28	33	3	0	4	
Bukalapak	1	3	0	1	0	0	7	1	0	8	3	5	3	0	28	25	2	1	2	
Traveloka	3	4	2	4	1	1	9	0	0	11	6	5	4	7	33	25	5	2	10	
Shopee	2	1	1	4	0	0	6	1	2	4	3	5	22	1	5	2	5	1	2	
Carsome/iCar Asia	1	1	1	0	0	0	1	2	1	1	2	4	6	1	1	2	1	1	1	
RedDoorz	0	0	0	1	0	0	2	1											1	
Global Foundries	1	1	2	1	2	2	1	1											0	
Micron Technology	2	2	2	3	1	3	3	2											0	
Intel	3	13	4	2	3	5	1	1											1	
Singtel	6	13	10	11	10	7	13	2											0	
Telkom/Telkom Indonesia/Telkomsel	2	2	1	1	0	0	3	0											1	
Deloitte	9	9	8	9	12	4	5	2											0	
EY	6	8	7	5	5	3	5	1											0	
PwC	7	11	6	6	7	4	5	1	2	10	3	5							2	
KPMG + KPMG US	3	7	3	3	3	2	2	0	1	5	2	3							1	
Bain & Company	5	2	1	3	2	1	1	0	1	2	1	1							0	
BCG	8	6	4	5	1	0	5	6	2	6	4	4							4	
McKinsey	11	7	3	9	2	2	4	2	4	5	4	4							2	
IBM	12	42	27	7	40	5	6	2	3	5	5	3							1	
Accenture	6	9	10	3	15	3	18	1	1	10	6	4							1	
Unilever	7	3	5	7	1	3	7	0	0	13	5	12							0	
P&G	12	9	5	7	2	6	4	2	1	6	2	7							1	
Nestle	2	1	2	1	0	1	2	0	0	6	1	4							0	
L'Oreal	6	3	3	6	2	3	10	3	3	8	3	15							1	

Looking at the Big 8, the most similar companies are Lazada and Sea, followed by Traveloka and Tokopedia...

...Sea and Tokopedia also has a relatively high index at 30

On the other end of the spectrum, the two members of the Big 8 with the least talent overlap are Gojek and Zalora – and this despite the fact that 28% of Zalora’s current employees (according to LinkedIn) are in Indonesia and the also relevant fact that the Gojek Co-Founder, Nadiem Makarim, was the former MD of Zalora Indonesia

# JUST LIKE HOW FOOD PRODUCTS HAVE NUTRITION LABELS, WE CAN NOW CREATE A 'NUTRITION FACT' PAGE FOR EACH OF OUR COMPANIES



## Nutrition Facts

Serving Size 1 package (61g)  
Servings Per Container 1

Amount Per Serving  
**Calories 240**    Calories from Fat 35

		% Daily Value*
<b>Total Fat</b> 3.5g		
Saturated Fat 2g		6%
Sodium 10mg		10%
Total Sugar 90mg		4%
<b>Total Carbohydrate</b> 42g		25%
Dietary Fiber less than 1g		3%
Sugars 6g		
<b>Protein</b> 10g		

Vitamin A 0%    • Vitamin C 0%  
Calcium 15%    • Iron 4%

\*Percent Daily Values are based on a diet of other people's secrets.

**INGREDIENTS:** SPIRAL PASTA (DURUM SEMOLINA FLOUR), NONFAT MILK, DEHYDRATED PARMESAN CHEESE, SALT, ENZYME, NATURAL FLAVOR (GARLIC), SEA SALT, SPICES, LACTIC ACID POWDER.

**ALL INGREDIENTS ARE NATURAL.**  
**Caution:** Contains heat from water.

## Nutrition Facts (Input) "Where Talent Comes From"

### Google

#### SE Asia Headcount:

~14,000

Per LinkedIn (Dec 2022)

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>688</b>	<b>4.91%</b>	<b>Semiconductors</b>	<b>55</b>	<b>0.39%</b>
Google	N/A	N/A	GlobalFoundries	6	0.04%
Microsoft	222	1.59%	Micron Technology	20	0.14%
Amazon	147	1.05%	Intel	29	0.21%
Facebook	145	1.04%	<b>Telcos</b>	<b>91</b>	<b>0.65%</b>
Oracle	115	0.82%	Singtel	52	0.37%
Apple	59	0.42%	Telkom Indonesia	39	0.28%
<b>China's BAT 2.0</b>	<b>96</b>	<b>0.69%</b>	<b>Big 4 Accounting Firms</b>	<b>269</b>	<b>1.92%</b>
Bytedance	69	0.49%	Deloitte	92	0.66%
Tencent	6	0.04%	EY	90	0.64%
Alibaba	21	0.15%	PwC	62	0.44%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>329</b>	<b>2.35%</b>	KPMG	25	0.18%
Sea	155	1.11%	<b>Management Consulting</b>	<b>136</b>	<b>0.97%</b>
Grab	92	0.66%	Bain	23	0.16%
Lazada	62	0.44%	BCG	45	0.32%
Zalora	20	0.14%	McKinsey	68	0.49%
<b>Indonesia Internet 1st Gen</b>	<b>64</b>	<b>0.46%</b>	<b>IT Services</b>	<b>302</b>	<b>2.16%</b>
Gojek	29	0.21%	IBM	157	1.12%
Tokopedia	11	0.08%	Accenture	145	1.04%
Bukalapak	3	0.02%	<b>Global FMCG</b>	<b>251</b>	<b>1.79%</b>
Traveloka	21	0.15%	Unilever	78	0.56%
<b>SE Asia Internet 2nd Gen</b>	<b>6</b>	<b>0.04%</b>	P&G	104	0.74%
Shopback	4	0.03%	Nestle	26	0.19%
Carsome	2	0.01%	L'Oreal	43	0.31%
RedDoorz	0	0.00%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	3,600	26%
Malaysia	894	6%
Indonesia	5,200	37%
Thailand	812	6%
Vietnam	1,800	13%
Philippines	2,600	19%
<b>Subtotal: Non-Singapore</b>		<b>74%</b>

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes Tiktok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Google

#### Alumni in SE Asia:

~6,100

Per LinkedIn (Dec 2022)

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>383</b>	<b>6.28%</b>	<b>Semiconductors</b>	<b>5</b>	<b>0.08%</b>
Google	N/A	N/A	GlobalFoundries	1	0.02%
Microsoft	70	1.15%	Micron Technology	2	0.03%
Amazon	98	1.61%	Intel	2	0.03%
Facebook	167	2.74%	<b>Telcos</b>	<b>9</b>	<b>0.15%</b>
Oracle	15	0.25%	Singtel	2	0.03%
Apple	33	0.54%	Telkom Indonesia	7	0.11%
<b>China's BAT 2.0</b>	<b>171</b>	<b>2.80%</b>	<b>Big 4 Accounting Firms</b>	<b>13</b>	<b>0.21%</b>
Bytedance	153	2.51%	Deloitte	8	0.13%
Tencent	6	0.10%	EY	3	0.05%
Alibaba	12	0.20%	PwC	0	0.00%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>126</b>	<b>2.07%</b>	KPMG	2	0.03%
Sea	56	0.92%	<b>Management Consulting</b>	<b>25</b>	<b>0.41%</b>
Grab	46	0.75%	Bain	8	0.13%
Lazada	24	0.39%	BCG	8	0.13%
Zalora	0	0.00%	McKinsey	9	0.15%
<b>Indonesia Internet 1st Gen</b>	<b>43</b>	<b>0.70%</b>	<b>IT Services</b>	<b>42</b>	<b>0.69%</b>
Gojek	19	0.31%	IBM	7	0.11%
Tokopedia	18	0.30%	Accenture	35	0.57%
Bukalapak	3	0.05%	<b>Global FMCG</b>	<b>23</b>	<b>0.38%</b>
Traveloka	3	0.05%	Unilever	9	0.15%
<b>SE Asia Internet 2nd Gen</b>	<b>11</b>	<b>0.18%</b>	P&G	7	0.11%
Shopback	6	0.10%	Nestle	2	0.03%
Carsome	5	0.08%	L'Oreal	5	0.08%
RedDoorz	0	0.00%			

#### Ratio of SE Asia Alumni to Current Headcount:

0.4x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+1.36%	Semiconductors	-0.31%
China's BAT 2.0	+2.12%	Telcos	-0.50%
Pan-SE Asia Internet 1st Gen	-0.28%	Big 4 Accounting Firms	-1.71%
Indonesia Internet 1st Gen	+0.25%	Management Consulting	-0.56%
SE Asia Internet 2nd Gen	+0.14%	IT Services	-1.47%
		Global FMCG	-1.42%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes Tiktok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.



## Nutrition Facts (Input) "Where Talent Comes From"

### Microsoft

#### SE Asia Headcount:

~4,300

Per LinkedIn (Dec 2022)

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>357</b>	<b>8.30%</b>	<b>Semiconductors</b>	<b>63</b>	<b>1.47%</b>
Google	70	1.63%	GlobalFoundries	4	0.09%
Microsoft	N/A	N/A	Micron Technology	3	0.07%
Amazon	73	1.70%	Intel	56	1.30%
Facebook	12	0.28%	<b>Telcos</b>	<b>51</b>	<b>1.19%</b>
Oracle	169	3.93%	Singtel	44	1.02%
Apple	33	0.77%	Telkom Indonesia	7	0.16%
<b>China's BAT 2.0</b>	<b>19</b>	<b>0.44%</b>	<b>Big 4 Accounting Firms</b>	<b>155</b>	<b>3.60%</b>
Bytedance	3	0.07%	Deloitte	45	1.05%
Tencent	4	0.09%	EY	49	1.14%
Alibaba	12	0.28%	PwC	43	1.00%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>40</b>	<b>0.93%</b>	KPMG	18	0.42%
Sea	22	0.51%	<b>Management Consulting</b>	<b>18</b>	<b>0.42%</b>
Grab	6	0.14%	Bain	1	0.02%
Lazada	9	0.21%	BCG	6	0.14%
Zalora	3	0.07%	McKinsey	11	0.26%
<b>Indonesia Internet 1st Gen</b>	<b>8</b>	<b>0.19%</b>	<b>IT Services</b>	<b>412</b>	<b>9.58%</b>
Gojek	2	0.05%	IBM	287	6.67%
Tokopedia	2	0.05%	Accenture	125	2.91%
Bukalapak	2	0.05%	<b>Global FMCG</b>	<b>52</b>	<b>1.21%</b>
Traveloka	2	0.05%	Unilever	13	0.30%
<b>SE Asia Internet 2nd Gen</b>	<b>3</b>	<b>0.07%</b>	P&G	31	0.72%
Shopback	2	0.05%	Nestle	4	0.09%
Carsome	0	0.00%	L'Oreal	4	0.09%
RedDoorz	1	0.02%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	1,800	42%
Malaysia	636	15%
Indonesia	675	16%
Thailand	331	8%
Vietnam	430	10%
Philippines	557	13%

Subtotal: Non-Singapore

58%

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Microsoft

#### Alumni in SE Asia:

~12,000

Per LinkedIn (Dec 2022)

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>747</b>	<b>6.23%</b>	<b>Semiconductors</b>	<b>43</b>	<b>0.36%</b>
Google	222	1.85%	GlobalFoundries	0	0.00%
Microsoft	N/A	N/A	Micron Technology	8	0.07%
Amazon	256	2.13%	Intel	35	0.29%
Facebook	117	0.98%	<b>Telcos</b>	<b>45</b>	<b>0.38%</b>
Oracle	90	0.75%	Singtel	22	0.18%
Apple	62	0.52%	Telkom Indonesia	23	0.19%
<b>China's BAT 2.0</b>	<b>94</b>	<b>0.78%</b>	<b>Big 4 Accounting Firms</b>	<b>59</b>	<b>0.49%</b>
Bytedance	59	0.49%	Deloitte	19	0.16%
Tencent	12	0.10%	EY	31	0.26%
Alibaba	23	0.19%	PwC	2	0.02%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>152</b>	<b>1.27%</b>	KPMG	7	0.06%
Sea	62	0.52%	<b>Management Consulting</b>	<b>21</b>	<b>0.18%</b>
Grab	53	0.44%	Bain	4	0.03%
Lazada	34	0.28%	BCG	9	0.08%
Zalora	3	0.03%	McKinsey	8	0.07%
<b>Indonesia Internet 1st Gen</b>	<b>55</b>	<b>0.46%</b>	<b>IT Services</b>	<b>180</b>	<b>1.50%</b>
Gojek	20	0.17%	IBM	84	0.70%
Tokopedia	15	0.13%	Accenture	96	0.80%
Bukalapak	8	0.07%	<b>Global FMCG</b>	<b>35</b>	<b>0.29%</b>
Traveloka	12	0.10%	Unilever	8	0.07%
<b>SE Asia Internet 2nd Gen</b>	<b>5</b>	<b>0.04%</b>	P&G	16	0.13%
Shopback	1	0.01%	Nestle	4	0.03%
Carsome	4	0.03%	L'Oreal	7	0.06%
RedDoorz	0	0.00%			

#### Ratio of SE Asia Alumni to Current Headcount:

2.8x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	-2.08%	Semiconductors	-1.11%
China's BAT 2.0	+0.34%	Telcos	-0.81%
Pan-SE Asia Internet 1st Gen	+0.34%	Big 4 Accounting Firms	-3.11%
Indonesia Internet 1st Gen	+0.27%	Management Consulting	-0.24%
SE Asia Internet 2nd Gen	-0.03%	IT Services	-8.08%
		Global FMCG	-0.92%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.





## Nutrition Facts (Input) "Where Talent Comes From"

### Amazon

**SE Asia Headcount:**

**~14,000**

Per LinkedIn (Dec 2022)

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>619</b>	<b>4.42%</b>	<b>Semiconductors</b>	<b>66</b>	<b>0.47%</b>
Google	98	0.70%	GlobalFoundries	13	0.09%
Microsoft	256	1.83%	Micron Technology	16	0.11%
Amazon	N/A	N/A	Intel	37	0.26%
Facebook	39	0.28%	<b>Telcos</b>	<b>91</b>	<b>0.65%</b>
Oracle	160	1.14%	Singtel	83	0.59%
Apple	66	0.47%	Telkom Indonesia	8	0.06%
<b>China's BAT 2.0</b>	<b>39</b>	<b>0.28%</b>	<b>Big 4 Accounting Firms</b>	<b>237</b>	<b>1.69%</b>
Bytedance	20	0.14%	Deloitte	78	0.56%
Tencent	4	0.03%	EY	86	0.61%
Alibaba	15	0.11%	PwC	49	0.35%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>201</b>	<b>1.44%</b>	KPMG	24	0.17%
Sea	92	0.66%	<b>Management Consulting</b>	<b>34</b>	<b>0.24%</b>
Grab	53	0.38%	Bain	3	0.02%
Lazada	48	0.34%	BCG	15	0.11%
Zalora	8	0.06%	McKinsey	16	0.11%
<b>Indonesia Internet 1st Gen</b>	<b>20</b>	<b>0.14%</b>	<b>IT Services</b>	<b>587</b>	<b>4.19%</b>
Gojek	8	0.06%	IBM	346	2.47%
Tokopedia	7	0.05%	Accenture	241	1.72%
Bukalapak	0	0.00%	<b>Global FMCG</b>	<b>137</b>	<b>0.98%</b>
Traveloka	5	0.04%	Unilever	48	0.34%
<b>SE Asia Internet 2nd Gen</b>	<b>6</b>	<b>0.04%</b>	P&G	45	0.32%
Shopback	5	0.04%	Nestle	25	0.18%
Carsome	1	0.01%	L'Oreal	19	0.14%
RedDoorz	0	0.00%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	3,400	24%
Malaysia	923	7%
Indonesia	2,700	19%
Thailand	2,200	16%
Vietnam	971	7%
Philippines	3,900	28%
<b>Subtotal: Non-Singapore</b>		<b>76%</b>

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Amazon

**Alumni in SE Asia:**

**~6,200**

Per LinkedIn (Dec 2022)

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>351</b>	<b>5.66%</b>	<b>Semiconductors</b>	<b>9</b>	<b>0.15%</b>
Google	147	2.37%	GlobalFoundries	1	0.02%
Microsoft	73	1.18%	Micron Technology	4	0.06%
Amazon	N/A	N/A	Intel	4	0.06%
Facebook	91	1.47%	<b>Telcos</b>	<b>12</b>	<b>0.19%</b>
Oracle	5	0.08%	Singtel	8	0.13%
Apple	35	0.56%	Telkom Indonesia	4	0.06%
<b>China's BAT 2.0</b>	<b>65</b>	<b>1.05%</b>	<b>Big 4 Accounting Firms</b>	<b>25</b>	<b>0.40%</b>
Bytedance	55	0.89%	Deloitte	9	0.15%
Tencent	5	0.08%	EY	12	0.19%
Alibaba	5	0.08%	PwC	3	0.05%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>149</b>	<b>2.40%</b>	KPMG	1	0.02%
Sea	76	1.23%	<b>Management Consulting</b>	<b>21</b>	<b>0.34%</b>
Grab	42	0.68%	Bain	5	0.08%
Lazada	29	0.47%	BCG	10	0.16%
Zalora	2	0.03%	McKinsey	6	0.10%
<b>Indonesia Internet 1st Gen</b>	<b>27</b>	<b>0.44%</b>	<b>IT Services</b>	<b>55</b>	<b>0.89%</b>
Gojek	8	0.13%	IBM	12	0.19%
Tokopedia	12	0.19%	Accenture	43	0.69%
Bukalapak	0	0.00%	<b>Global FMCG</b>	<b>21</b>	<b>0.34%</b>
Traveloka	7	0.11%	Unilever	7	0.11%
<b>SE Asia Internet 2nd Gen</b>	<b>7</b>	<b>0.11%</b>	P&G	6	0.10%
Shopback	4	0.06%	Nestle	6	0.10%
Carsome	3	0.05%	L'Oreal	2	0.03%
RedDoorz	0	0.00%			

#### Ratio of SE Asia Alumni to Current Headcount:

**0.4x**

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+1.24%	Semiconductors	-0.33%
China's BAT 2.0	+0.77%	Telcos	-0.46%
Pan-SE Asia Internet 1st Gen	+0.97%	Big 4 Accounting Firms	-1.29%
Indonesia Internet 1st Gen	+0.29%	Management Consulting	+0.10%
SE Asia Internet 2nd Gen	+0.07%	IT Services	-3.31%
		Global FMCG	-0.64%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

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## Nutrition Facts (Input) "Where Talent Comes From"

### Facebook

SE Asia Headcount:

~5,300

Per LinkedIn (Dec 2022)

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>454</b>	<b>8.57%</b>	<b>Semiconductors</b>	<b>37</b>	<b>0.70%</b>
Google	167	3.15%	GlobalFoundries	4	0.08%
Microsoft	117	2.21%	Micron Technology	17	0.32%
Amazon	91	1.72%	Intel	16	0.30%
Facebook	N/A	N/A	<b>Telcos</b>	<b>63</b>	<b>1.19%</b>
Oracle	25	0.47%	Singtel	54	1.02%
Apple	54	1.02%	Telkom Indonesia	9	0.17%
<b>China's BAT 2.0</b>	<b>75</b>	<b>1.42%</b>	<b>Big 4 Accounting Firms</b>	<b>162</b>	<b>3.06%</b>
Bytedance	52	0.98%	Deloitte	65	1.23%
Tencent	10	0.19%	EY	56	1.06%
Alibaba	13	0.25%	PwC	28	0.53%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>272</b>	<b>5.13%</b>	KPMG	13	0.25%
Sea	116	2.19%	<b>Management Consulting</b>	<b>44</b>	<b>0.83%</b>
Grab	98	1.85%	Bain	5	0.09%
Lazada	46	0.87%	BCG	14	0.26%
Zalora	12	0.23%	McKinsey	25	0.47%
<b>Indonesia Internet 1st Gen</b>	<b>50</b>	<b>0.94%</b>	<b>IT Services</b>	<b>136</b>	<b>2.57%</b>
Gojek	20	0.38%	IBM	59	1.11%
Tokopedia	10	0.19%	Accenture	77	1.45%
Bukalapak	5	0.09%	<b>Global FMCG</b>	<b>125</b>	<b>2.36%</b>
Traveloka	15	0.28%	Unilever	53	1.00%
<b>SE Asia Internet 2nd Gen</b>	<b>8</b>	<b>0.15%</b>	P&G	36	0.68%
Shopback	8	0.15%	Nestle	18	0.34%
Carsome	0	0.00%	L'Oreal	18	0.34%
RedDoorz	0	0.00%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	2,400	45%
Malaysia	387	7%
Indonesia	1,000	19%
Thailand	263	5%
Vietnam	469	9%
Philippines	889	17%
<b>Subtotal: Non-Singapore</b>		<b>55%</b>

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Facebook

Alumni in SE Asia:

~2,600

Per LinkedIn (Dec 2022)

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>227</b>	<b>8.73%</b>	<b>Semiconductors</b>	<b>2</b>	<b>0.08%</b>
Google	145	5.58%	GlobalFoundries	0	0.00%
Microsoft	12	0.46%	Micron Technology	1	0.04%
Amazon	39	1.50%	Intel	1	0.04%
Facebook	N/A	N/A	<b>Telcos</b>	<b>5</b>	<b>0.19%</b>
Oracle	2	0.08%	Singtel	3	0.12%
Apple	29	1.12%	Telkom Indonesia	2	0.08%
<b>China's BAT 2.0</b>	<b>157</b>	<b>6.04%</b>	<b>Big 4 Accounting Firms</b>	<b>6</b>	<b>0.23%</b>
Bytedance	152	5.85%	Deloitte	3	0.12%
Tencent	3	0.12%	EY	2	0.08%
Alibaba	2	0.08%	PwC	1	0.04%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>61</b>	<b>2.35%</b>	KPMG	0	0.00%
Sea	28	1.08%	<b>Management Consulting</b>	<b>7</b>	<b>0.27%</b>
Grab	24	0.92%	Bain	4	0.15%
Lazada	8	0.31%	BCG	1	0.04%
Zalora	1	0.04%	McKinsey	2	0.08%
<b>Indonesia Internet 1st Gen</b>	<b>10</b>	<b>0.38%</b>	<b>IT Services</b>	<b>14</b>	<b>0.54%</b>
Gojek	5	0.19%	IBM	2	0.08%
Tokopedia	4	0.15%	Accenture	12	0.46%
Bukalapak	0	0.00%	<b>Global FMCG</b>	<b>9</b>	<b>0.35%</b>
Traveloka	1	0.04%	Unilever	3	0.12%
<b>SE Asia Internet 2nd Gen</b>	<b>6</b>	<b>0.23%</b>	P&G	2	0.08%
Shopback	4	0.15%	Nestle	0	0.00%
Carsome	0	0.00%	L'Oreal	4	0.15%
RedDoorz	2	0.08%			

#### Ratio of SE Asia Alumni to Current Headcount:

0.5x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+0.16%	Semiconductors	-0.62%
China's BAT 2.0	+4.62%	Telcos	-1.00%
Pan-SE Asia Internet 1st Gen	-2.79%	Big 4 Accounting Firms	-2.83%
Indonesia Internet 1st Gen	-0.56%	Management Consulting	-0.56%
SE Asia Internet 2nd Gen	+0.08%	IT Services	-2.03%
		Global FMCG	-2.01%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

### Oracle

#### SE Asia Headcount:

~4,200

Per LinkedIn (Dec 2022)

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>117</b>	<b>2.79%</b>	<b>Semiconductors</b>	<b>15</b>	<b>0.36%</b>
Google	15	0.36%	GlobalFoundries	1	0.02%
Microsoft	90	2.14%	Micron Technology	4	0.10%
Amazon	5	0.12%	Intel	10	0.24%
Facebook	2	0.05%	<b>Telcos</b>	<b>32</b>	<b>0.76%</b>
Oracle	N/A	N/A	Singtel	29	0.69%
Apple	5	0.12%	Telkom Indonesia	3	0.07%
<b>China's BAT 2.0</b>	<b>4</b>	<b>0.10%</b>	<b>Big 4 Accounting Firms</b>	<b>87</b>	<b>2.07%</b>
Bytedance	2	0.05%	Deloitte	33	0.79%
Tencent	0	0.00%	EY	26	0.62%
Alibaba	2	0.05%	PwC	21	0.50%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>16</b>	<b>0.38%</b>	KPMG	7	0.17%
Sea	8	0.19%	<b>Management Consulting</b>	<b>4</b>	<b>0.10%</b>
Grab	5	0.12%	Bain	0	0.00%
Lazada	0	0.00%	BCG	2	0.05%
Zalora	3	0.07%	McKinsey	2	0.05%
<b>Indonesia Internet 1st Gen</b>	<b>1</b>	<b>0.02%</b>	<b>IT Services</b>	<b>529</b>	<b>12.60%</b>
Gojek	0	0.00%	IBM	253	6.02%
Tokopedia	0	0.00%	Accenture	276	6.57%
Bukalapak	1	0.02%	<b>Global FMCG</b>	<b>22</b>	<b>0.52%</b>
Traveloka	0	0.00%	Unilever	6	0.14%
<b>SE Asia Internet 2nd Gen</b>	<b>0</b>	<b>0.00%</b>	P&G	4	0.10%
Shopback	0	0.00%	Nestle	5	0.12%
Carsome	0	0.00%	L'Oreal	7	0.17%
RedDoorz	0	0.00%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	1,200	29%
Malaysia	650	15%
Indonesia	455	11%
Thailand	297	7%
Vietnam	315	8%
Philippines	1,300	31%
<b>Subtotal: Non-Singapore</b>		<b>71%</b>

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Oracle

#### Alumni in SE Asia:

~8,100

Per LinkedIn (Dec 2022)

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>488</b>	<b>6.02%</b>	<b>Semiconductors</b>	<b>16</b>	<b>0.20%</b>
Google	115	1.42%	GlobalFoundries	6	0.07%
Microsoft	169	2.09%	Micron Technology	2	0.02%
Amazon	160	1.98%	Intel	8	0.10%
Facebook	25	0.31%	<b>Telcos</b>	<b>23</b>	<b>0.28%</b>
Oracle	N/A	N/A	Singtel	20	0.25%
Apple	19	0.23%	Telkom Indonesia	3	0.04%
<b>China's BAT 2.0</b>	<b>22</b>	<b>0.27%</b>	<b>Big 4 Accounting Firms</b>	<b>93</b>	<b>1.15%</b>
Bytedance	15	0.19%	Deloitte	53	0.65%
Tencent	2	0.02%	EY	28	0.35%
Alibaba	5	0.06%	PwC	8	0.10%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>36</b>	<b>0.44%</b>	KPMG	4	0.05%
Sea	10	0.12%	<b>Management Consulting</b>	<b>6</b>	<b>0.07%</b>
Grab	17	0.21%	Bain	4	0.05%
Lazada	8	0.10%	BCG	0	0.00%
Zalora	1	0.01%	McKinsey	2	0.02%
<b>Indonesia Internet 1st Gen</b>	<b>12</b>	<b>0.15%</b>	<b>IT Services</b>	<b>212</b>	<b>2.62%</b>
Gojek	6	0.07%	IBM	96	1.19%
Tokopedia	4	0.05%	Accenture	116	1.43%
Bukalapak	0	0.00%	<b>Global FMCG</b>	<b>7</b>	<b>0.09%</b>
Traveloka	2	0.02%	Unilever	1	0.01%
<b>SE Asia Internet 2nd Gen</b>	<b>0</b>	<b>0.00%</b>	P&G	4	0.05%
Shopback	0	0.00%	Nestle	1	0.01%
Carsome	0	0.00%	L'Oreal	1	0.01%
RedDoorz	0	0.00%			

#### Ratio of SE Asia Alumni to Current Headcount:

1.9x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+3.24%	Semiconductors	-0.16%
China's BAT 2.0	+0.18%	Telcos	-0.48%
Pan-SE Asia Internet 1st Gen	+0.06%	Big 4 Accounting Firms	-0.92%
Indonesia Internet 1st Gen	+0.12%	Management Consulting	-0.02%
SE Asia Internet 2nd Gen	-	IT Services	-9.98%
		Global FMCG	-0.44%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

### Apple

#### SE Asia Headcount:

Per LinkedIn (Dec 2022)

**~13,000**

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>178</b>	<b>1.37%</b>	<b>Semiconductors</b>	<b>80</b>	<b>0.62%</b>
Google	33	0.25%	GlobalFoundries	13	0.10%
Microsoft	62	0.48%	Micron Technology	19	0.15%
Amazon	35	0.27%	Intel	48	0.37%
Facebook	29	0.22%	<b>Telcos</b>	<b>60</b>	<b>0.46%</b>
Oracle	19	0.15%	Singtel	55	0.42%
Apple	N/A	N/A	Telkom Indonesia	5	0.04%
<b>China's BAT 2.0</b>	<b>17</b>	<b>0.13%</b>	<b>Big 4 Accounting Firms</b>	<b>113</b>	<b>0.87%</b>
Bytedance	14	0.11%	Deloitte	40	0.31%
Tencent	2	0.02%	EY	32	0.25%
Alibaba	1	0.01%	PwC	29	0.22%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>102</b>	<b>0.78%</b>	KPMG	12	0.09%
Sea	43	0.33%	<b>Management Consulting</b>	<b>14</b>	<b>0.11%</b>
Grab	28	0.22%	Bain	4	0.03%
Lazada	21	0.16%	BCG	1	0.01%
Zalora	10	0.08%	McKinsey	9	0.07%
<b>Indonesia Internet 1st Gen</b>	<b>6</b>	<b>0.05%</b>	<b>IT Services</b>	<b>115</b>	<b>0.88%</b>
Gojek	3	0.02%	IBM	54	0.42%
Tokopedia	0	0.00%	Accenture	61	0.47%
Bukalapak	0	0.00%	<b>Global FMCG</b>	<b>100</b>	<b>0.77%</b>
Traveloka	3	0.02%	Unilever	30	0.23%
<b>SE Asia Internet 2nd Gen</b>	<b>1</b>	<b>0.01%</b>	P&G	43	0.33%
Shopback	0	0.00%	Nestle	12	0.09%
Carsome	0	0.00%	L'Oreal	15	0.12%
RedDoorz	1	0.01%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	3,300	25%
Malaysia	1,400	11%
Indonesia	5,700	44%
Thailand	1,200	9%
Vietnam	1,400	11%
Philippines	922	7%
<b>Subtotal: Non-Singapore</b>		<b>75%</b>

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomset; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Apple

#### Alumni in SE Asia:

Per LinkedIn (Dec 2022)

**~4,400**

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>217</b>	<b>4.93%</b>	<b>Semiconductors</b>	<b>11</b>	<b>0.25%</b>
Google	59	1.34%	GlobalFoundries	0	0.00%
Microsoft	33	0.75%	Micron Technology	6	0.14%
Amazon	66	1.50%	Intel	5	0.11%
Facebook	54	1.23%	<b>Telcos</b>	<b>13</b>	<b>0.30%</b>
Oracle	5	0.11%	Singtel	10	0.23%
Apple	N/A	N/A	Telkom Indonesia	3	0.07%
<b>China's BAT 2.0</b>	<b>56</b>	<b>1.27%</b>	<b>Big 4 Accounting Firms</b>	<b>8</b>	<b>0.18%</b>
Bytedance	44	1.00%	Deloitte	3	0.07%
Tencent	5	0.11%	EY	5	0.11%
Alibaba	7	0.16%	PwC	0	0.00%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>64</b>	<b>1.45%</b>	KPMG	0	0.00%
Sea	25	0.57%	<b>Management Consulting</b>	<b>4</b>	<b>0.09%</b>
Grab	30	0.68%	Bain	1	0.02%
Lazada	9	0.20%	BCG	2	0.05%
Zalora	0	0.00%	McKinsey	1	0.02%
<b>Indonesia Internet 1st Gen</b>	<b>12</b>	<b>0.27%</b>	<b>IT Services</b>	<b>41</b>	<b>0.93%</b>
Gojek	11	0.25%	IBM	10	0.23%
Tokopedia	0	0.00%	Accenture	31	0.70%
Bukalapak	0	0.00%	<b>Global FMCG</b>	<b>26</b>	<b>0.59%</b>
Traveloka	1	0.02%	Unilever	6	0.14%
<b>SE Asia Internet 2nd Gen</b>	<b>0</b>	<b>0.00%</b>	P&G	14	0.32%
Shopback	0	0.00%	Nestle	2	0.05%
Carsome	0	0.00%	L'Oreal	4	0.09%
RedDoorz	0	0.00%			

#### Ratio of SE Asia Alumni to Current Headcount:

0.3x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+3.56%	Semiconductors	-0.37%
China's BAT 2.0	+1.14%	Telcos	-0.17%
Pan-SE Asia Internet 1st Gen	+0.67%	Big 4 Accounting Firms	-0.69%
Indonesia Internet 1st Gen	+0.23%	Management Consulting	-0.02%
SE Asia Internet 2nd Gen	-0.01%	IT Services	+0.05%
		Global FMCG	-0.18%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomset; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

### Bytedance

#### SE Asia Headcount:

Per LinkedIn (Dec 2022)

**~10,000**

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>478</b>	<b>4.78%</b>	<b>Semiconductors</b>	<b>37</b>	<b>0.37%</b>
Google	153	1.53%	GlobalFoundries	4	0.04%
Microsoft	59	0.59%	Micron Technology	22	0.22%
Amazon	55	0.55%	Intel	11	0.11%
Facebook	152	1.52%	<b>Telcos</b>	<b>151</b>	<b>1.51%</b>
Oracle	15	0.15%	Singtel	94	0.94%
Apple	44	0.44%	Telkom Indonesia	57	0.57%
<b>China's BAT 2.0</b>	<b>133</b>	<b>1.33%</b>	<b>Big 4 Accounting Firms</b>	<b>150</b>	<b>1.50%</b>
Bytedance	N/A	N/A	Deloitte	44	0.44%
Tencent	60	0.60%	EY	65	0.65%
Alibaba	73	0.73%	PwC	31	0.31%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>1,589</b>	<b>15.89%</b>	KPMG	10	0.10%
Sea	966	9.66%	<b>Management Consulting</b>	<b>50</b>	<b>0.50%</b>
Grab	279	2.79%	Bain	7	0.07%
Lazada	286	2.86%	BCG	21	0.21%
Zalora	58	0.58%	McKinsey	22	0.22%
<b>Indonesia Internet 1st Gen</b>	<b>273</b>	<b>2.73%</b>	<b>IT Services</b>	<b>566</b>	<b>5.66%</b>
Gojek	70	0.70%	IBM	69	0.69%
Tokopedia	112	1.12%	Accenture	497	4.97%
Bukalapak	39	0.39%	<b>Global FMCG</b>	<b>184</b>	<b>1.84%</b>
Traveloka	52	0.52%	Unilever	71	0.71%
<b>SE Asia Internet 2nd Gen</b>	<b>41</b>	<b>0.41%</b>	P&G	29	0.29%
Shopback	26	0.26%	Nestle	30	0.30%
Carsome	6	0.06%	L'Oreal	54	0.54%
RedDoorz	9	0.09%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	3,300	33%
Malaysia	2,700	27%
Indonesia	3,000	30%
Thailand	657	7%
Vietnam	958	10%
Philippines	560	6%
<b>Subtotal: Non-Singapore</b>		<b>67%</b>

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Bytedance

#### Alumni in SE Asia:

Per LinkedIn (Dec 2022)

**~2,800**

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>160</b>	<b>5.71%</b>	<b>Semiconductors</b>	<b>4</b>	<b>0.14%</b>
Google	69	2.46%	GlobalFoundries	0	0.00%
Microsoft	3	0.11%	Micron Technology	1	0.04%
Amazon	20	0.71%	Intel	3	0.11%
Facebook	52	1.86%	<b>Telcos</b>	<b>5</b>	<b>0.18%</b>
Oracle	2	0.07%	Singtel	1	0.04%
Apple	14	0.50%	Telkom Indonesia	4	0.14%
<b>China's BAT 2.0</b>	<b>24</b>	<b>0.86%</b>	<b>Big 4 Accounting Firms</b>	<b>9</b>	<b>0.32%</b>
Bytedance	N/A	N/A	Deloitte	5	0.18%
Tencent	18	0.64%	EY	2	0.07%
Alibaba	6	0.21%	PwC	2	0.07%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>192</b>	<b>6.86%</b>	KPMG	0	0.00%
Sea	135	4.82%	<b>Management Consulting</b>	<b>2</b>	<b>0.07%</b>
Grab	34	1.21%	Bain	0	0.00%
Lazada	21	0.75%	BCG	2	0.07%
Zalora	2	0.07%	McKinsey	0	0.00%
<b>Indonesia Internet 1st Gen</b>	<b>26</b>	<b>0.93%</b>	<b>IT Services</b>	<b>18</b>	<b>0.64%</b>
Gojek	11	0.39%	IBM	3	0.11%
Tokopedia	13	0.46%	Accenture	15	0.54%
Bukalapak	0	0.00%	<b>Global FMCG</b>	<b>18</b>	<b>0.64%</b>
Traveloka	2	0.07%	Unilever	7	0.25%
<b>SE Asia Internet 2nd Gen</b>	<b>5</b>	<b>0.18%</b>	P&G	4	0.14%
Shopback	3	0.11%	Nestle	1	0.04%
Carsome	0	0.00%	L'Oreal	6	0.21%
RedDoorz	2	0.07%			

#### Ratio of SE Asia Alumni to Current Headcount:

0.3x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+0.93%	Semiconductors	-0.23%
China's BAT 2.0	-0.47%	Telcos	-1.33%
Pan-SE Asia Internet 1st Gen	-9.03%	Big 4 Accounting Firms	-1.18%
Indonesia Internet 1st Gen	-1.80%	Management Consulting	-0.43%
SE Asia Internet 2nd Gen	-0.23%	IT Services	-5.02%
		Global FMCG	-1.20%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

### Tencent

#### SE Asia Headcount:

Per LinkedIn (Dec 2022)

~1,531

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>33</b>	<b>2.16%</b>	<b>Semiconductors</b>	<b>12</b>	<b>0.78%</b>
Google	6	0.39%	GlobalFoundries	3	0.20%
Microsoft	12	0.78%	Micron Technology	6	0.39%
Amazon	5	0.33%	Intel	3	0.20%
Facebook	3	0.20%	<b>Telcos</b>	<b>10</b>	<b>0.65%</b>
Oracle	2	0.13%	Singtel	9	0.59%
Apple	5	0.33%	Telkom Indonesia	1	0.07%
<b>China's BAT 2.0</b>	<b>32</b>	<b>2.09%</b>	<b>Big 4 Accounting Firms</b>	<b>28</b>	<b>1.83%</b>
Bytedance	18	1.18%	Deloitte	12	0.78%
Tencent	N/A	N/A	EY	13	0.85%
Alibaba	14	0.91%	PwC	3	0.20%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>59</b>	<b>3.85%</b>	KPMG	0	0.00%
Sea	43	2.81%	<b>Management Consulting</b>	<b>8</b>	<b>0.52%</b>
Grab	9	0.59%	Bain	0	0.00%
Lazada	6	0.39%	BCG	6	0.39%
Zalora	1	0.07%	McKinsey	2	0.13%
<b>Indonesia Internet 1st Gen</b>	<b>3</b>	<b>0.20%</b>	<b>IT Services</b>	<b>23</b>	<b>1.50%</b>
Gojek	3	0.20%	IBM	12	0.78%
Tokopedia	0	0.00%	Accenture	11	0.72%
Bukalapak	0	0.00%	<b>Global FMCG</b>	<b>7</b>	<b>0.46%</b>
Traveloka	0	0.00%	Unilever	1	0.07%
<b>SE Asia Internet 2nd Gen</b>	<b>2</b>	<b>0.13%</b>	P&G	3	0.20%
Shopback	0	0.00%	Nestle	1	0.07%
Carsome	1	0.07%	L'Oreal	2	0.13%
RedDoorz	1	0.07%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	811	53%
Malaysia	114	7%
Indonesia	222	15%
Thailand	107	7%
Vietnam	155	10%
Philippines	122	8%

#### Subtotal: Non-Singapore

47%

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomse; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Tencent

#### Alumni in SE Asia:

Per LinkedIn (Dec 2022)

~1,100

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>26</b>	<b>2.36%</b>	<b>Semiconductors</b>	<b>0</b>	<b>0.00%</b>
Google	6	0.55%	GlobalFoundries	0	0.00%
Microsoft	4	0.36%	Micron Technology	0	0.00%
Amazon	4	0.36%	Intel	0	0.00%
Facebook	10	0.91%	<b>Telcos</b>	<b>2</b>	<b>0.18%</b>
Oracle	0	0.00%	Singtel	0	0.00%
Apple	2	0.18%	Telkom Indonesia	2	0.18%
<b>China's BAT 2.0</b>	<b>65</b>	<b>5.91%</b>	<b>Big 4 Accounting Firms</b>	<b>1</b>	<b>0.09%</b>
Bytedance	60	5.45%	Deloitte	1	0.09%
Tencent	N/A	N/A	EY	0	0.00%
Alibaba	5	0.45%	PwC	0	0.00%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>114</b>	<b>10.36%</b>	KPMG	0	0.00%
Sea	94	8.55%	<b>Management Consulting</b>	<b>2</b>	<b>0.18%</b>
Grab	16	1.45%	Bain	0	0.00%
Lazada	4	0.36%	BCG	2	0.18%
Zalora	0	0.00%	McKinsey	0	0.00%
<b>Indonesia Internet 1st Gen</b>	<b>9</b>	<b>0.82%</b>	<b>IT Services</b>	<b>4</b>	<b>0.36%</b>
Gojek	5	0.45%	IBM	0	0.00%
Tokopedia	3	0.27%	Accenture	4	0.36%
Bukalapak	1	0.09%	<b>Global FMCG</b>	<b>10</b>	<b>0.91%</b>
Traveloka	0	0.00%	Unilever	2	0.18%
<b>SE Asia Internet 2nd Gen</b>	<b>3</b>	<b>0.27%</b>	P&G	4	0.36%
Shopback	1	0.09%	Nestle	0	0.00%
Carsome	2	0.18%	L'Oreal	4	0.36%
RedDoorz	0	0.00%			

#### Ratio of SE Asia Alumni to Current Headcount:

0.7x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+0.21%	Semiconductors	-0.78%
China's BAT 2.0	+3.82%	Telcos	-0.47%
Pan-SE Asia Internet 1st Gen	+6.51%	Big 4 Accounting Firms	-1.74%
Indonesia Internet 1st Gen	+0.62%	Management Consulting	-0.34%
SE Asia Internet 2nd Gen	+0.14%	IT Services	-1.14%
		Global FMCG	+0.45%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomse; KPMG includes KPMG U.S.



## Nutrition Facts (Input) "Where Talent Comes From"

### Alibaba

#### SE Asia Headcount:

Per LinkedIn (Dec 2022)

**~1,709**

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>54</b>	<b>3.16%</b>	<b>Semiconductors</b>	<b>12</b>	<b>0.70%</b>
Google	12	0.70%	GlobalFoundries	5	0.29%
Microsoft	23	<b>1.35%</b>	Micron Technology	4	0.23%
Amazon	5	0.29%	Intel	3	0.18%
Facebook	2	0.12%	<b>Telcos</b>	<b>6</b>	<b>0.35%</b>
Oracle	5	0.29%	Singtel	6	0.35%
Apple	7	0.41%	Telkom Indonesia	0	0.00%
<b>China's BAT 2.0</b>	<b>11</b>	<b>0.64%</b>	<b>Big 4 Accounting Firms</b>	<b>18</b>	<b>1.05%</b>
Bytedance	6	0.35%	Deloitte	6	0.35%
Tencent	5	0.29%	EY	5	0.29%
Alibaba	N/A	N/A	PwC	5	0.29%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>44</b>	<b>2.57%</b>	KPMG	2	0.12%
Sea	18	<b>1.05%</b>	<b>Management Consulting</b>	<b>4</b>	<b>0.23%</b>
Grab	2	0.12%	Bain	1	0.06%
Lazada	23	<b>1.35%</b>	BCG	1	0.06%
Zalora	1	0.06%	McKinsey	2	0.12%
<b>Indonesia Internet 1st Gen</b>	<b>2</b>	<b>0.12%</b>	<b>IT Services</b>	<b>35</b>	<b>2.05%</b>
Gojek	1	0.06%	IBM	19	<b>1.11%</b>
Tokopedia	1	0.06%	Accenture	16	0.94%
Bukalapak	0	0.00%	<b>Global FMCG</b>	<b>12</b>	<b>0.70%</b>
Traveloka	0	0.00%	Unilever	1	0.06%
<b>SE Asia Internet 2nd Gen</b>	<b>2</b>	<b>0.12%</b>	P&G	5	0.29%
Shopback	1	0.06%	Nestle	4	0.23%
Carsome	1	0.06%	L'Oreal	2	0.12%
RedDoorz	0	0.00%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	552	<b>32%</b>
Malaysia	213	12%
Indonesia	548	<b>32%</b>
Thailand	107	6%
Vietnam	151	9%
Philippines	138	8%

#### Subtotal: Non-Singapore

**68%**

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes Tiktok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Alibaba

#### Alumni in SE Asia:

Per LinkedIn (Dec 2022)

**~1,500**

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>64</b>	<b>4.27%</b>	<b>Semiconductors</b>	<b>1</b>	<b>0.07%</b>
Google	21	<b>1.40%</b>	GlobalFoundries	0	0.00%
Microsoft	12	0.80%	Micron Technology	0	0.00%
Amazon	15	<b>1.00%</b>	Intel	1	0.07%
Facebook	13	0.87%	<b>Telcos</b>	<b>3</b>	<b>0.20%</b>
Oracle	2	0.13%	Singtel	0	0.00%
Apple	1	0.07%	Telkom Indonesia	3	0.20%
<b>China's BAT 2.0</b>	<b>87</b>	<b>5.80%</b>	<b>Big 4 Accounting Firms</b>	<b>1</b>	<b>0.07%</b>
Bytedance	73	<b>4.87%</b>	Deloitte	0	0.00%
Tencent	14	0.93%	EY	1	0.07%
Alibaba	N/A	N/A	PwC	0	0.00%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>178</b>	<b>11.87%</b>	KPMG	0	0.00%
Sea	106	<b>7.07%</b>	<b>Management Consulting</b>	<b>5</b>	<b>0.33%</b>
Grab	14	0.93%	Bain	0	0.00%
Lazada	58	<b>3.87%</b>	BCG	2	0.13%
Zalora	0	0.00%	McKinsey	3	0.20%
<b>Indonesia Internet 1st Gen</b>	<b>12</b>	<b>0.80%</b>	<b>IT Services</b>	<b>12</b>	<b>0.80%</b>
Gojek	7	0.47%	IBM	2	0.13%
Tokopedia	3	0.20%	Accenture	10	0.67%
Bukalapak	1	0.07%	<b>Global FMCG</b>	<b>4</b>	<b>0.27%</b>
Traveloka	1	0.07%	Unilever	0	0.00%
<b>SE Asia Internet 2nd Gen</b>	<b>2</b>	<b>0.13%</b>	P&G	0	0.00%
Shopback	1	0.07%	Nestle	0	0.00%
Carsome	1	0.07%	L'Oreal	4	0.27%
RedDoorz	0	0.00%			

#### Ratio of SE Asia Alumni to Current Headcount:

**0.9x**

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	<b>+1.11%</b>	Semiconductors	-0.64%
China's BAT 2.0	<b>+5.16%</b>	Telcos	-0.15%
Pan-SE Asia Internet 1st Gen	<b>+9.29%</b>	Big 4 Accounting Firms	-0.99%
Indonesia Internet 1st Gen	+0.68%	Management Consulting	+0.10%
SE Asia Internet 2nd Gen	+0.02%	IT Services	<b>-1.25%</b>
		Global FMCG	-0.44%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

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## Nutrition Facts (Input) "Where Talent Comes From"

Sea

**SE Asia Headcount:**

**~48,000**

Per LinkedIn (Dec 2022)

### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>257</b>	<b>0.54%</b>	<b>Semiconductors</b>	<b>115</b>	<b>0.24%</b>
Google	56	0.12%	GlobalFoundries	16	0.03%
Microsoft	62	0.13%	Micron Technology	69	0.14%
Amazon	76	0.16%	Intel	30	0.06%
Facebook	28	0.06%	<b>Telcos</b>	<b>347</b>	<b>0.72%</b>
Oracle	10	0.02%	Singtel	105	0.22%
Apple	25	0.05%	Telkom Indonesia	242	0.50%
<b>China's BAT 2.0</b>	<b>335</b>	<b>0.70%</b>	<b>Big 4 Accounting Firms</b>	<b>1,074</b>	<b>2.24%</b>
Bytedance	135	0.28%	Deloitte	320	0.67%
Tencent	94	0.20%	EY	430	0.90%
Alibaba	106	0.22%	PwC	210	0.44%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>1,569</b>	<b>3.27%</b>	KPMG	114	0.24%
Sea	N/A	N/A	<b>Management Consulting</b>	<b>219</b>	<b>0.46%</b>
Grab	692	1.44%	Bain	34	0.07%
Lazada	717	1.49%	BCG	99	0.21%
Zalora	160	0.33%	McKinsey	86	0.18%
<b>Indonesia Internet 1st Gen</b>	<b>1,316</b>	<b>2.74%</b>	<b>IT Services</b>	<b>425</b>	<b>0.89%</b>
Gojek	520	1.08%	IBM	116	0.24%
Tokopedia	409	0.85%	Accenture	309	0.64%
Bukalapak	167	0.35%	<b>Global FMCG</b>	<b>492</b>	<b>1.03%</b>
Traveloka	220	0.46%	Unilever	209	0.44%
<b>SE Asia Internet 2nd Gen</b>	<b>90</b>	<b>0.19%</b>	P&G	69	0.14%
Shopback	37	0.08%	Nestle	120	0.25%
Carsome	8	0.02%	L'Oreal	94	0.20%
RedDoorz	45	0.09%			

### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	5,600	12%
Malaysia	4,400	9%
Indonesia	23,000	48%
Thailand	4,200	9%
Vietnam	5,000	10%
Philippines	4,900	10%

**Subtotal: Non-Singapore**

**88%**

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

Sea

**Alumni in SE Asia:**

**~30,000**

Per LinkedIn (Dec 2022)

### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>436</b>	<b>1.45%</b>	<b>Semiconductors</b>	<b>21</b>	<b>0.07%</b>
Google	155	0.52%	GlobalFoundries	2	0.01%
Microsoft	22	0.07%	Micron Technology	16	0.05%
Amazon	92	0.31%	Intel	3	0.01%
Facebook	116	0.39%	<b>Telcos</b>	<b>92</b>	<b>0.31%</b>
Oracle	8	0.03%	Singtel	25	0.08%
Apple	43	0.14%	Telkom Indonesia	67	0.22%
<b>China's BAT 2.0</b>	<b>1,027</b>	<b>3.42%</b>	<b>Big 4 Accounting Firms</b>	<b>208</b>	<b>0.69%</b>
Bytedance	966	3.22%	Deloitte	70	0.23%
Tencent	43	0.14%	EY	91	0.30%
Alibaba	18	0.06%	PwC	37	0.12%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>825</b>	<b>2.75%</b>	KPMG	10	0.03%
Sea	N/A	N/A	<b>Management Consulting</b>	<b>82</b>	<b>0.27%</b>
Grab	461	1.54%	Bain	11	0.04%
Lazada	318	1.08%	BCG	41	0.14%
Zalora	46	0.15%	McKinsey	30	0.10%
<b>Indonesia Internet 1st Gen</b>	<b>614</b>	<b>2.05%</b>	<b>IT Services</b>	<b>156</b>	<b>0.52%</b>
Gojek	135	0.45%	IBM	14	0.05%
Tokopedia	340	1.13%	Accenture	142	0.47%
Bukalapak	71	0.24%	<b>Global FMCG</b>	<b>402</b>	<b>1.34%</b>
Traveloka	68	0.23%	Unilever	153	0.51%
<b>SE Asia Internet 2nd Gen</b>	<b>79</b>	<b>0.26%</b>	P&G	87	0.29%
Shopback	50	0.17%	Nestle	59	0.20%
Carsome	18	0.06%	L'Oreal	103	0.34%
RedDoorz	11	0.04%			

### Ratio of SE Asia Alumni to Current Headcount:

**0.6x**

### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+0.92%	Semiconductors	-0.17%
China's BAT 2.0	+2.73%	Telcos	-0.42%
Pan-SE Asia Internet 1st Gen	-0.52%	Big 4 Accounting Firms	-1.54%
Indonesia Internet 1st Gen	-0.70%	Management Consulting	-0.18%
SE Asia Internet 2nd Gen	+0.08%	IT Services	-0.37%
		Global FMCG	+0.32%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.



## Nutrition Facts (Input) "Where Talent Comes From"

### Grab

SE Asia Headcount:

~40,000

Per LinkedIn (Dec 2022)

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>212</b>	<b>0.53%</b>	<b>Semiconductors</b>	<b>37</b>	<b>0.09%</b>
Google	46	0.12%	GlobalFoundries	6	0.02%
Microsoft	53	0.13%	Micron Technology	15	0.04%
Amazon	42	0.11%	Intel	16	0.04%
Facebook	24	0.06%	<b>Telcos</b>	<b>195</b>	<b>0.49%</b>
Oracle	17	0.04%	Singtel	82	0.21%
Apple	30	0.08%	Telkom Indonesia	113	0.28%
<b>China's BAT 2.0</b>	<b>64</b>	<b>0.16%</b>	<b>Big 4 Accounting Firms</b>	<b>314</b>	<b>0.79%</b>
Bytedance	34	0.09%	Deloitte	90	0.23%
Tencent	16	0.04%	EY	120	0.30%
Alibaba	14	0.04%	PwC	62	0.16%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>679</b>	<b>1.70%</b>	KPMG	42	0.11%
Sea	461	1.15%	<b>Management Consulting</b>	<b>109</b>	<b>0.27%</b>
Grab	N/A	N/A	Bain	16	0.04%
Lazada	170	0.43%	BCG	50	0.13%
Zalora	48	0.12%	McKinsey	43	0.11%
<b>Indonesia Internet 1st Gen</b>	<b>317</b>	<b>0.79%</b>	<b>IT Services</b>	<b>294</b>	<b>0.74%</b>
Gojek	104	0.26%	IBM	110	0.28%
Tokopedia	88	0.22%	Accenture	184	0.46%
Bukalapak	37	0.09%	<b>Global FMCG</b>	<b>191</b>	<b>0.48%</b>
Traveloka	88	0.22%	Unilever	91	0.23%
<b>SE Asia Internet 2nd Gen</b>	<b>39</b>	<b>0.10%</b>	P&G	34	0.09%
Shopback	20	0.05%	Nestle	31	0.08%
Carsome	13	0.03%	L'Oreal	35	0.09%
RedDoorz	6	0.02%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	4,100	10%
Malaysia	4,600	12%
Indonesia	25,000	63%
Thailand	1,000	3%
Vietnam	1,400	4%
Philippines	3,000	8%

Subtotal: Non-Singapore

90%

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Grab

Alumni in SE Asia:

~18,000

Per LinkedIn (Dec 2022)

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>282</b>	<b>1.57%</b>	<b>Semiconductors</b>	<b>29</b>	<b>0.16%</b>
Google	92	0.51%	GlobalFoundries	2	0.01%
Microsoft	6	0.03%	Micron Technology	18	0.10%
Amazon	53	0.29%	Intel	9	0.05%
Facebook	98	0.54%	<b>Telcos</b>	<b>32</b>	<b>0.18%</b>
Oracle	5	0.03%	Singtel	11	0.06%
Apple	28	0.16%	Telkom Indonesia	21	0.12%
<b>China's BAT 2.0</b>	<b>290</b>	<b>1.61%</b>	<b>Big 4 Accounting Firms</b>	<b>71</b>	<b>0.39%</b>
Bytedance	279	1.55%	Deloitte	25	0.14%
Tencent	9	0.05%	EY	33	0.18%
Alibaba	2	0.01%	PwC	8	0.04%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>802</b>	<b>4.46%</b>	KPMG	5	0.03%
Sea	692	3.84%	<b>Management Consulting</b>	<b>51</b>	<b>0.28%</b>
Grab	N/A	N/A	Bain	9	0.05%
Lazada	106	0.59%	BCG	18	0.10%
Zalora	4	0.02%	McKinsey	24	0.13%
<b>Indonesia Internet 1st Gen</b>	<b>208</b>	<b>1.16%</b>	<b>IT Services</b>	<b>73</b>	<b>0.41%</b>
Gojek	83	0.46%	IBM	5	0.03%
Tokopedia	75	0.42%	Accenture	68	0.38%
Bukalapak	18	0.10%	<b>Global FMCG</b>	<b>66</b>	<b>0.37%</b>
Traveloka	32	0.18%	Unilever	31	0.17%
<b>SE Asia Internet 2nd Gen</b>	<b>86</b>	<b>0.48%</b>	P&G	7	0.04%
Shopback	35	0.19%	Nestle	9	0.05%
Carsome	24	0.13%	L'Oreal	19	0.11%
RedDoorz	27	0.15%			

#### Ratio of SE Asia Alumni to Current Headcount:

0.5x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+1.04%	Semiconductors	+0.07%
China's BAT 2.0	+1.45%	Telcos	-0.31%
Pan-SE Asia Internet 1st Gen	+2.76%	Big 4 Accounting Firms	-0.39%
Indonesia Internet 1st Gen	+0.36%	Management Consulting	+0.01%
SE Asia Internet 2nd Gen	+0.38%	IT Services	-0.33%
		Global FMCG	-0.11%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

### Zalora

#### SE Asia Headcount:

Per LinkedIn (Dec 2022)

**~2,483**

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>7</b>	<b>0.28%</b>	<b>Semiconductors</b>	<b>3</b>	<b>0.12%</b>
Google	0	0.00%	GlobalFoundries	0	0.00%
Microsoft	3	0.12%	Micron Technology	0	0.00%
Amazon	2	0.08%	Intel	3	0.12%
Facebook	1	0.04%	<b>Telcos</b>	<b>9</b>	<b>0.36%</b>
Oracle	1	0.04%	Singtel	2	0.08%
Apple	0	0.00%	Telkom Indonesia	7	0.28%
<b>China's BAT 2.0</b>	<b>2</b>	<b>0.08%</b>	<b>Big 4 Accounting Firms</b>	<b>38</b>	<b>1.53%</b>
Bytedance	2	0.08%	Deloitte	11	0.44%
Tencent	0	0.00%	EY	12	0.48%
Alibaba	0	0.00%	PwC	8	0.32%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>79</b>	<b>3.18%</b>	KPMG	7	0.28%
Sea	46	1.85%	<b>Management Consulting</b>	<b>8</b>	<b>0.32%</b>
Grab	4	0.16%	Bain	1	0.04%
Lazada	29	1.17%	BCG	3	0.12%
Zalora	N/A	N/A	McKinsey	4	0.16%
<b>Indonesia Internet 1st Gen</b>	<b>22</b>	<b>0.89%</b>	<b>IT Services</b>	<b>22</b>	<b>0.89%</b>
Gojek	3	0.12%	IBM	9	0.36%
Tokopedia	12	0.48%	Accenture	13	0.52%
Bukalapak	4	0.16%	<b>Global FMCG</b>	<b>20</b>	<b>0.81%</b>
Traveloka	3	0.12%	Unilever	4	0.16%
<b>SE Asia Internet 2nd Gen</b>	<b>10</b>	<b>0.40%</b>	P&G	2	0.08%
Shopback	6	0.24%	Nestle	5	0.20%
Carsome	4	0.16%	L'Oreal	9	0.36%
RedDoorz	0	0.00%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	275	11%
Malaysia	769	31%
Indonesia	690	28%
Thailand	72	3%
Vietnam	214	9%
Philippines	463	19%
<b>Subtotal: Non-Singapore</b>		<b>89%</b>

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Zalora

#### Alumni in SE Asia:

Per LinkedIn (Dec 2022)

**~4,900**

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>56</b>	<b>1.14%</b>	<b>Semiconductors</b>	<b>3</b>	<b>0.06%</b>
Google	20	0.41%	GlobalFoundries	0	0.00%
Microsoft	3	0.06%	Micron Technology	0	0.00%
Amazon	8	0.16%	Intel	3	0.06%
Facebook	12	0.24%	<b>Telcos</b>	<b>5</b>	<b>0.10%</b>
Oracle	3	0.06%	Singtel	1	0.02%
Apple	10	0.20%	Telkom Indonesia	4	0.08%
<b>China's BAT 2.0</b>	<b>60</b>	<b>1.22%</b>	<b>Big 4 Accounting Firms</b>	<b>24</b>	<b>0.49%</b>
Bytedance	58	1.18%	Deloitte	8	0.16%
Tencent	1	0.02%	EY	12	0.24%
Alibaba	1	0.02%	PwC	3	0.06%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>266</b>	<b>5.43%</b>	KPMG	1	0.02%
Sea	160	3.27%	<b>Management Consulting</b>	<b>4</b>	<b>0.08%</b>
Grab	48	0.98%	Bain	0	0.00%
Lazada	58	1.18%	BCG	0	0.00%
Zalora	N/A	N/A	McKinsey	4	0.08%
<b>Indonesia Internet 1st Gen</b>	<b>38</b>	<b>0.78%</b>	<b>IT Services</b>	<b>24</b>	<b>0.49%</b>
Gojek	10	0.20%	IBM	1	0.02%
Tokopedia	19	0.39%	Accenture	23	0.47%
Bukalapak	2	0.04%	<b>Global FMCG</b>	<b>42</b>	<b>0.86%</b>
Traveloka	7	0.14%	Unilever	10	0.20%
<b>SE Asia Internet 2nd Gen</b>	<b>35</b>	<b>0.71%</b>	P&G	9	0.18%
Shopback	25	0.51%	Nestle	8	0.16%
Carsome	8	0.16%	L'Oreal	15	0.31%
RedDoorz	2	0.04%			

#### Ratio of SE Asia Alumni to Current Headcount:

**2.0x**

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+0.86%	Semiconductors	-0.06%
China's BAT 2.0	+1.14%	Telcos	-0.26%
Pan-SE Asia Internet 1st Gen	+2.25%	Big 4 Accounting Firms	-1.04%
Indonesia Internet 1st Gen	-0.11%	Management Consulting	-0.24%
SE Asia Internet 2nd Gen	+0.31%	IT Services	-0.40%
		Global FMCG	+0.05%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

### Gojek

SE Asia Headcount:

~24,000

Per LinkedIn (Dec 2022)

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>69</b>	<b>0.29%</b>	<b>Semiconductors</b>	<b>7</b>	<b>0.03%</b>
Google	19	0.08%	GlobalFoundries	1	0.00%
Microsoft	20	0.08%	Micron Technology	2	0.01%
Amazon	8	0.03%	Intel	4	0.02%
Facebook	5	0.02%	<b>Telcos</b>	<b>86</b>	<b>0.36%</b>
Oracle	6	0.03%	Singtel	5	0.02%
Apple	11	0.05%	Telkom Indonesia	81	0.34%
<b>China's BAT 2.0</b>	<b>23</b>	<b>0.10%</b>	<b>Big 4 Accounting Firms</b>	<b>125</b>	<b>0.52%</b>
Bytedance	11	0.05%	Deloitte	40	0.17%
Tencent	5	0.02%	EY	45	0.19%
Alibaba	7	0.03%	PwC	29	0.12%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>304</b>	<b>1.27%</b>	KPMG	11	0.05%
Sea	135	0.56%	<b>Management Consulting</b>	<b>31</b>	<b>0.13%</b>
Grab	83	0.35%	Bain	2	0.01%
Lazada	76	0.32%	BCG	16	0.07%
Zalora	10	0.04%	McKinsey	13	0.05%
<b>Indonesia Internet 1st Gen</b>	<b>212</b>	<b>0.88%</b>	<b>IT Services</b>	<b>62</b>	<b>0.26%</b>
Gojek	N/A	N/A	IBM	25	0.10%
Tokopedia	87	0.36%	Accenture	37	0.15%
Bukalapak	71	0.30%	<b>Global FMCG</b>	<b>103</b>	<b>0.43%</b>
Traveloka	54	0.23%	Unilever	47	0.20%
<b>SE Asia Internet 2nd Gen</b>	<b>12</b>	<b>0.05%</b>	P&G	14	0.06%
Shopback	5	0.02%	Nestle	30	0.13%
Carsome	1	0.00%	L'Oreal	12	0.05%
RedDoorz	6	0.03%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	342	1%
Malaysia	4	0%
Indonesia	23,000	96%
Thailand	10	0%
Vietnam	272	1%
Philippines	1	0%

Subtotal: Non-Singapore

99%

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Gojek

Alumni in SE Asia:

~8,900

Per LinkedIn (Dec 2022)

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>62</b>	<b>0.70%</b>	<b>Semiconductors</b>	<b>1</b>	<b>0.01%</b>
Google	29	0.33%	GlobalFoundries	0	0.00%
Microsoft	2	0.02%	Micron Technology	1	0.01%
Amazon	8	0.09%	Intel	0	0.00%
Facebook	20	0.22%	<b>Telcos</b>	<b>42</b>	<b>0.47%</b>
Oracle	0	0.00%	Singtel	0	0.00%
Apple	3	0.03%	Telkom Indonesia	42	0.47%
<b>China's BAT 2.0</b>	<b>74</b>	<b>0.83%</b>	<b>Big 4 Accounting Firms</b>	<b>17</b>	<b>0.19%</b>
Bytedance	70	0.79%	Deloitte	8	0.09%
Tencent	3	0.03%	EY	7	0.08%
Alibaba	1	0.01%	PwC	2	0.02%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>666</b>	<b>7.48%</b>	KPMG	0	0.00%
Sea	520	5.84%	<b>Management Consulting</b>	<b>22</b>	<b>0.25%</b>
Grab	104	1.17%	Bain	2	0.02%
Lazada	39	0.44%	BCG	11	0.12%
Zalora	3	0.03%	McKinsey	9	0.10%
<b>Indonesia Internet 1st Gen</b>	<b>182</b>	<b>2.04%</b>	<b>IT Services</b>	<b>16</b>	<b>0.18%</b>
Gojek	N/A	N/A	IBM	2	0.02%
Tokopedia	104	1.17%	Accenture	14	0.16%
Bukalapak	44	0.49%	<b>Global FMCG</b>	<b>29</b>	<b>0.33%</b>
Traveloka	34	0.38%	Unilever	17	0.19%
<b>SE Asia Internet 2nd Gen</b>	<b>23</b>	<b>0.26%</b>	P&G	4	0.04%
Shopback	4	0.04%	Nestle	3	0.03%
Carsome	8	0.09%	L'Oreal	5	0.06%
RedDoorz	11	0.12%			

#### Ratio of SE Asia Alumni to Current Headcount:

0.4x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+0.41%	Semiconductors	-0.02%
China's BAT 2.0	+0.74%	Telcos	+0.11%
Pan-SE Asia Internet 1st Gen	+6.22%	Big 4 Accounting Firms	-0.33%
Indonesia Internet 1st Gen	+1.16%	Management Consulting	+0.12%
SE Asia Internet 2nd Gen	+0.21%	IT Services	-0.08%
		Global FMCG	-0.10%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

### Tokopedia

SE Asia Headcount:

~7,600

Per LinkedIn (Dec 2022)

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>53</b>	<b>0.70%</b>	<b>Semiconductors</b>	<b>4</b>	<b>0.05%</b>
Google	18	0.24%	GlobalFoundries	0	0.00%
Microsoft	15	0.20%	Micron Technology	2	0.03%
Amazon	12	0.16%	Intel	2	0.03%
Facebook	4	0.05%	<b>Telcos</b>	<b>147</b>	<b>1.93%</b>
Oracle	4	0.05%	Singtel	3	0.04%
Apple	0	0.00%	Telkom Indonesia	144	1.89%
<b>China's BAT 2.0</b>	<b>19</b>	<b>0.25%</b>	<b>Big 4 Accounting Firms</b>	<b>116</b>	<b>1.53%</b>
Bytedance	13	0.17%	Deloitte	35	0.46%
Tencent	3	0.04%	EY	49	0.64%
Alibaba	3	0.04%	PwC	28	0.37%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>532</b>	<b>7.00%</b>	KPMG	4	0.05%
Sea	340	4.47%	<b>Management Consulting</b>	<b>30</b>	<b>0.39%</b>
Grab	75	0.99%	Bain	0	0.00%
Lazada	98	1.28%	BCG	20	0.26%
Zalora	19	0.25%	McKinsey	10	0.13%
<b>Indonesia Internet 1st Gen</b>	<b>262</b>	<b>3.45%</b>	<b>IT Services</b>	<b>69</b>	<b>0.91%</b>
Gojek	104	1.37%	IBM	13	0.17%
Tokopedia	N/A	N/A	Accenture	56	0.74%
Bukalapak	81	1.07%	<b>Global FMCG</b>	<b>97</b>	<b>1.28%</b>
Traveloka	77	1.01%	Unilever	55	0.72%
<b>SE Asia Internet 2nd Gen</b>	<b>10</b>	<b>0.13%</b>	P&G	7	0.09%
Shopback	4	0.05%	Nestle	16	0.21%
Carsome	0	0.00%	L'Oreal	19	0.25%
RedDoorz	6	0.08%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	31	0%
Malaysia	8	0%
Indonesia	7,600	100%
Thailand	0	0%
Vietnam	2	0%
Philippines	1	0%

Subtotal: Non-Singapore

100%

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Tokopedia

Alumni in SE Asia:

~6,700

Per LinkedIn (Dec 2022)

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>30</b>	<b>0.45%</b>	<b>Semiconductors</b>	<b>0</b>	<b>0.00%</b>
Google	11	0.16%	GlobalFoundries	0	0.00%
Microsoft	2	0.03%	Micron Technology	0	0.00%
Amazon	7	0.10%	Intel	0	0.00%
Facebook	10	0.15%	<b>Telcos</b>	<b>50</b>	<b>0.75%</b>
Oracle	0	0.00%	Singtel	0	0.00%
Apple	0	0.00%	Telkom Indonesia	50	0.75%
<b>China's BAT 2.0</b>	<b>113</b>	<b>1.69%</b>	<b>Big 4 Accounting Firms</b>	<b>34</b>	<b>0.51%</b>
Bytedance	112	1.67%	Deloitte	14	0.21%
Tencent	0	0.00%	EY	16	0.24%
Alibaba	1	0.01%	PwC	3	0.04%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>552</b>	<b>8.24%</b>	KPMG	1	0.01%
Sea	409	6.10%	<b>Management Consulting</b>	<b>8</b>	<b>0.12%</b>
Grab	88	1.31%	Bain	2	0.03%
Lazada	43	0.64%	BCG	4	0.06%
Zalora	12	0.18%	McKinsey	2	0.03%
<b>Indonesia Internet 1st Gen</b>	<b>219</b>	<b>3.27%</b>	<b>IT Services</b>	<b>12</b>	<b>0.18%</b>
Gojek	87	1.30%	IBM	3	0.04%
Tokopedia	N/A	N/A	Accenture	9	0.13%
Bukalapak	50	0.75%	<b>Global FMCG</b>	<b>56</b>	<b>0.84%</b>
Traveloka	82	1.22%	Unilever	29	0.43%
<b>SE Asia Internet 2nd Gen</b>	<b>17</b>	<b>0.25%</b>	P&G	6	0.09%
Shopback	6	0.09%	Nestle	5	0.07%
Carsome	1	0.01%	L'Oreal	16	0.24%
RedDoorz	10	0.15%			

#### Ratio of SE Asia Alumni to Current Headcount:

0.9x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	-0.25%	Semiconductors	-0.05%
China's BAT 2.0	+1.44%	Telcos	-1.19%
Pan-SE Asia Internet 1st Gen	+1.24%	Big 4 Accounting Firms	-1.02%
Indonesia Internet 1st Gen	-0.18%	Management Consulting	-0.28%
SE Asia Internet 2nd Gen	+0.12%	IT Services	-0.73%
		Global FMCG	-0.44%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.



## Nutrition Facts (Input) "Where Talent Comes From"

### Bukalapak

#### SE Asia Headcount:

Per LinkedIn (Dec 2022)

~2,800

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>11</b>	<b>0.39%</b>	<b>Semiconductors</b>	<b>1</b>	<b>0.04%</b>
Google	3	0.11%	GlobalFoundries	0	0.00%
Microsoft	8	0.29%	Micron Technology	1	0.04%
Amazon	0	0.00%	Intel	0	0.00%
Facebook	0	0.00%	<b>Telcos</b>	<b>50</b>	<b>1.79%</b>
Oracle	0	0.00%	Singtel	0	0.00%
Apple	0	0.00%	Telkom Indonesia	50	1.79%
<b>China's BAT 2.0</b>	<b>2</b>	<b>0.07%</b>	<b>Big 4 Accounting Firms</b>	<b>63</b>	<b>2.25%</b>
Bytedance	0	0.00%	Deloitte	10	0.36%
Tencent	1	0.04%	EY	28	1.00%
Alibaba	1	0.04%	PwC	22	0.79%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>117</b>	<b>4.18%</b>	KPMG	3	0.11%
Sea	71	2.54%	<b>Management Consulting</b>	<b>23</b>	<b>0.82%</b>
Grab	18	0.64%	Bain	2	0.07%
Lazada	26	0.93%	BCG	19	0.68%
Zalora	2	0.07%	McKinsey	2	0.07%
<b>Indonesia Internet 1st Gen</b>	<b>124</b>	<b>4.43%</b>	<b>IT Services</b>	<b>22</b>	<b>0.79%</b>
Gojek	44	1.57%	IBM	8	0.29%
Tokopedia	50	1.79%	Accenture	14	0.50%
Bukalapak	N/A	N/A	<b>Global FMCG</b>	<b>32</b>	<b>1.14%</b>
Traveloka	30	1.07%	Unilever	17	0.61%
<b>SE Asia Internet 2nd Gen</b>	<b>0</b>	<b>0.00%</b>	P&G	5	0.18%
Shopback	0	0.00%	Nestle	4	0.14%
Carsome	0	0.00%	L'Oreal	6	0.21%
RedDoorz	0	0.00%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	17	1%
Malaysia	0	0%
Indonesia	2,700	96%
Thailand	0	0%
Vietnam	0	0%
Philippines	0	0%

Subtotal: Non-Singapore

99%

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomse; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Bukalapak

#### Alumni in SE Asia:

Per LinkedIn (Dec 2022)

~3,700

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>11</b>	<b>0.30%</b>	<b>Semiconductors</b>	<b>1</b>	<b>0.03%</b>
Google	3	0.08%	GlobalFoundries	0	0.00%
Microsoft	2	0.05%	Micron Technology	0	0.00%
Amazon	0	0.00%	Intel	1	0.03%
Facebook	5	0.14%	<b>Telcos</b>	<b>70</b>	<b>1.89%</b>
Oracle	1	0.03%	Singtel	0	0.00%
Apple	0	0.00%	Telkom Indonesia	70	1.89%
<b>China's BAT 2.0</b>	<b>39</b>	<b>1.05%</b>	<b>Big 4 Accounting Firms</b>	<b>18</b>	<b>0.49%</b>
Bytedance	39	1.05%	Deloitte	8	0.22%
Tencent	0	0.00%	EY	9	0.24%
Alibaba	0	0.00%	PwC	1	0.03%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>222</b>	<b>6.00%</b>	KPMG	0	0.00%
Sea	167	4.51%	<b>Management Consulting</b>	<b>5</b>	<b>0.14%</b>
Grab	37	1.00%	Bain	2	0.05%
Lazada	14	0.38%	BCG	1	0.03%
Zalora	4	0.11%	McKinsey	2	0.05%
<b>Indonesia Internet 1st Gen</b>	<b>187</b>	<b>5.05%</b>	<b>IT Services</b>	<b>3</b>	<b>0.08%</b>
Gojek	71	1.92%	IBM	1	0.03%
Tokopedia	81	2.19%	Accenture	2	0.05%
Bukalapak	N/A	N/A	<b>Global FMCG</b>	<b>17</b>	<b>0.46%</b>
Traveloka	35	0.95%	Unilever	8	0.22%
<b>SE Asia Internet 2nd Gen</b>	<b>10</b>	<b>0.27%</b>	P&G	5	0.14%
Shopback	3	0.08%	Nestle	2	0.05%
Carsome	3	0.08%	L'Oreal	2	0.05%
RedDoorz	4	0.11%			

#### Ratio of SE Asia Alumni to Current Headcount:

1.3x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	-0.10%	Semiconductors	-0.01%
China's BAT 2.0	+0.98%	Telcos	+0.11%
Pan-SE Asia Internet 1st Gen	+1.82%	Big 4 Accounting Firms	-1.76%
Indonesia Internet 1st Gen	+0.63%	Management Consulting	-0.69%
SE Asia Internet 2nd Gen	+0.27%	IT Services	-0.70%
		Global FMCG	-0.68%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomse; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

### Lazada

#### SE Asia Headcount:

~15,000

Per LinkedIn (Dec 2022)

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>112</b>	<b>0.75%</b>	<b>Semiconductors</b>	<b>24</b>	<b>0.16%</b>
Google	24	0.16%	GlobalFoundries	6	0.04%
Microsoft	34	0.23%	Micron Technology	12	0.08%
Amazon	29	0.19%	Intel	6	0.04%
Facebook	8	0.05%	<b>Telcos</b>	<b>75</b>	<b>0.50%</b>
Oracle	8	0.05%	Singtel	33	0.22%
Apple	9	0.06%	Telkom Indonesia	42	0.28%
<b>China's BAT 2.0</b>	<b>83</b>	<b>0.55%</b>	<b>Big 4 Accounting Firms</b>	<b>206</b>	<b>1.37%</b>
Bytedance	21	0.14%	Deloitte	43	0.29%
Tencent	4	0.03%	EY	94	0.63%
Alibaba	58	0.39%	PwC	46	0.31%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>482</b>	<b>3.21%</b>	KPMG	23	0.15%
Sea	318	2.12%	<b>Management Consulting</b>	<b>53</b>	<b>0.35%</b>
Grab	106	0.71%	Bain	9	0.06%
Lazada	N/A	N/A	BCG	24	0.16%
Zalora	58	0.39%	McKinsey	20	0.13%
<b>Indonesia Internet 1st Gen</b>	<b>117</b>	<b>0.78%</b>	<b>IT Services</b>	<b>109</b>	<b>0.73%</b>
Gojek	39	0.26%	IBM	37	0.25%
Tokopedia	43	0.29%	Accenture	72	0.48%
Bukalapak	14	0.09%	<b>Global FMCG</b>	<b>271</b>	<b>1.81%</b>
Traveloka	21	0.14%	Unilever	109	0.73%
<b>SE Asia Internet 2nd Gen</b>	<b>10</b>	<b>0.07%</b>	P&G	57	0.38%
Shopback	6	0.04%	Nestle	61	0.41%
Carsome	4	0.03%	L'Oreal	44	0.29%
RedDoorz	0	0.00%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	1,400	9%
Malaysia	1,400	9%
Indonesia	6,500	43%
Thailand	1,600	11%
Vietnam	1,600	11%
Philippines	3,000	20%
<b>Subtotal: Non-Singapore</b>		<b>91%</b>

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Lazada

#### Alumni in SE Asia:

~13,000

Per LinkedIn (Dec 2022)

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>186</b>	<b>1.43%</b>	<b>Semiconductors</b>	<b>2</b>	<b>0.02%</b>
Google	62	0.48%	GlobalFoundries	0	0.00%
Microsoft	9	0.07%	Micron Technology	2	0.02%
Amazon	48	0.37%	Intel	0	0.00%
Facebook	46	0.35%	<b>Telcos</b>	<b>22</b>	<b>0.17%</b>
Oracle	0	0.00%	Singtel	3	0.02%
Apple	21	0.16%	Telkom Indonesia	19	0.15%
<b>China's BAT 2.0</b>	<b>315</b>	<b>2.42%</b>	<b>Big 4 Accounting Firms</b>	<b>33</b>	<b>0.25%</b>
Bytedance	286	2.20%	Deloitte	11	0.08%
Tencent	6	0.05%	EY	19	0.15%
Alibaba	23	0.18%	PwC	1	0.01%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>916</b>	<b>7.05%</b>	KPMG	2	0.02%
Sea	717	5.52%	<b>Management Consulting</b>	<b>19</b>	<b>0.15%</b>
Grab	170	1.31%	Bain	1	0.01%
Lazada	N/A	N/A	BCG	7	0.05%
Zalora	29	0.22%	McKinsey	11	0.08%
<b>Indonesia Internet 1st Gen</b>	<b>219</b>	<b>1.68%</b>	<b>IT Services</b>	<b>43</b>	<b>0.33%</b>
Gojek	76	0.58%	IBM	6	0.05%
Tokopedia	98	0.75%	Accenture	37	0.28%
Bukalapak	26	0.20%	<b>Global FMCG</b>	<b>158</b>	<b>1.22%</b>
Traveloka	19	0.15%	Unilever	45	0.35%
<b>SE Asia Internet 2nd Gen</b>	<b>57</b>	<b>0.44%</b>	P&G	16	0.12%
Shopback	27	0.21%	Nestle	15	0.12%
Carsome	25	0.19%	L'Oreal	82	0.63%
RedDoorz	5	0.04%			

#### Ratio of SE Asia Alumni to Current Headcount:

0.9x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+0.68%	Semiconductors	-0.14%
China's BAT 2.0	+1.87%	Telcos	-0.33%
Pan-SE Asia Internet 1st Gen	+3.83%	Big 4 Accounting Firms	-1.12%
Indonesia Internet 1st Gen	+0.90%	Management Consulting	-0.21%
SE Asia Internet 2nd Gen	+0.37%	IT Services	-0.40%
		Global FMCG	-0.59%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

### Traveloka

#### SE Asia Headcount:

~2,900

Per LinkedIn (Dec 2022)

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>26</b>	<b>0.90%</b>	<b>Semiconductors</b>	<b>4</b>	<b>0.14%</b>
Google	3	0.10%	GlobalFoundries	0	0.00%
Microsoft	12	0.41%	Micron Technology	2	0.07%
Amazon	7	0.24%	Intel	2	0.07%
Facebook	1	0.03%	<b>Telcos</b>	<b>51</b>	<b>1.76%</b>
Oracle	2	0.07%	Singtel	2	0.07%
Apple	1	0.03%	Telkom Indonesia	49	1.69%
<b>China's BAT 2.0</b>	<b>3</b>	<b>0.10%</b>	<b>Big 4 Accounting Firms</b>	<b>82</b>	<b>2.83%</b>
Bytedance	2	0.07%	Deloitte	25	0.86%
Tencent	0	0.00%	EY	39	1.34%
Alibaba	1	0.03%	PwC	13	0.45%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>126</b>	<b>4.34%</b>	KPMG	5	0.17%
Sea	68	2.34%	<b>Management Consulting</b>	<b>11</b>	<b>0.38%</b>
Grab	32	1.10%	Bain	0	0.00%
Lazada	19	0.66%	BCG	7	0.24%
Zalora	7	0.24%	McKinsey	4	0.14%
<b>Indonesia Internet 1st Gen</b>	<b>151</b>	<b>5.21%</b>	<b>IT Services</b>	<b>51</b>	<b>1.76%</b>
Gojek	34	1.17%	IBM	14	0.48%
Tokopedia	82	2.83%	Accenture	37	1.28%
Bukalapak	35	1.21%	<b>Global FMCG</b>	<b>29</b>	<b>1.00%</b>
Traveloka	N/A	N/A	Unilever	12	0.41%
<b>SE Asia Internet 2nd Gen</b>	<b>16</b>	<b>0.55%</b>	P&G	9	0.31%
Shopback	4	0.14%	Nestle	6	0.21%
Carsome	0	0.00%	L'Oreal	2	0.07%
RedDoorz	12	0.41%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	94	3%
Malaysia	70	2%
Indonesia	2,500	86%
Thailand	116	4%
Vietnam	152	5%
Philippines	22	1%

#### Subtotal: Non-Singapore

97%

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Traveloka

#### Alumni in SE Asia:

~4,100

Per LinkedIn (Dec 2022)

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>46</b>	<b>1.12%</b>	<b>Semiconductors</b>	<b>0</b>	<b>0.00%</b>
Google	21	0.51%	GlobalFoundries	0	0.00%
Microsoft	2	0.05%	Micron Technology	0	0.00%
Amazon	5	0.12%	Intel	0	0.00%
Facebook	15	0.37%	<b>Telcos</b>	<b>21</b>	<b>0.51%</b>
Oracle	0	0.00%	Singtel	1	0.02%
Apple	3	0.07%	Telkom Indonesia	20	0.49%
<b>China's BAT 2.0</b>	<b>52</b>	<b>1.27%</b>	<b>Big 4 Accounting Firms</b>	<b>13</b>	<b>0.32%</b>
Bytedance	52	1.27%	Deloitte	9	0.22%
Tencent	0	0.00%	EY	4	0.10%
Alibaba	0	0.00%	PwC	0	0.00%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>332</b>	<b>8.10%</b>	KPMG	0	0.00%
Sea	220	5.37%	<b>Management Consulting</b>	<b>14</b>	<b>0.34%</b>
Grab	88	2.15%	Bain	3	0.07%
Lazada	21	0.51%	BCG	5	0.12%
Zalora	3	0.07%	McKinsey	6	0.15%
<b>Indonesia Internet 1st Gen</b>	<b>161</b>	<b>3.93%</b>	<b>IT Services</b>	<b>8</b>	<b>0.20%</b>
Gojek	54	1.32%	IBM	1	0.02%
Tokopedia	77	1.88%	Accenture	7	0.17%
Bukalapak	30	0.73%	<b>Global FMCG</b>	<b>17</b>	<b>0.41%</b>
Traveloka	N/A	N/A	Unilever	9	0.22%
<b>SE Asia Internet 2nd Gen</b>	<b>14</b>	<b>0.34%</b>	P&G	1	0.02%
Shopback	4	0.10%	Nestle	5	0.12%
Carsome	4	0.10%	L'Oreal	2	0.05%
RedDoorz	6	0.15%			

#### Ratio of SE Asia Alumni to Current Headcount:

1.4x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+0.23%	Semiconductors	-0.14%
China's BAT 2.0	+1.16%	Telcos	-1.25%
Pan-SE Asia Internet 1st Gen	+3.75%	Big 4 Accounting Firms	-2.51%
Indonesia Internet 1st Gen	-1.28%	Management Consulting	-0.04%
SE Asia Internet 2nd Gen	-0.21%	IT Services	-1.56%
		Global FMCG	-0.59%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

### Carsome

#### SE Asia Headcount:

Per LinkedIn (Dec 2022)

~1,900

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>12</b>	<b>0.63%</b>	<b>Semiconductors</b>	<b>4</b>	<b>0.21%</b>
Google	5	0.26%	GlobalFoundries	0	0.00%
Microsoft	4	0.21%	Micron Technology	0	0.00%
Amazon	3	0.16%	Intel	4	0.21%
Facebook	0	0.00%	<b>Telcos</b>	<b>8</b>	<b>0.42%</b>
Oracle	0	0.00%	Singtel	2	0.11%
Apple	0	0.00%	Telkom Indonesia	6	0.32%
<b>China's BAT 2.0</b>	<b>3</b>	<b>0.16%</b>	<b>Big 4 Accounting Firms</b>	<b>39</b>	<b>2.05%</b>
Bytedance	0	0.00%	Deloitte	10	0.53%
Tencent	2	0.11%	EY	19	1.00%
Alibaba	1	0.05%	PwC	7	0.37%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>75</b>	<b>3.95%</b>	KPMG	3	0.16%
Sea	18	0.95%	<b>Management Consulting</b>	<b>9</b>	<b>0.47%</b>
Grab	24	1.26%	Bain	0	0.00%
Lazada	25	1.32%	BCG	6	0.32%
Zalora	8	0.42%	McKinsey	3	0.16%
<b>Indonesia Internet 1st Gen</b>	<b>16</b>	<b>0.84%</b>	<b>IT Services</b>	<b>22</b>	<b>1.16%</b>
Gojek	8	0.42%	IBM	9	0.47%
Tokopedia	1	0.05%	Accenture	13	0.68%
Bukalapak	3	0.16%	<b>Global FMCG</b>	<b>8</b>	<b>0.42%</b>
Traveloka	4	0.21%	Unilever	3	0.16%
<b>SE Asia Internet 2nd Gen</b>	<b>3</b>	<b>0.16%</b>	P&G	3	0.16%
Shopback	1	0.05%	Nestle	0	0.00%
Carsome	N/A	N/A	L'Oreal	2	0.11%
RedDoorz	2	0.11%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	22	1%
Malaysia	1,100	58%
Indonesia	645	34%
Thailand	173	9%
Vietnam	1	0%
Philippines	9	0%

#### Subtotal: Non-Singapore

99%

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomse; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Carsome

#### Alumni in SE Asia:

Per LinkedIn (Dec 2022)

~1,100

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>3</b>	<b>0.27%</b>	<b>Semiconductors</b>	<b>0</b>	<b>0.00%</b>
Google	2	0.18%	GlobalFoundries	0	0.00%
Microsoft	0	0.00%	Micron Technology	0	0.00%
Amazon	1	0.09%	Intel	0	0.00%
Facebook	0	0.00%	<b>Telcos</b>	<b>1</b>	<b>0.09%</b>
Oracle	0	0.00%	Singtel	1	0.09%
Apple	0	0.00%	Telkom Indonesia	0	0.00%
<b>China's BAT 2.0</b>	<b>8</b>	<b>0.73%</b>	<b>Big 4 Accounting Firms</b>	<b>3</b>	<b>0.27%</b>
Bytedance	6	0.55%	Deloitte	2	0.18%
Tencent	1	0.09%	EY	1	0.09%
Alibaba	1	0.09%	PwC	0	0.00%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>29</b>	<b>2.64%</b>	KPMG	0	0.00%
Sea	8	0.73%	<b>Management Consulting</b>	<b>0</b>	<b>0.00%</b>
Grab	13	1.18%	Bain	0	0.00%
Lazada	4	0.36%	BCG	0	0.00%
Zalora	4	0.36%	McKinsey	0	0.00%
<b>Indonesia Internet 1st Gen</b>	<b>1</b>	<b>0.09%</b>	<b>IT Services</b>	<b>3</b>	<b>0.27%</b>
Gojek	1	0.09%	IBM	0	0.00%
Tokopedia	0	0.00%	Accenture	3	0.27%
Bukalapak	0	0.00%	<b>Global FMCG</b>	<b>0</b>	<b>0.00%</b>
Traveloka	0	0.00%	Unilever	0	0.00%
<b>SE Asia Internet 2nd Gen</b>	<b>0</b>	<b>0.00%</b>	P&G	0	0.00%
Shopback	0	0.00%	Nestle	0	0.00%
Carsome	N/A	N/A	L'Oreal	0	0.00%
RedDoorz	0	0.00%			

#### Ratio of SE Asia Alumni to Current Headcount:

0.6x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	-0.36%	Semiconductors	-0.21%
China's BAT 2.0	+0.57%	Telcos	-0.33%
Pan-SE Asia Internet 1st Gen	-1.31%	Big 4 Accounting Firms	-1.78%
Indonesia Internet 1st Gen	-0.75%	Management Consulting	-0.47%
SE Asia Internet 2nd Gen	-0.16%	IT Services	-0.89%
		Global FMCG	-0.42%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomse; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

### Shopback

SE Asia Headcount:

~700

Per LinkedIn (Dec 2022)

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>15</b>	<b>2.14%</b>	<b>Semiconductors</b>	<b>0</b>	<b>0.00%</b>
Google	6	0.86%	GlobalFoundries	0	0.00%
Microsoft	1	0.14%	Micron Technology	0	0.00%
Amazon	4	0.57%	Intel	0	0.00%
Facebook	4	0.57%	<b>Telcos</b>	<b>15</b>	<b>2.14%</b>
Oracle	0	0.00%	Singtel	14	2.00%
Apple	0	0.00%	Telkom Indonesia	1	0.14%
<b>China's BAT 2.0</b>	<b>5</b>	<b>0.71%</b>	<b>Big 4 Accounting Firms</b>	<b>20</b>	<b>2.86%</b>
Bytedance	3	0.43%	Deloitte	6	0.86%
Tencent	1	0.14%	EY	8	1.14%
Alibaba	1	0.14%	PwC	5	0.71%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>137</b>	<b>19.57%</b>	KPMG	1	0.14%
Sea	50	7.14%	<b>Management Consulting</b>	<b>4</b>	<b>0.57%</b>
Grab	35	5.00%	Bain	0	0.00%
Lazada	27	3.86%	BCG	1	0.14%
Zalora	25	3.57%	McKinsey	3	0.43%
<b>Indonesia Internet 1st Gen</b>	<b>17</b>	<b>2.43%</b>	<b>IT Services</b>	<b>16</b>	<b>2.29%</b>
Gojek	4	0.57%	IBM	9	1.29%
Tokopedia	6	0.86%	Accenture	7	1.00%
Bukalapak	3	0.43%	<b>Global FMCG</b>	<b>7</b>	<b>1.00%</b>
Traveloka	4	0.57%	Unilever	2	0.29%
<b>SE Asia Internet 2nd Gen</b>	<b>2</b>	<b>0.29%</b>	P&G	3	0.43%
Shopback	N/A	N/A	Nestle	1	0.14%
Carsome	0	0.00%	L'Oreal	1	0.14%
RedDoorz	2	0.29%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	342	49%
Malaysia	164	23%
Indonesia	52	7%
Thailand	46	7%
Vietnam	69	10%
Philippines	27	4%
<b>Subtotal: Non-Singapore</b>		<b>51%</b>

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Shopback

Alumni in SE Asia:

~899

Per LinkedIn (Dec 2022)

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>19</b>	<b>2.11%</b>	<b>Semiconductors</b>	<b>0</b>	<b>0.00%</b>
Google	4	0.44%	GlobalFoundries	0	0.00%
Microsoft	2	0.22%	Micron Technology	0	0.00%
Amazon	5	0.56%	Intel	0	0.00%
Facebook	8	0.89%	<b>Telcos</b>	<b>2</b>	<b>0.22%</b>
Oracle	0	0.00%	Singtel	1	0.11%
Apple	0	0.00%	Telkom Indonesia	1	0.11%
<b>China's BAT 2.0</b>	<b>27</b>	<b>3.00%</b>	<b>Big 4 Accounting Firms</b>	<b>3</b>	<b>0.33%</b>
Bytedance	26	2.89%	Deloitte	1	0.11%
Tencent	0	0.00%	EY	1	0.11%
Alibaba	1	0.11%	PwC	1	0.11%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>69</b>	<b>7.68%</b>	KPMG	0	0.00%
Sea	37	4.12%	<b>Management Consulting</b>	<b>6</b>	<b>0.67%</b>
Grab	20	2.22%	Bain	1	0.11%
Lazada	6	0.67%	BCG	2	0.22%
Zalora	6	0.67%	McKinsey	3	0.33%
<b>Indonesia Internet 1st Gen</b>	<b>13</b>	<b>1.45%</b>	<b>IT Services</b>	<b>6</b>	<b>0.67%</b>
Gojek	5	0.56%	IBM	0	0.00%
Tokopedia	4	0.44%	Accenture	6	0.67%
Bukalapak	0	0.00%	<b>Global FMCG</b>	<b>6</b>	<b>0.67%</b>
Traveloka	4	0.44%	Unilever	3	0.33%
<b>SE Asia Internet 2nd Gen</b>	<b>1</b>	<b>0.11%</b>	P&G	1	0.11%
Shopback	N/A	N/A	Nestle	1	0.11%
Carsome	1	0.11%	L'Oreal	1	0.11%
RedDoorz	0	0.00%			

#### Ratio of SE Asia Alumni to Current Headcount:

1.3x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	-0.03%	Semiconductors	-
China's BAT 2.0	+2.29%	Telcos	-1.92%
Pan-SE Asia Internet 1st Gen	-11.90%	Big 4 Accounting Firms	-2.52%
Indonesia Internet 1st Gen	-0.98%	Management Consulting	+0.10%
SE Asia Internet 2nd Gen	-0.17%	IT Services	-1.62%
		Global FMCG	-0.33%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

### RedDoorz

#### SE Asia Headcount:

~1,200

Per LinkedIn (Dec 2022)

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>2</b>	<b>0.17%</b>	<b>Semiconductors</b>	<b>0</b>	<b>0.00%</b>
Google	0	0.00%	GlobalFoundries	0	0.00%
Microsoft	0	0.00%	Micron Technology	0	0.00%
Amazon	0	0.00%	Intel	0	0.00%
Facebook	2	0.17%	<b>Telcos</b>	<b>14</b>	<b>1.17%</b>
Oracle	0	0.00%	Singtel	0	0.00%
Apple	0	0.00%	Telkom Indonesia	14	1.17%
<b>China's BAT 2.0</b>	<b>2</b>	<b>0.17%</b>	<b>Big 4 Accounting Firms</b>	<b>3</b>	<b>0.25%</b>
Bytedance	2	0.17%	Deloitte	2	0.17%
Tencent	0	0.00%	EY	1	0.08%
Alibaba	0	0.00%	PwC	0	0.00%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>45</b>	<b>3.75%</b>	KPMG	0	0.00%
Sea	11	0.92%	<b>Management Consulting</b>	<b>1</b>	<b>0.08%</b>
Grab	27	2.25%	Bain	0	0.00%
Lazada	5	0.42%	BCG	1	0.08%
Zalora	2	0.17%	McKinsey	0	0.00%
<b>Indonesia Internet 1st Gen</b>	<b>31</b>	<b>2.58%</b>	<b>IT Services</b>	<b>0</b>	<b>0.00%</b>
Gojek	11	0.92%	IBM	0	0.00%
Tokopedia	10	0.83%	Accenture	0	0.00%
Bukalapak	4	0.33%	<b>Global FMCG</b>	<b>2</b>	<b>0.17%</b>
Traveloka	6	0.50%	Unilever	1	0.08%
<b>SE Asia Internet 2nd Gen</b>	<b>0</b>	<b>0.00%</b>	P&G	0	0.00%
Shopback	0	0.00%	Nestle	1	0.08%
Carsome	0	0.00%	L'Oreal	0	0.00%
RedDoorz	N/A	N/A			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	32	3%
Malaysia	1	0%
Indonesia	1,000	83%
Thailand	9	1%
Vietnam	41	3%
Philippines	172	14%
<b>Subtotal: Non-Singapore</b>		<b>97%</b>

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### RedDoorz

#### Alumni in SE Asia:

~1,600

Per LinkedIn (Dec 2022)

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>2</b>	<b>0.13%</b>	<b>Semiconductors</b>	<b>0</b>	<b>0.00%</b>
Google	0	0.00%	GlobalFoundries	0	0.00%
Microsoft	1	0.06%	Micron Technology	0	0.00%
Amazon	0	0.00%	Intel	0	0.00%
Facebook	0	0.00%	<b>Telcos</b>	<b>2</b>	<b>0.13%</b>
Oracle	0	0.00%	Singtel	0	0.00%
Apple	1	0.06%	Telkom Indonesia	2	0.13%
<b>China's BAT 2.0</b>	<b>10</b>	<b>0.63%</b>	<b>Big 4 Accounting Firms</b>	<b>1</b>	<b>0.06%</b>
Bytedance	9	0.56%	Deloitte	1	0.06%
Tencent	1	0.06%	EY	0	0.00%
Alibaba	0	0.00%	PwC	0	0.00%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>51</b>	<b>3.19%</b>	KPMG	0	0.00%
Sea	45	2.81%	<b>Management Consulting</b>	<b>0</b>	<b>0.00%</b>
Grab	6	0.38%	Bain	0	0.00%
Lazada	0	0.00%	BCG	0	0.00%
Zalora	0	0.00%	McKinsey	0	0.00%
<b>Indonesia Internet 1st Gen</b>	<b>24</b>	<b>1.50%</b>	<b>IT Services</b>	<b>4</b>	<b>0.25%</b>
Gojek	6	0.38%	IBM	0	0.00%
Tokopedia	6	0.38%	Accenture	4	0.25%
Bukalapak	0	0.00%	<b>Global FMCG</b>	<b>2</b>	<b>0.13%</b>
Traveloka	12	0.75%	Unilever	2	0.13%
<b>SE Asia Internet 2nd Gen</b>	<b>4</b>	<b>0.25%</b>	P&G	0	0.00%
Shopback	2	0.13%	Nestle	0	0.00%
Carsome	2	0.13%	L'Oreal	0	0.00%
RedDoorz	N/A	N/A			

#### Ratio of SE Asia Alumni to Current Headcount:

1.3x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	-0.04%	Semiconductors	-
China's BAT 2.0	+0.46%	Telcos	-1.04%
Pan-SE Asia Internet 1st Gen	-0.56%	Big 4 Accounting Firms	-0.19%
Indonesia Internet 1st Gen	-1.08%	Management Consulting	-0.08%
SE Asia Internet 2nd Gen	+0.25%	IT Services	+0.25%
		Global FMCG	-0.04%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.



## Nutrition Facts (Input) "Where Talent Comes From"

### GlobalFoundries

#### SE Asia Headcount:

~4,000

Per LinkedIn (Dec 2022)

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>8</b>	<b>0.20%</b>	<b>Semiconductors</b>	<b>115</b>	<b>2.88%</b>
Google	1	0.03%	GlobalFoundries	N/A	N/A
Microsoft	0	0.00%	Micron Technology	52	1.30%
Amazon	1	0.03%	Intel	63	1.58%
Facebook	0	0.00%	<b>Telcos</b>	<b>3</b>	<b>0.08%</b>
Oracle	6	0.15%	Singtel	3	0.08%
Apple	0	0.00%	Telkom Indonesia	0	0.00%
<b>China's BAT 2.0</b>	<b>0</b>	<b>0.00%</b>	<b>Big 4 Accounting Firms</b>	<b>18</b>	<b>0.45%</b>
Bytedance	0	0.00%	Deloitte	2	0.05%
Tencent	0	0.00%	EY	8	0.20%
Alibaba	0	0.00%	PwC	5	0.13%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>4</b>	<b>0.10%</b>	KPMG	3	0.08%
Sea	2	0.05%	<b>Management Consulting</b>	<b>2</b>	<b>0.05%</b>
Grab	2	0.05%	Bain	0	0.00%
Lazada	0	0.00%	BCG	1	0.03%
Zalora	0	0.00%	McKinsey	1	0.03%
<b>Indonesia Internet 1st Gen</b>	<b>0</b>	<b>0.00%</b>	<b>IT Services</b>	<b>33</b>	<b>0.83%</b>
Gojek	0	0.00%	IBM	29	0.73%
Tokopedia	0	0.00%	Accenture	4	0.10%
Bukalapak	0	0.00%	<b>Global FMCG</b>	<b>6</b>	<b>0.15%</b>
Traveloka	0	0.00%	Unilever	1	0.03%
<b>SE Asia Internet 2nd Gen</b>	<b>0</b>	<b>0.00%</b>	P&G	1	0.03%
Shopback	0	0.00%	Nestle	4	0.10%
Carsome	0	0.00%	L'Oreal	0	0.00%
RedDoorz	0	0.00%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	3,800	95%
Malaysia	232	6%
Indonesia	2	0%
Thailand	5	0%
Vietnam	7	0%
Philippines	20	1%

**Subtotal: Non-Singapore**

**5%**

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## Alumni Diaspora (Output) "Where Talent Goes To"

### GlobalFoundries

#### Alumni in SE Asia:

~3,500

Per LinkedIn (Dec 2022)

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>41</b>	<b>1.17%</b>	<b>Semiconductors</b>	<b>294</b>	<b>8.40%</b>
Google	6	0.17%	GlobalFoundries	N/A	N/A
Microsoft	4	0.11%	Micron Technology	270	7.71%
Amazon	13	0.37%	Intel	24	0.69%
Facebook	4	0.11%	<b>Telcos</b>	<b>5</b>	<b>0.14%</b>
Oracle	1	0.03%	Singtel	5	0.14%
Apple	13	0.37%	Telkom Indonesia	0	0.00%
<b>China's BAT 2.0</b>	<b>12</b>	<b>0.34%</b>	<b>Big 4 Accounting Firms</b>	<b>9</b>	<b>0.26%</b>
Bytedance	4	0.11%	Deloitte	3	0.09%
Tencent	3	0.09%	EY	3	0.09%
Alibaba	5	0.14%	PwC	3	0.09%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>28</b>	<b>0.80%</b>	KPMG	0	0.00%
Sea	16	0.46%	<b>Management Consulting</b>	<b>4</b>	<b>0.11%</b>
Grab	6	0.17%	Bain	0	0.00%
Lazada	6	0.17%	BCG	4	0.11%
Zalora	0	0.00%	McKinsey	0	0.00%
<b>Indonesia Internet 1st Gen</b>	<b>1</b>	<b>0.03%</b>	<b>IT Services</b>	<b>14</b>	<b>0.40%</b>
Gojek	1	0.03%	IBM	3	0.09%
Tokopedia	0	0.00%	Accenture	11	0.31%
Bukalapak	0	0.00%	<b>Global FMCG</b>	<b>5</b>	<b>0.14%</b>
Traveloka	0	0.00%	Unilever	0	0.00%
<b>SE Asia Internet 2nd Gen</b>	<b>0</b>	<b>0.00%</b>	P&G	3	0.09%
Shopback	0	0.00%	Nestle	1	0.03%
Carsome	0	0.00%	L'Oreal	1	0.03%
RedDoorz	0	0.00%			

#### Ratio of SE Asia Alumni to Current Headcount:

0.9x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+0.97%	Semiconductors	+5.53%
China's BAT 2.0	+0.34%	Telcos	+0.07%
Pan-SE Asia Internet 1st Gen	+0.70%	Big 4 Accounting Firms	-0.19%
Indonesia Internet 1st Gen	+0.03%	Management Consulting	+0.06%
SE Asia Internet 2nd Gen	-	IT Services	-0.43%
		Global FMCG	-0.01%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

### Micron Technology

**SE Asia Headcount:**

**~6,200**

Per LinkedIn (Dec 2022)

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>23</b>	<b>0.37%</b>	<b>Semiconductors</b>	<b>502</b>	<b>8.10%</b>
Google	2	0.03%	GlobalFoundries	270	4.35%
Microsoft	8	0.13%	Micron Technology	N/A	N/A
Amazon	4	0.06%	Intel	232	3.74%
Facebook	1	0.02%	<b>Telcos</b>	<b>15</b>	<b>0.24%</b>
Oracle	2	0.03%	Singtel	15	0.24%
Apple	6	0.10%	Telkom Indonesia	0	0.00%
<b>China's BAT 2.0</b>	<b>1</b>	<b>0.02%</b>	<b>Big 4 Accounting Firms</b>	<b>57</b>	<b>0.92%</b>
Bytedance	1	0.02%	Deloitte	16	0.26%
Tencent	0	0.00%	EY	23	0.37%
Alibaba	0	0.00%	PwC	9	0.15%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>36</b>	<b>0.58%</b>	KPMG	9	0.15%
Sea	16	0.26%	<b>Management Consulting</b>	<b>11</b>	<b>0.18%</b>
Grab	18	0.29%	Bain	1	0.02%
Lazada	2	0.03%	BCG	0	0.00%
Zalora	0	0.00%	McKinsey	10	0.16%
<b>Indonesia Internet 1st Gen</b>	<b>1</b>	<b>0.02%</b>	<b>IT Services</b>	<b>46</b>	<b>0.74%</b>
Gojek	1	0.02%	IBM	23	0.37%
Tokopedia	0	0.00%	Accenture	23	0.37%
Bukalapak	0	0.00%	<b>Global FMCG</b>	<b>25</b>	<b>0.40%</b>
Traveloka	0	0.00%	Unilever	3	0.05%
<b>SE Asia Internet 2nd Gen</b>	<b>0</b>	<b>0.00%</b>	P&G	7	0.11%
Shopback	0	0.00%	Nestle	11	0.18%
Carsome	0	0.00%	L'Oreal	4	0.06%
RedDoorz	0	0.00%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	4,500	73%
Malaysia	1,700	27%
Indonesia	16	0%
Thailand	15	0%
Vietnam	12	0%
Philippines	22	0%

**Subtotal: Non-Singapore**

**27%**

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes Tiktok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Micron Technology

**Alumni in SE Asia:**

**~3,500**

Per LinkedIn (Dec 2022)

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>79</b>	<b>2.26%</b>	<b>Semiconductors</b>	<b>108</b>	<b>3.09%</b>
Google	20	0.57%	GlobalFoundries	52	1.49%
Microsoft	3	0.09%	Micron Technology	N/A	N/A
Amazon	16	0.46%	Intel	56	1.60%
Facebook	17	0.49%	<b>Telcos</b>	<b>11</b>	<b>0.31%</b>
Oracle	4	0.11%	Singtel	11	0.31%
Apple	19	0.54%	Telkom Indonesia	0	0.00%
<b>China's BAT 2.0</b>	<b>32</b>	<b>0.91%</b>	<b>Big 4 Accounting Firms</b>	<b>8</b>	<b>0.23%</b>
Bytedance	22	0.63%	Deloitte	2	0.06%
Tencent	6	0.17%	EY	4	0.11%
Alibaba	4	0.11%	PwC	2	0.06%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>96</b>	<b>2.74%</b>	KPMG	0	0.00%
Sea	69	1.97%	<b>Management Consulting</b>	<b>8</b>	<b>0.23%</b>
Grab	15	0.43%	Bain	0	0.00%
Lazada	12	0.34%	BCG	2	0.06%
Zalora	0	0.00%	McKinsey	6	0.17%
<b>Indonesia Internet 1st Gen</b>	<b>7</b>	<b>0.20%</b>	<b>IT Services</b>	<b>19</b>	<b>0.54%</b>
Gojek	2	0.06%	IBM	7	0.20%
Tokopedia	2	0.06%	Accenture	12	0.34%
Bukalapak	1	0.03%	<b>Global FMCG</b>	<b>16</b>	<b>0.46%</b>
Traveloka	2	0.06%	Unilever	2	0.06%
<b>SE Asia Internet 2nd Gen</b>	<b>0</b>	<b>0.00%</b>	P&G	13	0.37%
Shopback	0	0.00%	Nestle	1	0.03%
Carsome	0	0.00%	L'Oreal	0	0.00%
RedDoorz	0	0.00%			

#### Ratio of SE Asia Alumni to Current Headcount:

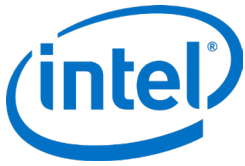
**0.6x**

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+1.89%	Semiconductors	-5.01%
China's BAT 2.0	+0.90%	Telcos	+0.07%
Pan-SE Asia Internet 1st Gen	+2.16%	Big 4 Accounting Firms	-0.69%
Indonesia Internet 1st Gen	+0.18%	Management Consulting	+0.05%
SE Asia Internet 2nd Gen	-	IT Services	-0.20%
		Global FMCG	+0.05%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes Tiktok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.



## Nutrition Facts (Input) "Where Talent Comes From"

Intel

SE Asia Headcount:

~11,000

Per LinkedIn (Dec 2022)

### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>55</b>	<b>0.50%</b>	<b>Semiconductors</b>	<b>80</b>	<b>0.73%</b>
Google	2	0.02%	GlobalFoundries	24	0.22%
Microsoft	35	0.32%	Micron Technology	56	0.51%
Amazon	4	0.04%	Intel	N/A	N/A
Facebook	1	0.01%	<b>Telcos</b>	<b>10</b>	<b>0.09%</b>
Oracle	8	0.07%	Singtel	9	0.08%
Apple	5	0.05%	Telkom Indonesia	1	0.01%
<b>China's BAT 2.0</b>	<b>4</b>	<b>0.04%</b>	<b>Big 4 Accounting Firms</b>	<b>79</b>	<b>0.72%</b>
Bytedance	3	0.03%	Deloitte	20	0.18%
Tencent	0	0.00%	EY	32	0.29%
Alibaba	1	0.01%	PwC	15	0.14%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>15</b>	<b>0.14%</b>	KPMG	12	0.11%
Sea	3	0.03%	<b>Management Consulting</b>	<b>2</b>	<b>0.02%</b>
Grab	9	0.08%	Bain	0	0.00%
Lazada	0	0.00%	BCG	1	0.01%
Zalora	3	0.03%	McKinsey	1	0.01%
<b>Indonesia Internet 1st Gen</b>	<b>1</b>	<b>0.01%</b>	<b>IT Services</b>	<b>52</b>	<b>0.47%</b>
Gojek	0	0.00%	IBM	38	0.35%
Tokopedia	0	0.00%	Accenture	14	0.13%
Bukalapak	1	0.01%	<b>Global FMCG</b>	<b>37</b>	<b>0.34%</b>
Traveloka	0	0.00%	Unilever	11	0.10%
<b>SE Asia Internet 2nd Gen</b>	<b>0</b>	<b>0.00%</b>	P&G	2	0.02%
Shopback	0	0.00%	Nestle	24	0.22%
Carsome	0	0.00%	L'Oreal	0	0.00%
RedDoorz	0	0.00%			

### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	443	4%
Malaysia	8,900	81%
Indonesia	380	3%
Thailand	80	1%
Vietnam	1,200	11%
Philippines	209	2%
<b>Subtotal: Non-Singapore</b>		<b>96%</b>

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

Intel

Alumni in SE Asia:

~11,000

Per LinkedIn (Dec 2022)

### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>196</b>	<b>1.78%</b>	<b>Semiconductors</b>	<b>295</b>	<b>2.68%</b>
Google	29	0.26%	GlobalFoundries	63	0.57%
Microsoft	56	0.51%	Micron Technology	232	2.11%
Amazon	37	0.34%	Intel	N/A	N/A
Facebook	16	0.15%	<b>Telcos</b>	<b>9</b>	<b>0.08%</b>
Oracle	10	0.09%	Singtel	6	0.05%
Apple	48	0.44%	Telkom Indonesia	3	0.03%
<b>China's BAT 2.0</b>	<b>17</b>	<b>0.15%</b>	<b>Big 4 Accounting Firms</b>	<b>44</b>	<b>0.40%</b>
Bytedance	11	0.10%	Deloitte	20	0.18%
Tencent	3	0.03%	EY	19	0.17%
Alibaba	3	0.03%	PwC	3	0.03%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>55</b>	<b>0.50%</b>	KPMG	2	0.02%
Sea	30	0.27%	<b>Management Consulting</b>	<b>6</b>	<b>0.05%</b>
Grab	16	0.15%	Bain	0	0.00%
Lazada	6	0.05%	BCG	0	0.00%
Zalora	3	0.03%	McKinsey	6	0.05%
<b>Indonesia Internet 1st Gen</b>	<b>8</b>	<b>0.07%</b>	<b>IT Services</b>	<b>84</b>	<b>0.76%</b>
Gojek	4	0.04%	IBM	26	0.24%
Tokopedia	2	0.02%	Accenture	58	0.53%
Bukalapak	0	0.00%	<b>Global FMCG</b>	<b>35</b>	<b>0.32%</b>
Traveloka	2	0.02%	Unilever	8	0.07%
<b>SE Asia Internet 2nd Gen</b>	<b>4</b>	<b>0.04%</b>	P&G	13	0.12%
Shopback	0	0.00%	Nestle	10	0.09%
Carsome	4	0.04%	L'Oreal	4	0.04%
RedDoorz	0	0.00%			

### Ratio of SE Asia Alumni to Current Headcount:

1.0x

### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+1.28%	Semiconductors	+1.95%
China's BAT 2.0	+0.12%	Telcos	-0.11%
Pan-SE Asia Internet 1st Gen	+0.36%	Big 4 Accounting Firms	-0.32%
Indonesia Internet 1st Gen	+0.06%	Management Consulting	+0.04%
SE Asia Internet 2nd Gen	+0.04%	IT Services	+0.29%
		Global FMCG	-0.02%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

### Singtel

**SE Asia Headcount:**

**~6,600**

Per LinkedIn (Dec 2022)

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>65</b>	<b>0.98%</b>	<b>Semiconductors</b>	<b>22</b>	<b>0.33%</b>
Google	2	0.03%	GlobalFoundries	5	0.08%
Microsoft	22	0.33%	Micron Technology	11	0.17%
Amazon	8	0.12%	Intel	6	0.09%
Facebook	3	0.05%	<b>Telcos</b>	<b>6</b>	<b>0.09%</b>
Oracle	20	0.30%	Singtel	N/A	N/A
Apple	10	0.15%	Telkom Indonesia	6	0.09%
<b>China's BAT 2.0</b>	<b>1</b>	<b>0.02%</b>	<b>Big 4 Accounting Firms</b>	<b>147</b>	<b>2.23%</b>
Bytedance	1	0.02%	Deloitte	36	0.55%
Tencent	0	0.00%	EY	61	0.92%
Alibaba	0	0.00%	PwC	29	0.44%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>40</b>	<b>0.61%</b>	KPMG	21	0.32%
Sea	25	0.38%	<b>Management Consulting</b>	<b>8</b>	<b>0.12%</b>
Grab	11	0.17%	Bain	1	0.02%
Lazada	3	0.05%	BCG	1	0.02%
Zalora	1	0.02%	McKinsey	6	0.09%
<b>Indonesia Internet 1st Gen</b>	<b>1</b>	<b>0.02%</b>	<b>IT Services</b>	<b>176</b>	<b>2.67%</b>
Gojek	0	0.00%	IBM	89	1.35%
Tokopedia	0	0.00%	Accenture	87	1.32%
Bukalapak	0	0.00%	<b>Global FMCG</b>	<b>31</b>	<b>0.47%</b>
Traveloka	1	0.02%	Unilever	11	0.17%
<b>SE Asia Internet 2nd Gen</b>	<b>2</b>	<b>0.03%</b>	P&G	7	0.11%
Shopback	1	0.02%	Nestle	7	0.11%
Carsome	1	0.02%	L'Oreal	6	0.09%
RedDoorz	0	0.00%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	6,000	91%
Malaysia	638	10%
Indonesia	11	0%
Thailand	11	0%
Vietnam	6	0%
Philippines	57	1%

**Subtotal: Non-Singapore**

**9%**

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Singtel

**Alumni in SE Asia:**

**~14,000**

Per LinkedIn (Dec 2022)

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>317</b>	<b>2.26%</b>	<b>Semiconductors</b>	<b>27</b>	<b>0.19%</b>
Google	52	0.37%	GlobalFoundries	3	0.02%
Microsoft	44	0.31%	Micron Technology	15	0.11%
Amazon	83	0.59%	Intel	9	0.06%
Facebook	54	0.39%	<b>Telcos</b>	<b>12</b>	<b>0.09%</b>
Oracle	29	0.21%	Singtel	N/A	N/A
Apple	55	0.39%	Telkom Indonesia	12	0.09%
<b>China's BAT 2.0</b>	<b>109</b>	<b>0.78%</b>	<b>Big 4 Accounting Firms</b>	<b>43</b>	<b>0.31%</b>
Bytedance	94	0.67%	Deloitte	17	0.12%
Tencent	9	0.06%	EY	16	0.11%
Alibaba	6	0.04%	PwC	9	0.06%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>222</b>	<b>1.59%</b>	KPMG	1	0.01%
Sea	105	0.75%	<b>Management Consulting</b>	<b>12</b>	<b>0.09%</b>
Grab	82	0.59%	Bain	3	0.02%
Lazada	33	0.24%	BCG	2	0.01%
Zalora	2	0.01%	McKinsey	7	0.05%
<b>Indonesia Internet 1st Gen</b>	<b>10</b>	<b>0.07%</b>	<b>IT Services</b>	<b>138</b>	<b>0.99%</b>
Gojek	5	0.04%	IBM	38	0.27%
Tokopedia	3	0.02%	Accenture	100	0.71%
Bukalapak	0	0.00%	<b>Global FMCG</b>	<b>33</b>	<b>0.24%</b>
Traveloka	2	0.01%	Unilever	6	0.04%
<b>SE Asia Internet 2nd Gen</b>	<b>16</b>	<b>0.11%</b>	P&G	17	0.12%
Shopback	14	0.10%	Nestle	6	0.04%
Carsome	2	0.01%	L'Oreal	4	0.03%
RedDoorz	0	0.00%			

#### Ratio of SE Asia Alumni to Current Headcount:

**2.1x**

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+1.28%	Semiconductors	-0.14%
China's BAT 2.0	+0.76%	Telcos	-0.01%
Pan-SE Asia Internet 1st Gen	+0.98%	Big 4 Accounting Firms	-1.92%
Indonesia Internet 1st Gen	+0.06%	Management Consulting	-0.04%
SE Asia Internet 2nd Gen	+0.08%	IT Services	-1.68%
		Global FMCG	-0.23%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

### Telkom Indonesia

#### SE Asia Headcount:

~35,000

Per LinkedIn (Dec 2022)

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>42</b>	<b>0.12%</b>	<b>Semiconductors</b>	<b>3</b>	<b>0.01%</b>
Google	7	0.02%	GlobalFoundries	0	0.00%
Microsoft	23	0.07%	Micron Technology	0	0.00%
Amazon	4	0.01%	Intel	3	0.01%
Facebook	2	0.01%	<b>Telcos</b>	<b>12</b>	<b>0.03%</b>
Oracle	3	0.01%	Singtel	12	0.03%
Apple	3	0.01%	Telkom Indonesia	N/A	N/A
<b>China's BAT 2.0</b>	<b>9</b>	<b>0.03%</b>	<b>Big 4 Accounting Firms</b>	<b>86</b>	<b>0.25%</b>
Bytedance	4	0.01%	Deloitte	22	0.06%
Tencent	2	0.01%	EY	44	0.13%
Alibaba	3	0.01%	PwC	17	0.05%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>111</b>	<b>0.32%</b>	KPMG	3	0.01%
Sea	67	0.19%	<b>Management Consulting</b>	<b>9</b>	<b>0.03%</b>
Grab	21	0.06%	Bain	0	0.00%
Lazada	19	0.05%	BCG	3	0.01%
Zalora	4	0.01%	McKinsey	6	0.02%
<b>Indonesia Internet 1st Gen</b>	<b>182</b>	<b>0.52%</b>	<b>IT Services</b>	<b>50</b>	<b>0.14%</b>
Gojek	42	0.12%	IBM	13	0.04%
Tokopedia	50	0.14%	Accenture	37	0.11%
Bukalapak	70	0.20%	<b>Global FMCG</b>	<b>66</b>	<b>0.19%</b>
Traveloka	20	0.06%	Unilever	38	0.11%
<b>SE Asia Internet 2nd Gen</b>	<b>3</b>	<b>0.01%</b>	P&G	6	0.02%
Shopback	1	0.00%	Nestle	15	0.04%
Carsome	0	0.00%	L'Oreal	7	0.02%
RedDoorz	2	0.01%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	29	0%
Malaysia	20	0%
Indonesia	35,000	100%
Thailand	0	0%
Vietnam	2	0%
Philippines	1	0%

#### Subtotal: Non-Singapore

100%

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Telkom Indonesia

#### Alumni in SE Asia:

~36,000

Per LinkedIn (Dec 2022)

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>71</b>	<b>0.20%</b>	<b>Semiconductors</b>	<b>1</b>	<b>0.00%</b>
Google	39	0.11%	GlobalFoundries	0	0.00%
Microsoft	7	0.02%	Micron Technology	0	0.00%
Amazon	8	0.02%	Intel	1	0.00%
Facebook	9	0.03%	<b>Telcos</b>	<b>6</b>	<b>0.02%</b>
Oracle	3	0.01%	Singtel	6	0.02%
Apple	5	0.01%	Telkom Indonesia	N/A	N/A
<b>China's BAT 2.0</b>	<b>58</b>	<b>0.16%</b>	<b>Big 4 Accounting Firms</b>	<b>70</b>	<b>0.19%</b>
Bytedance	57	0.16%	Deloitte	37	0.10%
Tencent	1	0.00%	EY	24	0.07%
Alibaba	0	0.00%	PwC	7	0.02%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>404</b>	<b>1.12%</b>	KPMG	2	0.01%
Sea	242	0.67%	<b>Management Consulting</b>	<b>8</b>	<b>0.02%</b>
Grab	113	0.31%	Bain	1	0.00%
Lazada	42	0.12%	BCG	3	0.01%
Zalora	7	0.02%	McKinsey	4	0.01%
<b>Indonesia Internet 1st Gen</b>	<b>324</b>	<b>0.90%</b>	<b>IT Services</b>	<b>73</b>	<b>0.20%</b>
Gojek	81	0.23%	IBM	14	0.04%
Tokopedia	144	0.40%	Accenture	59	0.16%
Bukalapak	50	0.14%	<b>Global FMCG</b>	<b>56</b>	<b>0.16%</b>
Traveloka	49	0.14%	Unilever	32	0.09%
<b>SE Asia Internet 2nd Gen</b>	<b>21</b>	<b>0.06%</b>	P&G	5	0.01%
Shopback	1	0.00%	Nestle	14	0.04%
Carsome	6	0.02%	L'Oreal	5	0.01%
RedDoorz	14	0.04%			

#### Ratio of SE Asia Alumni to Current Headcount:

1.0x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+0.08%	Semiconductors	-0.01%
China's BAT 2.0	+0.14%	Telcos	-0.02%
Pan-SE Asia Internet 1st Gen	+0.81%	Big 4 Accounting Firms	-0.05%
Indonesia Internet 1st Gen	+0.38%	Management Consulting	-0.00%
SE Asia Internet 2nd Gen	+0.05%	IT Services	+0.06%
		Global FMCG	-0.03%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

### Deloitte

#### SE Asia Headcount:

~11,000

Per LinkedIn (Dec 2022)

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>95</b>	<b>0.86%</b>	<b>Semiconductors</b>	<b>25</b>	<b>0.23%</b>
Google	8	0.07%	GlobalFoundries	3	0.03%
Microsoft	19	0.17%	Micron Technology	2	0.02%
Amazon	9	0.08%	Intel	20	0.18%
Facebook	3	0.03%	<b>Telcos</b>	<b>54</b>	<b>0.49%</b>
Oracle	53	0.48%	Singtel	17	0.15%
Apple	3	0.03%	Telkom Indonesia	37	0.34%
<b>China's BAT 2.0</b>	<b>6</b>	<b>0.05%</b>	<b>Big 4 Accounting Firms</b>	<b>1,151</b>	<b>10.46%</b>
Bytedance	5	0.05%	Deloitte	N/A	N/A
Tencent	1	0.01%	EY	703	6.39%
Alibaba	0	0.00%	PwC	295	2.68%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>114</b>	<b>1.04%</b>	KPMG	153	1.39%
Sea	70	0.64%	<b>Management Consulting</b>	<b>34</b>	<b>0.31%</b>
Grab	25	0.23%	Bain	5	0.05%
Lazada	11	0.10%	BCG	16	0.15%
Zalora	8	0.07%	McKinsey	13	0.12%
<b>Indonesia Internet 1st Gen</b>	<b>39</b>	<b>0.35%</b>	<b>IT Services</b>	<b>861</b>	<b>7.83%</b>
Gojek	8	0.07%	IBM	235	2.14%
Tokopedia	14	0.13%	Accenture	626	5.69%
Bukalapak	8	0.07%	<b>Global FMCG</b>	<b>79</b>	<b>0.72%</b>
Traveloka	9	0.08%	Unilever	33	0.30%
<b>SE Asia Internet 2nd Gen</b>	<b>4</b>	<b>0.04%</b>	P&G	12	0.11%
Shopback	1	0.01%	Nestle	27	0.25%
Carsome	2	0.02%	L'Oreal	7	0.06%
RedDoorz	1	0.01%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	2,600	24%
Malaysia	2,500	23%
Indonesia	2,200	20%
Thailand	1,200	11%
Vietnam	1,300	12%
Philippines	1,700	15%
<b>Subtotal: Non-Singapore</b>		<b>76%</b>

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Deloitte

#### Alumni in SE Asia:

~26,000

Per LinkedIn (Dec 2022)

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>353</b>	<b>1.36%</b>	<b>Semiconductors</b>	<b>38</b>	<b>0.15%</b>
Google	92	0.35%	GlobalFoundries	2	0.01%
Microsoft	45	0.17%	Micron Technology	16	0.06%
Amazon	78	0.30%	Intel	20	0.08%
Facebook	65	0.25%	<b>Telcos</b>	<b>58</b>	<b>0.22%</b>
Oracle	33	0.13%	Singtel	36	0.14%
Apple	40	0.15%	Telkom Indonesia	22	0.08%
<b>China's BAT 2.0</b>	<b>62</b>	<b>0.24%</b>	<b>Big 4 Accounting Firms</b>	<b>956</b>	<b>3.68%</b>
Bytedance	44	0.17%	Deloitte	N/A	N/A
Tencent	12	0.05%	EY	655	2.52%
Alibaba	6	0.02%	PwC	208	0.80%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>464</b>	<b>1.78%</b>	KPMG	93	0.36%
Sea	320	1.23%	<b>Management Consulting</b>	<b>144</b>	<b>0.55%</b>
Grab	90	0.35%	Bain	15	0.06%
Lazada	43	0.17%	BCG	72	0.28%
Zalora	11	0.04%	McKinsey	57	0.22%
<b>Indonesia Internet 1st Gen</b>	<b>110</b>	<b>0.42%</b>	<b>IT Services</b>	<b>358</b>	<b>1.38%</b>
Gojek	40	0.15%	IBM	96	0.37%
Tokopedia	35	0.13%	Accenture	262	1.01%
Bukalapak	10	0.04%	<b>Global FMCG</b>	<b>167</b>	<b>0.64%</b>
Traveloka	25	0.10%	Unilever	60	0.23%
<b>SE Asia Internet 2nd Gen</b>	<b>18</b>	<b>0.07%</b>	P&G	42	0.16%
Shopback	6	0.02%	Nestle	35	0.13%
Carsome	10	0.04%	L'Oreal	30	0.12%
RedDoorz	2	0.01%			

#### Ratio of SE Asia Alumni to Current Headcount:

2.4x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+0.49%	Semiconductors	-0.08%
China's BAT 2.0	+0.18%	Telcos	-0.27%
Pan-SE Asia Internet 1st Gen	+0.75%	Big 4 Accounting Firms	-6.79%
Indonesia Internet 1st Gen	+0.07%	Management Consulting	+0.24%
SE Asia Internet 2nd Gen	+0.03%	IT Services	-6.45%
		Global FMCG	-0.08%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.



## Nutrition Facts (Input) "Where Talent Comes From"

**EY**  
**SE Asia Headcount:** **~19,000**  
*Per LinkedIn (Dec 2022)*

### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>81</b>	<b>0.43%</b>	<b>Semiconductors</b>	<b>26</b>	<b>0.14%</b>
Google	3	0.02%	GlobalFoundries	3	0.02%
Microsoft	31	0.16%	Micron Technology	4	0.02%
Amazon	12	0.06%	Intel	19	0.10%
Facebook	2	0.01%	<b>Telcos</b>	<b>40</b>	<b>0.21%</b>
Oracle	28	0.15%	Singtel	16	0.08%
Apple	5	0.03%	Telkom Indonesia	24	0.13%
<b>China's BAT 2.0</b>	<b>3</b>	<b>0.02%</b>	<b>Big 4 Accounting Firms</b>	<b>1,259</b>	<b>6.63%</b>
Bytedance	2	0.01%	Deloitte	655	3.45%
Tencent	0	0.00%	EY	N/A	N/A
Alibaba	1	0.01%	PwC	375	1.97%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>155</b>	<b>0.82%</b>	KPMG	229	1.21%
Sea	91	0.48%	<b>Management Consulting</b>	<b>33</b>	<b>0.17%</b>
Grab	33	0.17%	Bain	6	0.03%
Lazada	19	0.10%	BCG	15	0.08%
Zalora	12	0.06%	McKinsey	12	0.06%
<b>Indonesia Internet 1st Gen</b>	<b>36</b>	<b>0.19%</b>	<b>IT Services</b>	<b>784</b>	<b>4.13%</b>
Gojek	7	0.04%	IBM	245	1.29%
Tokopedia	16	0.08%	Accenture	539	2.84%
Bukalapak	9	0.05%	<b>Global FMCG</b>	<b>108</b>	<b>0.57%</b>
Traveloka	4	0.02%	Unilever	31	0.16%
<b>SE Asia Internet 2nd Gen</b>	<b>2</b>	<b>0.01%</b>	P&G	28	0.15%
Shopback	1	0.01%	Nestle	38	0.20%
Carsome	1	0.01%	L'Oreal	11	0.06%
RedDoorz	0	0.00%			

### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	0	N/A
Malaysia	0	N/A
Indonesia	0	N/A
Thailand	0	N/A
Vietnam	0	N/A
Philippines	0	N/A

**Subtotal: Non-Singapore** **N/A**

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes Tiktok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

**EY**  
**Alumni in SE Asia:** **~43,000**  
*Per LinkedIn (Dec 2022)*

### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>339</b>	<b>0.79%</b>	<b>Semiconductors</b>	<b>63</b>	<b>0.15%</b>
Google	90	0.21%	GlobalFoundries	8	0.02%
Microsoft	49	0.11%	Micron Technology	23	0.05%
Amazon	86	0.20%	Intel	32	0.07%
Facebook	56	0.13%	<b>Telcos</b>	<b>105</b>	<b>0.24%</b>
Oracle	26	0.06%	Singtel	61	0.14%
Apple	32	0.07%	Telkom Indonesia	44	0.10%
<b>China's BAT 2.0</b>	<b>83</b>	<b>0.19%</b>	<b>Big 4 Accounting Firms</b>	<b>1,243</b>	<b>2.89%</b>
Bytedance	65	0.15%	Deloitte	703	1.63%
Tencent	13	0.03%	EY	N/A	N/A
Alibaba	5	0.01%	PwC	372	0.87%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>656</b>	<b>1.53%</b>	KPMG	168	0.39%
Sea	430	1.00%	<b>Management Consulting</b>	<b>131</b>	<b>0.30%</b>
Grab	120	0.28%	Bain	27	0.06%
Lazada	94	0.22%	BCG	56	0.13%
Zalora	12	0.03%	McKinsey	48	0.11%
<b>Indonesia Internet 1st Gen</b>	<b>161</b>	<b>0.37%</b>	<b>IT Services</b>	<b>405</b>	<b>0.94%</b>
Gojek	45	0.10%	IBM	149	0.35%
Tokopedia	49	0.11%	Accenture	256	0.60%
Bukalapak	28	0.07%	<b>Global FMCG</b>	<b>286</b>	<b>0.67%</b>
Traveloka	39	0.09%	Unilever	86	0.20%
<b>SE Asia Internet 2nd Gen</b>	<b>28</b>	<b>0.07%</b>	P&G	85	0.20%
Shopback	8	0.02%	Nestle	51	0.12%
Carsome	19	0.04%	L'Oreal	64	0.15%
RedDoorz	1	0.00%			

### Ratio of SE Asia Alumni to Current Headcount:

2.3x

### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+0.36%	Semiconductors	+0.01%
China's BAT 2.0	+0.18%	Telcos	+0.03%
Pan-SE Asia Internet 1st Gen	+0.71%	Big 4 Accounting Firms	-3.74%
Indonesia Internet 1st Gen	+0.18%	Management Consulting	+0.13%
SE Asia Internet 2nd Gen	+0.05%	IT Services	-3.18%
		Global FMCG	+0.10%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes Tiktok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

PwC

SE Asia Headcount:

~4,900

Per LinkedIn (Dec 2022)

### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>14</b>	<b>0.29%</b>	<b>Semiconductors</b>	<b>8</b>	<b>0.16%</b>
Google	0	0.00%	GlobalFoundries	3	0.06%
Microsoft	2	0.04%	Micron Technology	2	0.04%
Amazon	3	0.06%	Intel	3	0.06%
Facebook	1	0.02%	<b>Telcos</b>	<b>16</b>	<b>0.33%</b>
Oracle	8	0.16%	Singtel	9	0.18%
Apple	0	0.00%	Telkom Indonesia	7	0.14%
<b>China's BAT 2.0</b>	<b>2</b>	<b>0.04%</b>	<b>Big 4 Accounting Firms</b>	<b>671</b>	<b>13.69%</b>
Bytedance	2	0.04%	Deloitte	208	4.24%
Tencent	0	0.00%	EY	372	7.59%
Alibaba	0	0.00%	PwC	N/A	N/A
<b>Pan-SE Asia Internet 1st Gen</b>	<b>49</b>	<b>1.00%</b>	KPMG	91	1.86%
Sea	37	0.76%	<b>Management Consulting</b>	<b>20</b>	<b>0.41%</b>
Grab	8	0.16%	Bain	2	0.04%
Lazada	1	0.02%	BCG	11	0.22%
Zalora	3	0.06%	McKinsey	7	0.14%
<b>Indonesia Internet 1st Gen</b>	<b>6</b>	<b>0.12%</b>	<b>IT Services</b>	<b>96</b>	<b>1.96%</b>
Gojek	2	0.04%	IBM	36	0.73%
Tokopedia	3	0.06%	Accenture	60	1.22%
Bukalapak	1	0.02%	<b>Global FMCG</b>	<b>19</b>	<b>0.39%</b>
Traveloka	0	0.00%	Unilever	9	0.18%
<b>SE Asia Internet 2nd Gen</b>	<b>1</b>	<b>0.02%</b>	P&G	3	0.06%
Shopback	1	0.02%	Nestle	6	0.12%
Carsome	0	0.00%	L'Oreal	1	0.02%
RedDoorz	0	0.00%			

### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	0	N/A
Malaysia	0	N/A
Indonesia	0	N/A
Thailand	0	N/A
Vietnam	0	N/A
Philippines	0	N/A

Subtotal: Non-Singapore

N/A

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

PwC

Alumni in SE Asia:

~21,000

Per LinkedIn (Dec 2022)

### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>232</b>	<b>1.10%</b>	<b>Semiconductors</b>	<b>29</b>	<b>0.14%</b>
Google	62	0.30%	GlobalFoundries	5	0.02%
Microsoft	43	0.20%	Micron Technology	9	0.04%
Amazon	49	0.23%	Intel	15	0.07%
Facebook	28	0.13%	<b>Telcos</b>	<b>46</b>	<b>0.22%</b>
Oracle	21	0.10%	Singtel	29	0.14%
Apple	29	0.14%	Telkom Indonesia	17	0.08%
<b>China's BAT 2.0</b>	<b>39</b>	<b>0.19%</b>	<b>Big 4 Accounting Firms</b>	<b>764</b>	<b>3.64%</b>
Bytedance	31	0.15%	Deloitte	295	1.40%
Tencent	3	0.01%	EY	375	1.79%
Alibaba	5	0.02%	PwC	N/A	N/A
<b>Pan-SE Asia Internet 1st Gen</b>	<b>326</b>	<b>1.55%</b>	KPMG	94	0.45%
Sea	210	1.00%	<b>Management Consulting</b>	<b>97</b>	<b>0.46%</b>
Grab	62	0.30%	Bain	21	0.10%
Lazada	46	0.22%	BCG	43	0.20%
Zalora	8	0.04%	McKinsey	33	0.16%
<b>Indonesia Internet 1st Gen</b>	<b>92</b>	<b>0.44%</b>	<b>IT Services</b>	<b>183</b>	<b>0.87%</b>
Gojek	29	0.14%	IBM	68	0.32%
Tokopedia	28	0.13%	Accenture	115	0.55%
Bukalapak	22	0.10%	<b>Global FMCG</b>	<b>153</b>	<b>0.73%</b>
Traveloka	13	0.06%	Unilever	57	0.27%
<b>SE Asia Internet 2nd Gen</b>	<b>12</b>	<b>0.06%</b>	P&G	44	0.21%
Shopback	5	0.02%	Nestle	21	0.10%
Carsome	7	0.03%	L'Oreal	31	0.15%
RedDoorz	0	0.00%			

### Ratio of SE Asia Alumni to Current Headcount:

4.3x

### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+0.82%	Semiconductors	-0.03%
China's BAT 2.0	+0.14%	Telcos	-0.11%
Pan-SE Asia Internet 1st Gen	+0.55%	Big 4 Accounting Firms	-10.06%
Indonesia Internet 1st Gen	+0.32%	Management Consulting	+0.05%
SE Asia Internet 2nd Gen	+0.04%	IT Services	-1.09%
		Global FMCG	+0.34%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

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## Nutrition Facts (Input) "Where Talent Comes From"

KPMG

SE Asia Headcount:

~3,200

Per LinkedIn (Dec 2022)

### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>14</b>	<b>0.44%</b>	<b>Semiconductors</b>	<b>2</b>	<b>0.06%</b>
Google	2	0.06%	GlobalFoundries	0	0.00%
Microsoft	7	0.22%	Micron Technology	0	0.00%
Amazon	1	0.03%	Intel	2	0.06%
Facebook	0	0.00%	<b>Telcos</b>	<b>3</b>	<b>0.09%</b>
Oracle	4	0.13%	Singtel	1	0.03%
Apple	0	0.00%	Telkom Indonesia	2	0.06%
<b>China's BAT 2.0</b>	<b>0</b>	<b>0.00%</b>	<b>Big 4 Accounting Firms</b>	<b>355</b>	<b>11.09%</b>
Bytedance	0	0.00%	Deloitte	93	2.91%
Tencent	0	0.00%	EY	168	5.25%
Alibaba	0	0.00%	PwC	94	2.94%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>18</b>	<b>0.56%</b>	KPMG	N/A	N/A
Sea	10	0.31%	<b>Management Consulting</b>	<b>6</b>	<b>0.19%</b>
Grab	5	0.16%	Bain	0	0.00%
Lazada	2	0.06%	BCG	4	0.13%
Zalora	1	0.03%	McKinsey	2	0.06%
<b>Indonesia Internet 1st Gen</b>	<b>1</b>	<b>0.03%</b>	<b>IT Services</b>	<b>37</b>	<b>1.16%</b>
Gojek	0	0.00%	IBM	14	0.44%
Tokopedia	1	0.03%	Accenture	23	0.72%
Bukalapak	0	0.00%	<b>Global FMCG</b>	<b>9</b>	<b>0.28%</b>
Traveloka	0	0.00%	Unilever	5	0.16%
<b>SE Asia Internet 2nd Gen</b>	<b>0</b>	<b>0.00%</b>	P&G	3	0.09%
Shopback	0	0.00%	Nestle	1	0.03%
Carsome	0	0.00%	L'Oreal	0	0.00%
RedDoorz	0	0.00%			

### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	0	N/A
Malaysia	0	N/A
Indonesia	0	N/A
Thailand	0	N/A
Vietnam	0	N/A
Philippines	0	N/A

Subtotal: Non-Singapore

N/A

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

KPMG

Alumni in SE Asia:

~11,000

Per LinkedIn (Dec 2022)

### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>99</b>	<b>0.90%</b>	<b>Semiconductors</b>	<b>24</b>	<b>0.22%</b>
Google	25	0.23%	GlobalFoundries	3	0.03%
Microsoft	18	0.16%	Micron Technology	9	0.08%
Amazon	24	0.22%	Intel	12	0.11%
Facebook	13	0.12%	<b>Telcos</b>	<b>24</b>	<b>0.22%</b>
Oracle	7	0.06%	Singtel	21	0.19%
Apple	12	0.11%	Telkom Indonesia	3	0.03%
<b>China's BAT 2.0</b>	<b>12</b>	<b>0.11%</b>	<b>Big 4 Accounting Firms</b>	<b>473</b>	<b>4.30%</b>
Bytedance	10	0.09%	Deloitte	153	1.39%
Tencent	0	0.00%	EY	229	2.08%
Alibaba	2	0.02%	PwC	91	0.83%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>186</b>	<b>1.69%</b>	KPMG	N/A	N/A
Sea	114	1.04%	<b>Management Consulting</b>	<b>38</b>	<b>0.35%</b>
Grab	42	0.38%	Bain	9	0.08%
Lazada	23	0.21%	BCG	20	0.18%
Zalora	7	0.06%	McKinsey	9	0.08%
<b>Indonesia Internet 1st Gen</b>	<b>23</b>	<b>0.21%</b>	<b>IT Services</b>	<b>101</b>	<b>0.92%</b>
Gojek	11	0.10%	IBM	29	0.26%
Tokopedia	4	0.04%	Accenture	72	0.65%
Bukalapak	3	0.03%	<b>Global FMCG</b>	<b>54</b>	<b>0.49%</b>
Traveloka	5	0.05%	Unilever	16	0.15%
<b>SE Asia Internet 2nd Gen</b>	<b>4</b>	<b>0.04%</b>	P&G	16	0.15%
Shopback	1	0.01%	Nestle	10	0.09%
Carsome	3	0.03%	L'Oreal	12	0.11%
RedDoorz	0	0.00%			

### Ratio of SE Asia Alumni to Current Headcount:

3.4x

### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+0.46%	Semiconductors	+0.16%
China's BAT 2.0	+0.11%	Telcos	+0.12%
Pan-SE Asia Internet 1st Gen	+1.13%	Big 4 Accounting Firms	-6.79%
Indonesia Internet 1st Gen	+0.18%	Management Consulting	+0.16%
SE Asia Internet 2nd Gen	+0.04%	IT Services	-0.24%
		Global FMCG	+0.21%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

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## Nutrition Facts (Input) "Where Talent Comes From"

### Bain

SE Asia Headcount:

~640

Per LinkedIn (Dec 2022)

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>26</b>	<b>4.06%</b>	<b>Semiconductors</b>	<b>0</b>	<b>0.00%</b>
Google	8	1.25%	GlobalFoundries	0	0.00%
Microsoft	4	0.63%	Micron Technology	0	0.00%
Amazon	5	0.78%	Intel	0	0.00%
Facebook	4	0.63%	<b>Telcos</b>	<b>4</b>	<b>0.63%</b>
Oracle	4	0.63%	Singtel	3	0.47%
Apple	1	0.16%	Telkom Indonesia	1	0.16%
<b>China's BAT 2.0</b>	<b>0</b>	<b>0.00%</b>	<b>Big 4 Accounting Firms</b>	<b>72</b>	<b>11.25%</b>
Bytedance	0	0.00%	Deloitte	15	2.34%
Tencent	0	0.00%	EY	27	4.22%
Alibaba	0	0.00%	PwC	21	3.28%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>21</b>	<b>3.28%</b>	KPMG	9	1.41%
Sea	11	1.72%	<b>Management Consulting</b>	<b>58</b>	<b>9.06%</b>
Grab	9	1.41%	Bain	N/A	N/A
Lazada	1	0.16%	BCG	31	4.84%
Zalora	0	0.00%	McKinsey	27	4.22%
<b>Indonesia Internet 1st Gen</b>	<b>9</b>	<b>1.41%</b>	<b>IT Services</b>	<b>46</b>	<b>7.19%</b>
Gojek	2	0.31%	IBM	7	1.09%
Tokopedia	2	0.31%	Accenture	39	6.09%
Bukalapak	2	0.31%	<b>Global FMCG</b>	<b>35</b>	<b>5.47%</b>
Traveloka	3	0.47%	Unilever	12	1.88%
<b>SE Asia Internet 2nd Gen</b>	<b>1</b>	<b>0.16%</b>	P&G	12	1.88%
Shopback	1	0.16%	Nestle	4	0.63%
Carsome	0	0.00%	L'Oreal	7	1.09%
RedDoorz	0	0.00%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	0	N/A
Malaysia	0	N/A
Indonesia	0	N/A
Thailand	0	N/A
Vietnam	0	N/A
Philippines	0	N/A

Subtotal: Non-Singapore

N/A

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Bain

Alumni in SE Asia:

~1,000

Per LinkedIn (Dec 2022)

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>36</b>	<b>3.60%</b>	<b>Semiconductors</b>	<b>1</b>	<b>0.10%</b>
Google	23	2.30%	GlobalFoundries	0	0.00%
Microsoft	1	0.10%	Micron Technology	1	0.10%
Amazon	3	0.30%	Intel	0	0.00%
Facebook	5	0.50%	<b>Telcos</b>	<b>1</b>	<b>0.10%</b>
Oracle	0	0.00%	Singtel	1	0.10%
Apple	4	0.40%	Telkom Indonesia	0	0.00%
<b>China's BAT 2.0</b>	<b>8</b>	<b>0.80%</b>	<b>Big 4 Accounting Firms</b>	<b>13</b>	<b>1.30%</b>
Bytedance	7	0.70%	Deloitte	5	0.50%
Tencent	0	0.00%	EY	6	0.60%
Alibaba	1	0.10%	PwC	2	0.20%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>60</b>	<b>6.00%</b>	KPMG	0	0.00%
Sea	34	3.40%	<b>Management Consulting</b>	<b>19</b>	<b>1.90%</b>
Grab	16	1.60%	Bain	N/A	N/A
Lazada	9	0.90%	BCG	11	1.10%
Zalora	1	0.10%	McKinsey	8	0.80%
<b>Indonesia Internet 1st Gen</b>	<b>4</b>	<b>0.40%</b>	<b>IT Services</b>	<b>7</b>	<b>0.70%</b>
Gojek	2	0.20%	IBM	2	0.20%
Tokopedia	0	0.00%	Accenture	5	0.50%
Bukalapak	2	0.20%	<b>Global FMCG</b>	<b>4</b>	<b>0.40%</b>
Traveloka	0	0.00%	Unilever	1	0.10%
<b>SE Asia Internet 2nd Gen</b>	<b>0</b>	<b>0.00%</b>	P&G	2	0.20%
Shopback	0	0.00%	Nestle	0	0.00%
Carsome	0	0.00%	L'Oreal	1	0.10%
RedDoorz	0	0.00%			

#### Ratio of SE Asia Alumni to Current Headcount:

1.6x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	-0.46%	Semiconductors	+0.10%
China's BAT 2.0	+0.80%	Telcos	-0.53%
Pan-SE Asia Internet 1st Gen	+2.72%	Big 4 Accounting Firms	-9.95%
Indonesia Internet 1st Gen	-1.01%	Management Consulting	-7.16%
SE Asia Internet 2nd Gen	-0.16%	IT Services	-6.49%
		Global FMCG	-5.07%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

### BCG

#### SE Asia Headcount:

Per LinkedIn (Dec 2022)

~1,200

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>30</b>	<b>2.50%</b>	<b>Semiconductors</b>	<b>6</b>	<b>0.50%</b>
Google	8	0.67%	GlobalFoundries	4	0.33%
Microsoft	9	0.75%	Micron Technology	2	0.17%
Amazon	10	0.83%	Intel	0	0.00%
Facebook	1	0.08%	<b>Telcos</b>	<b>5</b>	<b>0.42%</b>
Oracle	0	0.00%	Singtel	2	0.17%
Apple	2	0.17%	Telkom Indonesia	3	0.25%
<b>China's BAT 2.0</b>	<b>6</b>	<b>0.50%</b>	<b>Big 4 Accounting Firms</b>	<b>191</b>	<b>15.92%</b>
Bytedance	2	0.17%	Deloitte	72	6.00%
Tencent	2	0.17%	EY	56	4.67%
Alibaba	2	0.17%	PwC	43	3.58%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>66</b>	<b>5.50%</b>	KPMG	20	1.67%
Sea	41	3.42%	<b>Management Consulting</b>	<b>39</b>	<b>3.25%</b>
Grab	18	1.50%	Bain	11	0.92%
Lazada	7	0.58%	BCG	N/A	N/A
Zalora	0	0.00%	McKinsey	28	2.33%
<b>Indonesia Internet 1st Gen</b>	<b>21</b>	<b>1.75%</b>	<b>IT Services</b>	<b>93</b>	<b>7.75%</b>
Gojek	11	0.92%	IBM	13	1.08%
Tokopedia	4	0.33%	Accenture	80	6.67%
Bukalapak	1	0.08%	<b>Global FMCG</b>	<b>80</b>	<b>6.67%</b>
Traveloka	5	0.42%	Unilever	32	2.67%
<b>SE Asia Internet 2nd Gen</b>	<b>2</b>	<b>0.17%</b>	P&G	33	2.75%
Shopback	2	0.17%	Nestle	7	0.58%
Carsome	0	0.00%	L'Oreal	8	0.67%
RedDoorz	0	0.00%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	0	N/A
Malaysia	0	N/A
Indonesia	0	N/A
Thailand	0	N/A
Vietnam	0	N/A
Philippines	0	N/A

Subtotal: Non-Singapore

N/A

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### BCG

#### Alumni in SE Asia:

Per LinkedIn (Dec 2022)

~3,100

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>83</b>	<b>2.68%</b>	<b>Semiconductors</b>	<b>2</b>	<b>0.06%</b>
Google	45	1.45%	GlobalFoundries	1	0.03%
Microsoft	6	0.19%	Micron Technology	0	0.00%
Amazon	15	0.48%	Intel	1	0.03%
Facebook	14	0.45%	<b>Telcos</b>	<b>4</b>	<b>0.13%</b>
Oracle	2	0.06%	Singtel	1	0.03%
Apple	1	0.03%	Telkom Indonesia	3	0.10%
<b>China's BAT 2.0</b>	<b>28</b>	<b>0.90%</b>	<b>Big 4 Accounting Firms</b>	<b>46</b>	<b>1.48%</b>
Bytedance	21	0.68%	Deloitte	16	0.52%
Tencent	6	0.19%	EY	15	0.48%
Alibaba	1	0.03%	PwC	11	0.35%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>176</b>	<b>5.68%</b>	KPMG	4	0.13%
Sea	99	3.19%	<b>Management Consulting</b>	<b>70</b>	<b>2.26%</b>
Grab	50	1.61%	Bain	31	1.03%
Lazada	24	0.77%	BCG	N/A	N/A
Zalora	3	0.10%	McKinsey	39	1.26%
<b>Indonesia Internet 1st Gen</b>	<b>62</b>	<b>2.00%</b>	<b>IT Services</b>	<b>30</b>	<b>0.97%</b>
Gojek	16	0.52%	IBM	4	0.13%
Tokopedia	20	0.65%	Accenture	26	0.84%
Bukalapak	19	0.61%	<b>Global FMCG</b>	<b>39</b>	<b>1.26%</b>
Traveloka	7	0.23%	Unilever	12	0.39%
<b>SE Asia Internet 2nd Gen</b>	<b>8</b>	<b>0.26%</b>	P&G	12	0.39%
Shopback	1	0.03%	Nestle	8	0.26%
Carsome	6	0.19%	L'Oreal	7	0.23%
RedDoorz	1	0.03%			

#### Ratio of SE Asia Alumni to Current Headcount:

2.6x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+0.18%	Semiconductors	-0.44%
China's BAT 2.0	+0.40%	Telcos	-0.29%
Pan-SE Asia Internet 1st Gen	+0.18%	Big 4 Accounting Firms	-14.43%
Indonesia Internet 1st Gen	+0.25%	Management Consulting	-0.99%
SE Asia Internet 2nd Gen	+0.09%	IT Services	-6.78%
		Global FMCG	-5.41%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

### McKinsey

#### SE Asia Headcount:

Per LinkedIn (Dec 2022)

~1,400

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>28</b>	<b>2.00%</b>	<b>Semiconductors</b>	<b>12</b>	<b>0.86%</b>
Google	9	0.64%	GlobalFoundries	0	0.00%
Microsoft	8	0.57%	Micron Technology	6	0.43%
Amazon	6	0.43%	Intel	6	0.43%
Facebook	2	0.14%	<b>Telcos</b>	<b>11</b>	<b>0.79%</b>
Oracle	2	0.14%	Singtel	7	0.50%
Apple	1	0.07%	Telkom Indonesia	4	0.29%
<b>China's BAT 2.0</b>	<b>3</b>	<b>0.21%</b>	<b>Big 4 Accounting Firms</b>	<b>147</b>	<b>10.50%</b>
Bytedance	0	0.00%	Deloitte	57	4.07%
Tencent	0	0.00%	EY	48	3.43%
Alibaba	3	0.21%	PwC	33	2.36%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>69</b>	<b>4.93%</b>	KPMG	9	0.64%
Sea	30	2.14%	<b>Management Consulting</b>	<b>47</b>	<b>3.36%</b>
Grab	24	1.71%	Bain	8	0.57%
Lazada	11	0.79%	BCG	39	2.79%
Zalora	4	0.29%	McKinsey	N/A	N/A
<b>Indonesia Internet 1st Gen</b>	<b>19</b>	<b>1.36%</b>	<b>IT Services</b>	<b>101</b>	<b>7.21%</b>
Gojek	9	0.64%	IBM	29	2.07%
Tokopedia	2	0.14%	Accenture	72	5.14%
Bukalapak	2	0.14%	<b>Global FMCG</b>	<b>67</b>	<b>4.79%</b>
Traveloka	6	0.43%	Unilever	32	2.29%
<b>SE Asia Internet 2nd Gen</b>	<b>3</b>	<b>0.21%</b>	P&G	21	1.50%
Shopback	3	0.21%	Nestle	9	0.64%
Carsome	0	0.00%	L'Oreal	5	0.36%
RedDoorz	0	0.00%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	0	N/A
Malaysia	0	N/A
Indonesia	0	N/A
Thailand	0	N/A
Vietnam	0	N/A
Philippines	0	N/A

Subtotal: Non-Singapore

N/A

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### McKinsey

#### Alumni in SE Asia:

Per LinkedIn (Dec 2022)

~3,100

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>131</b>	<b>4.23%</b>	<b>Semiconductors</b>	<b>12</b>	<b>0.39%</b>
Google	68	2.19%	GlobalFoundries	1	0.03%
Microsoft	11	0.35%	Micron Technology	10	0.32%
Amazon	16	0.52%	Intel	1	0.03%
Facebook	25	0.81%	<b>Telcos</b>	<b>12</b>	<b>0.39%</b>
Oracle	2	0.06%	Singtel	6	0.19%
Apple	9	0.29%	Telkom Indonesia	6	0.19%
<b>China's BAT 2.0</b>	<b>26</b>	<b>0.84%</b>	<b>Big 4 Accounting Firms</b>	<b>34</b>	<b>1.10%</b>
Bytedance	22	0.71%	Deloitte	13	0.42%
Tencent	2	0.06%	EY	12	0.39%
Alibaba	2	0.06%	PwC	7	0.23%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>153</b>	<b>4.94%</b>	KPMG	2	0.06%
Sea	86	2.77%	<b>Management Consulting</b>	<b>55</b>	<b>1.77%</b>
Grab	43	1.39%	Bain	27	0.87%
Lazada	20	0.65%	BCG	28	0.90%
Zalora	4	0.13%	McKinsey	N/A	N/A
<b>Indonesia Internet 1st Gen</b>	<b>29</b>	<b>0.94%</b>	<b>IT Services</b>	<b>17</b>	<b>0.55%</b>
Gojek	13	0.42%	IBM	3	0.10%
Tokopedia	10	0.32%	Accenture	14	0.45%
Bukalapak	2	0.06%	<b>Global FMCG</b>	<b>30</b>	<b>0.97%</b>
Traveloka	4	0.13%	Unilever	12	0.39%
<b>SE Asia Internet 2nd Gen</b>	<b>6</b>	<b>0.19%</b>	P&G	15	0.48%
Shopback	3	0.10%	Nestle	3	0.10%
Carsome	3	0.10%	L'Oreal	0	0.00%
RedDoorz	0	0.00%			

#### Ratio of SE Asia Alumni to Current Headcount:

2.2x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+2.23%	Semiconductors	-0.47%
China's BAT 2.0	+0.62%	Telcos	-0.40%
Pan-SE Asia Internet 1st Gen	+0.01%	Big 4 Accounting Firms	-9.40%
Indonesia Internet 1st Gen	-0.42%	Management Consulting	-1.58%
SE Asia Internet 2nd Gen	-0.02%	IT Services	-6.67%
		Global FMCG	-3.82%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.





## Nutrition Facts (Input) "Where Talent Comes From"

**IBM**  
**SE Asia Headcount:** **~15,000**  
*Per LinkedIn (Dec 2022)*

### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>211</b>	<b>1.41%</b>	<b>Semiconductors</b>	<b>36</b>	<b>0.24%</b>
Google	7	0.05%	GlobalFoundries	3	0.02%
Microsoft	84	0.56%	Micron Technology	7	0.05%
Amazon	12	0.08%	Intel	26	0.17%
Facebook	2	0.01%	<b>Telcos</b>	<b>52</b>	<b>0.35%</b>
Oracle	96	0.64%	Singtel	38	0.25%
Apple	10	0.07%	Telkom Indonesia	14	0.09%
<b>China's BAT 2.0</b>	<b>5</b>	<b>0.03%</b>	<b>Big 4 Accounting Firms</b>	<b>342</b>	<b>2.28%</b>
Bytedance	3	0.02%	Deloitte	96	0.64%
Tencent	0	0.00%	EY	149	0.99%
Alibaba	2	0.01%	PwC	68	0.45%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>26</b>	<b>0.17%</b>	KPMG	29	0.19%
Sea	14	0.09%	<b>Management Consulting</b>	<b>9</b>	<b>0.06%</b>
Grab	5	0.03%	Bain	2	0.01%
Lazada	6	0.04%	BCG	4	0.03%
Zalora	1	0.01%	McKinsey	3	0.02%
<b>Indonesia Internet 1st Gen</b>	<b>7</b>	<b>0.05%</b>	<b>IT Services</b>	<b>1,087</b>	<b>7.25%</b>
Gojek	2	0.01%	IBM	N/A	N/A
Tokopedia	3	0.02%	Accenture	1,087	7.25%
Bukalapak	1	0.01%	<b>Global FMCG</b>	<b>59</b>	<b>0.39%</b>
Traveloka	1	0.01%	Unilever	13	0.09%
<b>SE Asia Internet 2nd Gen</b>	<b>0</b>	<b>0.00%</b>	P&G	32	0.21%
Shopback	0	0.00%	Nestle	12	0.08%
Carsome	0	0.00%	L'Oreal	2	0.01%
RedDoorz	0	0.00%			

### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	2,800	19%
Malaysia	2,600	17%
Indonesia	764	5%
Thailand	892	6%
Vietnam	433	3%
Philippines	7,700	51%

**Subtotal: Non-Singapore** **81%**

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

**IBM**  
**Alumni in SE Asia:** **~45,000**  
*Per LinkedIn (Dec 2022)*

### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>1,156</b>	<b>2.57%</b>	<b>Semiconductors</b>	<b>90</b>	<b>0.20%</b>
Google	157	0.35%	GlobalFoundries	29	0.06%
Microsoft	287	0.64%	Micron Technology	23	0.05%
Amazon	346	0.77%	Intel	38	0.08%
Facebook	59	0.13%	<b>Telcos</b>	<b>102</b>	<b>0.23%</b>
Oracle	253	0.56%	Singtel	89	0.20%
Apple	54	0.12%	Telkom Indonesia	13	0.03%
<b>China's BAT 2.0</b>	<b>100</b>	<b>0.22%</b>	<b>Big 4 Accounting Firms</b>	<b>530</b>	<b>1.18%</b>
Bytedance	69	0.15%	Deloitte	235	0.52%
Tencent	12	0.03%	EY	245	0.54%
Alibaba	19	0.04%	PwC	36	0.08%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>272</b>	<b>0.60%</b>	KPMG	14	0.03%
Sea	116	0.26%	<b>Management Consulting</b>	<b>49</b>	<b>0.11%</b>
Grab	110	0.24%	Bain	7	0.02%
Lazada	37	0.08%	BCG	13	0.03%
Zalora	9	0.02%	McKinsey	29	0.06%
<b>Indonesia Internet 1st Gen</b>	<b>60</b>	<b>0.13%</b>	<b>IT Services</b>	<b>1,113</b>	<b>2.47%</b>
Gojek	25	0.06%	IBM	N/A	N/A
Tokopedia	13	0.03%	Accenture	1,113	2.47%
Bukalapak	8	0.02%	<b>Global FMCG</b>	<b>196</b>	<b>0.44%</b>
Traveloka	14	0.03%	Unilever	36	0.08%
<b>SE Asia Internet 2nd Gen</b>	<b>18</b>	<b>0.04%</b>	P&G	74	0.16%
Shopback	9	0.02%	Nestle	71	0.16%
Carsome	9	0.02%	L'Oreal	15	0.03%
RedDoorz	0	0.00%			

### Ratio of SE Asia Alumni to Current Headcount:

3.0x

### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+1.16%	Semiconductors	-0.04%
China's BAT 2.0	+0.19%	Telcos	-0.12%
Pan-SE Asia Internet 1st Gen	+0.43%	Big 4 Accounting Firms	-1.10%
Indonesia Internet 1st Gen	+0.09%	Management Consulting	+0.05%
SE Asia Internet 2nd Gen	+0.04%	IT Services	-4.77%
		Global FMCG	+0.04%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

### Accenture

#### SE Asia Headcount:

~52,000

Per LinkedIn (Dec 2022)

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>333</b>	<b>0.64%</b>	<b>Semiconductors</b>	<b>81</b>	<b>0.16%</b>
Google	35	0.07%	GlobalFoundries	11	0.02%
Microsoft	96	0.18%	Micron Technology	12	0.02%
Amazon	43	0.08%	Intel	58	0.11%
Facebook	12	0.02%	<b>Telcos</b>	<b>159</b>	<b>0.31%</b>
Oracle	116	0.22%	Singtel	100	0.19%
Apple	31	0.06%	Telkom Indonesia	59	0.11%
<b>China's BAT 2.0</b>	<b>29</b>	<b>0.06%</b>	<b>Big 4 Accounting Firms</b>	<b>705</b>	<b>1.36%</b>
Bytedance	15	0.03%	Deloitte	262	0.50%
Tencent	4	0.01%	EY	256	0.49%
Alibaba	10	0.02%	PwC	115	0.22%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>270</b>	<b>0.52%</b>	KPMG	72	0.14%
Sea	142	0.27%	<b>Management Consulting</b>	<b>45</b>	<b>0.09%</b>
Grab	68	0.13%	Bain	5	0.01%
Lazada	37	0.07%	BCG	26	0.05%
Zalora	23	0.04%	McKinsey	14	0.03%
<b>Indonesia Internet 1st Gen</b>	<b>32</b>	<b>0.06%</b>	<b>IT Services</b>	<b>1,113</b>	<b>2.14%</b>
Gojek	14	0.03%	IBM	1,113	2.14%
Tokopedia	9	0.02%	Accenture	N/A	N/A
Bukalapak	2	0.00%	<b>Global FMCG</b>	<b>211</b>	<b>0.41%</b>
Traveloka	7	0.01%	Unilever	83	0.12%
<b>SE Asia Internet 2nd Gen</b>	<b>13</b>	<b>0.03%</b>	P&G	73	0.14%
Shopback	6	0.01%	Nestle	59	0.11%
Carsome	3	0.01%	L'Oreal	16	0.03%
RedDoorz	4	0.01%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	4,100	8%
Malaysia	5,900	11%
Indonesia	2,000	4%
Thailand	1,700	3%
Vietnam	292	1%
Philippines	38,000	73%

#### Subtotal: Non-Singapore

92%

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Accenture

#### Alumni in SE Asia:

~68,000

Per LinkedIn (Dec 2022)

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>925</b>	<b>1.36%</b>	<b>Semiconductors</b>	<b>41</b>	<b>0.06%</b>
Google	145	0.21%	GlobalFoundries	4	0.01%
Microsoft	125	0.18%	Micron Technology	23	0.03%
Amazon	241	0.35%	Intel	14	0.02%
Facebook	77	0.11%	<b>Telcos</b>	<b>124</b>	<b>0.18%</b>
Oracle	276	0.41%	Singtel	87	0.13%
Apple	61	0.09%	Telkom Indonesia	37	0.05%
<b>China's BAT 2.0</b>	<b>524</b>	<b>0.77%</b>	<b>Big 4 Accounting Firms</b>	<b>1,248</b>	<b>1.84%</b>
Bytedance	497	0.73%	Deloitte	626	0.92%
Tencent	11	0.02%	EY	539	0.79%
Alibaba	16	0.02%	PwC	60	0.09%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>578</b>	<b>0.85%</b>	KPMG	23	0.03%
Sea	309	0.45%	<b>Management Consulting</b>	<b>191</b>	<b>0.28%</b>
Grab	184	0.27%	Bain	39	0.06%
Lazada	72	0.11%	BCG	80	0.12%
Zalora	13	0.02%	McKinsey	72	0.11%
<b>Indonesia Internet 1st Gen</b>	<b>144</b>	<b>0.21%</b>	<b>IT Services</b>	<b>1,087</b>	<b>1.60%</b>
Gojek	37	0.05%	IBM	1,087	1.60%
Tokopedia	56	0.08%	Accenture	N/A	N/A
Bukalapak	14	0.02%	<b>Global FMCG</b>	<b>267</b>	<b>0.39%</b>
Traveloka	37	0.05%	Unilever	56	0.08%
<b>SE Asia Internet 2nd Gen</b>	<b>20</b>	<b>0.03%</b>	P&G	106	0.16%
Shopback	7	0.01%	Nestle	71	0.10%
Carsome	13	0.02%	L'Oreal	34	0.05%
RedDoorz	0	0.00%			

#### Ratio of SE Asia Alumni to Current Headcount:

1.3x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+0.72%	Semiconductors	-0.10%
China's BAT 2.0	+0.71%	Telcos	-0.12%
Pan-SE Asia Internet 1st Gen	+0.33%	Big 4 Accounting Firms	+0.48%
Indonesia Internet 1st Gen	+0.15%	Management Consulting	+0.19%
SE Asia Internet 2nd Gen	+0.00%	IT Services	-0.54%
		Global FMCG	-0.01%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

### Unilever

#### SE Asia Headcount:

~13,000

Per LinkedIn (Dec 2022)

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>34</b>	<b>0.26%</b>	<b>Semiconductors</b>	<b>10</b>	<b>0.08%</b>
Google	9	0.07%	GlobalFoundries	0	0.00%
Microsoft	8	0.06%	Micron Technology	2	0.02%
Amazon	7	0.05%	Intel	8	0.06%
Facebook	3	0.02%	<b>Telcos</b>	<b>38</b>	<b>0.29%</b>
Oracle	1	0.01%	Singtel	6	0.05%
Apple	6	0.05%	Telkom Indonesia	32	0.25%
<b>China's BAT 2.0</b>	<b>9</b>	<b>0.07%</b>	<b>Big 4 Accounting Firms</b>	<b>219</b>	<b>1.68%</b>
Bytedance	7	0.05%	Deloitte	60	0.46%
Tencent	2	0.02%	EY	86	0.66%
Alibaba	0	0.00%	PwC	57	0.44%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>239</b>	<b>1.84%</b>	KPMG	16	0.12%
Sea	153	1.18%	<b>Management Consulting</b>	<b>25</b>	<b>0.19%</b>
Grab	31	0.24%	Bain	1	0.01%
Lazada	45	0.35%	BCG	12	0.09%
Zalora	10	0.08%	McKinsey	12	0.09%
<b>Indonesia Internet 1st Gen</b>	<b>63</b>	<b>0.48%</b>	<b>IT Services</b>	<b>92</b>	<b>0.71%</b>
Gojek	17	0.13%	IBM	36	0.28%
Tokopedia	29	0.22%	Accenture	56	0.43%
Bukalapak	8	0.06%	<b>Global FMCG</b>	<b>430</b>	<b>3.31%</b>
Traveloka	9	0.07%	Unilever	N/A	N/A
<b>SE Asia Internet 2nd Gen</b>	<b>5</b>	<b>0.04%</b>	P&G	91	0.70%
Shopback	3	0.02%	Nestle	211	1.62%
Carsome	0	0.00%	L'Oreal	128	0.98%
RedDoorz	2	0.02%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	961	7%
Malaysia	616	5%
Indonesia	7,400	57%
Thailand	1,200	9%
Vietnam	1,400	11%
Philippines	2,000	15%
<b>Subtotal: Non-Singapore</b>		<b>93%</b>

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Unilever

#### Alumni in SE Asia:

~19,000

Per LinkedIn (Dec 2022)

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>228</b>	<b>1.20%</b>	<b>Semiconductors</b>	<b>15</b>	<b>0.08%</b>
Google	78	0.41%	GlobalFoundries	1	0.01%
Microsoft	13	0.07%	Micron Technology	3	0.02%
Amazon	48	0.25%	Intel	11	0.06%
Facebook	53	0.28%	<b>Telcos</b>	<b>49</b>	<b>0.26%</b>
Oracle	6	0.03%	Singtel	11	0.06%
Apple	30	0.16%	Telkom Indonesia	38	0.20%
<b>China's BAT 2.0</b>	<b>73</b>	<b>0.38%</b>	<b>Big 4 Accounting Firms</b>	<b>78</b>	<b>0.41%</b>
Bytedance	71	0.37%	Deloitte	33	0.17%
Tencent	1	0.01%	EY	31	0.16%
Alibaba	1	0.01%	PwC	9	0.05%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>413</b>	<b>2.17%</b>	KPMG	5	0.03%
Sea	209	1.10%	<b>Management Consulting</b>	<b>76</b>	<b>0.40%</b>
Grab	91	0.48%	Bain	12	0.06%
Lazada	109	0.57%	BCG	32	0.17%
Zalora	4	0.02%	McKinsey	32	0.17%
<b>Indonesia Internet 1st Gen</b>	<b>131</b>	<b>0.69%</b>	<b>IT Services</b>	<b>76</b>	<b>0.40%</b>
Gojek	47	0.25%	IBM	13	0.07%
Tokopedia	55	0.29%	Accenture	63	0.33%
Bukalapak	17	0.09%	<b>Global FMCG</b>	<b>568</b>	<b>2.99%</b>
Traveloka	12	0.06%	Unilever	N/A	N/A
<b>SE Asia Internet 2nd Gen</b>	<b>6</b>	<b>0.03%</b>	P&G	141	0.74%
Shopback	2	0.01%	Nestle	251	1.32%
Carsome	3	0.02%	L'Oreal	176	0.93%
RedDoorz	1	0.01%			

#### Ratio of SE Asia Alumni to Current Headcount:

1.5x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+0.94%	Semiconductors	+0.00%
China's BAT 2.0	+0.31%	Telcos	-0.03%
Pan-SE Asia Internet 1st Gen	+0.34%	Big 4 Accounting Firms	-1.27%
Indonesia Internet 1st Gen	+0.20%	Management Consulting	+0.21%
SE Asia Internet 2nd Gen	-0.01%	IT Services	-0.31%
		Global FMCG	-0.32%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

### P&G

**SE Asia Headcount:**

**~7,000**

Per LinkedIn (Dec 2022)

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>49</b>	<b>0.70%</b>	<b>Semiconductors</b>	<b>29</b>	<b>0.41%</b>
Google	7	0.10%	GlobalFoundries	3	0.04%
Microsoft	16	0.23%	Micron Technology	13	0.19%
Amazon	6	0.09%	Intel	13	0.19%
Facebook	2	0.03%	<b>Telcos</b>	<b>22</b>	<b>0.31%</b>
Oracle	4	0.06%	Singtel	17	0.24%
Apple	14	0.20%	Telkom Indonesia	5	0.07%
<b>China's BAT 2.0</b>	<b>8</b>	<b>0.11%</b>	<b>Big 4 Accounting Firms</b>	<b>187</b>	<b>2.67%</b>
Bytedance	4	0.06%	Deloitte	42	0.60%
Tencent	4	0.06%	EY	85	1.21%
Alibaba	0	0.00%	PwC	44	0.63%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>119</b>	<b>1.70%</b>	KPMG	16	0.23%
Sea	87	1.24%	<b>Management Consulting</b>	<b>29</b>	<b>0.41%</b>
Grab	7	0.10%	Bain	2	0.03%
Lazada	16	0.23%	BCG	12	0.17%
Zalora	9	0.13%	McKinsey	15	0.21%
<b>Indonesia Internet 1st Gen</b>	<b>16</b>	<b>0.23%</b>	<b>IT Services</b>	<b>180</b>	<b>2.57%</b>
Gojek	4	0.06%	IBM	74	1.06%
Tokopedia	6	0.09%	Accenture	106	1.51%
Bukalapak	5	0.07%	<b>Global FMCG</b>	<b>268</b>	<b>3.83%</b>
Traveloka	1	0.01%	Unilever	141	2.01%
<b>SE Asia Internet 2nd Gen</b>	<b>1</b>	<b>0.01%</b>	P&G	N/A	N/A
Shopback	1	0.01%	Nestle	67	0.96%
Carsome	0	0.00%	L'Oreal	60	0.86%
RedDoorz	0	0.00%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	0	N/A
Malaysia	0	N/A
Indonesia	0	N/A
Thailand	0	N/A
Vietnam	0	N/A
Philippines	0	N/A

**Subtotal: Non-Singapore**

**N/A**

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes Tiktok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### P&G

**Alumni in SE Asia:**

**~10,000**

Per LinkedIn (Dec 2022)

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>263</b>	<b>2.63%</b>	<b>Semiconductors</b>	<b>10</b>	<b>0.10%</b>
Google	104	1.04%	GlobalFoundries	1	0.01%
Microsoft	31	0.31%	Micron Technology	7	0.07%
Amazon	45	0.45%	Intel	2	0.02%
Facebook	36	0.36%	<b>Telcos</b>	<b>13</b>	<b>0.13%</b>
Oracle	4	0.04%	Singtel	7	0.07%
Apple	43	0.43%	Telkom Indonesia	6	0.06%
<b>China's BAT 2.0</b>	<b>37</b>	<b>0.37%</b>	<b>Big 4 Accounting Firms</b>	<b>46</b>	<b>0.46%</b>
Bytedance	29	0.29%	Deloitte	12	0.12%
Tencent	3	0.03%	EY	28	0.28%
Alibaba	5	0.05%	PwC	3	0.03%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>162</b>	<b>1.62%</b>	KPMG	3	0.03%
Sea	69	0.69%	<b>Management Consulting</b>	<b>66</b>	<b>0.66%</b>
Grab	34	0.34%	Bain	12	0.12%
Lazada	57	0.57%	BCG	33	0.33%
Zalora	2	0.02%	McKinsey	21	0.21%
<b>Indonesia Internet 1st Gen</b>	<b>35</b>	<b>0.35%</b>	<b>IT Services</b>	<b>105</b>	<b>1.05%</b>
Gojek	14	0.14%	IBM	32	0.32%
Tokopedia	7	0.07%	Accenture	73	0.73%
Bukalapak	5	0.05%	<b>Global FMCG</b>	<b>221</b>	<b>2.21%</b>
Traveloka	9	0.09%	Unilever	91	0.91%
<b>SE Asia Internet 2nd Gen</b>	<b>6</b>	<b>0.06%</b>	P&G	N/A	N/A
Shopback	3	0.03%	Nestle	56	0.56%
Carsome	3	0.03%	L'Oreal	74	0.74%
RedDoorz	0	0.00%			

#### Ratio of SE Asia Alumni to Current Headcount:

**1.4x**

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+1.93%	Semiconductors	-0.31%
China's BAT 2.0	+0.26%	Telcos	-0.18%
Pan-SE Asia Internet 1st Gen	-0.08%	Big 4 Accounting Firms	-2.21%
Indonesia Internet 1st Gen	+0.12%	Management Consulting	+0.25%
SE Asia Internet 2nd Gen	+0.05%	IT Services	-1.52%
		Global FMCG	-1.62%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes Tiktok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

### Nestlé

#### SE Asia Headcount:

~23,000

Per LinkedIn (Dec 2022)

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>15</b>	<b>0.07%</b>	<b>Semiconductors</b>	<b>12</b>	<b>0.05%</b>
Google	2	0.01%	GlobalFoundries	1	0.00%
Microsoft	4	0.02%	Micron Technology	1	0.00%
Amazon	6	0.03%	Intel	10	0.04%
Facebook	0	0.00%	<b>Telcos</b>	<b>20</b>	<b>0.09%</b>
Oracle	1	0.00%	Singtel	6	0.03%
Apple	2	0.01%	Telkom Indonesia	14	0.06%
<b>China's BAT 2.0</b>	<b>1</b>	<b>0.00%</b>	<b>Big 4 Accounting Firms</b>	<b>117</b>	<b>0.51%</b>
Bytedance	1	0.00%	Deloitte	35	0.15%
Tencent	0	0.00%	EY	51	0.22%
Alibaba	0	0.00%	PwC	21	0.09%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>91</b>	<b>0.40%</b>	KPMG	10	0.04%
Sea	59	0.26%	<b>Management Consulting</b>	<b>11</b>	<b>0.05%</b>
Grab	9	0.04%	Bain	0	0.00%
Lazada	15	0.07%	BCG	8	0.03%
Zalora	8	0.03%	McKinsey	3	0.01%
<b>Indonesia Internet 1st Gen</b>	<b>15</b>	<b>0.07%</b>	<b>IT Services</b>	<b>142</b>	<b>0.62%</b>
Gojek	3	0.01%	IBM	71	0.31%
Tokopedia	5	0.02%	Accenture	71	0.31%
Bukalapak	2	0.01%	<b>Global FMCG</b>	<b>352</b>	<b>1.53%</b>
Traveloka	5	0.02%	Unilever	251	1.09%
<b>SE Asia Internet 2nd Gen</b>	<b>1</b>	<b>0.00%</b>	P&G	56	0.24%
Shopback	1	0.00%	Nestlé	N/A	N/A
Carsome	0	0.00%	L'Oreal	45	0.20%
RedDoorz	0	0.00%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	784	3%
Malaysia	3,300	14%
Indonesia	12,000	52%
Thailand	1,300	6%
Vietnam	1,700	7%
Philippines	4,600	20%

#### Subtotal: Non-Singapore

97%

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Nestlé

#### Alumni in SE Asia:

~15,000

Per LinkedIn (Dec 2022)

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>90</b>	<b>0.60%</b>	<b>Semiconductors</b>	<b>39</b>	<b>0.26%</b>
Google	26	0.17%	GlobalFoundries	4	0.03%
Microsoft	4	0.03%	Micron Technology	11	0.07%
Amazon	25	0.17%	Intel	24	0.16%
Facebook	18	0.12%	<b>Telcos</b>	<b>22</b>	<b>0.15%</b>
Oracle	5	0.03%	Singtel	7	0.05%
Apple	12	0.08%	Telkom Indonesia	15	0.10%
<b>China's BAT 2.0</b>	<b>35</b>	<b>0.23%</b>	<b>Big 4 Accounting Firms</b>	<b>72</b>	<b>0.48%</b>
Bytedance	30	0.20%	Deloitte	27	0.18%
Tencent	1	0.01%	EY	38	0.25%
Alibaba	4	0.03%	PwC	6	0.04%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>217</b>	<b>1.45%</b>	KPMG	1	0.01%
Sea	120	0.80%	<b>Management Consulting</b>	<b>20</b>	<b>0.13%</b>
Grab	31	0.21%	Bain	4	0.03%
Lazada	61	0.41%	BCG	7	0.05%
Zalora	5	0.03%	McKinsey	9	0.06%
<b>Indonesia Internet 1st Gen</b>	<b>56</b>	<b>0.37%</b>	<b>IT Services</b>	<b>71</b>	<b>0.47%</b>
Gojek	30	0.20%	IBM	12	0.08%
Tokopedia	16	0.11%	Accenture	59	0.39%
Bukalapak	4	0.03%	<b>Global FMCG</b>	<b>362</b>	<b>2.41%</b>
Traveloka	6	0.04%	Unilever	211	1.41%
<b>SE Asia Internet 2nd Gen</b>	<b>2</b>	<b>0.01%</b>	P&G	67	0.45%
Shopback	1	0.01%	Nestlé	N/A	N/A
Carsome	0	0.00%	L'Oreal	84	0.56%
RedDoorz	1	0.01%			

#### Ratio of SE Asia Alumni to Current Headcount:

0.7x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+0.53%	Semiconductors	+0.21%
China's BAT 2.0	+0.23%	Telcos	+0.06%
Pan-SE Asia Internet 1st Gen	+1.05%	Big 4 Accounting Firms	-0.03%
Indonesia Internet 1st Gen	+0.31%	Management Consulting	+0.09%
SE Asia Internet 2nd Gen	+0.01%	IT Services	-0.14%
		Global FMCG	+0.88%

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Nutrition Facts (Input) "Where Talent Comes From"

L'Oreal

**SE Asia Headcount:**

**~3,500**

Per LinkedIn (Dec 2022)

### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>23</b>	<b>0.66%</b>	<b>Semiconductors</b>	<b>5</b>	<b>0.14%</b>
Google	5	0.14%	GlobalFoundries	1	0.03%
Microsoft	7	0.20%	Micron Technology	0	0.00%
Amazon	2	0.06%	Intel	4	0.11%
Facebook	4	0.11%	<b>Telcos</b>	<b>9</b>	<b>0.26%</b>
Oracle	1	0.03%	Singtel	4	0.11%
Apple	4	0.11%	Telkom Indonesia	5	0.14%
<b>China's BAT 2.0</b>	<b>14</b>	<b>0.40%</b>	<b>Big 4 Accounting Firms</b>	<b>137</b>	<b>3.91%</b>
Bytedance	6	0.17%	Deloitte	30	0.86%
Tencent	4	0.11%	EY	64	1.83%
Alibaba	4	0.11%	PwC	31	0.89%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>219</b>	<b>6.26%</b>	KPMG	12	0.34%
Sea	103	2.94%	<b>Management Consulting</b>	<b>8</b>	<b>0.23%</b>
Grab	19	0.54%	Bain	1	0.03%
Lazada	82	2.34%	BCG	7	0.20%
Zalora	15	0.43%	McKinsey	0	0.00%
<b>Indonesia Internet 1st Gen</b>	<b>25</b>	<b>0.71%</b>	<b>IT Services</b>	<b>49</b>	<b>1.40%</b>
Gojek	5	0.14%	IBM	15	0.43%
Tokopedia	16	0.46%	Accenture	34	0.97%
Bukalapak	2	0.06%	<b>Global FMCG</b>	<b>334</b>	<b>9.54%</b>
Traveloka	2	0.06%	Unilever	176	5.03%
<b>SE Asia Internet 2nd Gen</b>	<b>1</b>	<b>0.03%</b>	P&G	74	2.11%
Shopback	1	0.03%	Nestle	84	2.40%
Carsome	0	0.00%	L'Oreal	N/A	N/A
RedDoorz	0	0.00%			

### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	0	N/A
Malaysia	0	N/A
Indonesia	0	N/A
Thailand	0	N/A
Vietnam	0	N/A
Philippines	0	N/A

**Subtotal: Non-Singapore**

**N/A**

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

L'Oreal

**Alumni in SE Asia:**

**~6,800**

Per LinkedIn (Dec 2022)

### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>106</b>	<b>1.56%</b>	<b>Semiconductors</b>	<b>4</b>	<b>0.06%</b>
Google	43	0.63%	GlobalFoundries	0	0.00%
Microsoft	4	0.06%	Micron Technology	4	0.06%
Amazon	19	0.28%	Intel	0	0.00%
Facebook	18	0.26%	<b>Telcos</b>	<b>13</b>	<b>0.19%</b>
Oracle	7	0.10%	Singtel	6	0.09%
Apple	15	0.22%	Telkom Indonesia	7	0.10%
<b>China's BAT 2.0</b>	<b>58</b>	<b>0.85%</b>	<b>Big 4 Accounting Firms</b>	<b>19</b>	<b>0.28%</b>
Bytedance	54	0.79%	Deloitte	7	0.10%
Tencent	2	0.03%	EY	11	0.16%
Alibaba	2	0.03%	PwC	1	0.01%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>182</b>	<b>2.68%</b>	KPMG	0	0.00%
Sea	94	1.38%	<b>Management Consulting</b>	<b>20</b>	<b>0.29%</b>
Grab	35	0.51%	Bain	7	0.10%
Lazada	44	0.65%	BCG	8	0.12%
Zalora	9	0.13%	McKinsey	5	0.07%
<b>Indonesia Internet 1st Gen</b>	<b>39</b>	<b>0.57%</b>	<b>IT Services</b>	<b>18</b>	<b>0.26%</b>
Gojek	12	0.18%	IBM	2	0.03%
Tokopedia	19	0.28%	Accenture	16	0.24%
Bukalapak	6	0.09%	<b>Global FMCG</b>	<b>233</b>	<b>3.43%</b>
Traveloka	2	0.03%	Unilever	128	1.88%
<b>SE Asia Internet 2nd Gen</b>	<b>3</b>	<b>0.04%</b>	P&G	60	0.88%
Shopback	1	0.01%	Nestle	45	0.66%
Carsome	2	0.03%	L'Oreal	N/A	N/A
RedDoorz	0	0.00%			

### Ratio of SE Asia Alumni to Current Headcount:

**1.9x**

### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+0.90%	Semiconductors	-0.08%
China's BAT 2.0	+0.45%	Telcos	-0.07%
Pan-SE Asia Internet 1st Gen	<b>-3.58%</b>	Big 4 Accounting Firms	<b>-3.63%</b>
Indonesia Internet 1st Gen	-0.14%	Management Consulting	+0.07%
SE Asia Internet 2nd Gen	+0.02%	IT Services	<b>-1.14%</b>
		Global FMCG	<b>-6.12%</b>

Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomsel; KPMG includes KPMG U.S.



*Southeast Asia's Moment*

**The Case for Southeast Asia in a Global Portfolio**

*Plan vs. Actual*

**Revisiting Our Predictions from 2019**

*You are What You Eat*

**Talent Flows in Southeast Asia's Innovation Ecosystem**

*The Elephant in the Room*

**Where Are We in the Macro Cycle? When will IPOs Return?**

*Around the World in 47 Charts*

**Where and When Does GDP Growth Actually Lead to Value Creation?**

*To Each Their Own*

**Regional Specialization in Building TMT Equity Value**

*A Few Final Thoughts for the 2020s-2030s*



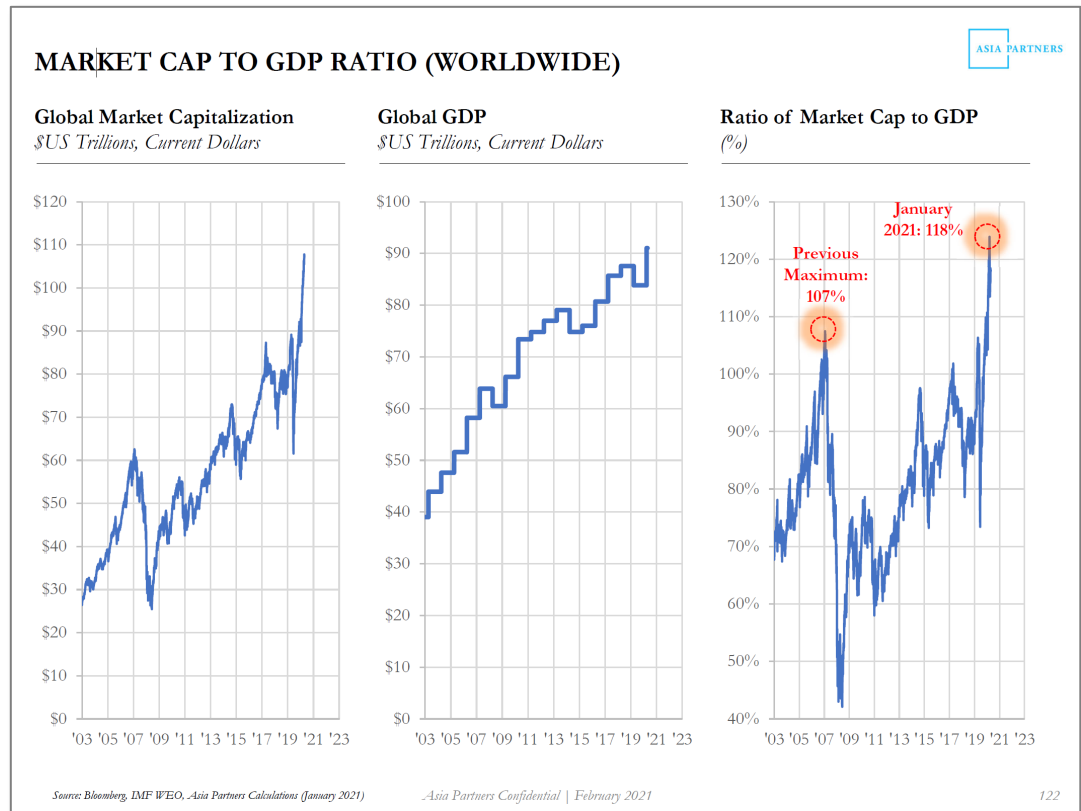
# Where are we in the markets? Can we know?

We felt that things were getting overheated...

FINAL THOUGHTS IN JANUARY 2021

## Are Today's Public Equity Markets Overvalued?

*Asia Partners Confidential | February 2021* 119



# WE HAD A MORE DEFINITE VIEW IN OUR THIRD REPORT (NOVEMBER 2021)

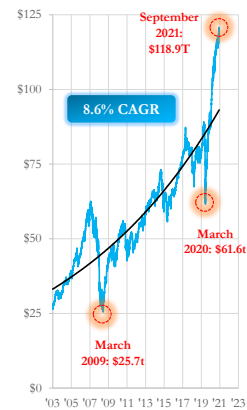


## FINAL THOUGHTS (2)

# Are Today's Global Public Equity Markets Overvalued? We Say Yes.

### MARKET CAP TO GDP RATIO (WORLDWIDE)

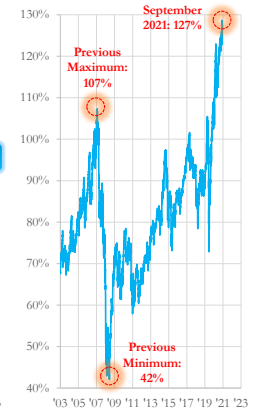
Global Market Capitalization  
US\$, Current Dollars



Global GDP  
US\$, Current Dollars



Ratio of Market Cap to GDP  
(%)



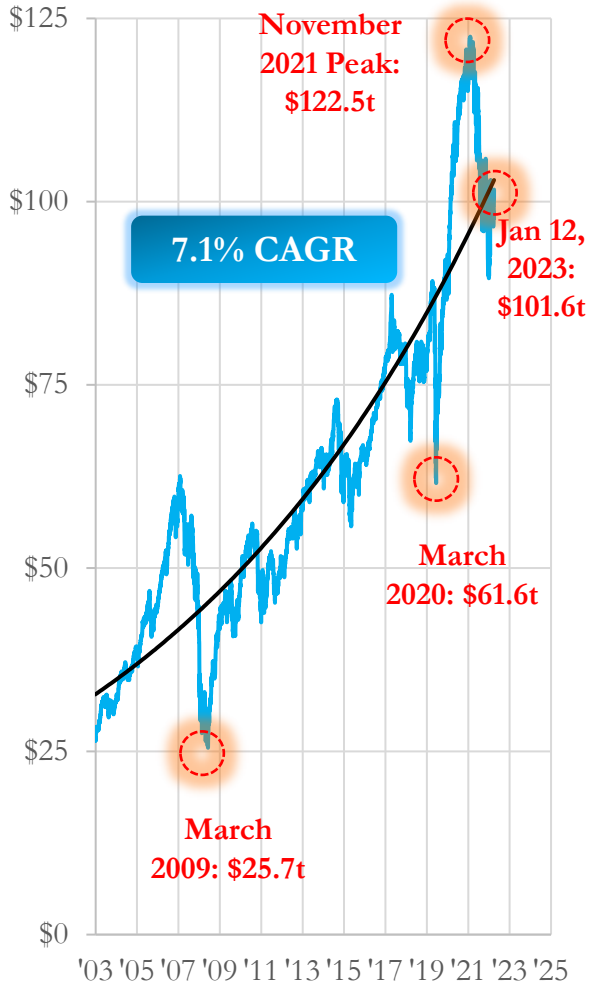
Source: Bloomberg, IMF WEO, Asia Partners Calculations (September 2021)

Source: Bloomberg, IMF WEO, Asia Partners Calculations (Note that November 2021 prediction was based on September 2021 market levels)

# WHY? THE BUFFETT RATIO: GLOBAL MARKET CAP / GLOBAL GDP

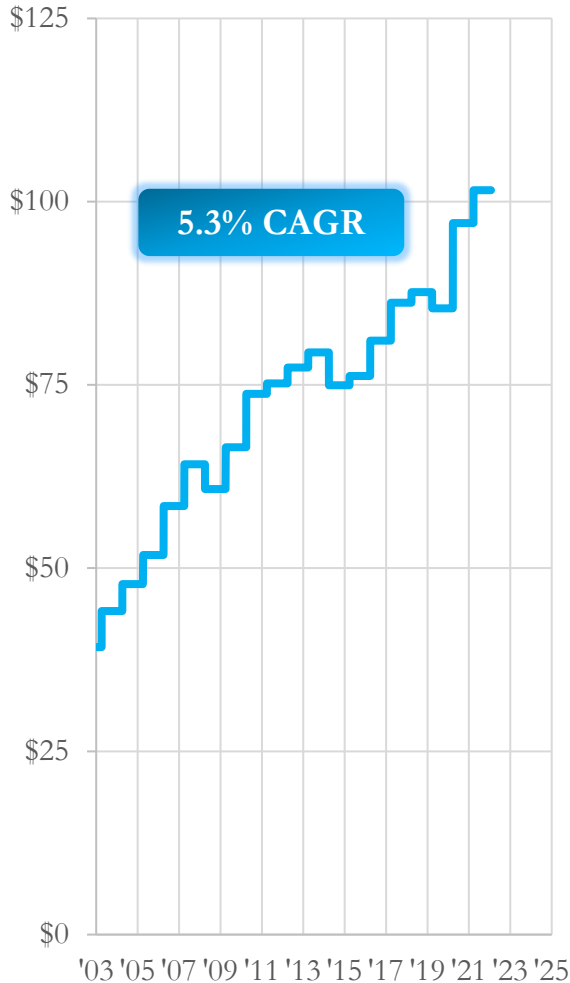
## Global Market Capitalization

US\$ Trillions, Current Dollars



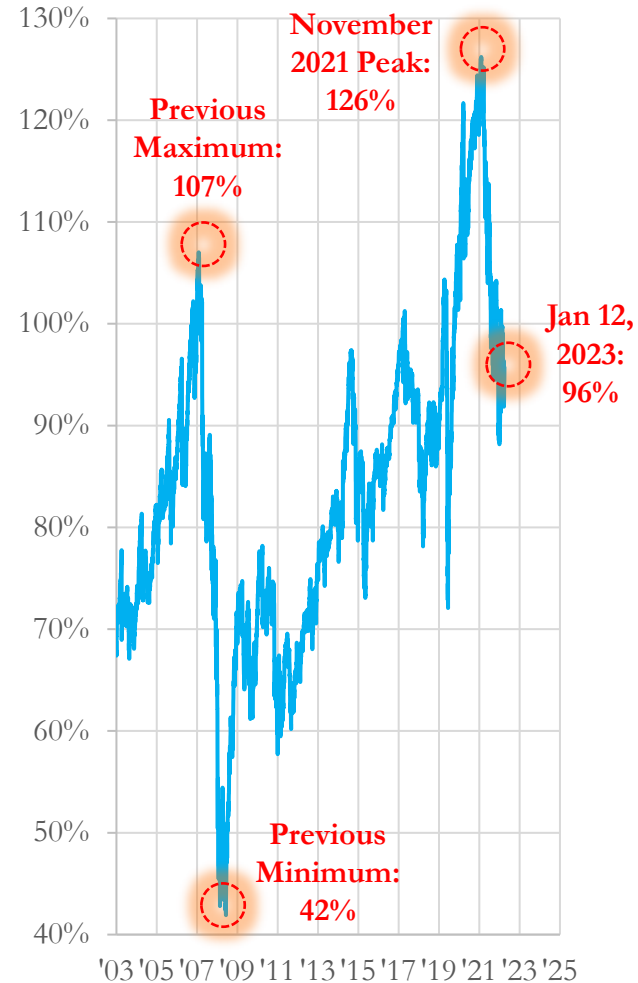
## Global Nominal GDP

US\$ Trillions, Current Dollars



## Ratio: Global Market Cap to GDP

(%)

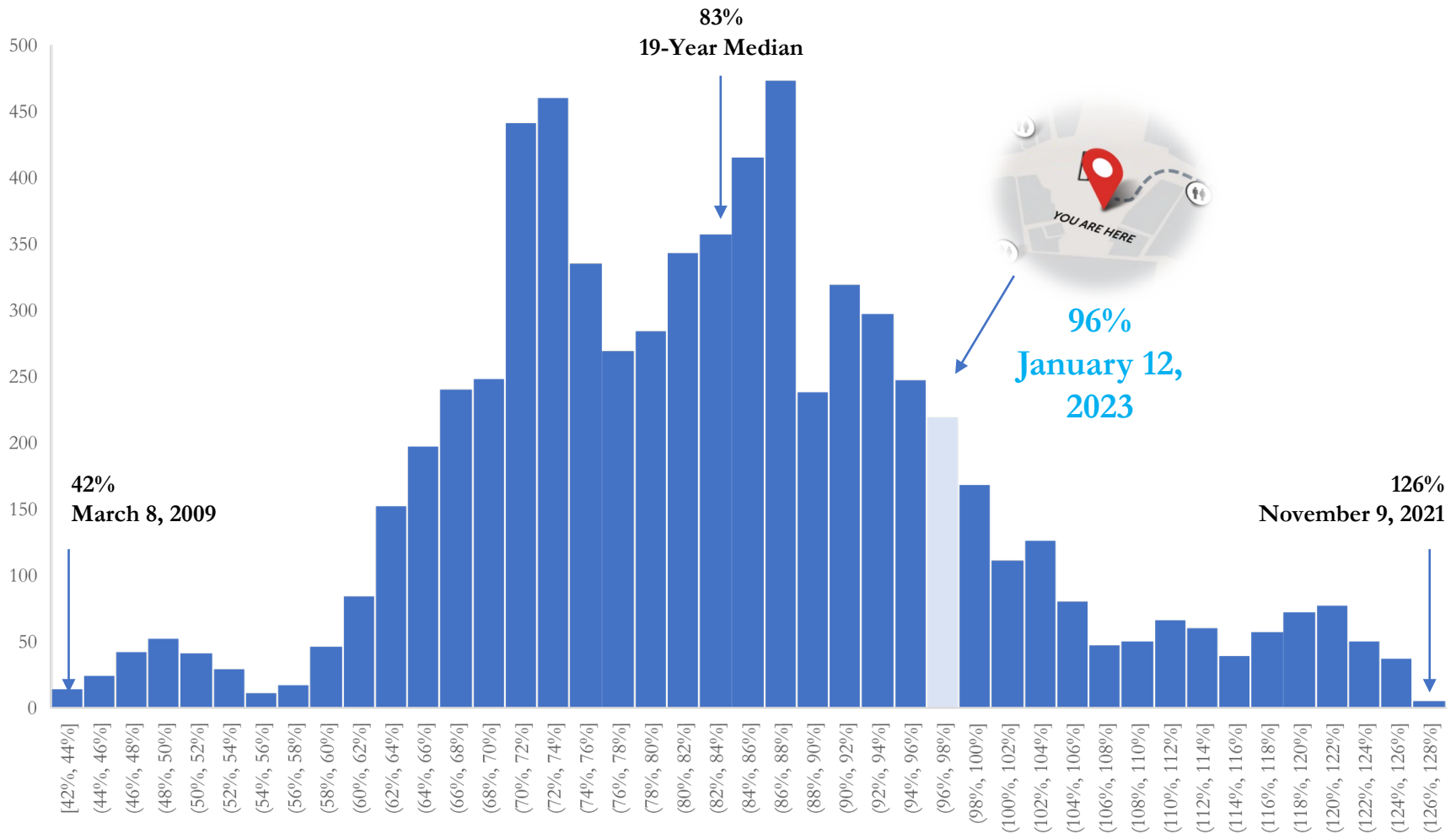


Source: Bloomberg, IMF WEO, Asia Partners Calculations (January 2023)

# THE MALL MAP FOR THE BUFFETT RATIO: 'YOU ARE HERE'

## Histogram of Global Market Cap to Global GDP Ratio Since 2003

Count of Days, by Bands



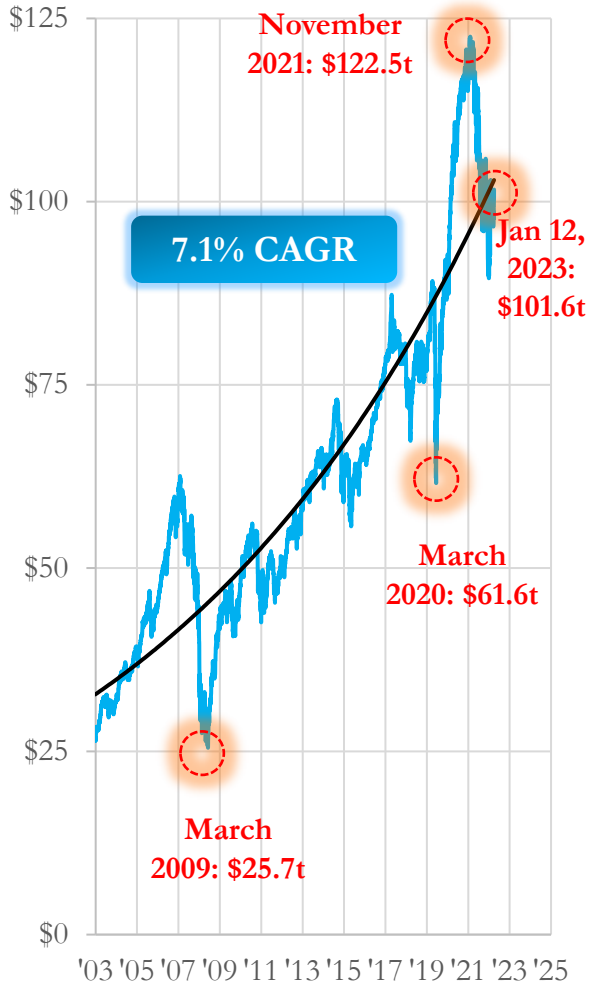
Source: Bloomberg, IMF WEO, Asia Partners Calculations (January 2023)



# MARKET CAP TENDS TO UNDULATE AROUND THE 7.1% CAGR LINE

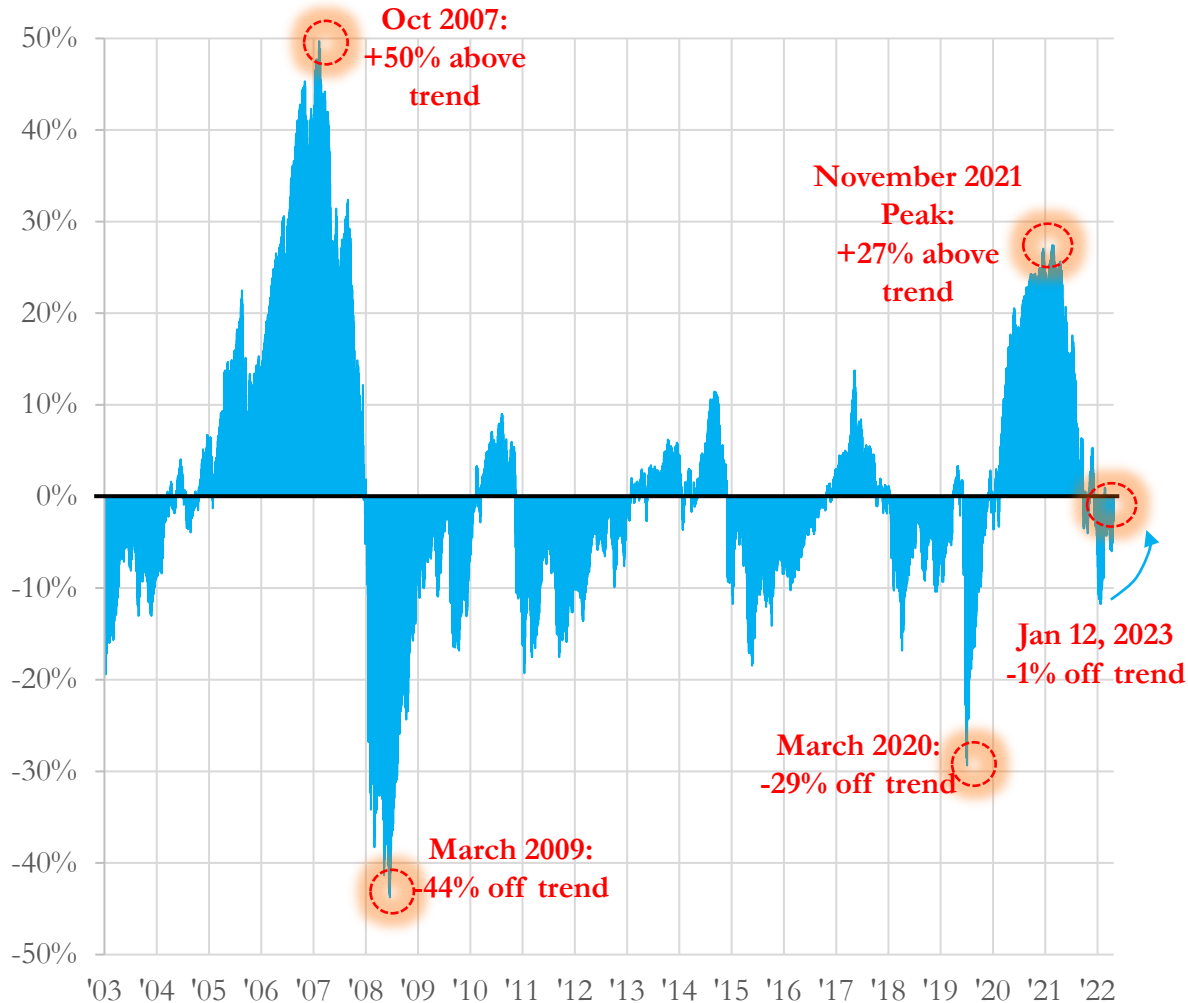
## Global Market Capitalization

US\$ Trillions, Current Dollars



## Delta to Trendline (Black Line in Chart at Left)

(%)



Source: Bloomberg, IMF WEO, Asia Partners Calculations (January 2023)



# Will there be a global recession?

# FINANCIAL TIMES

US COMPANIES TECH MARKETS CLIMATE OPINION WORK & CAREERS LIFE & ARTS HTSI

Opinion **US economy**

## Economists see recession coming, so maybe it's not

Markets have a better record at predicting downturns — but sometimes the inevitable never happens

RUCHIR SHARMA [+ Add to myFT](#)



America's economy still seems far away from recession territory © FT montage: Getty Images/Bloomberg

Ruchir Sharma YESTERDAY

198

*The writer is chair of Rockefeller International*

Economists tend to think in small incremental steps, missing big turns in the story, which helps explain why their consensus view had not forecast a single US recession since records began in 1970 — until now.

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POLITICS

## Biden says he doesn't think there will be a recession, if so it will be 'very slight'

PUBLISHED TUE, OCT 11 2022, 10:33 PM EDT | UPDATED WED, OCT 12 2022, 2:13 AM EDT

Emma Kliney @EMMAKLINEY SHARE f t i n e

**KEY POINTS**

- "I don't think there will be a recession. If it is, it'll be a very slight recession. That is, we'll move down slightly," Biden told CNN's Jake Tapper in an interview that was aired Tuesday.
- JPMorgan Chase CEO Jamie Dimon on Monday told CNBC there will likely be a recession in six to nine months.
- In September, the U.S. central bank raised benchmark interest rates by three-quarters of a percentage point — it was the Fed's third consecutive hike.

**Financial Infidelity** WATCH LIVE UP NEXT Dateline 02:00 am ET

# Bloomberg

Asia Edition Sign In

Live Now Markets Economics Industries Technology Politics **Wealth** Pursuits Opinion Businessweek Equality Green CityLab

Wealth Economics

## Goldman Sachs Says There's Still a 'Very Plausible' Path to Avoid US Recession

- Bank maintains odds of a recession at 35% in next 12 months
- Average probability among Wall Street economists is at 60%

By [Alexandre Tanzi](#)

November 7, 2022 at 9:32 PM GMT+8 Updated on November 8, 2022 at 2:52 AM GMT+8

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2:36

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Goldman Sachs Group Inc.'s top economist said there's still a "very plausible" path for the US economy to avoid a recession despite the Federal Reserve's aggressive tightening of interest rates and geopolitical uncertainties.

The bank maintained a 35% probability that the world's largest economy will enter a downturn in the next 12 months, well below Wall Street's consensus.

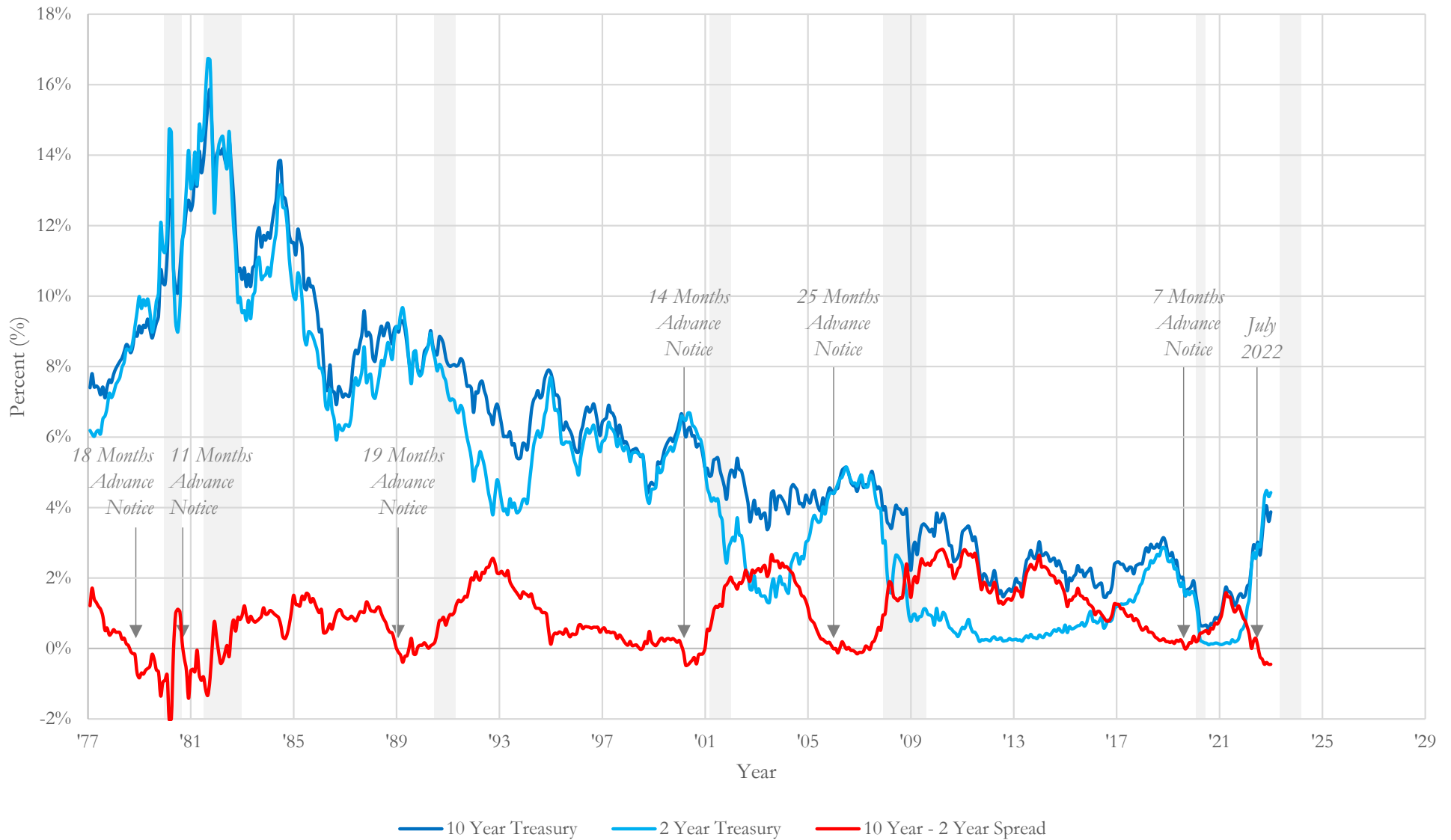
# DELTA BETWEEN THE 10 YEAR U.S. TREASURY YIELD AND 2 YEAR YIELD, IN RED, IS A POWERFUL PREDICTOR OF U.S. RECESSIONS

*10 Year Versus 2 Year Treasuries with Recessions in Gray*



# HOW MUCH ADVANCE WARNING OF A U.S. RECESSION?

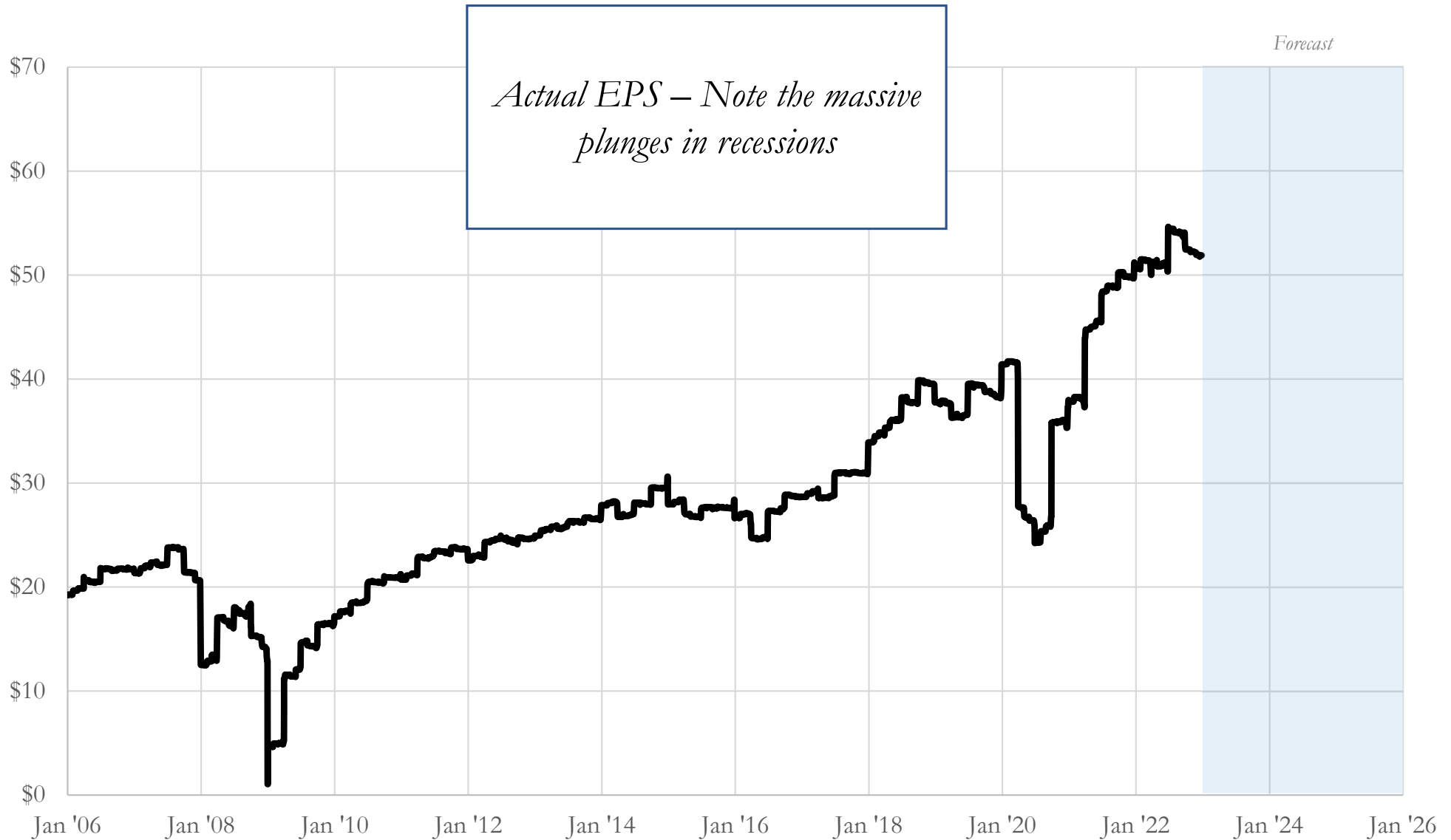
*Timing from First Negative Reading of 10 Year – 2 Year Treasury Spread and Onset of Recession*



Source: Bloomberg as of December 31, 2022

# U.S. RECESSIONS INVOLVE MASSIVE EARNINGS HITS: CASE STUDY OF S&P 500 EARNINGS PER SHARE

*Black = Actuals*

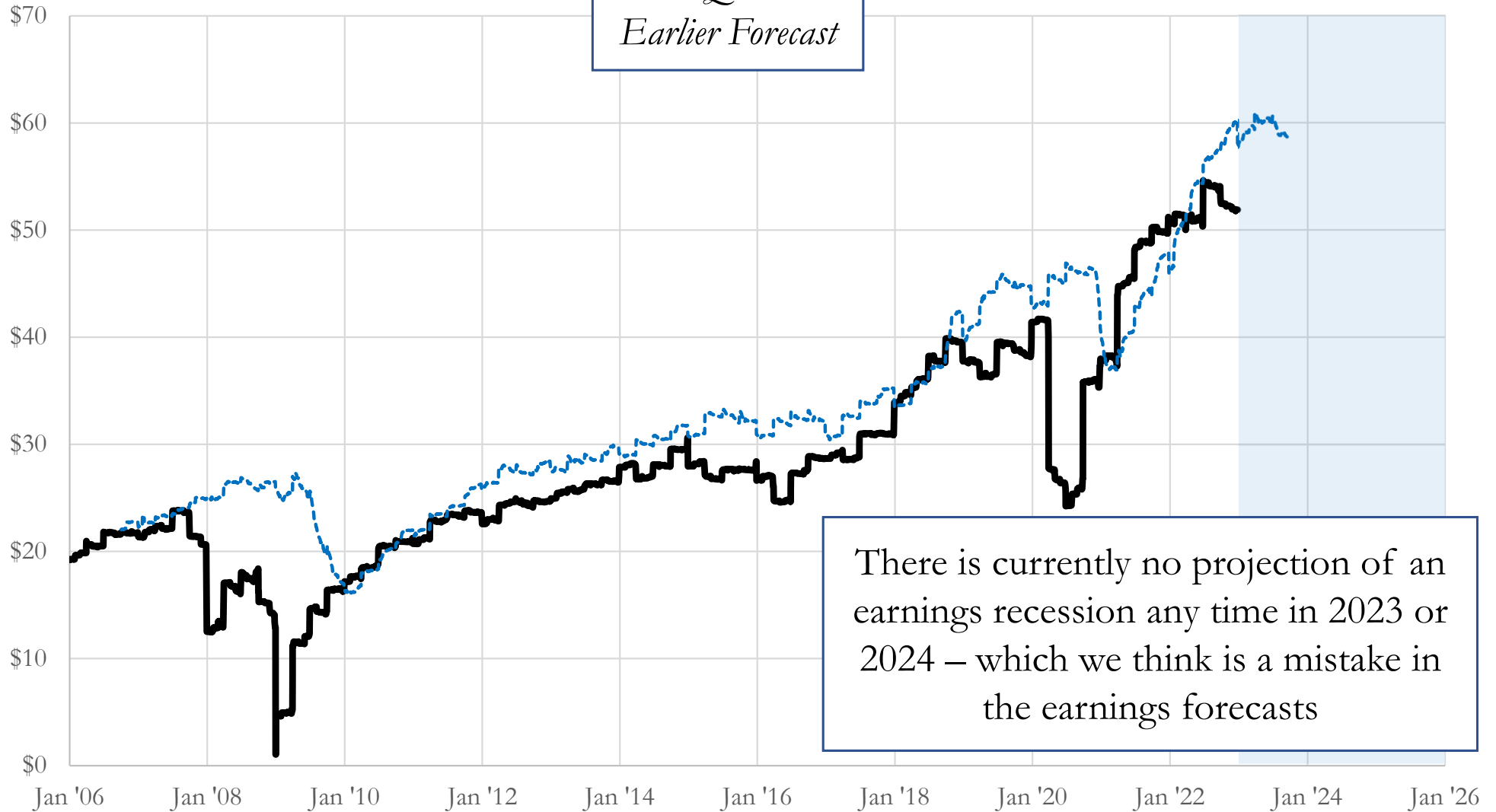




# HOW GOOD ARE WE AT FORECASTING RECESSIONS 3 QTRS AHEAD?

*Black = Actuals, Dark Blue = Forecast 3 Quarters Earlier*

+ 3 Quarter  
Earlier Forecast

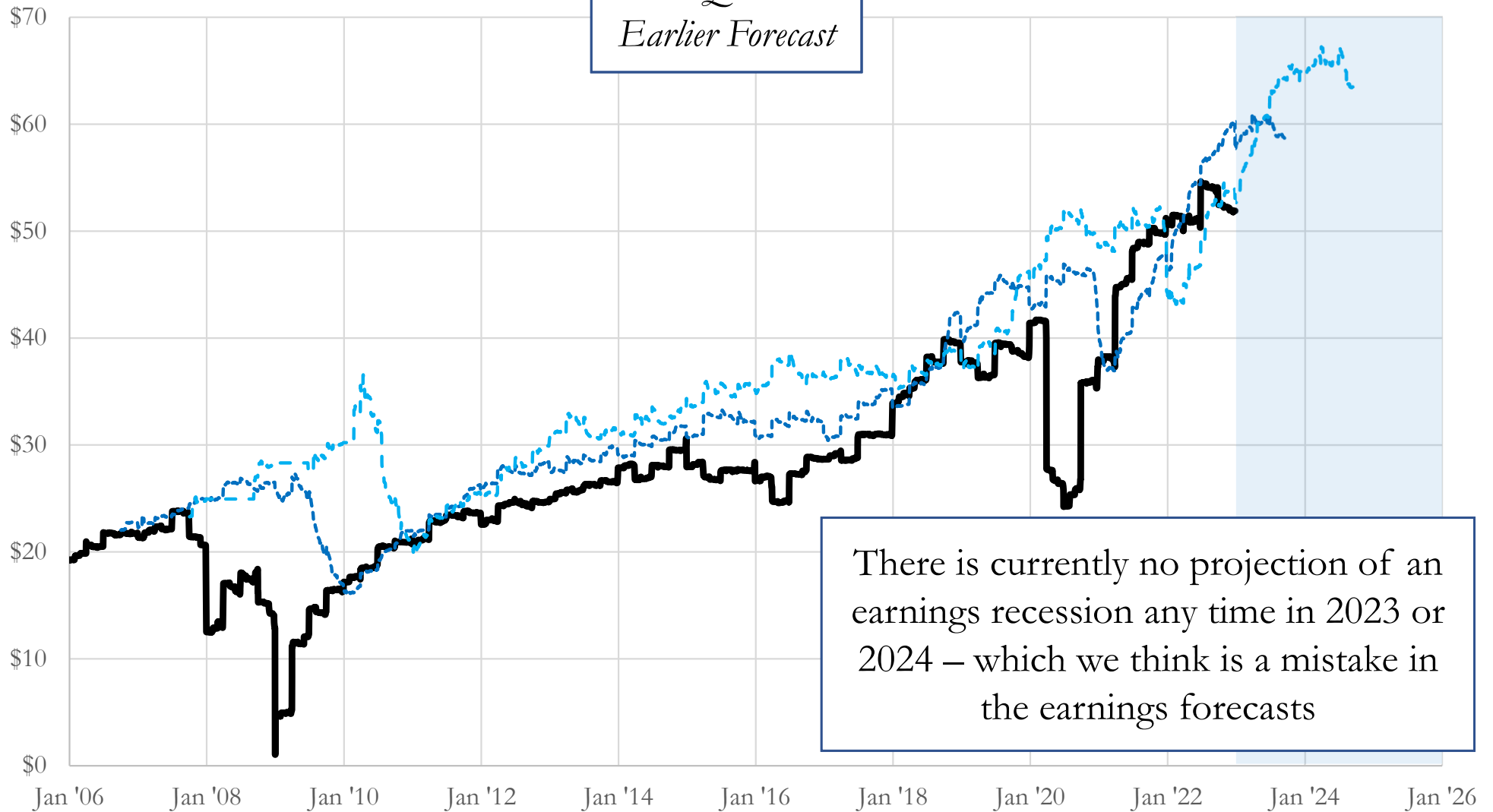


# OR 7 QUARTERS AHEAD?

*Black = Actuals, Dark Blue = Forecast 3 Quarters Earlier, Light Blue = Forecast 7 Quarters Earlier*

+ 7 Quarter  
Earlier Forecast

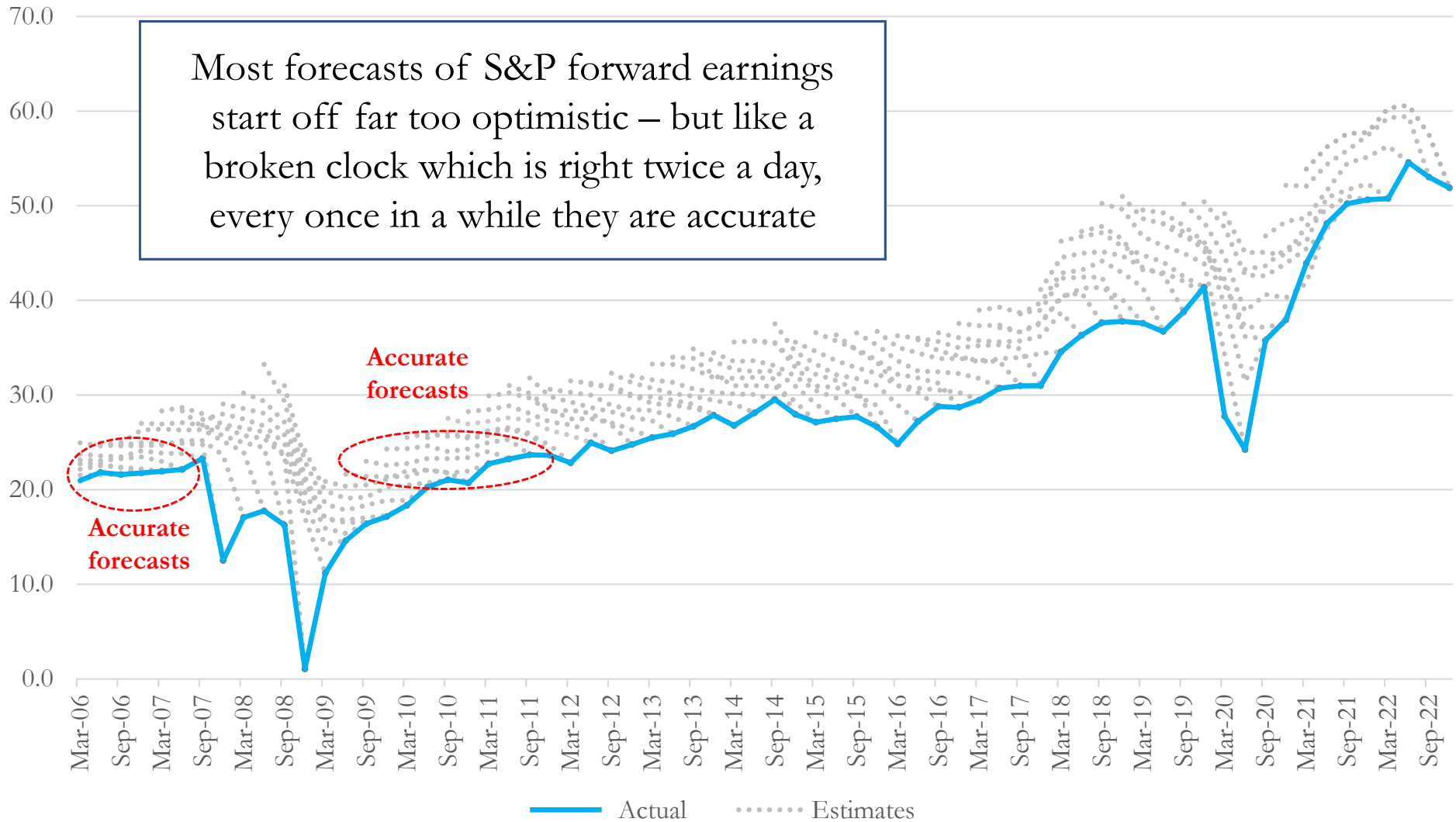
Forecast



There is currently no projection of an earnings recession any time in 2023 or 2024 – which we think is a mistake in the earnings forecasts

# SYSTEMATIC BIAS: ANALYST FORECASTS START OFF HIGH FOR MOST QUARTERS AND EVENTUALLY COME DOWN TO REALITY

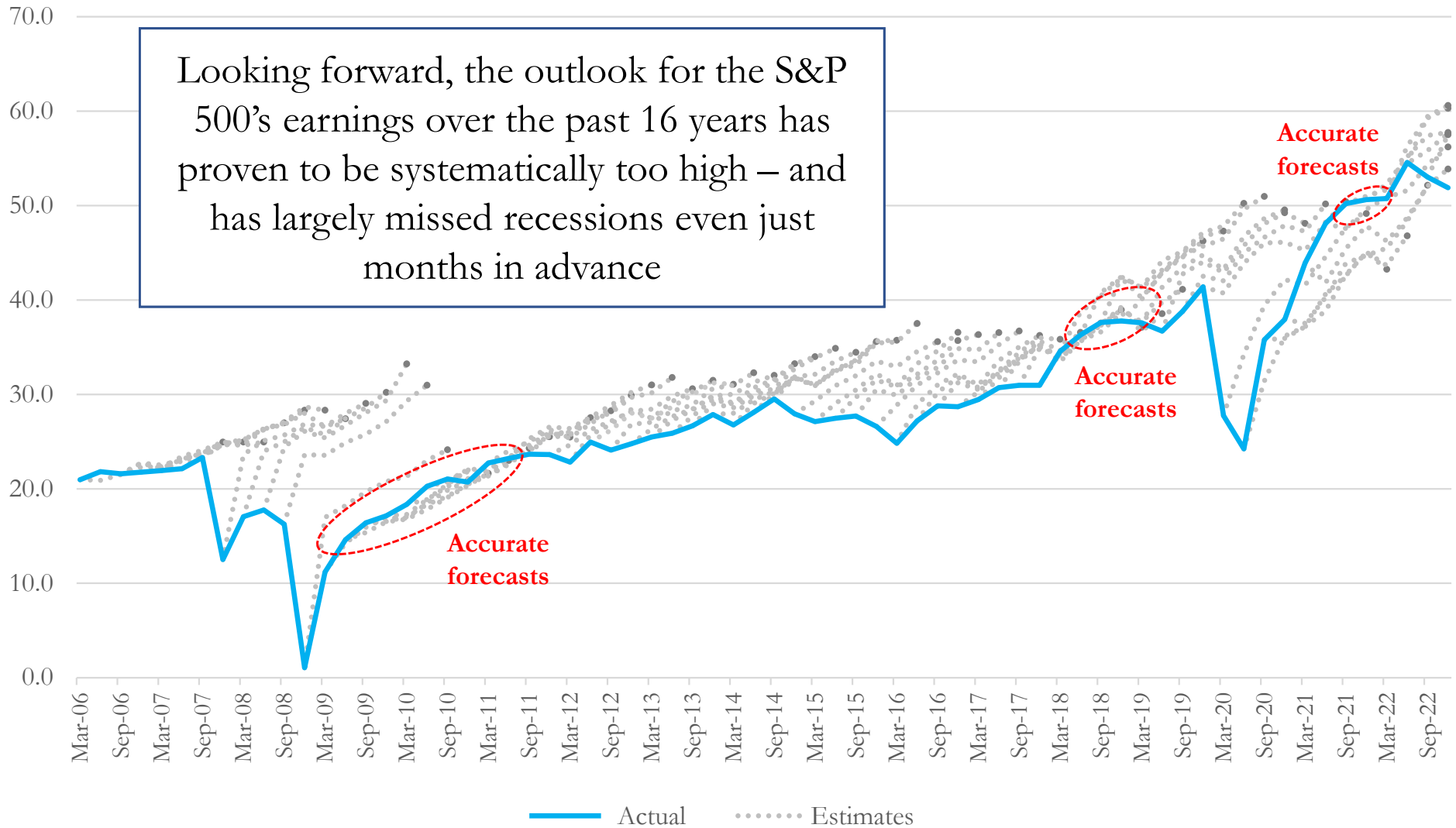
Landing: S&P 500 Index Actual EPS vs. Historical Estimates of Future EPS, \$US



Source: Bloomberg as of December 31, 2022

# ANOTHER WAY TO LOOK AT IT: AT EACH MOMENT IN TIME, WHAT WERE THE FORWARD LOOKING ESTIMATES? OFTEN TOO HIGH

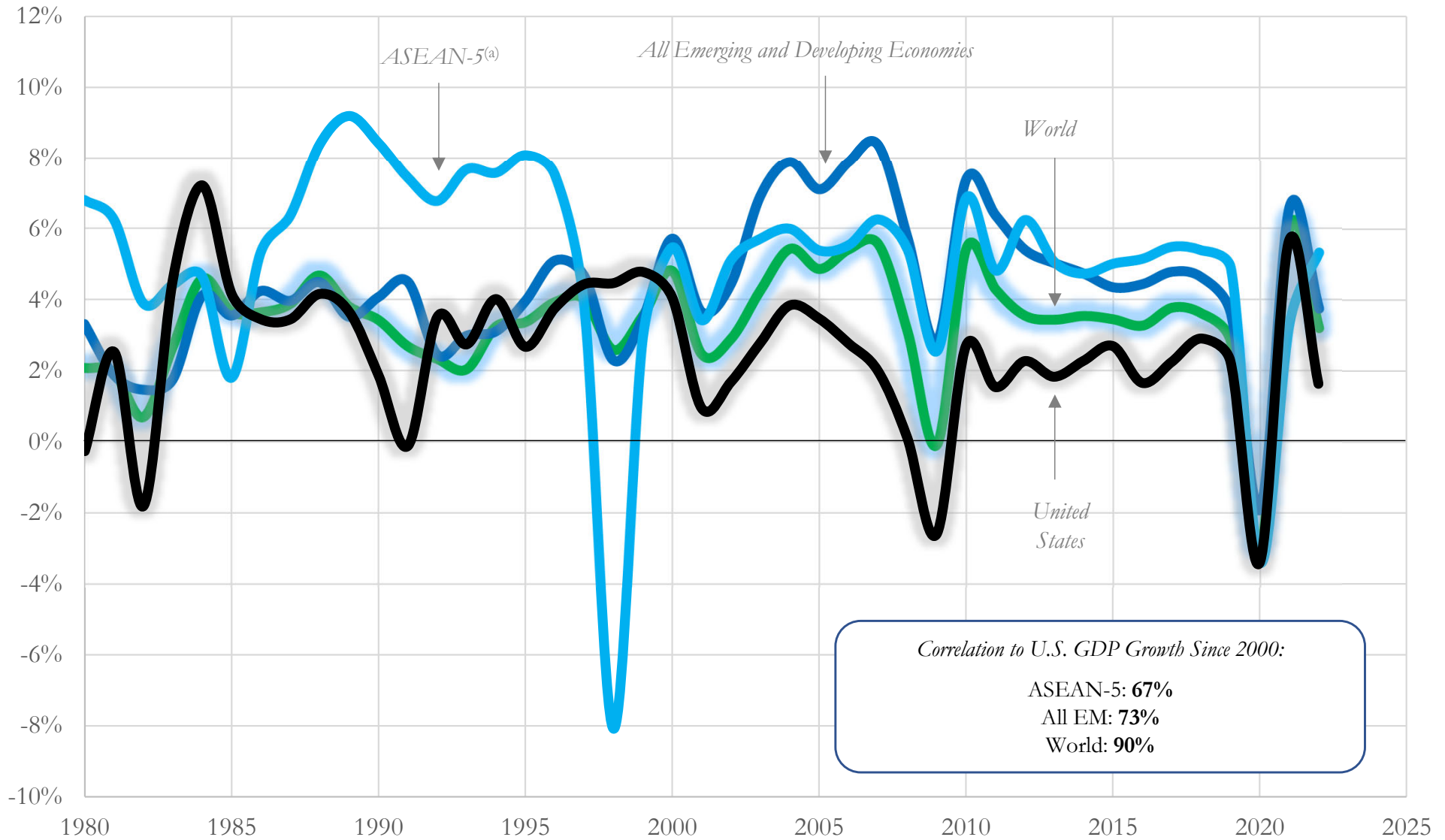
Takeoff: S&P 500 Index Actual EPS vs. Historical Forward Curve of Forecasted EPS, \$US



Source: Bloomberg as of December 31, 2022

# WHILE THE PREVIOUS DATA POINTS WERE U.S.-CENTRIC, U.S. RECESSIONS HAVE A CORRELATED GLOBAL IMPACT

*Real GDP Change (%), Year-on-Year*



*Note: ASEAN-5 excludes Vietnam  
Source: IMF WEO (October 2022)*

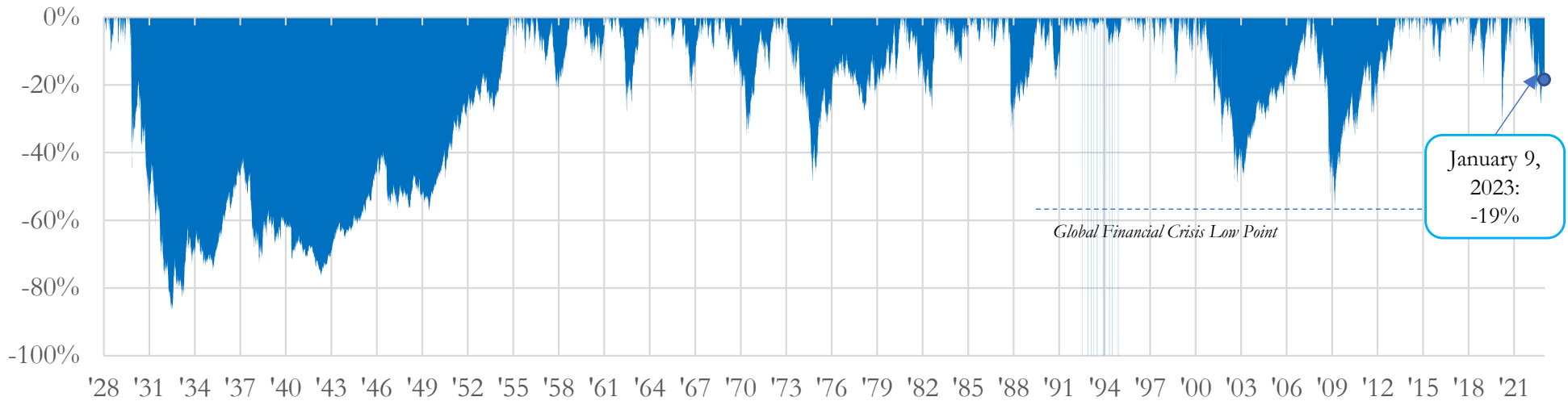
# Navigating Through Recessions



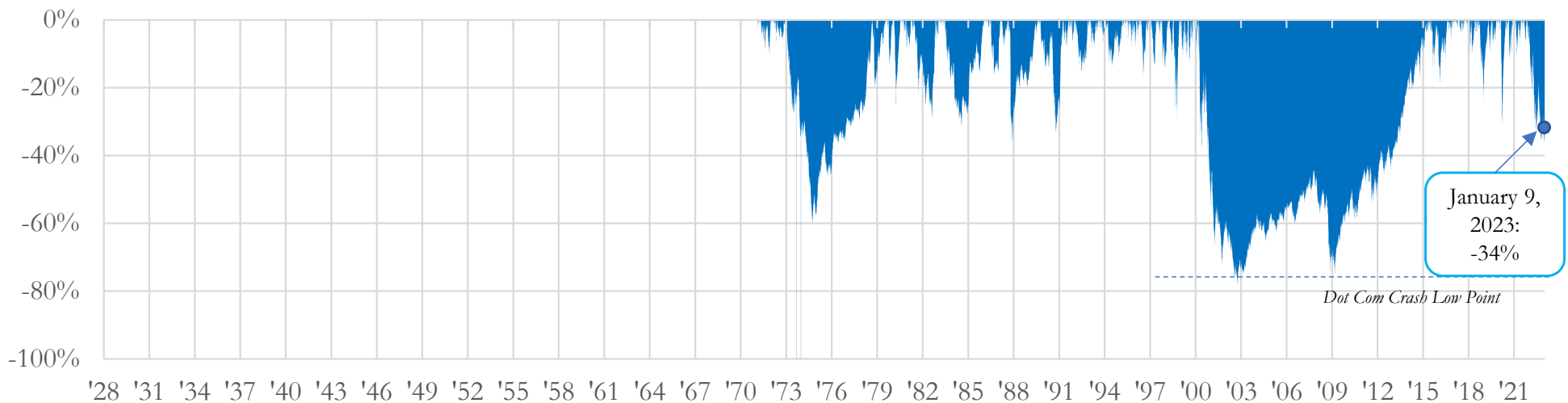
# PUTTING THE CAPITAL MARKETS DOWNTURN IN PERSPECTIVE

*Percentage Decline from Previous Peak*

## U.S. S&P 500 (1928-Present)



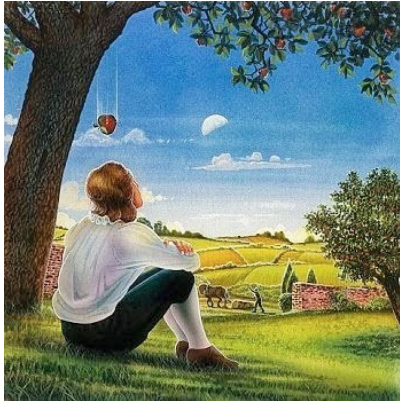
## U.S. NASDAQ (1971-Present)



Source: Bloomberg, Asia Partners Analysis

# THE PHYSICS OF RECESSION VALUATIONS

*Asia Partners Perspective*



## Mathematical Fact

- If  $A \times B = C$ , and A falls by 50%, B has to rise by 100% just to keep C constant

---

## The First Law of Recession Valuations

- In a recession, revenue multiples usually fall much faster in percentage terms than revenues rise

---

### *Corollary*

- So do GMV multiples, and every other kind of multiple

---

### *Implication*

- It's almost impossible to have a rising share price in a recession

---

## The Second Law of Recession Valuations

- It's a lot easier to raise money if you don't need the money

---

### *Corollary*

- Revenue multiples don't matter anymore – people are looking at your cash flow

---

### *Implication*

- It's easier, and better, to spend a dollar less than to raise a dollar more

---

## The Third Law of Recession Valuations

- It's better to own less of a business that survives than more of a business that goes bankrupt

---

### *Corollary*

- This is the time to be practical on valuation

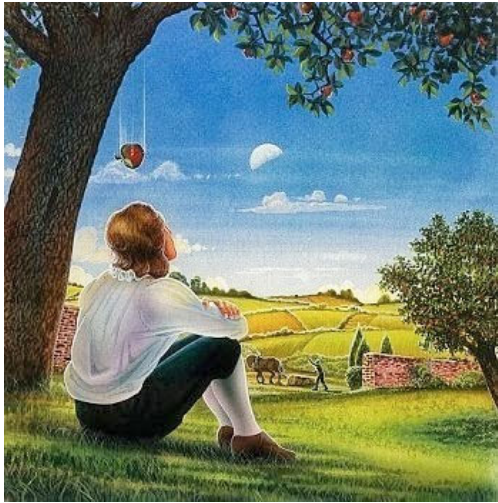
---

### *Implication*

- In the game of 'musical chairs' of recession era fundraising, raise early

# AP'S FIRST LAW OF RECESSION VALUATIONS

*In a Recession, Revenue Multiples Usually Fall Much Faster in Percentage Terms Than Revenues Rise*



## The Dot Com Recession

- From Q1 2000 to Q3 2001, Apple's revenue multiple fell by 89% from 2.8x to 0.3x. Over the same period of time, its revenues fell by 25% (recessions hurt revenue growth for even the best companies).
- Amazon went from trading at 12x-16x revenues in Q4 1999/Q1 2000 to trading at 2x revenues in Q4 2001. Over this period of time its revenues doubled – but that was nowhere enough to counteract the fall in multiple.

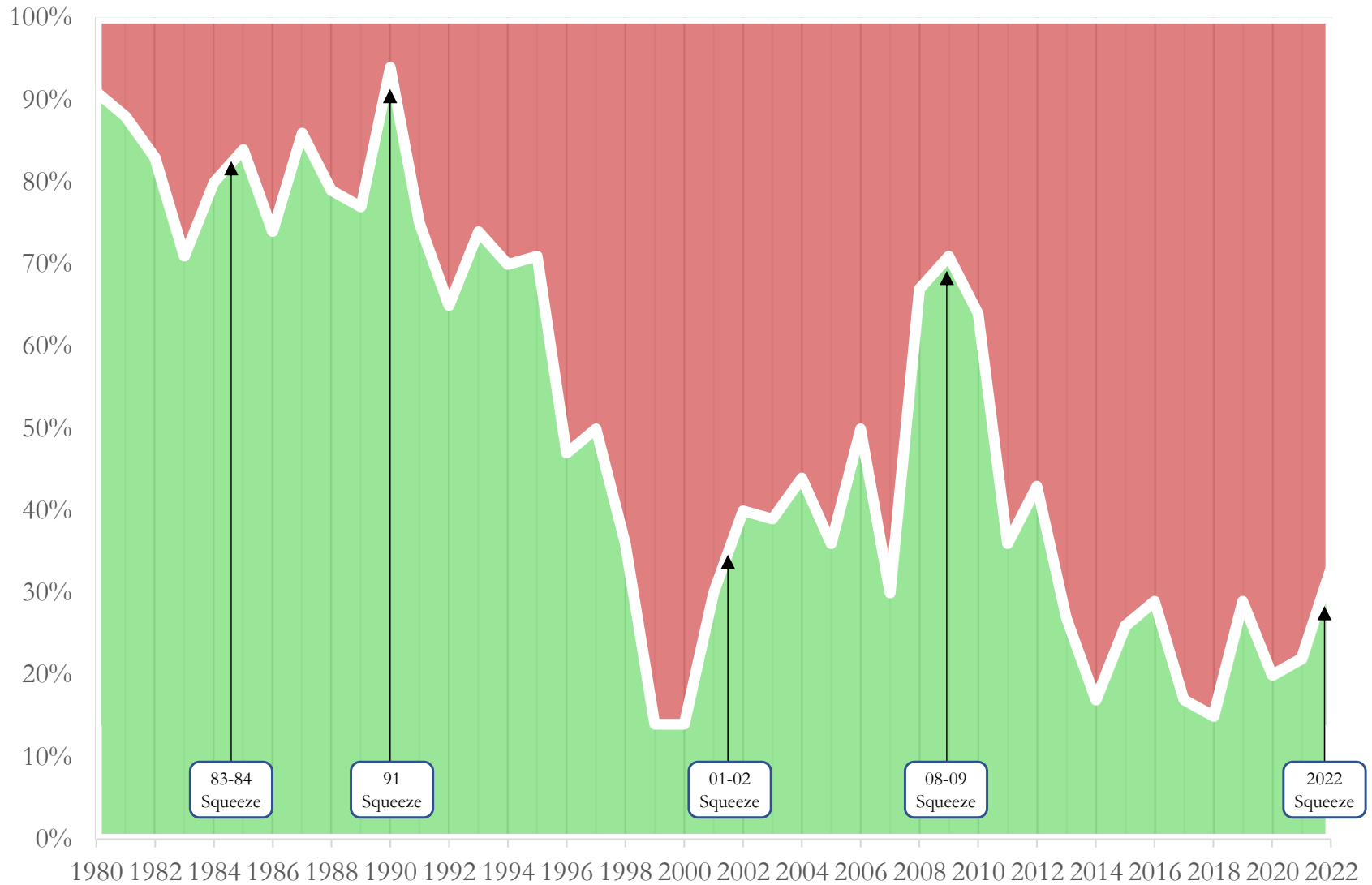
## The Global Financial Crisis

- Google traded at 12x revenues in Q4 2007 – which fell to 4x revenues a year later in Q4 2008. Over the same period of time, its revenues grew 30%, which led to a massive fall in valuation for the world's pre-eminent internet company at the time.
- Tencent traded at 25x revenues in Q4 2007 – which fell to 11x revenues in Q4 2008. Over the same period of time, its revenues doubled, but because its multiple had more than halved its valuation still suffered.
- Baidu had an even larger fall from grace, with a Q4 2007 revenue multiple of 55x and then a Q4 2008 revenue multiple of 9x. Its revenues almost doubled over the same period of time.

# AP'S SECOND LAW OF RECESSION VALUATIONS

*It's a Lot Easier to Raise Money ... If You Don't Need The Money*

### Percent of U.S. Tech IPOs from Profitable (Green) vs. Unprofitable (Red) Companies



Source: Professor Jay Ritter, University of Florida

# WHY CAPITAL DRIES UP IN FALLING MARKETS



## In a Rising Market...

---

- Incentive to invest is higher because good companies will be more expensive in 12 months
  - Revenues might be higher
  - Margins might be better
  - Multiples might be better
  - $\therefore$  Valuation will probably rise, and it will be a good investment on paper
- In a rising market, it's perceived to be more plausible that another investor will invest in the next round, rather than existing investors needing to reserve capital for the next round

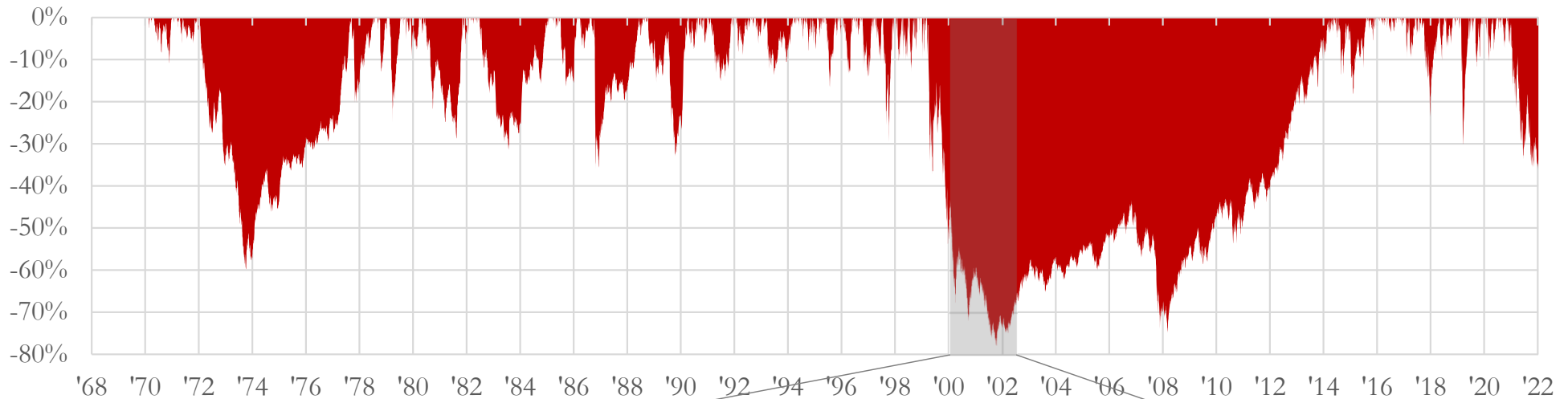
## In a Falling Market...

---

- Exactly in reverse
  - Revenues might be lower
  - Margins might be lower
  - Multiples might be lower
  - $\therefore$  Valuation will probably fall, so we might as well wait to invest later, and on better terms
- And in a falling market, existing investors need to focus on re-investing in their existing companies to ensure they stay solvent and, more constructively, take advantage of the strategic opportunities a recession presents

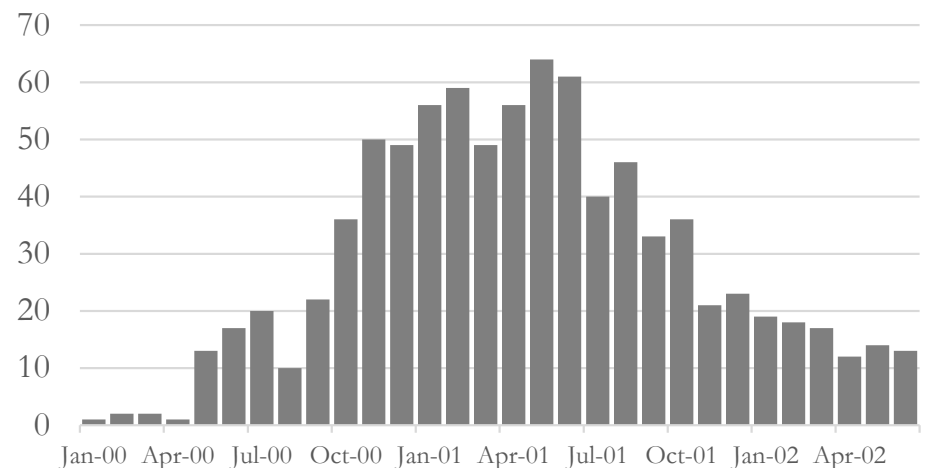
# WHEN CAPITAL DRIES UP, MANY COMPANIES ARE FORCED INTO LIQUIDATION

U.S. NASDAQ (1971-Present)



## Internet Company Shutdowns (January 2000 through June 2002)

- 860 U.S. Internet companies went bankrupt or closed down
  - 43% e-commerce companies
  - 25% digital content companies
  - 16% infrastructure companies
  - 10% internet access providers
  - 6% professional services companies
  
- Sequencing of bankruptcies: first B2C, then B2B and distressed asset sales for infrastructure
  - Wave of e-commerce company bankruptcies came first
  - Then content providers, infrastructure, internet services and dial-up/broadband internet (often asset sales)



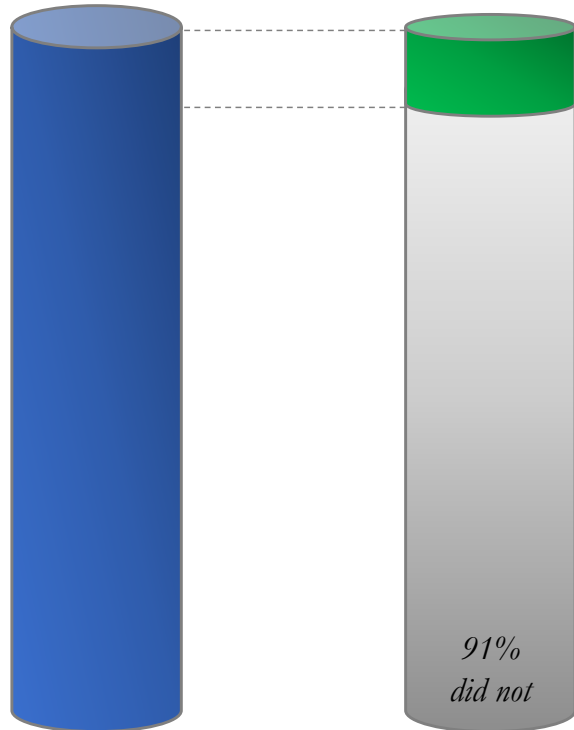


# IT IS POSSIBLE TO CREATE VALUE IN A RECESSION

## 2008-09 Global Financial Crisis Example

On January 1, 2008, there were 6,640 public companies worldwide with a \$1bn market cap or greater

9% of them created shareholder value across the recession through share price appreciation and dividends



### Notable Examples

Company	Industry	Country	Recession IRR
NCSOFT Corp.	Video Games	South Korea	100%
BYD Co. Ltd.	Batteries, Autos	China	85%
Sanyo Electric	Appliances	Japan	52%
Fast Retailing	Clothing Stores	Japan	52%
Netease Inc.	Video Games	China	51%
Randgold Res. Ltd.	Gold Mining	Jersey	46%
Jordan Phosphate	Phosphate Fertilizers	Jordan	46%
Kangmei Pharma	Health Care Distribution	China	46%
Hero Motocorp Ltd.	Motorcycles	India	42%
CP All PCL	Convenience Stores	Thailand	42%
Nankai Elec Rail	Railroad	Japan	39%
Culture Convenience Club	Book Stores	Japan	38%
Dollar Tree Inc.	Dollar Stores	USA	38%
Franco-Nevada Co.	Gold Mining	Canada	38%
Myriad Genetics	In Vitro Diagnostics	USA	37%
Tsumura & Co.	Pharmaceuticals	Japan	37%
Cypress Semicon	Semiconductors	USA	37%
Allscripts Health	Health Care Software	USA	37%
National Bank Fujairah	Corporate Banking	UAE	36%
Xcmg Construct	Construction Machinery	China	36%
Advanced Tech	Advanced Ceramics	China	35%
Shanda Interactive	Video Games	China	35%
Ross Stores Inc.	Off-Price Apparel	USA	33%
Family Dollar Stores	Dollar Stores	USA	32%
Natura	Cosmetics	Brazil	31%
Nitori Holdings	Furniture	Japan	30%
Edwards Life	Cardiovascular Devices	USA	30%

Source: Bloomberg, Asia Partners Analysis; Recession IRR calculated in local currency terms from January 1, 2008 to June 30, 2008 and includes dividends



# What will happen to the cost of capital?

# THE EPONYMOUS TAYLOR RULE

This work is distributed as a Policy Paper by the  
**CENTER FOR ECONOMIC POLICY RESEARCH**

CEPR Publication No. 327

## DISCRETION VERSUS POLICY RULES IN PRACTICE

by

John B. Taylor  
Stanford University

November 1992

Center for Economic Policy Research  
100 Encina Commons  
Stanford University  
Stanford, CA 94305  
(415) 725-1874

The Center for Economic Policy Research at Stanford University supports research bearing on economic and public policy issues. The CEPR Discussion Paper Series reports on research and policy analysis conducted by researchers affiliated with the Center. Working papers in this series reflect the views of the authors and not necessarily those of the Center for Economic Policy Research or Stanford University.

Although there is not a consensus about the size of the coefficients of policy rules, it is useful to consider what a representative policy rule might look like. One policy rule that

13

captures the spirit of the recent research and which is quite straightforward is:

$$(1) \quad r = p + .5((Y-Y^*)/Y^*) + .5(p-2) + 2$$

where

$r$  is the federal funds rate, (average for the quarter)

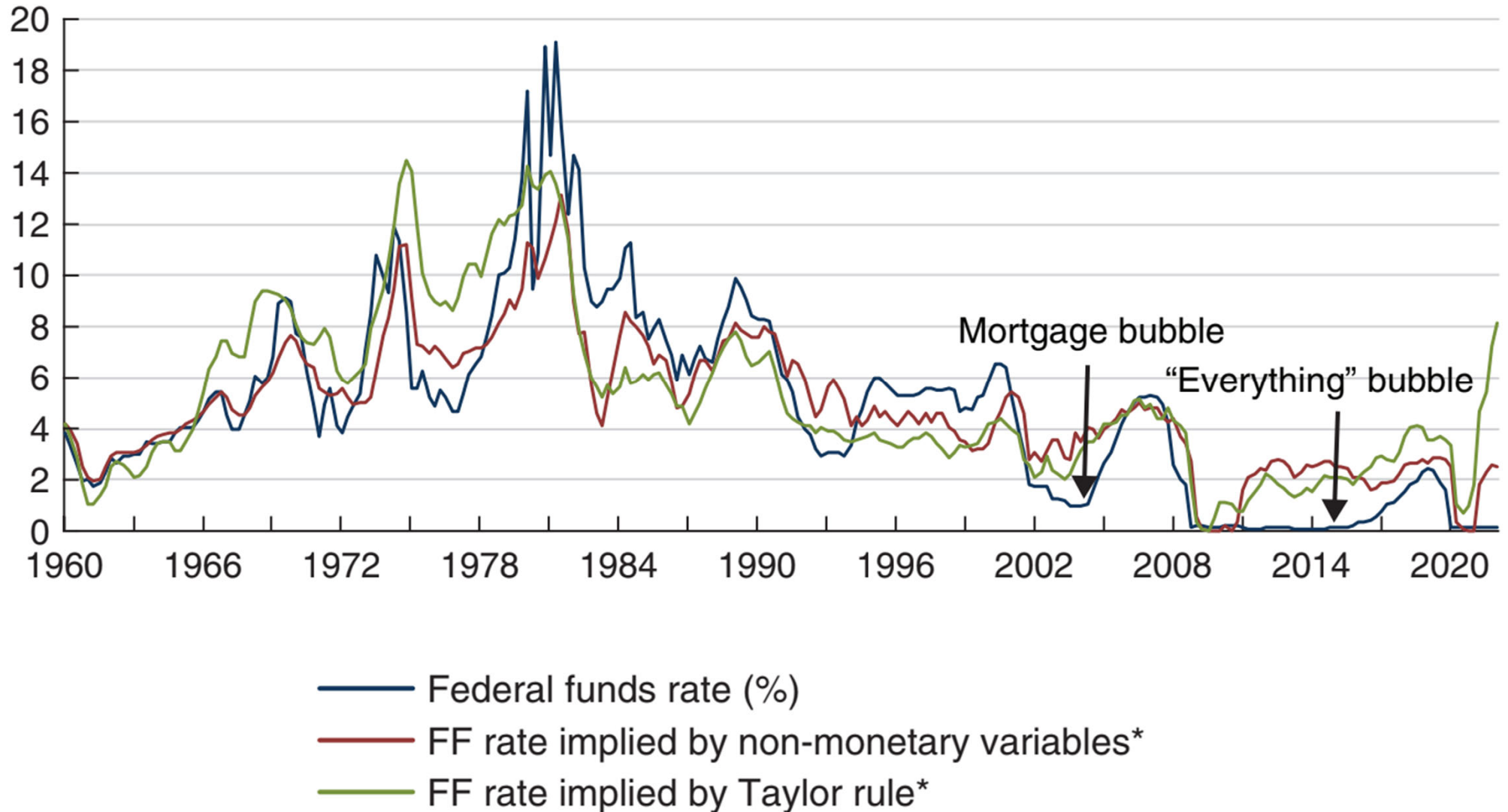
$Y$  is real GDP,

$Y^*$  is trend real GDP (equals 2.2 percent per year from 1984.1 through 1992.3), and

$p$  is the rate of inflation over the previous four quarters.



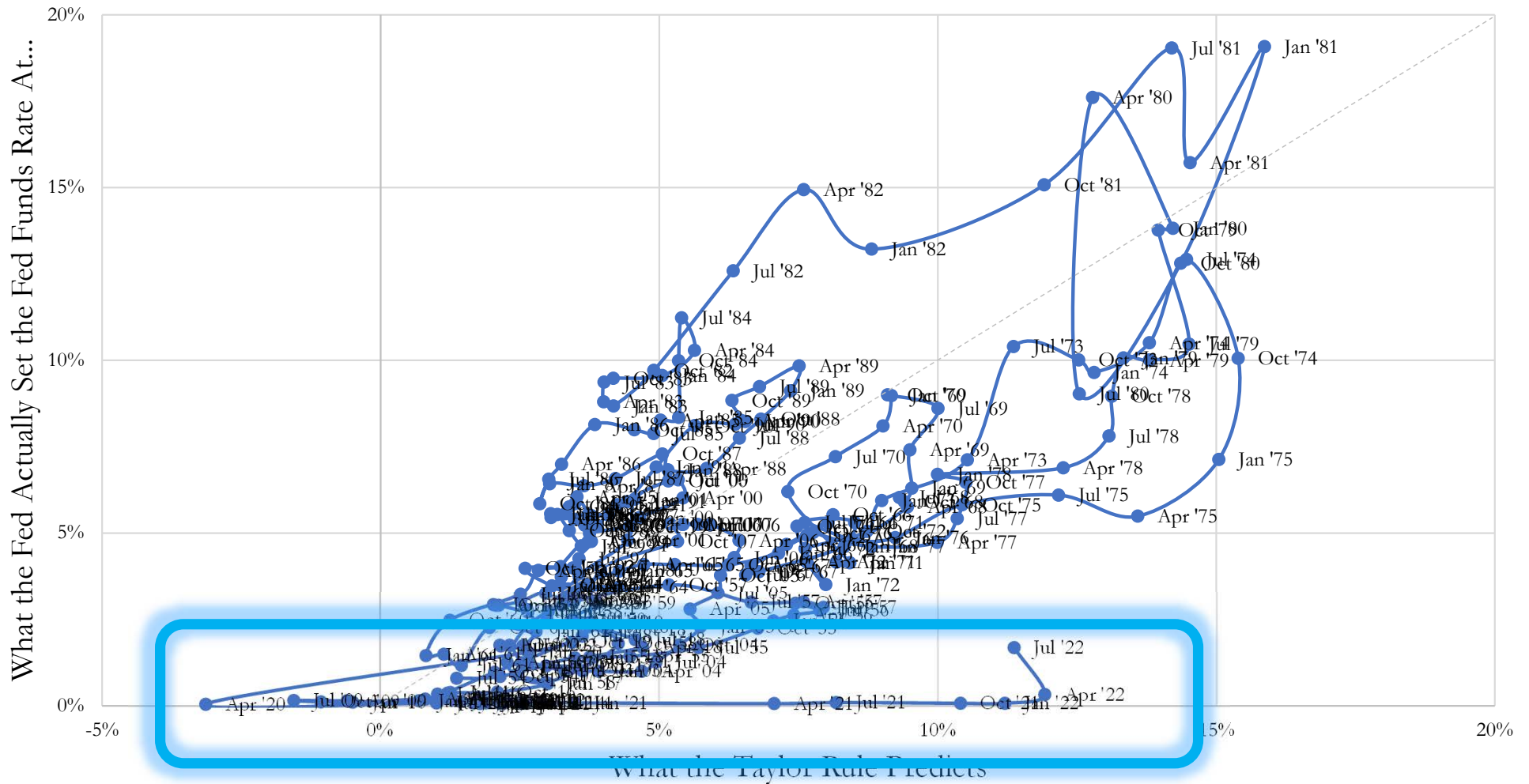
# PUTTING THE RULE INTO PRACTICE: THE ACTUAL RATE HAS CLOSELY HEWN TO THE TAYLOR RULE UNTIL RECENT YEARS



Source: Financial Times. Nonmonetary explanatory variables include real GDP output gap, inflation (PCE deflator), and current and lagged growth rates of real GDP, non-farm payroll employment, and real retail sales

# THE FED HAS KEPT RATES LOWER IN RECENT QUARTERS THAN THE TAYLOR RULE WOULD RECOMMEND, CAUSING INFLATION

## Taylor Rule Prediction ... Versus Actual Fed Funds Rate

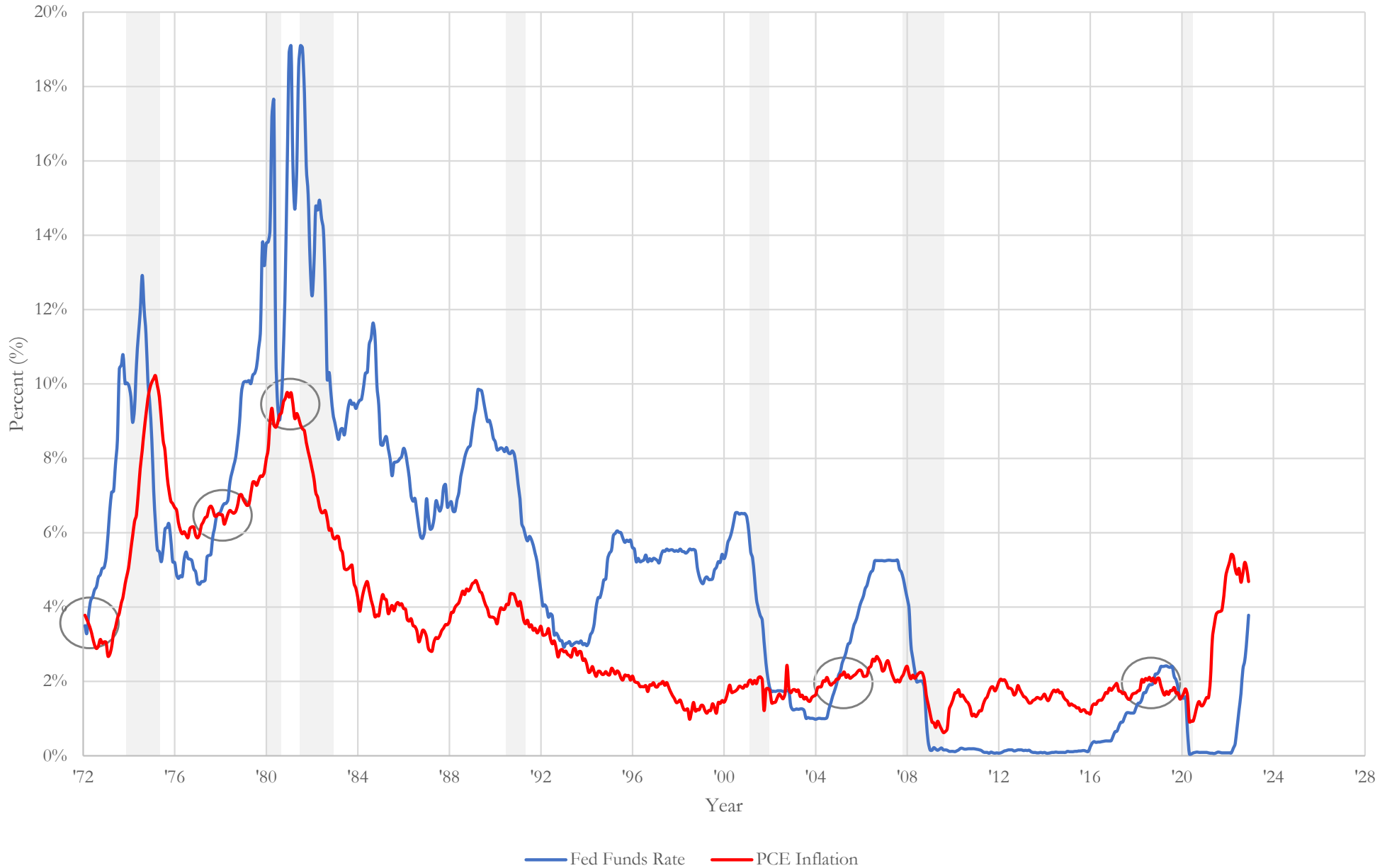


Source: St. Louis Fed as of mid-October, Asia Partners Chart



# WILL THE FED KEEP RAISING UNTIL FED FUNDS > INFLATION?

*Recessions Shaded in Gray*

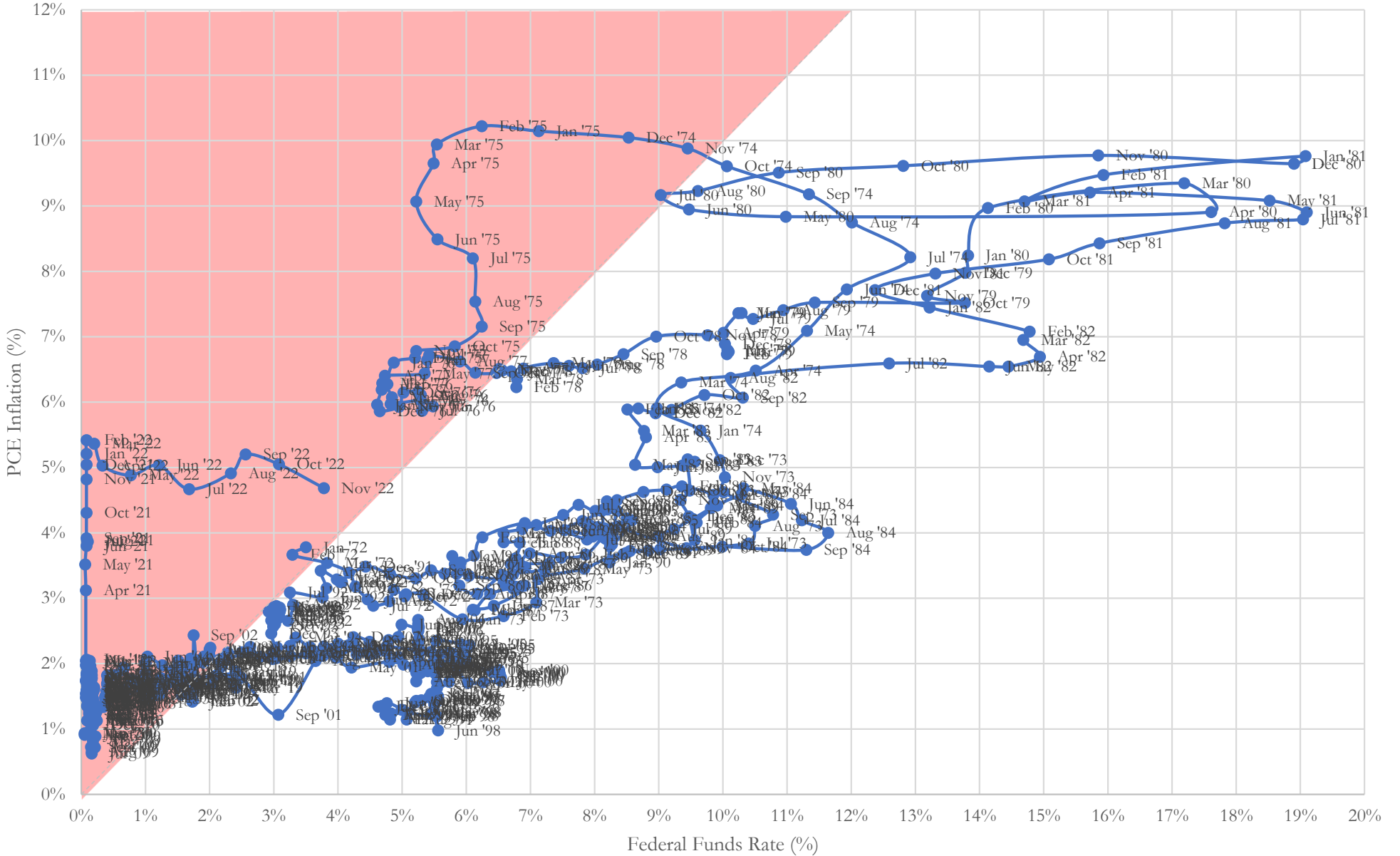


Source: Bloomberg as of December 31, 2022



# WILL THE FED KEEP RAISING UNTIL FED FUNDS > INFLATION?

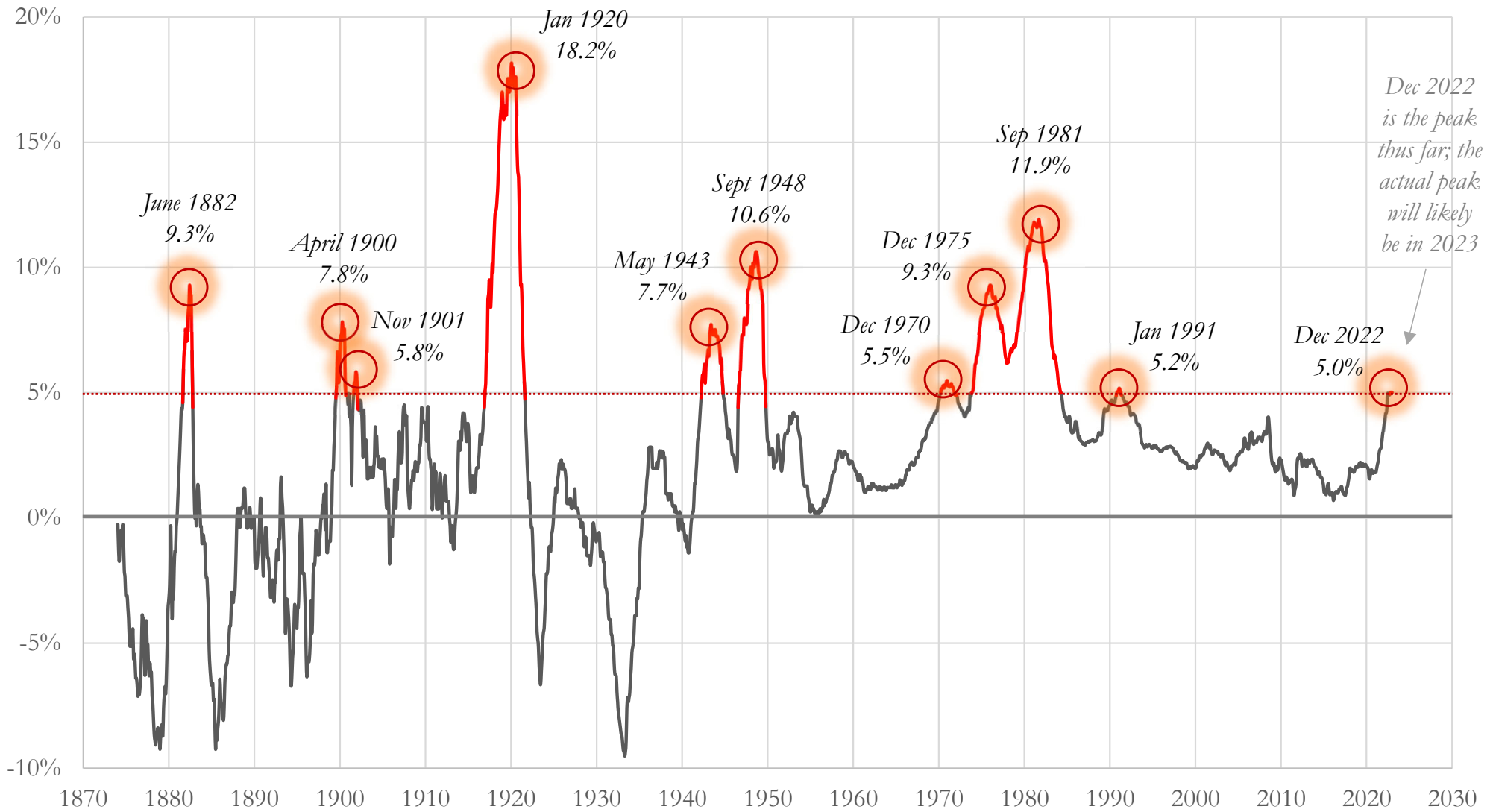
*Federal Funds Rate < PCE Inflation in Red*



**Other than  
commodities, who  
prosperes in times of  
high inflation?**

# THERE HAVE BEEN 11 SPIKES OF U.S. INFLATION ABOVE 5% ON A ROLLING THREE YEAR BASIS OVER THE PAST 140 YEARS

3 Year Trailing CAGR of CPI, Jan 1874 - Dec 2022

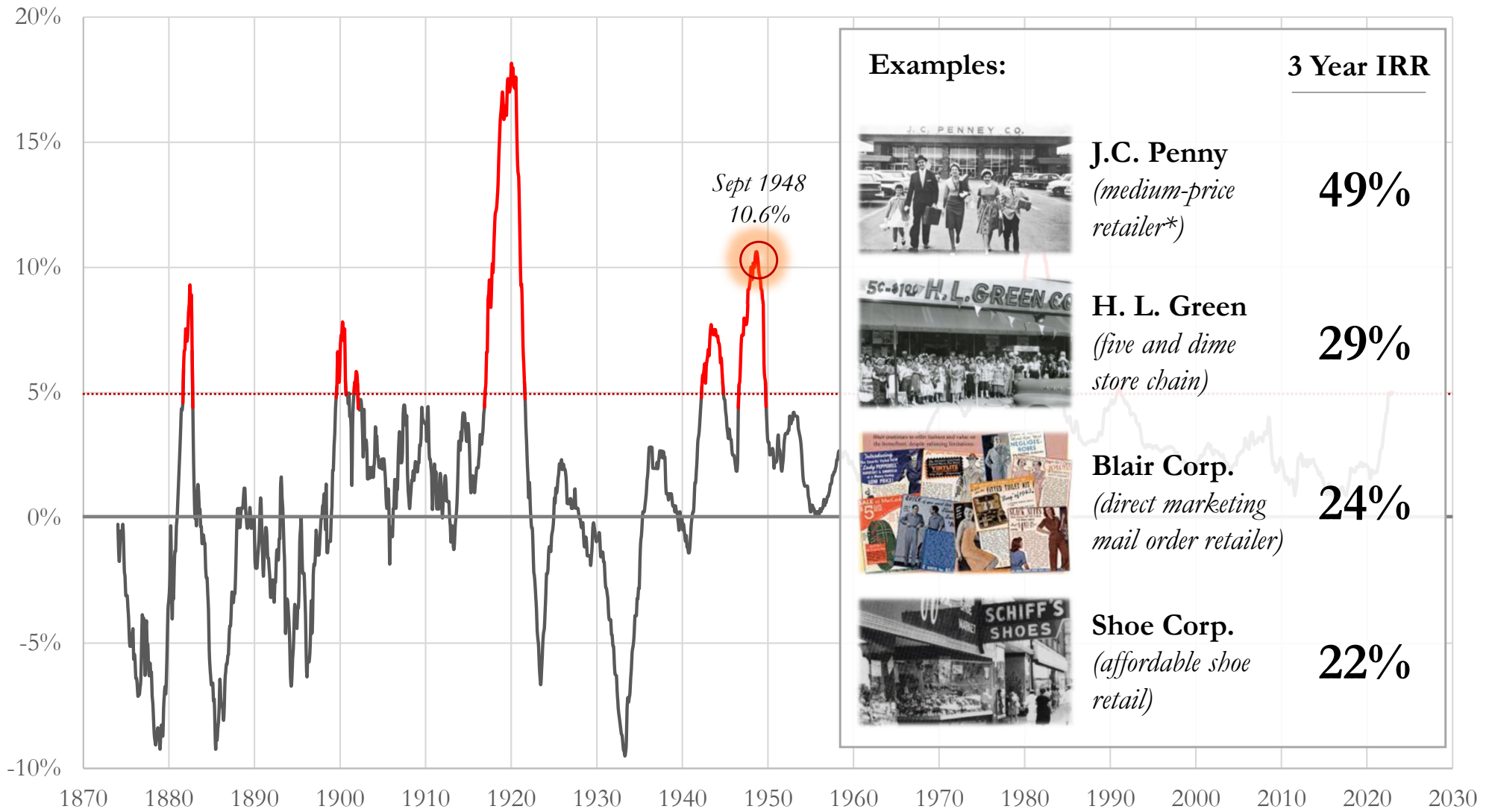


Dec 2022 is the peak thus far; the actual peak will likely be in 2023

Source: Yale Professor Robert J. Shiller, January 2023

# IN THE 1948 SPIKE, AFFORDABLE CONSUMER PRODUCTS AND SERVICES CREATED SUBSTANTIAL VALUE

U.S. Examples, \$US IRRs

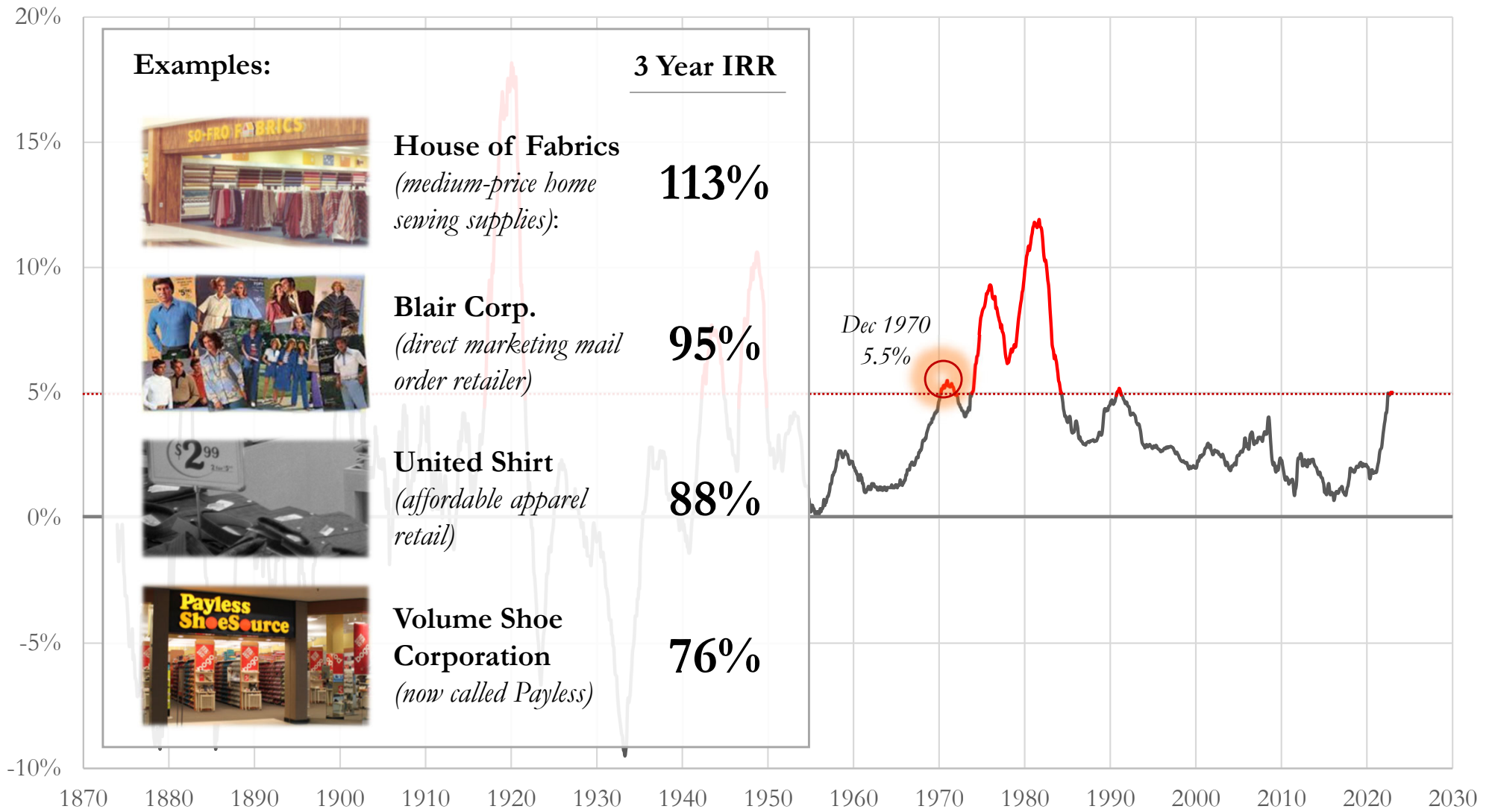


Source: Global Financial Data; IRRs exclude dividends and are calculated over a trailing 36 month period before September 1948

\* Sam Walton, founder of Walmart, began working at a J.C. Penney in Des Moines, Iowa, in 1940

# IN THE 1970 SPIKE, AFFORDABLE CONSUMER PRODUCTS AND SERVICES CREATED SUBSTANTIAL VALUE

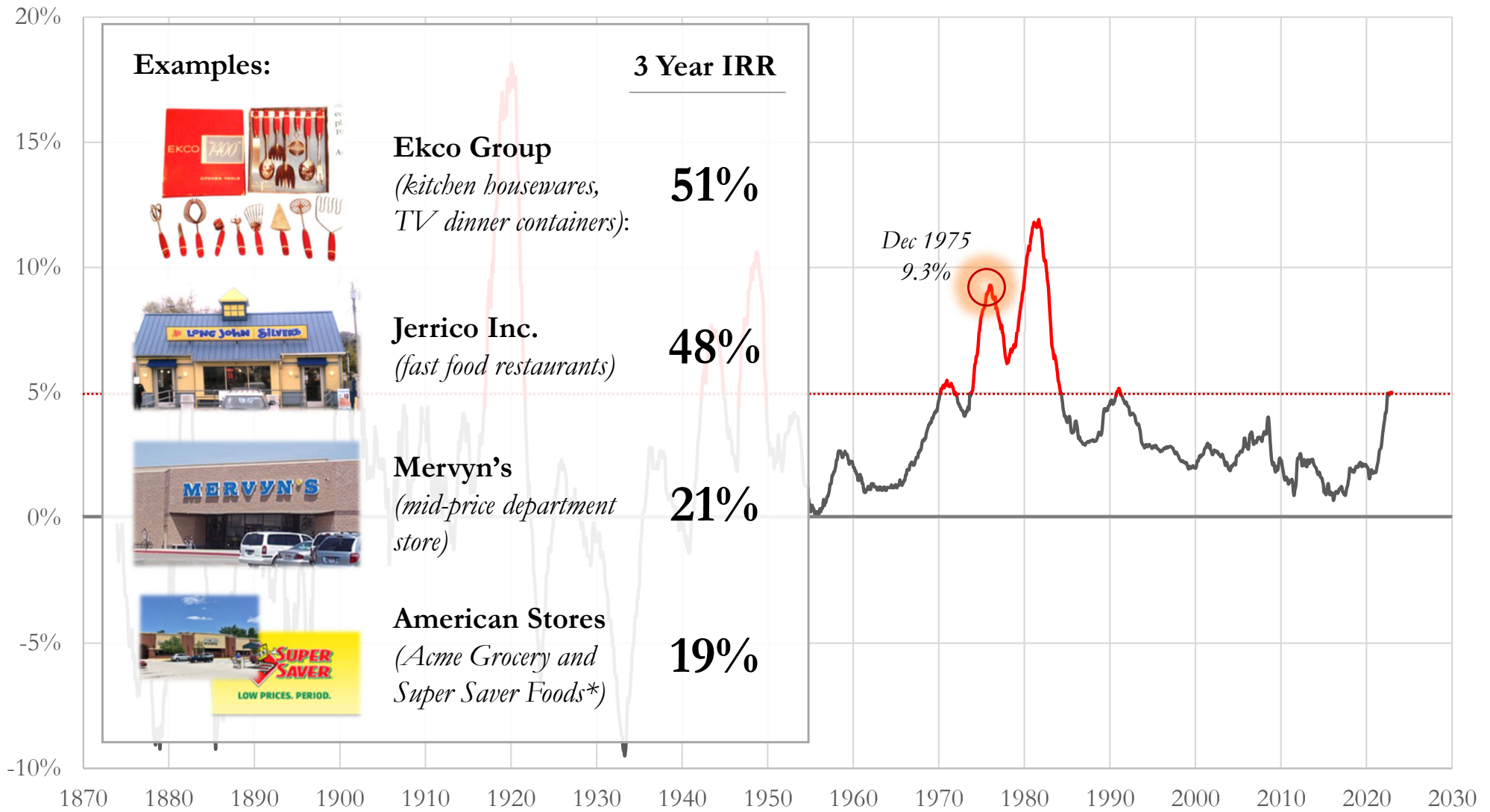
U.S. Examples, \$US IRRs



Source: Global Financial Data; IRRs exclude dividends and are calculated over a trailing 36 month period before December 1970

# IN THE 1975 SPIKE, AFFORDABLE CONSUMER PRODUCTS AND SERVICES CREATED SUBSTANTIAL VALUE

U.S. Examples, \$US IRRs



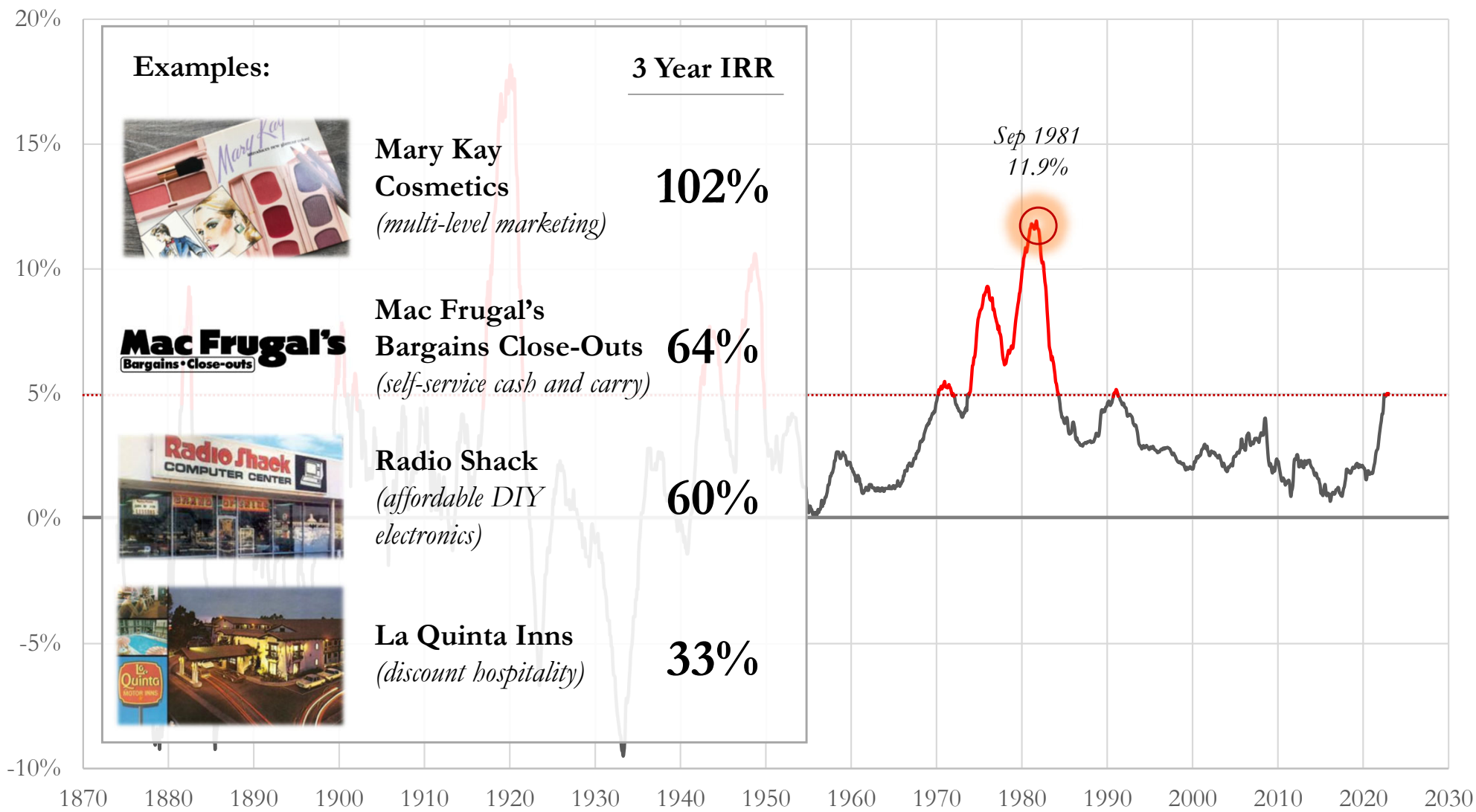
Source: Global Financial Data; IRRs exclude dividends and are calculated over a trailing 36 month period before December 1975

\* Customers at Super Saver Foods bagged their own groceries at the checkout



# IN THE 1981 SPIKE, AFFORDABLE CONSUMER PRODUCTS AND SERVICES CREATED SUBSTANTIAL VALUE

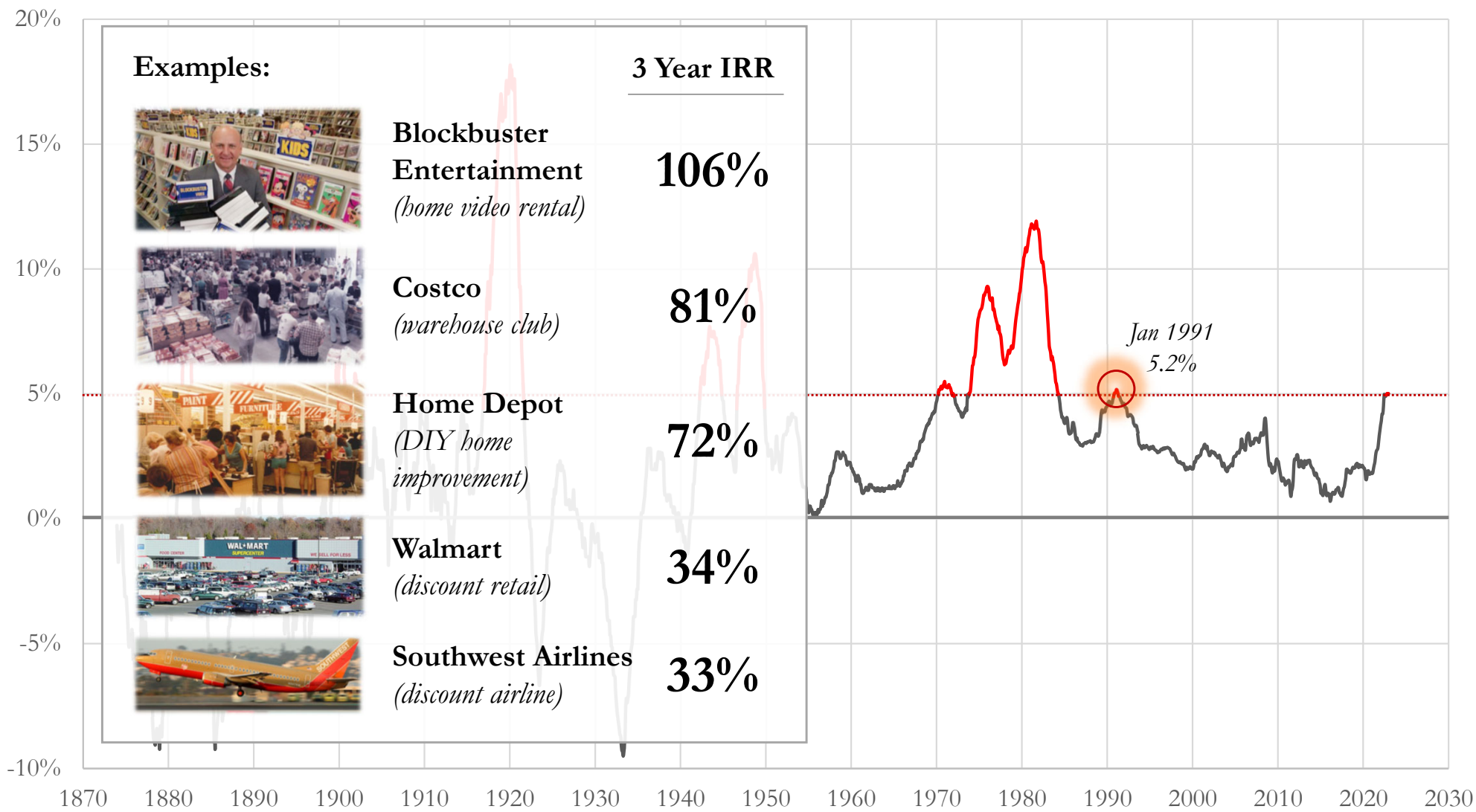
U.S. Examples, \$US IRRs



Source: Global Financial Data; IRRs exclude dividends and are calculated over a trailing 36 month period before September 1981

# IN THE 1991 SPIKE, AFFORDABLE CONSUMER PRODUCTS AND SERVICES CREATED SUBSTANTIAL VALUE

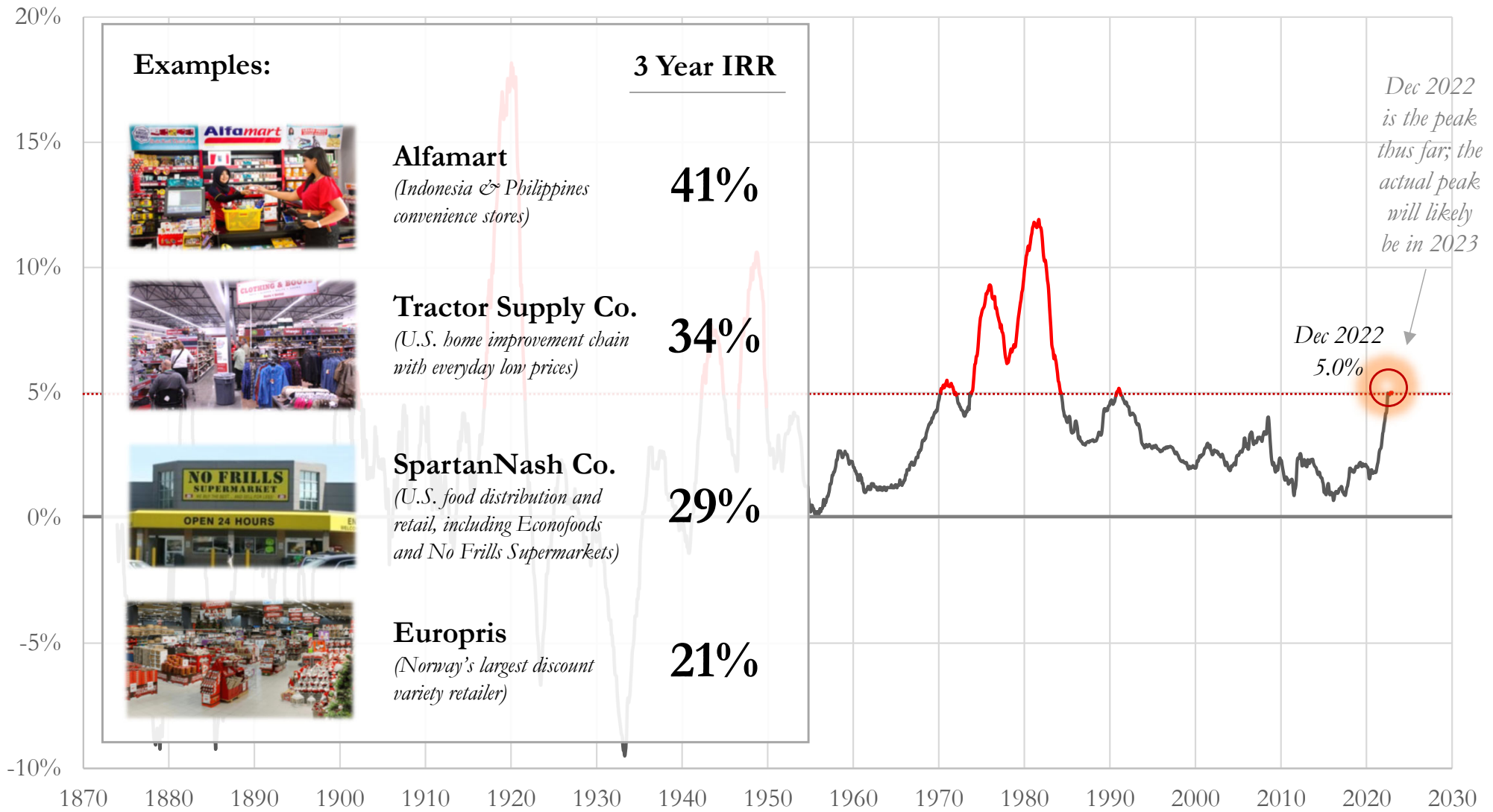
U.S. Examples, \$US IRRs



Source: Global Financial Data; IRRs exclude dividends and are calculated over a trailing 36 month period before January 1991

# IN THE 2022 SPIKE, THE PATTERN OF AFFORDABLE CONSUMER PRODUCTS AND SERVICES CREATING VALUE CONTINUED

Global Examples, \$US IRRs



Source: Global Financial Data; IRRs in U.S. dollars, excluding dividends, and are calculated over a trailing 36 month period before December 2022

# WHAT WE CALL 'FRUGALTECH' IS THE APPLICATION OF THIS CONCEPT TO THE 21<sup>ST</sup> CENTURY

*Frugaltech Examples in Asia Partners Portfolio*



**E-commerce  
Rewards Platform**

*Cashback for  
consumers across  
Southeast Asia and  
beyond*



**B2B E-commerce  
Platform**

*Enabling e-  
commerce for local  
shopkeepers across  
Indonesia*



**Used Car  
Marketplace**

*Helping families  
improve their lives &  
careers with high  
quality, affordable cars*



**Cross-border E-  
commerce Enabler**

*Bringing the best of  
quality & price to  
Asian consumers via  
cross-border retail*



**Online  
Healthcare  
Platform**

*Affordable &  
reliable access to  
healthcare across  
Southeast Asia*



**Affordable  
Hotel  
Marketplace**

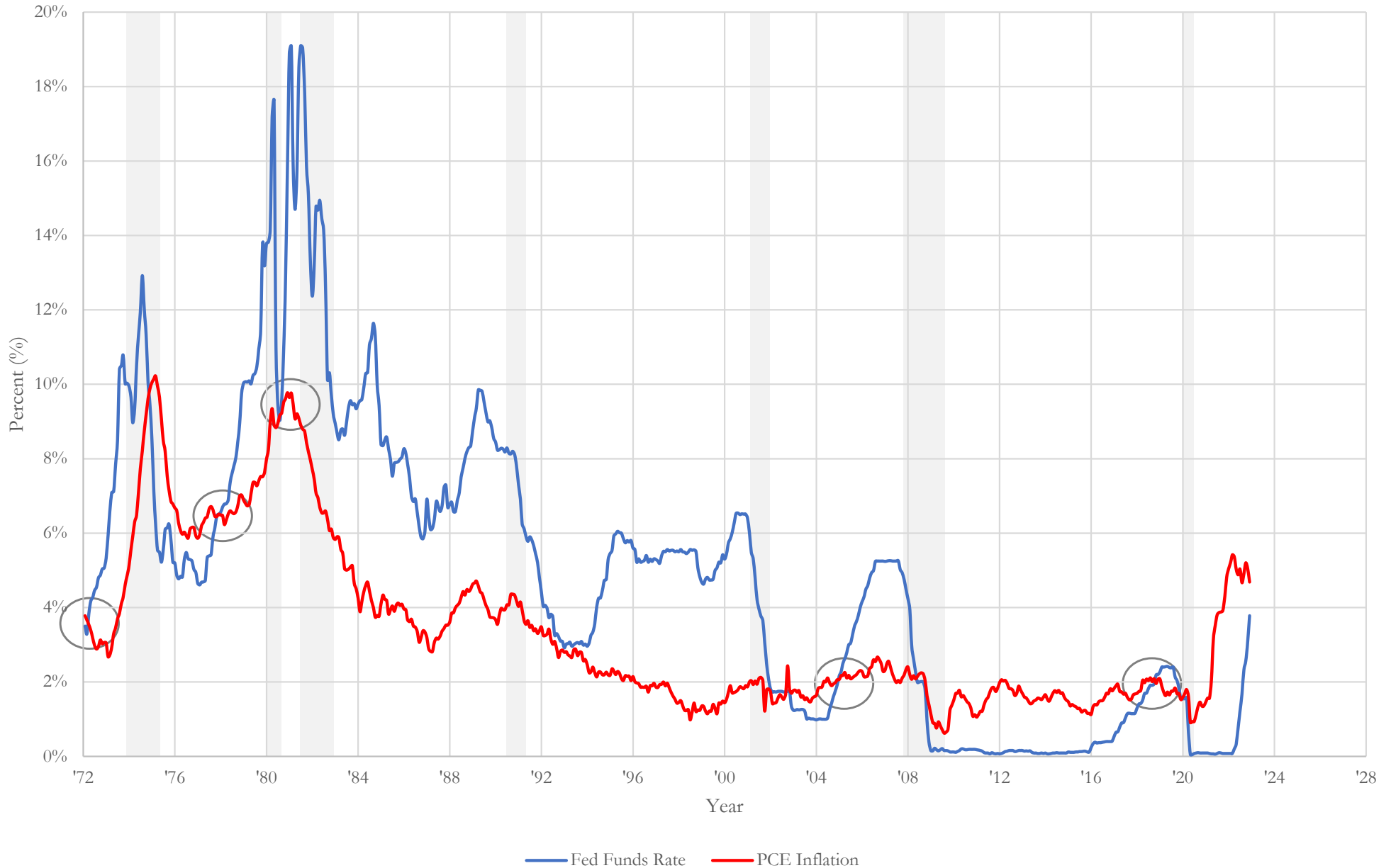
*Affordable &  
consistent  
hospitality  
across Southeast  
Asia*



**Online  
Tutoring  
Platform**

*Democratizing  
tutoring so that  
every student  
can learn*

# BACK TO RATES – WHAT WILL HAPPEN TO EQUITY VALUATIONS AS THE FED KEEPS RAISING RATES TO BREAK INFLATION?



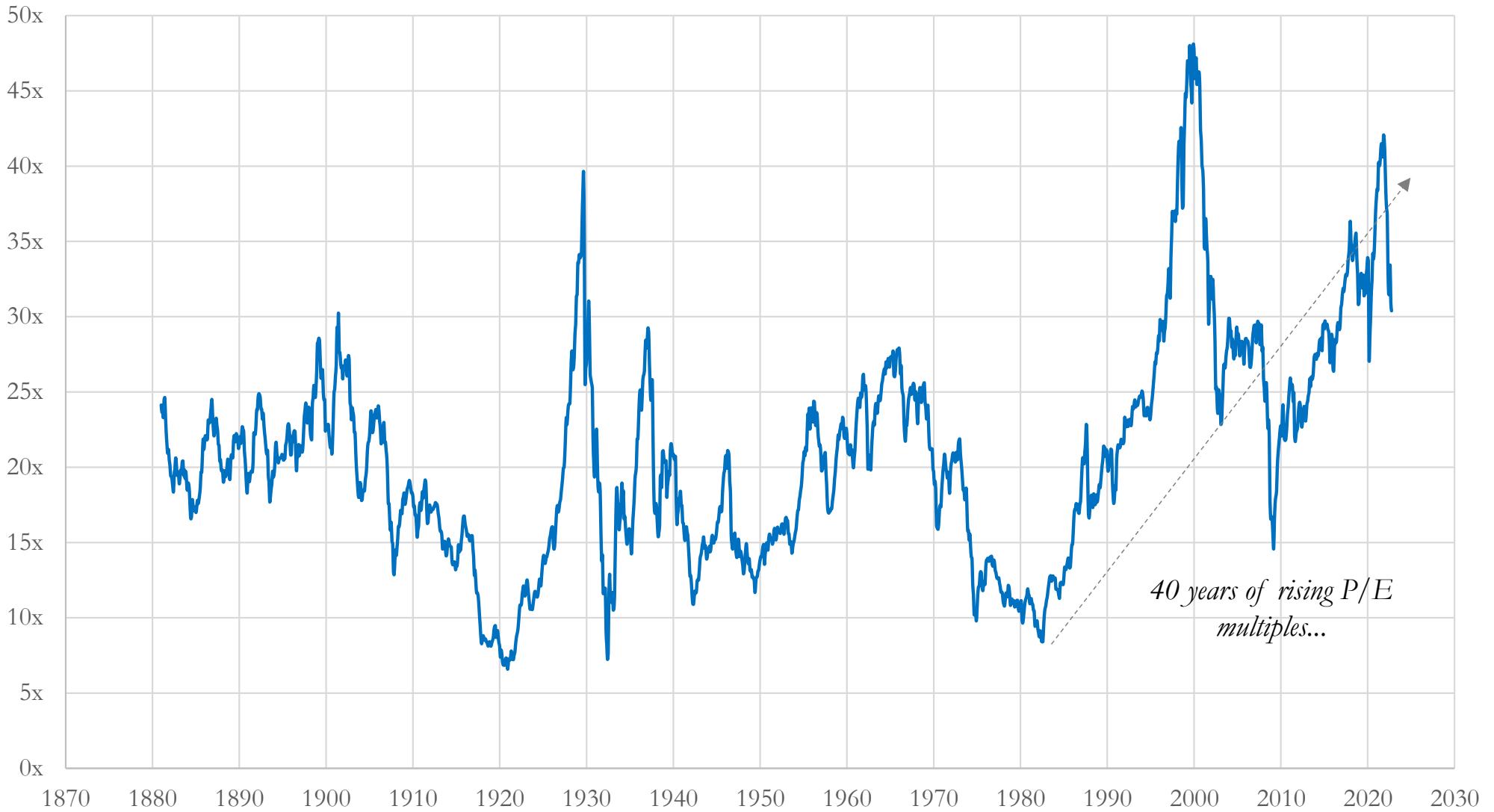
Source: Bloomberg as of December 31, 2022

# ROBERT SHILLER'S 10-YEAR AVERAGE P/E, OR CAPE



## 140+ years of the S&P 500 Earnings Multiple

*U.S. S&P 500 10-Year Cyclically Adjusted P/E (CAPE)*

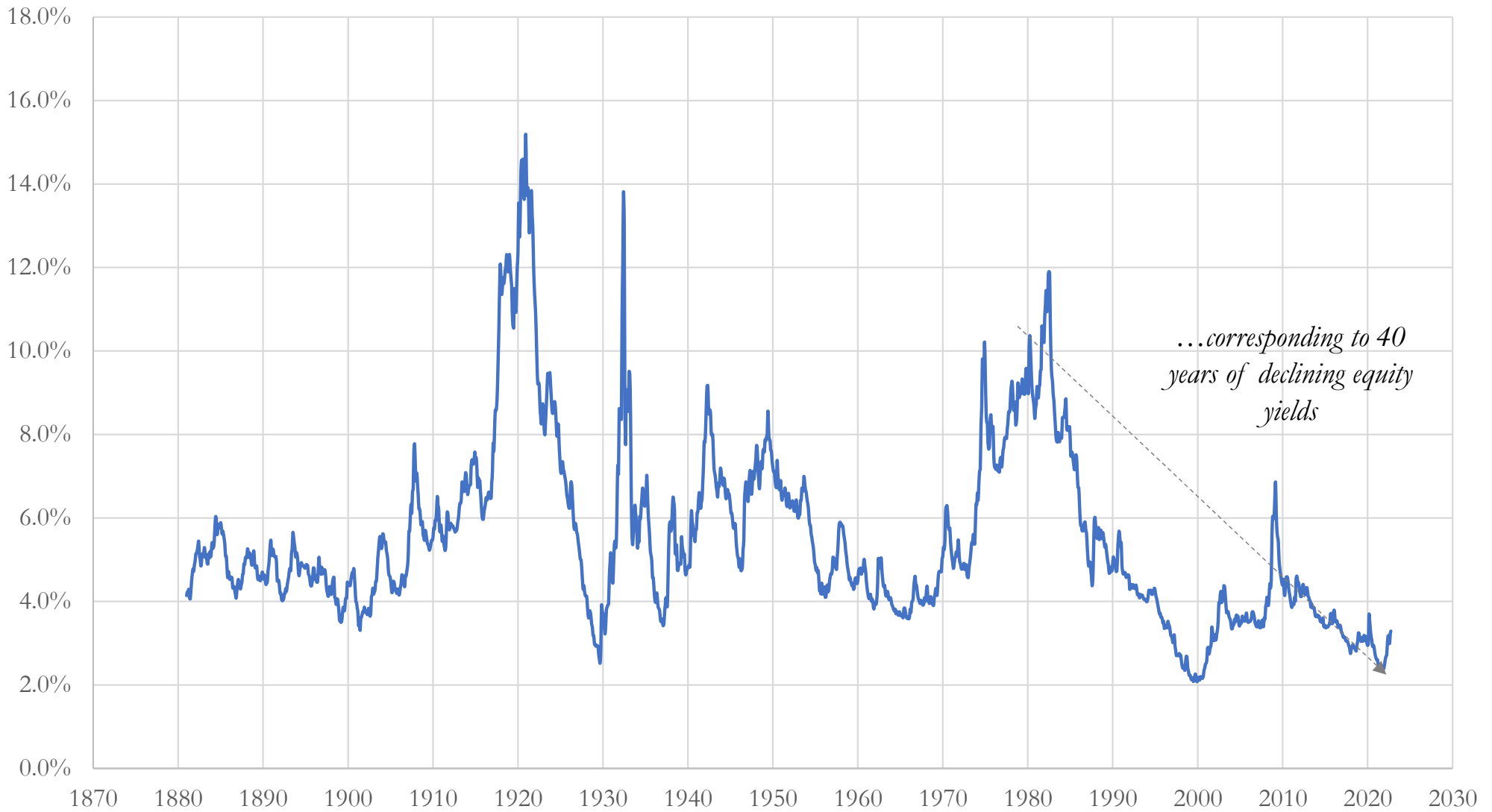


Source: Yale Professor Robert J. Shiller, Nov 2022 Data, Based on Total Return P/E



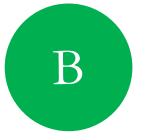
# WE CAN CONVERT THIS P/E INTO E/P, OR AN EARNINGS YIELD

1 / U.S. S&P 500 10-Year Cyclically Adjusted P/E, i.e., the Reciprocal of the Previous Page



Source: Yale Professor Robert J. Shiller, Nov 2022 Data, Based on Total Return P/E

# THERE IS A STRONG PARALLEL BETWEEN THE E/P RATIO AND THE 10 YEAR TREASURY YIELD...



## 140+ years of 10 Year U.S. Treasury Yields

Percent (%)

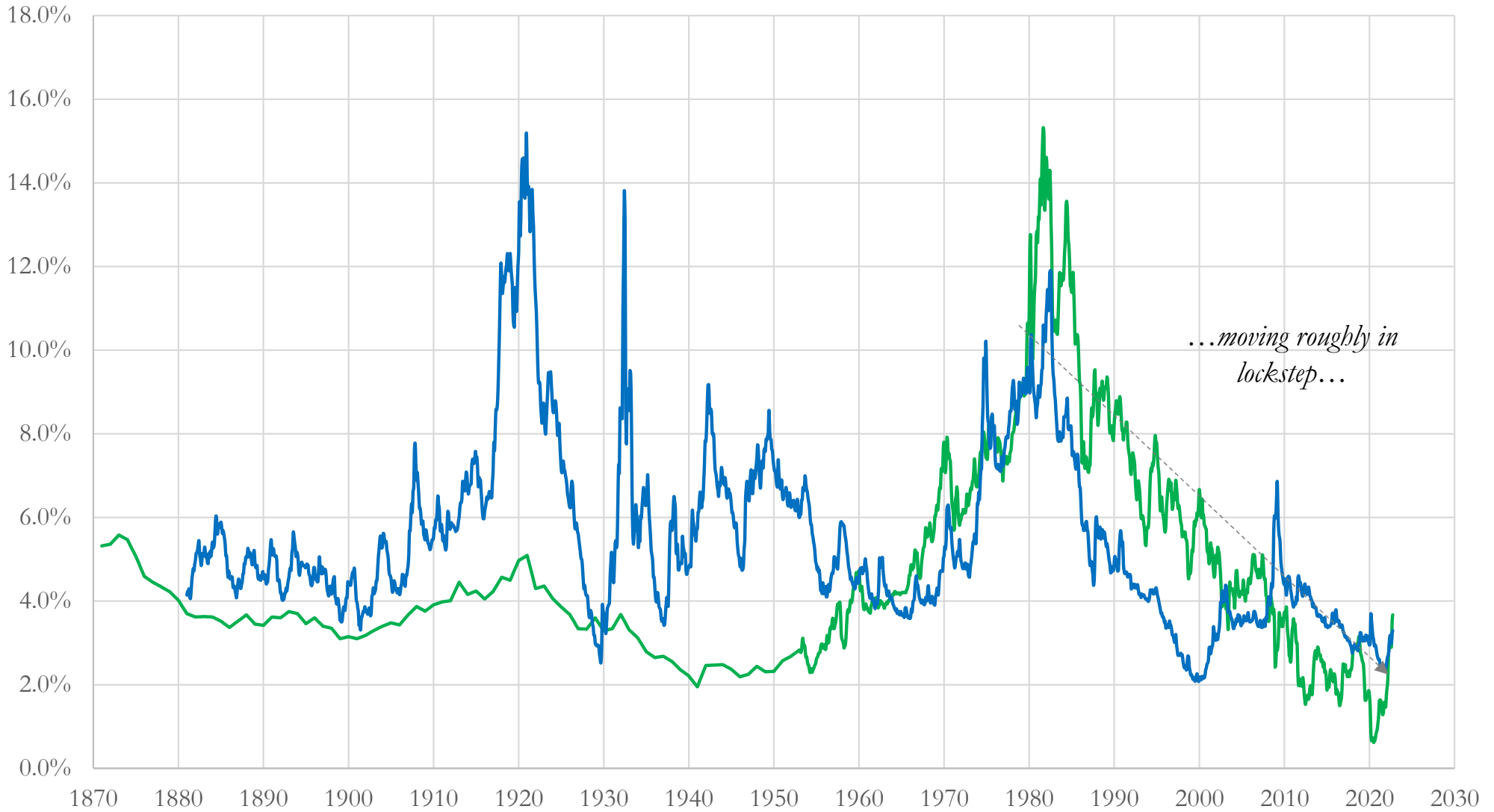


Source: Yale Professor Robert J. Shiller, Nov 2022 Data

# WHICH BECOMES MORE CLEAR WHEN WE SUPERIMPOSE BOTH CHARTS ON TOP OF EACH OTHER

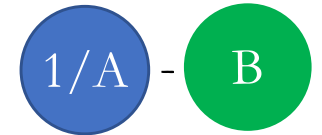


*S&P 500 Earnings Yield (Blue) and U.S. Treasury 10 Year Yield (Green)*



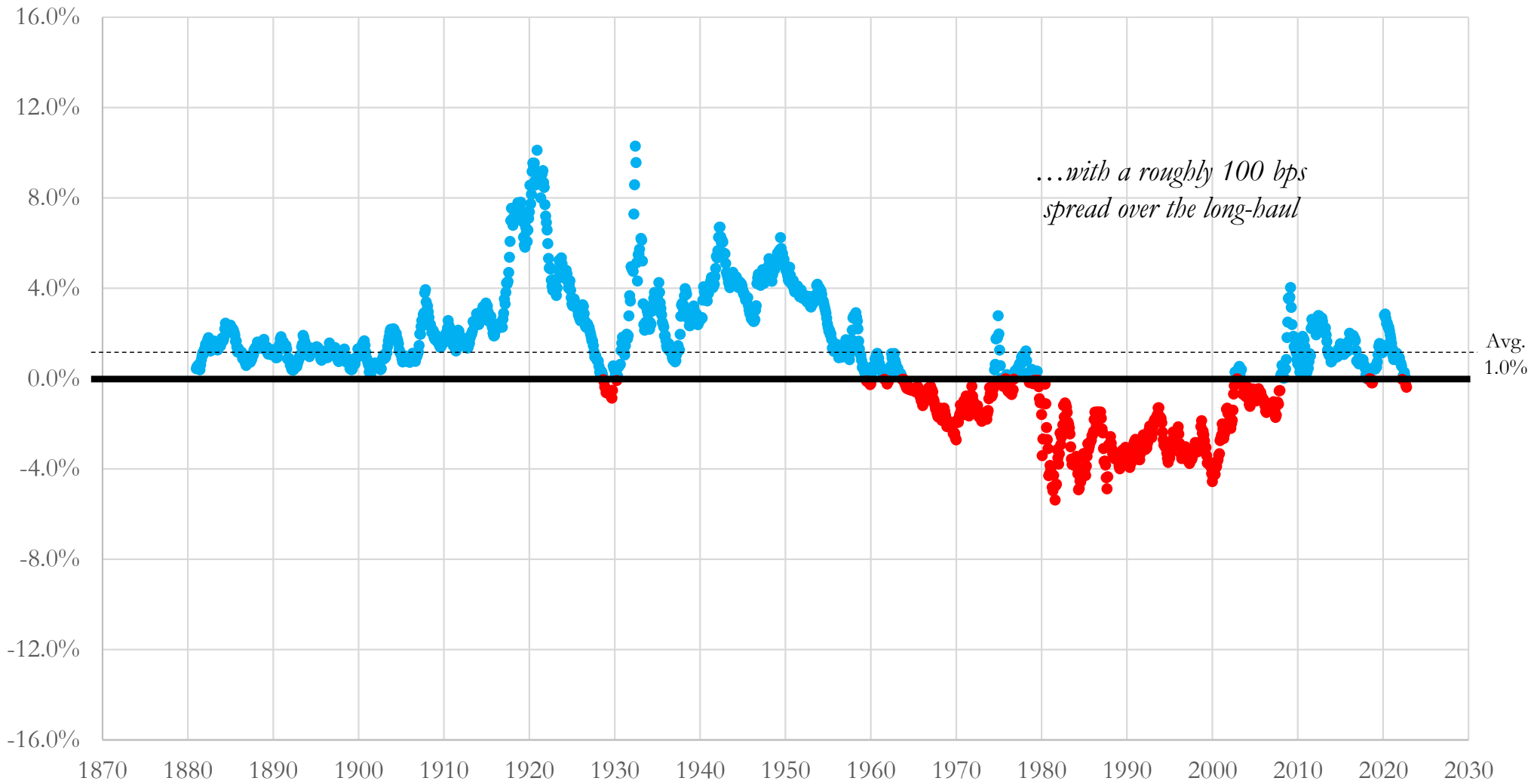
Source: Yale Professor Robert J. Shiller, Nov 2022 Data

# OVER LONG PERIODS OF TIME, THE E/P RATIO IS ABOUT 100 BASIS POINTS HIGHER THAN THE 10 YEAR NOTE'S YIELD



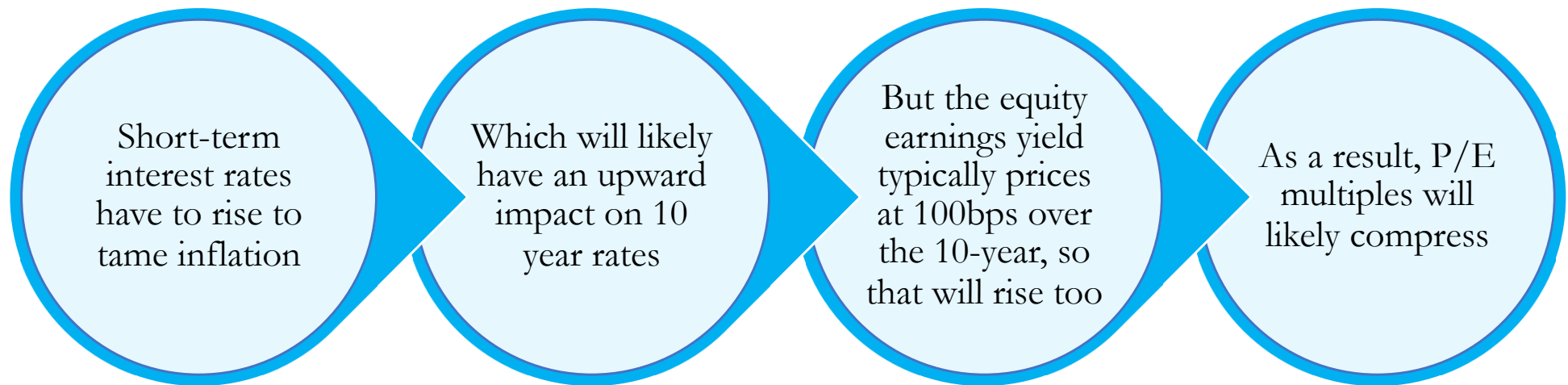
## E/P Ratio Minus 10 Year Yield

Percent, Blue = Positive Spread, Red = Negative Spread



Source: Yale Professor Robert J. Shiller, Nov 2022 Data

## WHAT DOES THIS MEAN FOR THE FUTURE?



**This is a fundamentally different paradigm than the past 40 years of declining interest rates, which led to declining earnings yields, which led to rising P/E multiples**

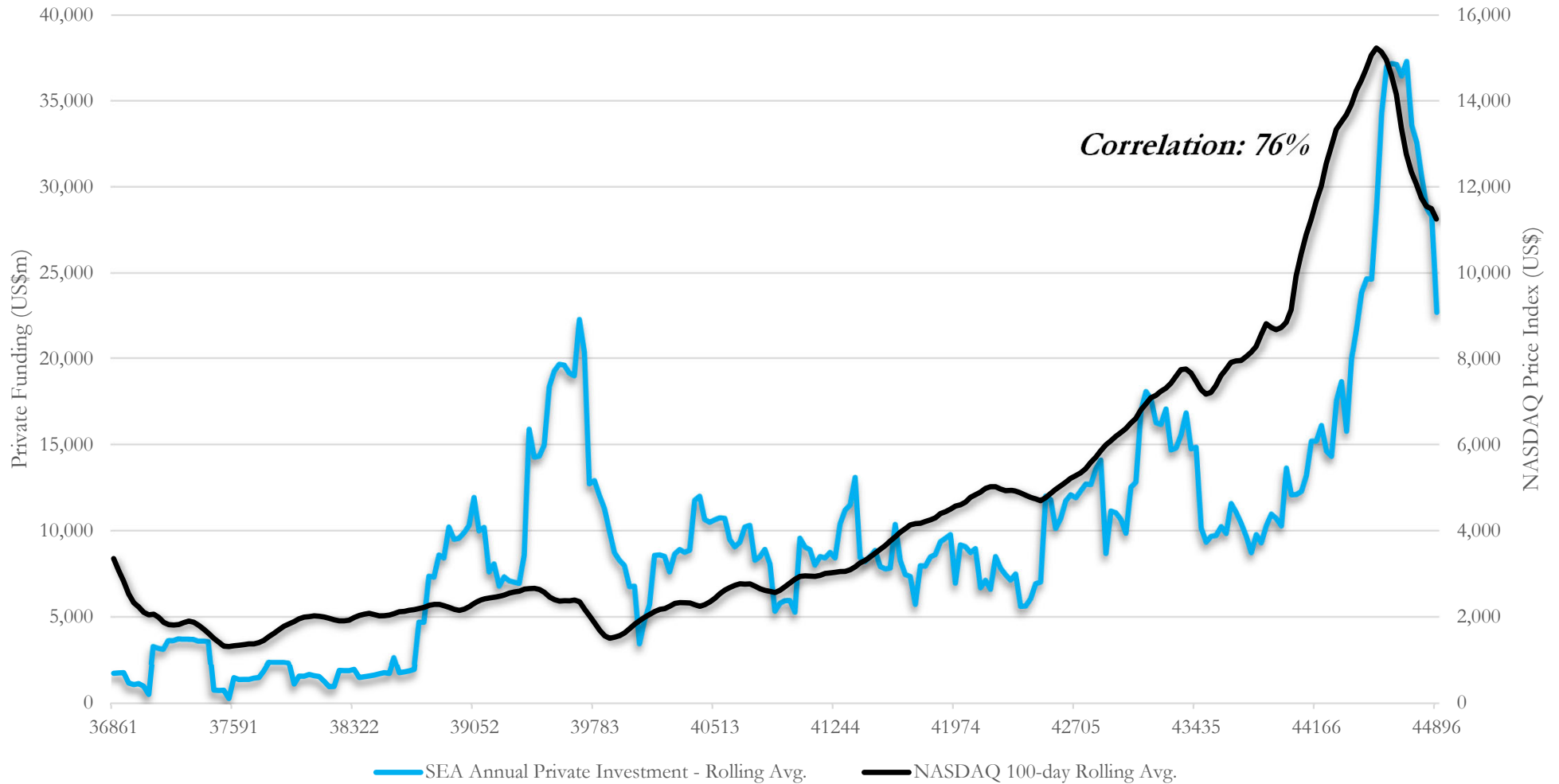
# The Return of Capital Productivity





# INVESTMENTS IN PRIVATE MARKETS ACROSS SOUTHEAST ASIA MOVE IN LINE WITH GLOBAL MARKETS, WITH A LAG

*Southeast Asia Private Investments (All sectors) vs NASDAQ Movement over last 20+ years*



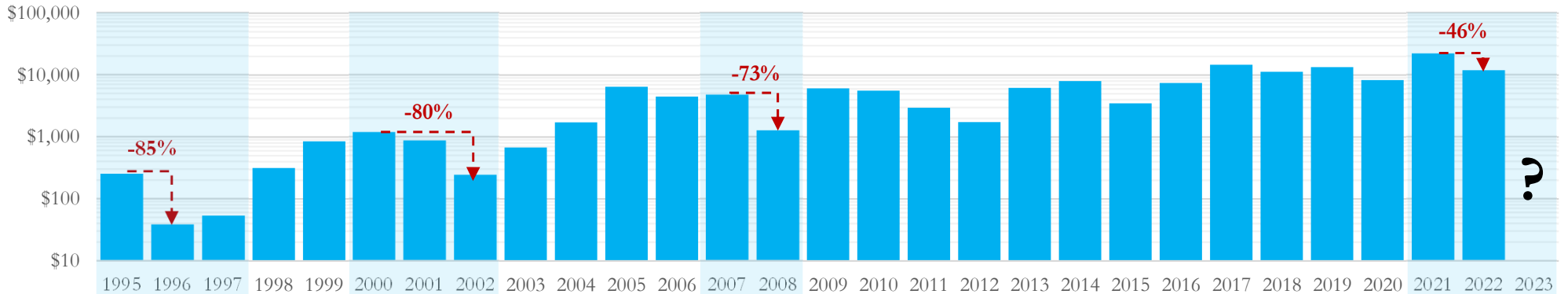
Source: S&P CapIQ, Asia Partners Analysis

# RECESSIONS FORCE COMPANIES AND CONSUMERS ALIKE TO BE MORE FRUGAL AND MORE CREATIVE

Total Private Capital Raising across Tech & Tech-enabled Sectors, All Stages of Capital

## Southeast Asia Total

\$US MM, Log Scale



## Indonesia Subset

\$US MM, Log Scale




Source: AVCJ, Asia Partners Analysis

# BACK TO BASICS: THE PUBLIC MARKETS HAVE REDISCOVERED THAT IT ISN'T GROWTH *OR* PROFITABILITY, IT'S BOTH

*Global Software Industry Valuation Metrics as of December 30, 2022*

	Average Metrics				Average CY23E Revenue Multiples
	CY22E Revenue	CY22E/21A Revenue Growth (Street)	CY22E Free Cash Flow Margin	'Rule of 40' Performance	
<b>High Growth + Profitable</b>	\$1,142MM	64%	18%	82%	<b>8.8x</b>
<b>High Growth + Unprofitable</b>	\$571MM	59%	(17%)	42%	<b>6.2x</b>
<b>Moderate Growth + Breakeven</b>	\$750MM	24%	4%	28%	<b>5.1x</b>
<b>Moderate Growth + Unprofitable</b>	\$772MM	13%	(16%)	(3%)	<b>2.6x</b>



### Methodology:

- High Growth + Profitable defined as companies with greater than 40% CY22E/21A revenue growth and positive CY22E FCF margins
- High Growth + Unprofitable defined as companies with greater than 40% CY22E/21A revenue growth and negative CY22E FCF margins
- Moderate Growth + Breakeven defined as companies with between 20% - 30% CY22E/21A revenue growth and CY22E FCF margins between 0%-10%
- Moderate Growth + Unprofitable defined as companies with less than 30% CY22E/21A revenue growth and negative CY22E FCF margins

# WHEN WILL THE IPO MARKET'S REOPEN?





# WE HAVE A FIRSTHAND PERSPECTIVE ON THIS OPPORTUNITY



**October 2017**

# DESPITE A DECLINE FROM ITS 2021 PEAK, SEA REMAINS ONE OF THE WORLD'S 100 BEST PERFORMING LARGE CAP STOCKS SINCE ITS OCTOBER 2017 IPO

*Shareholder Return from October 20, 2017 to December 30, 2022; Global Public Companies with \$20bn+ Market Cap Today*

Rank	Name	Market Cap (\$Bn)	Country	Industry	Total Return (x)	IRR (%)
1	INTL HOLDING CO PJSC	\$245	United Arab Emirates	Health Care Supply Chain	280.9x	196%
2	ENPHASE ENERGY INC	\$36	United States	Renewable Energy Equipment	193.4x	176%
3	ADANI ENTERPRISES LTD	\$53	India	Coal Mining	39.5x	103%
4	BAYAN RESOURCES TBK PT	\$45	Indonesia	Coal Mining	32.3x	95%
5	ARGENX SE	\$21	Netherlands	Biotech	15.5x	70%
6	DELTA ELECTRONICS THAI PCL	\$30	Thailand	Electrical Components	10.4x	57%
7	LI NING CO LTD	\$23	China	Specialty Apparel Stores	10.2x	56%
8	DEXCOM INC	\$43	United States	Medical Equipment	10.1x	56%
9	ADANI TRANSMISSION LTD	\$35	India	Electric Transmission & Dist	9.0x	53%
10	EVOLUTION AB	\$21	Sweden	Casinos & Gaming	8.1x	50%
11	HORIZON THERAPEUTICS PLC	\$26	United States	Biotech	8.1x	50%
12	SHANXI XINGHUACUN FEN WINE-A	\$50	China	Alcoholic Beverages	7.3x	47%
13	TRADE DESK INC/THE -CLASS A	\$22	United States	Advertising & Marketing	7.0x	46%
14	EVE ENERGY CO LTD-A	\$26	China	Renewable Energy Equipment	6.9x	45%
15	FORTESCUE METALS GROUP LTD	\$43	Australia	Iron	6.8x	45%
...						
70	ASML HOLDING NV	\$218	Netherlands	Semiconductor Mfg	3.2x	25%
71	<b>SEA LTD-ADR</b>	<b>\$30</b>	<b>Singapore</b>	<b>Online Marketplace</b>	<b>3.2x</b>	<b>25%</b>
72	HERMES INTERNATIONAL	\$163	France	Apparel, Footwear & Acc Design	3.2x	25%
73	ENBW ENERGIE BADEN-WUERTEMBERG	\$25	Germany	Power Generation	3.2x	25%
74	CINTAS CORP	\$46	United States	Other Commercial Support Svcs	3.2x	25%
75	NESTE OYJ	\$35	Finland	Refining & Marketing	3.1x	25%
76	PROGRESSIVE CORP	\$76	United States	P&C Insurance	3.1x	25%
77	MOTOROLA SOLUTIONS INC	\$43	United States	Communications Equipment	3.1x	24%
78	SERVICENOW INC	\$79	United States	Infrastructure Software	3.1x	24%
79	ON SEMICONDUCTOR	\$27	United States	Semiconductor Devices	3.1x	24%
80	HCA HEALTHCARE INC	\$68	United States	Health Care Facilities	3.1x	24%



*Source: Bloomberg*

*Note: Total return for each company is in local currency, based on the exchange*



# AND RELATIVE TO OTHER IPOs IN RECENT YEARS, SEA HAS BEEN ONE OF THE BEST PERFORMING LARGE CAP STOCKS

## Offer-to-Date Performance: All Industries

*All Global IPOs since January 2017 Across All Industries, \$20bn+ Current Market Cap*

Rank	Name	Country	Industry	Total Return (x)
1	CONTEMPORARY AMPEREX TECHNOLOGY	China	Auto Parts	15.6x
2	WUXI BIOLOGICS CAYMAN INC	China	Healthcare	8.7x
3	IMEIK TECHNOLOGY DEVELOPMENT C	China	Pharmaceuticals	8.6x
4	MODERNA INC	United States	Biotechnology	7.8x
5	AVANTOR INC	United States	Healthcare	7.5x
6	LOMA NEGRA CIA INDUSTRIAL ARGE	Argentina	Building Materials	7.2x
7	SHENZHEN MINDRAY BIO-MEDICAL E	China	Healthcare	6.5x
8	GULF ENERGY DEVELOPMENT PCL	Thailand	Energy	6.2x
9	BEIJING KINGSOFT OFFICE SOFTWA	China	Software	5.8x
10	ADYEN NV	Netherlands	Payments	5.4x
11	DR SULAIMAN AL HABIB MEDICAL S	Saudi Arabia	Healthcare	4.4x
12	PINDUODUO INC	China	Internet	4.3x
13	CHINA RESOURCES MICROELECTRONI	China	Semiconductors	4.1x
14	BJ'S WHOLESALE CLUB HOLDINGS I	United States	Retail	3.9x
15	EMPYREAN TECHNOLOGY CO LTD	China	Software	3.5x
16	SEA LTD	Singapore	Internet	3.5x
17	JINKO SOLAR CO LTD	China	Energy	3.4x
18	EQT AB	Sweden	Private Equity	3.3x
19	CROWDSTRIKE HOLDINGS INC	United States	Computers	3.1x
20	CERIDIAN HCM HOLDING INC	United States	Software	3.1x
21	HUANENG LANCIANG RIVER HYDROPOW	China	Energy	3.0x
22	YUNENG TECHNOLOGY CO LTD	China	Energy	3.0x
23	CLOUDFLARE INC	United States	Software	3.0x
24	CERIDIAN HCM HOLDING INC	United States	Software	2.9x
25	FOOD & LIFE COS LTD	Japan	Retail	2.9x

## Offer-to-Date Performance: Technology Sector

*All Global IPOs since January 2017 in the Technology Sector, \$20bn+ Current Market Cap*

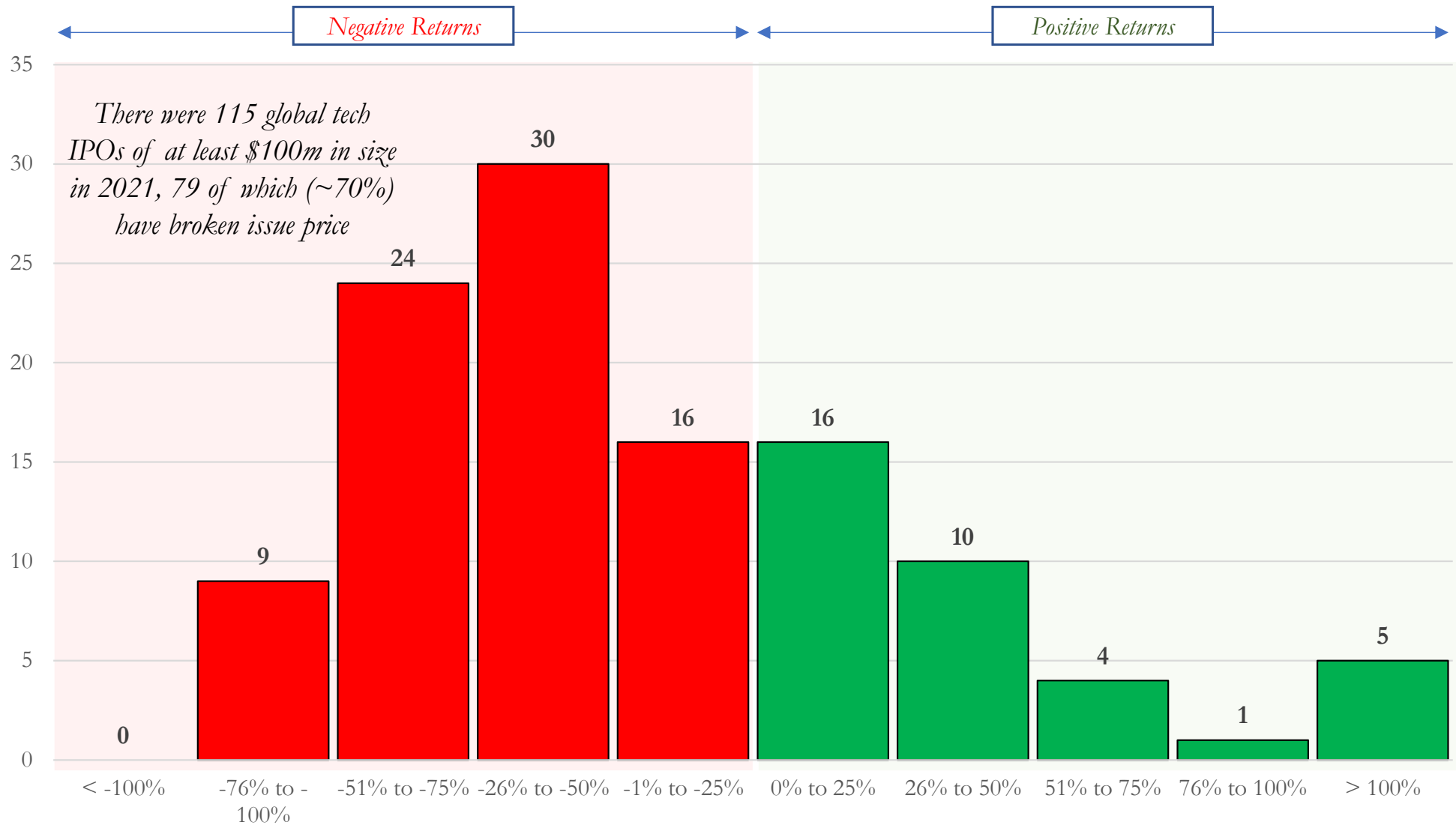
Rank	Name	Country	Total Return (x)
1	BEIJING KINGSOFT OFFICE SOFTWA	China	5.8x
2	PINDUODUO INC	China	4.3x
3	CHINA RESOURCES MICROELECTRONI	China	4.1x
4	EMPYREAN TECHNOLOGY CO LTD	China	3.5x
5	SEA LTD	Singapore	3.5x
6	CROWDSTRIKE HOLDINGS INC	United States	3.1x
7	CERIDIAN HCM HOLDING INC	United States	3.1x
8	CLOUDFLARE INC	United States	3.0x
9	CERIDIAN HCM HOLDING INC	United States	2.9x
10	AVAST PLC	Czech	2.9x
11	DATADOG INC	United States	2.7x
12	ELM CO	Saudi Arabia	2.6x
13	MEITUAN	China	2.5x
14	DYNATRACE INC	United States	2.4x
15	KASPI.KZ JSC	Kazakhstan	2.1x
16	CHANGE HEALTHCARE INC	United States	2.1x
17	SWITCH INC	United States	2.0x
18	DOCUSIGN INC	United States	1.9x
19	NETCOMPANY GROUP A/S	Denmark	1.9x
20	ZOOM VIDEO COMMUNICATIONS INC	United States	1.9x
21	GUIZHOU ZHENHUA FENGGUANG SEMI	China	1.8x
22	HWATSING TECHNOLOGY CO LTD	China	1.8x
23	DELIVERY HERO SE	Germany	1.8x
24	PARSONS CORP	United States	1.7x
25	CHEWY INC	United States	1.7x

Source: Bloomberg, December 2022

Note: Total return for each company is in local currency, based on the exchange

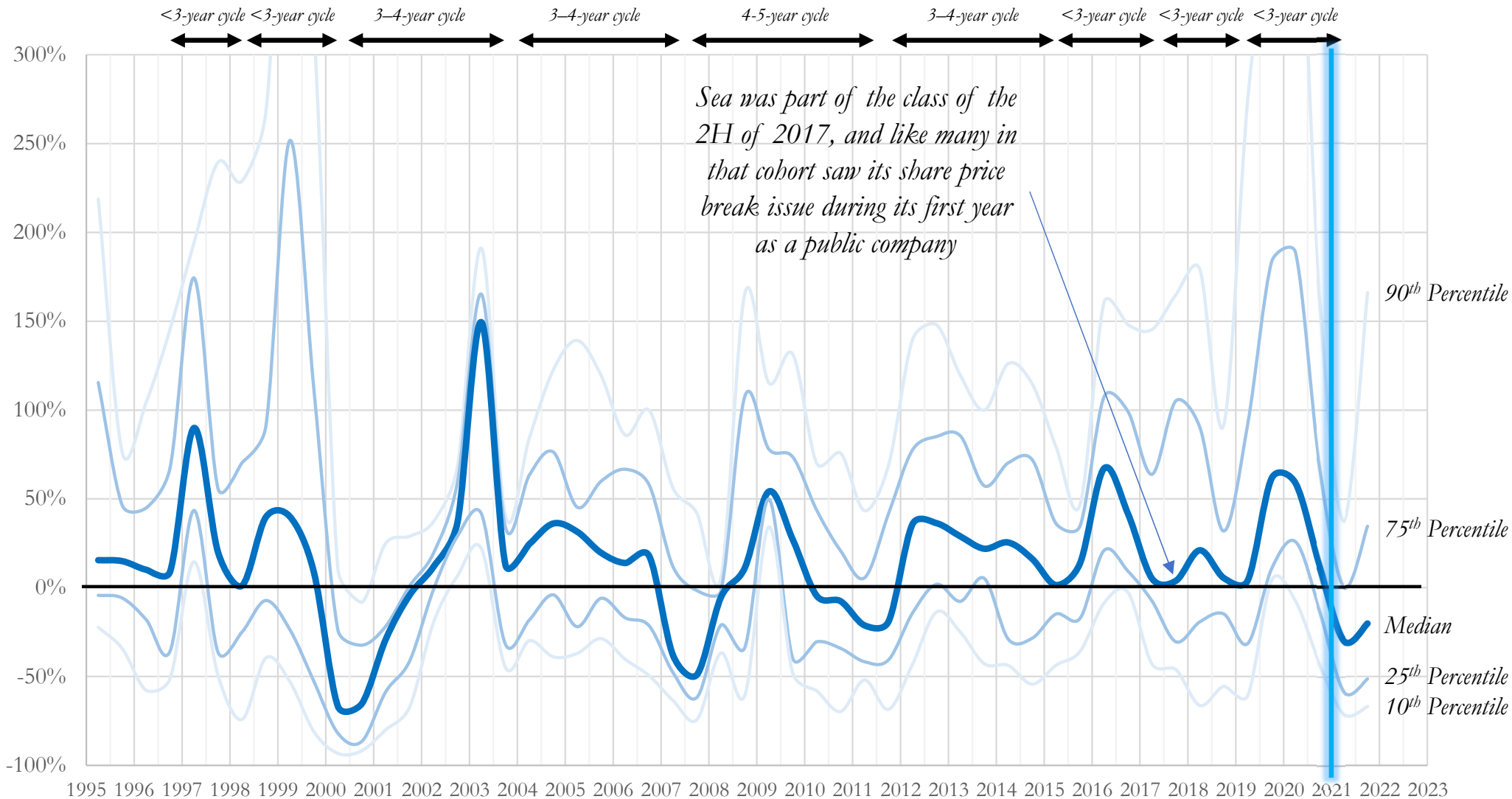
# IN CONTRAST TO SEA'S 2017 IPO, MOST 2021 IPOs HAVE UNDERPERFORMED IN THE AFTERMARKET

1-year Return for Global Tech IPOs in 2021 of at least \$100M in Offer Size, Tech and Telcos Only



# BUT THIS IS NOT ENTIRELY SURPRISING – THE AFTERMARKET PERFORMANCE OF IPOs FOLLOWS A 3-4 YEAR CYCLE

One Year Post-IPO Aftermarket Performance of Global Tech IPOs (10<sup>th</sup> Percentile, 25<sup>th</sup>, Median, 75<sup>th</sup>, and 90<sup>th</sup> Percentiles)

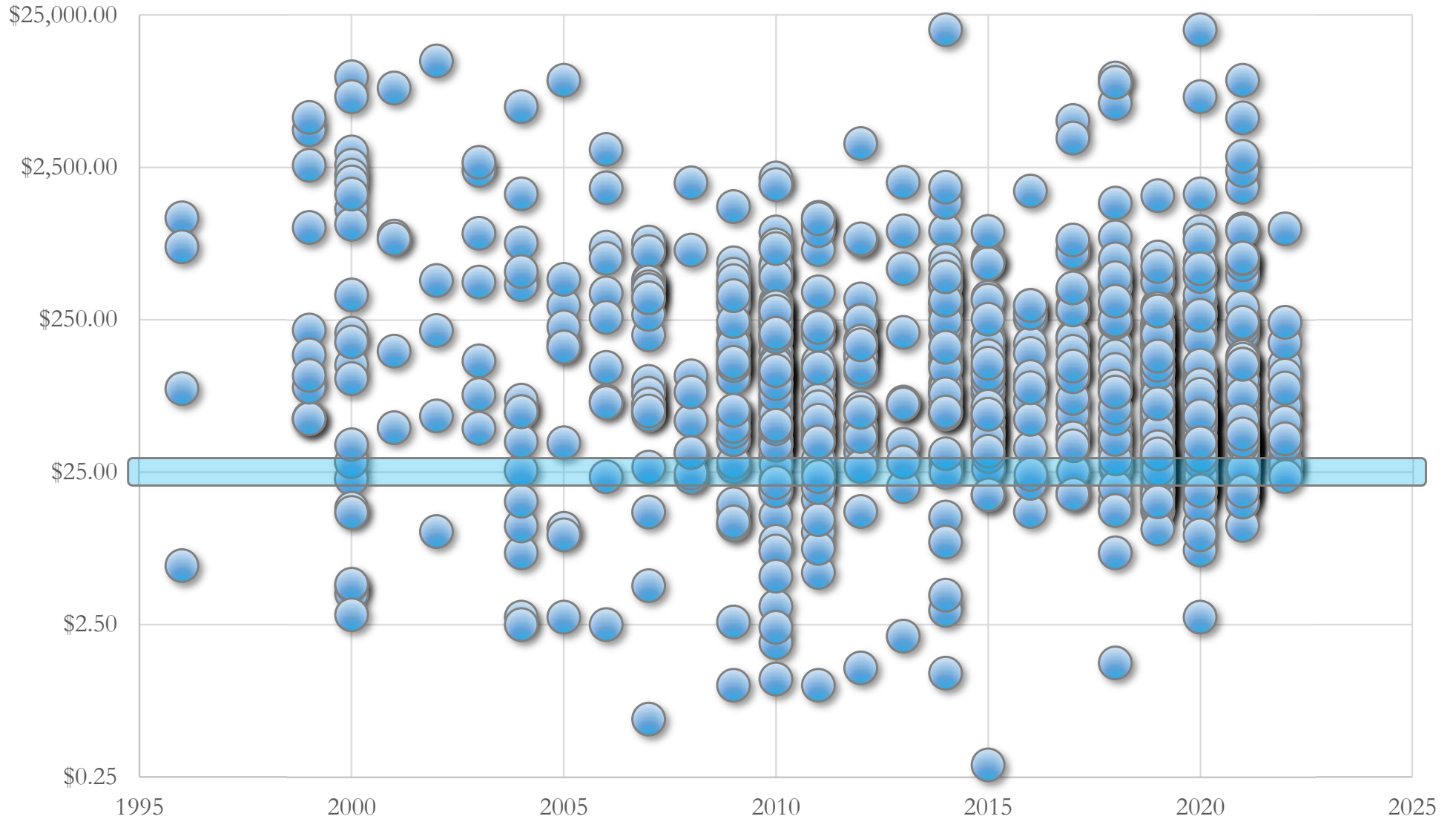


Note: Data shown is for the next 12 months, biannually  
 Source: Bloomberg, Asia Partners Analysis

# “The Rule of 25”

# ALL IPOs FROM EMERGING ASIA: GROSS PROFITS FOR MOST RECENT CURRENT FISCAL YEAR

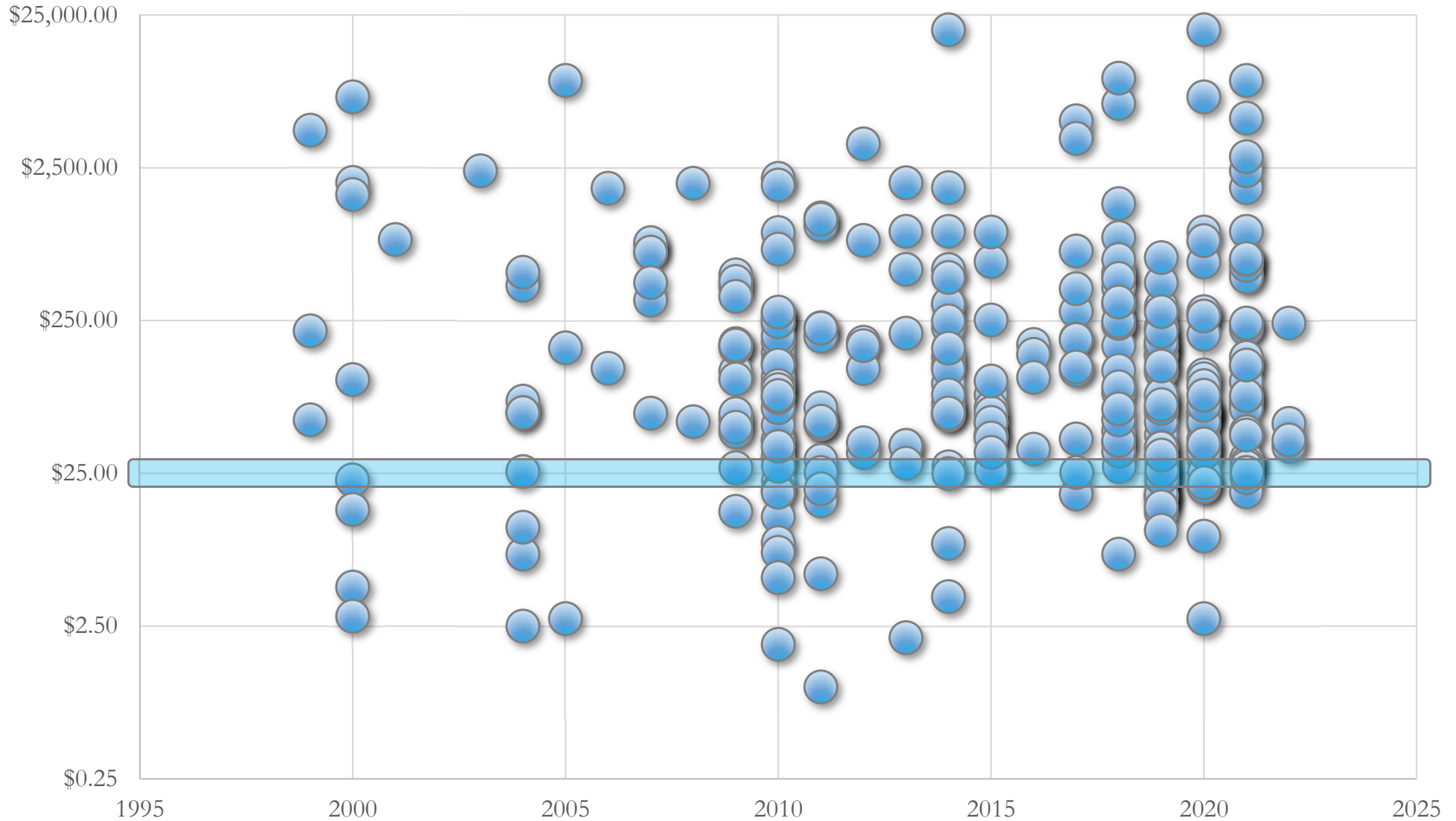
1999-2020 YTD IPOs, by Year; Includes Only IPOs Raising \$50M or More; All Exchanges



Source: Bloomberg, Asia Partners Analysis

# ALL INTERNET AND SOFTWARE IPOs FROM EMERGING ASIA: GROSS PROFITS FOR MOST RECENT CURRENT FISCAL YEAR

1999-2020 YTD IPOs, by Year; Includes Only IPOs Raising \$50M or More; All Exchanges



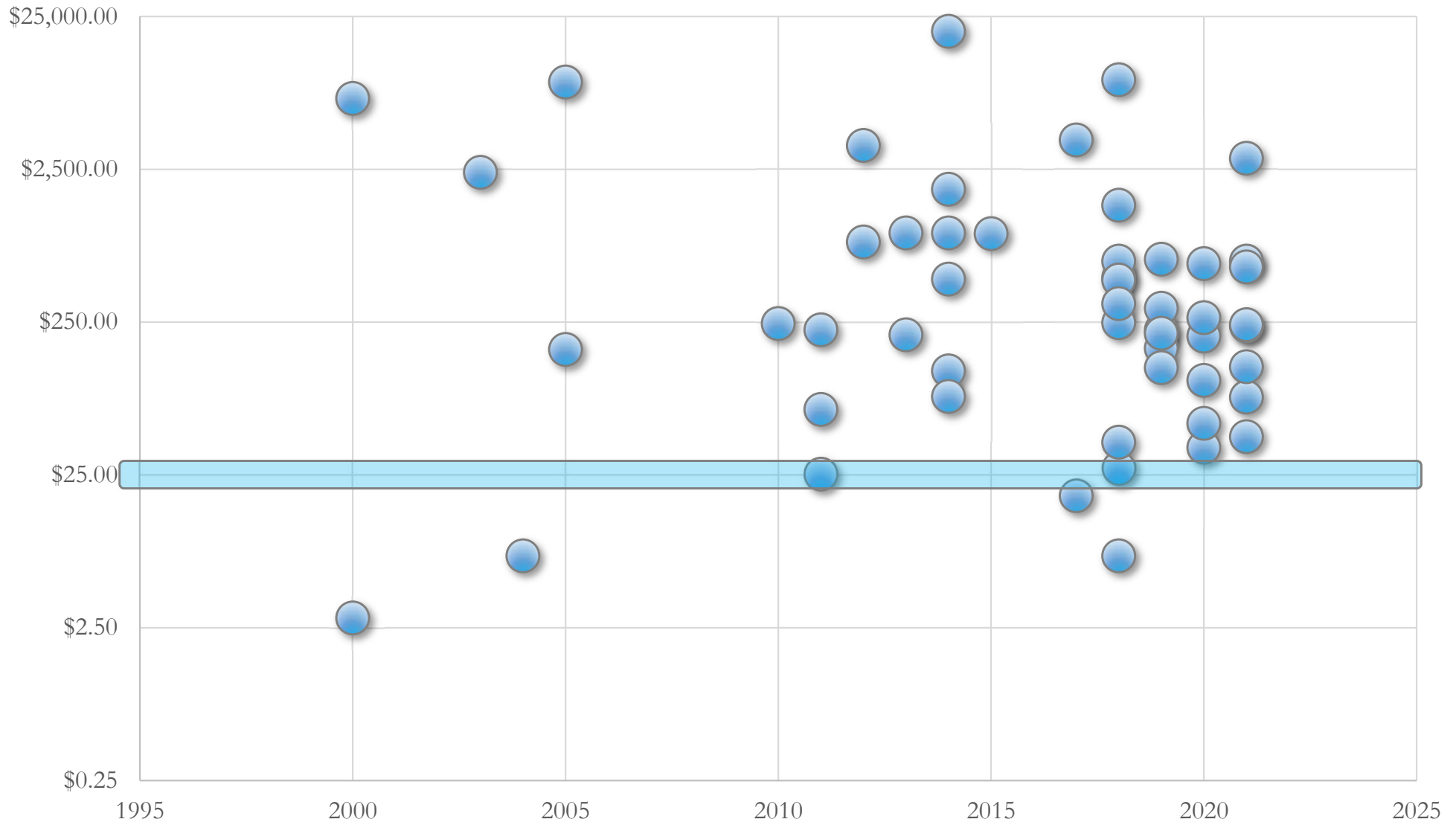
Source: Bloomberg, Asia Partners Analysis



# ALL INTERNET AND SOFTWARE IPOs FROM EMERGING ASIA IN THE U.S.: GROSS PROFITS FOR MOST RECENT CURRENT FY



1999-2020 YTD IPOs, by Year; Includes Only IPOs Raising \$50M or More; Only US Exchanges

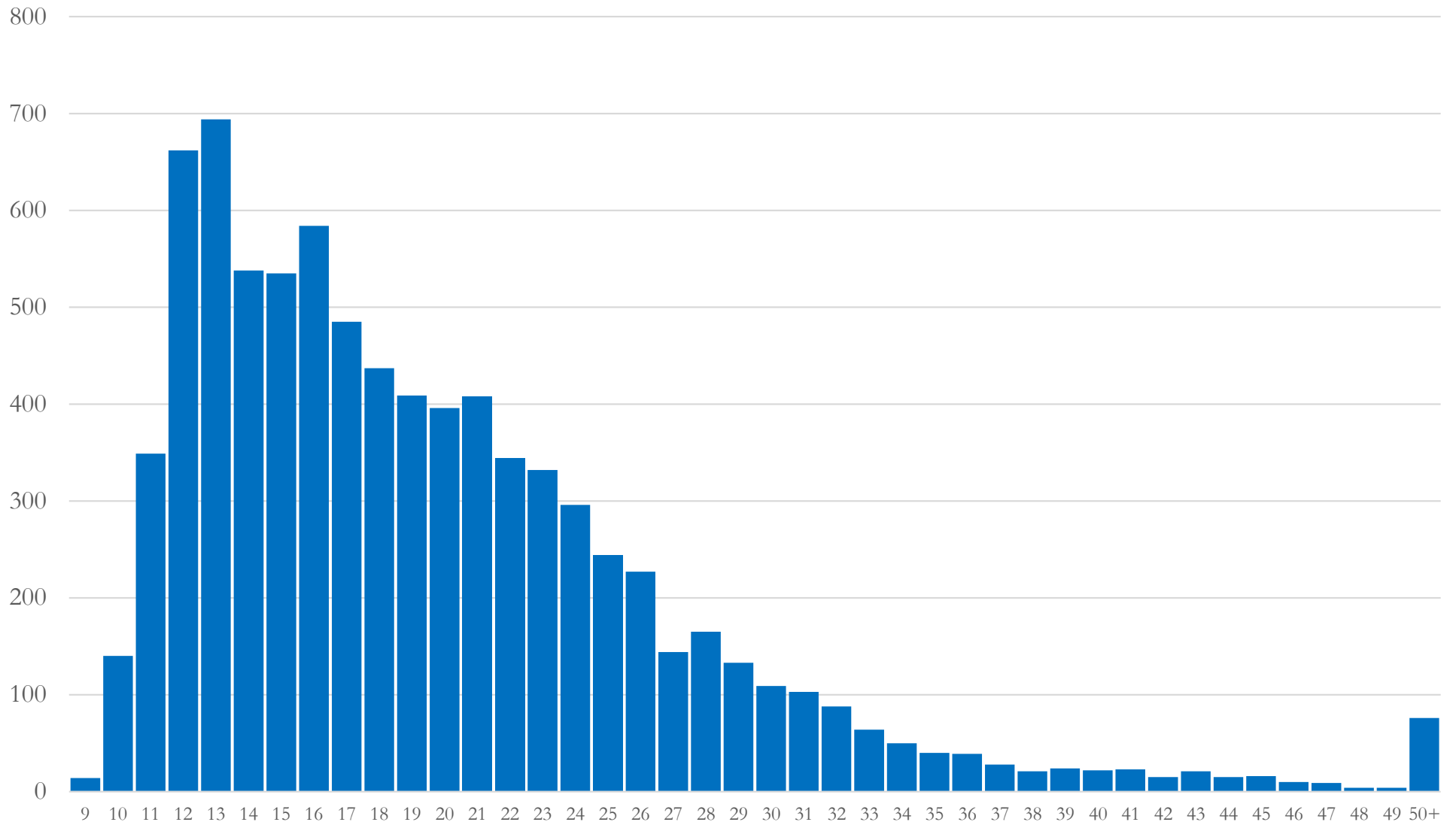


Source: Bloomberg, Asia Partners Analysis

# “The Second Rule of 25”

# THE VIX HISTOGRAM: THE 'SHAPE OF CAPITAL MARKETS FEAR'

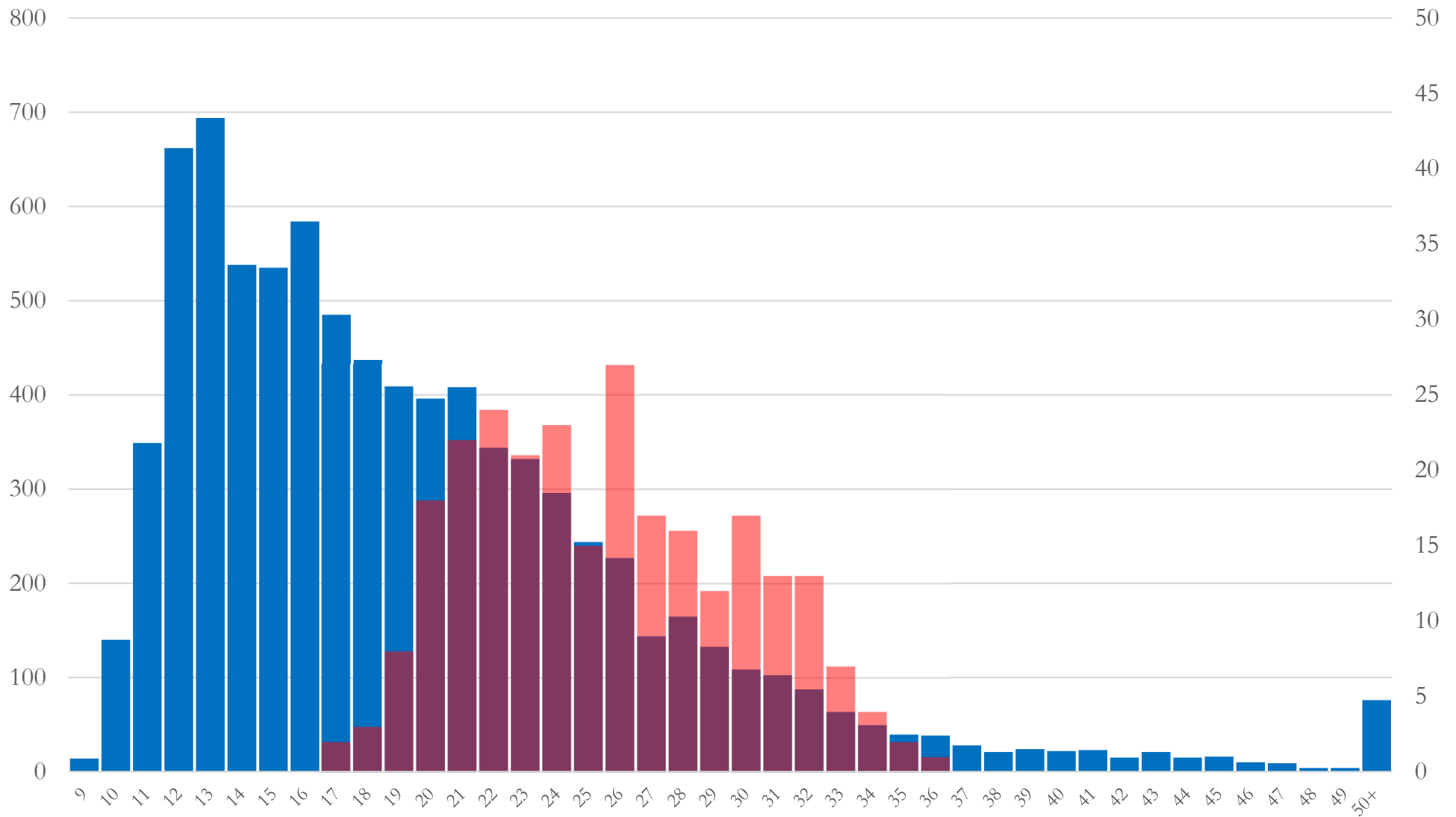
*Number of Trading Days at Each VIX Level Since January 1990*



*Source: Bloomberg as of December 2022, Asia Partners Analysis*

# SINCE THE BEGINNING OF 2022, THE VIX HAS BEEN ELEVATED

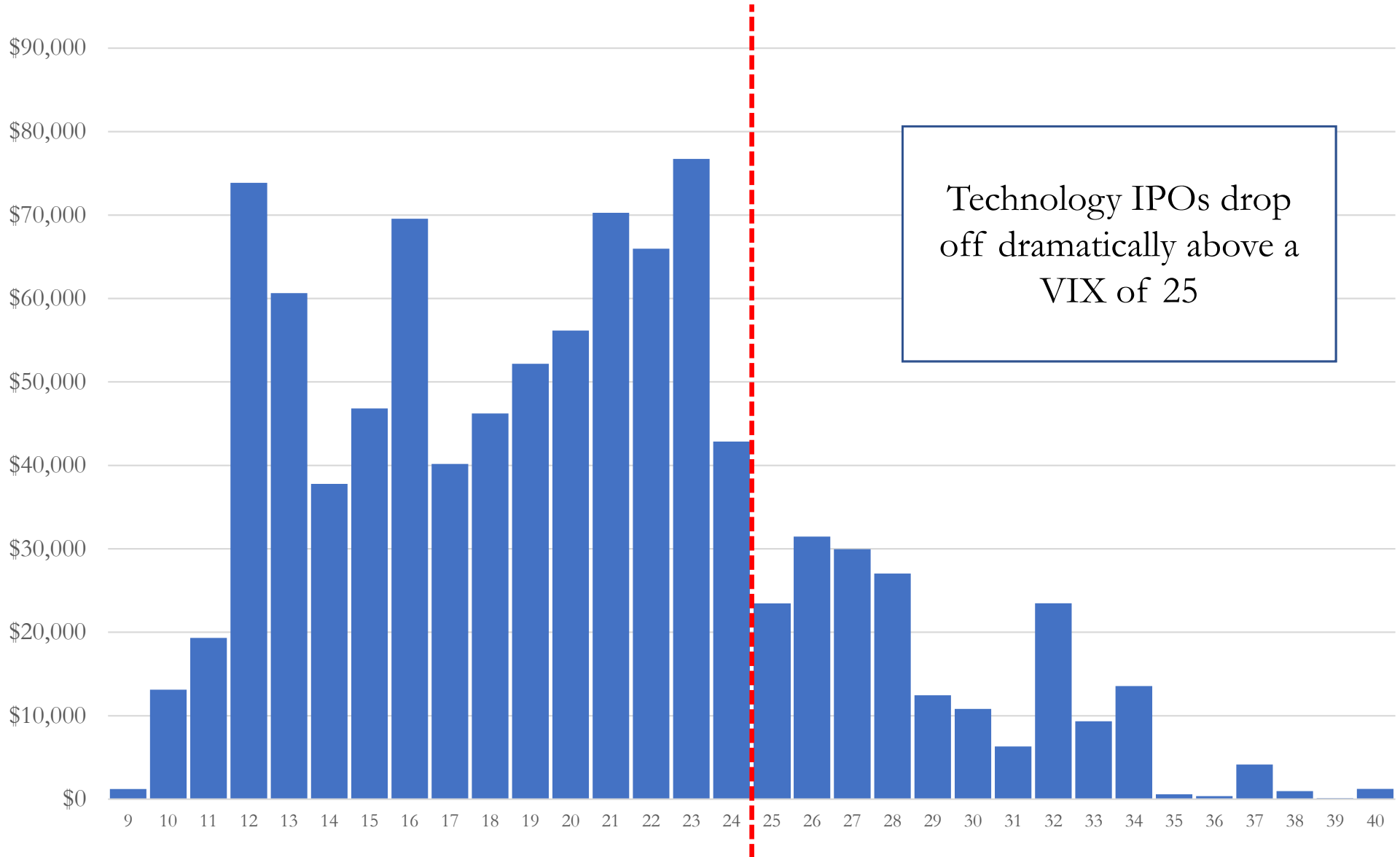
Number of Trading Days at Each VIX Level *Since January 1990* (Left Hand Axis) and *Since January 2022* (Right Hand)



Source: Bloomberg and Google Finance as of January 13, 2023; Asia Partners Analysis

# CAPITAL RAISED IN TECH IPOs DEPENDING ON THE VIX ON DAY OF PRICING

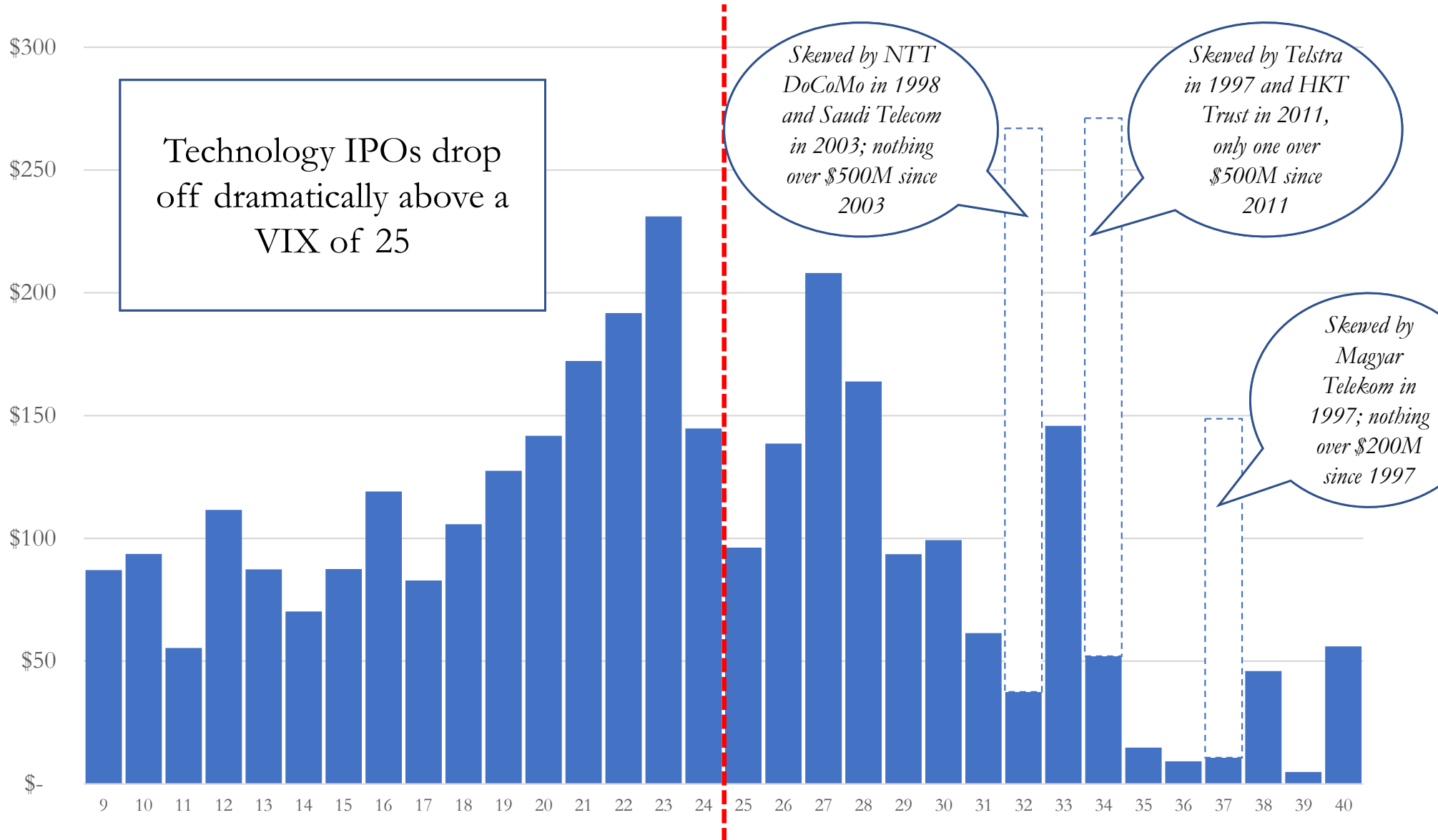
*\$US MM, All Global Tech IPOs Since January 1990 of at least \$100M in Size*



*Source: Bloomberg as of December 2022, Asia Partners Analysis*

# CAPITAL RAISED IN TECH IPOs *PER DAY*, DEPENDING ON THE VIX

*\$US MM, All Global Tech IPOs Since January 1990 of at least \$100M in Size, Normalizing for Frequency of VIX at Each Level*



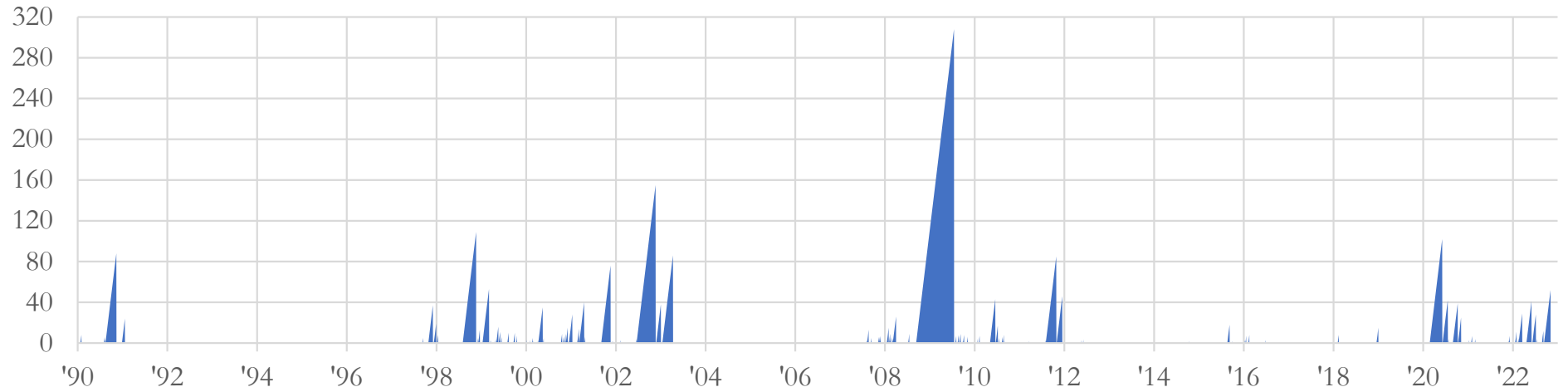
Source: Bloomberg as of December 2022, Asia Partners Analysis



**“How long can the  
VIX stay above 25?”**

# NUMBER OF CUMULATIVE DAYS VIX EXCEEDED 25 SINCE 1990

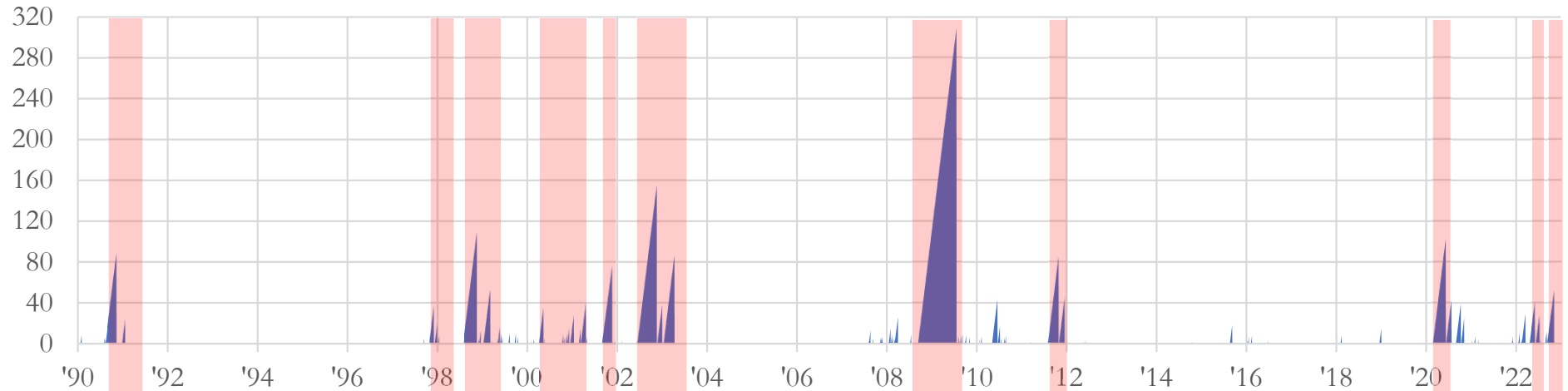
*Calendar Days, Interpolating for Weekends and Public Holidays*



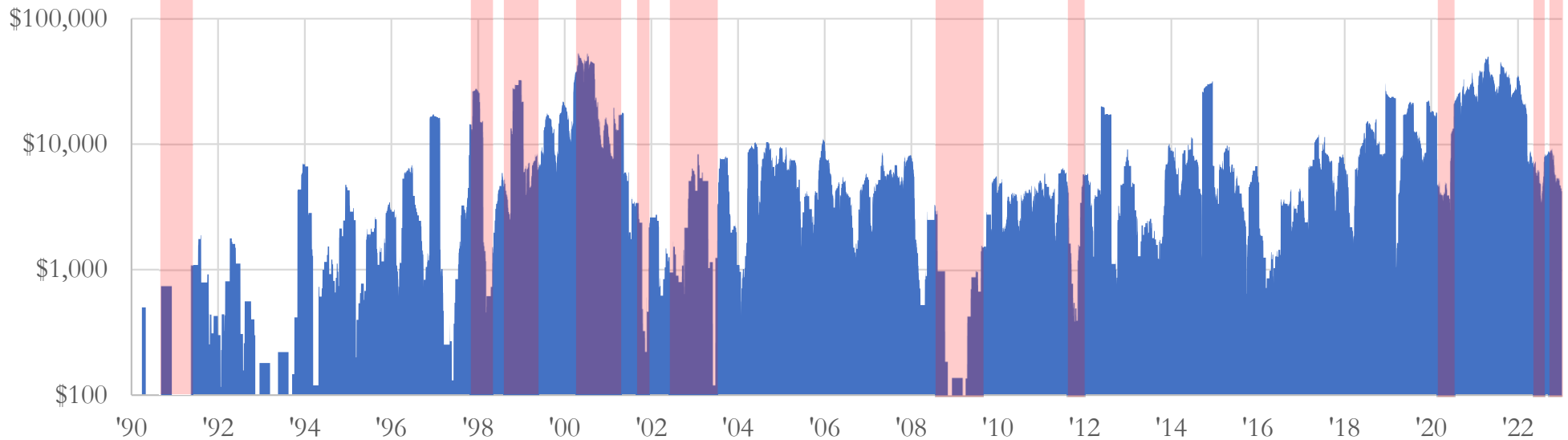
*Source: Bloomberg, Asia Partners Analysis*

# ...WHICH OVERLAPS FAIRLY WELL WITH IPO 'DRY PATCHES'

## Number Of Cumulative Calendar Days VIX Exceeded 25 Since 1990



## Rolling Last 90 Day Capital Raised in Global Tech IPOs (Log Scale)



Source: Bloomberg, Asia Partners Analysis

*Southeast Asia's Moment*

**The Case for Southeast Asia in a Global Portfolio**

*Plan vs. Actual*

**Revisiting Our Predictions from 2019**

*You are What You Eat*

**Talent Flows in Southeast Asia's Innovation Ecosystem**

*The Elephant in the Room*

**Where Are We in the Macro Cycle? When will IPOs Return?**

*Around the World in 47 Charts*

**Where and When Does GDP Growth Actually Lead to Value Creation?**

*To Each Their Own*

**Regional Specialization in Building TMT Equity Value**

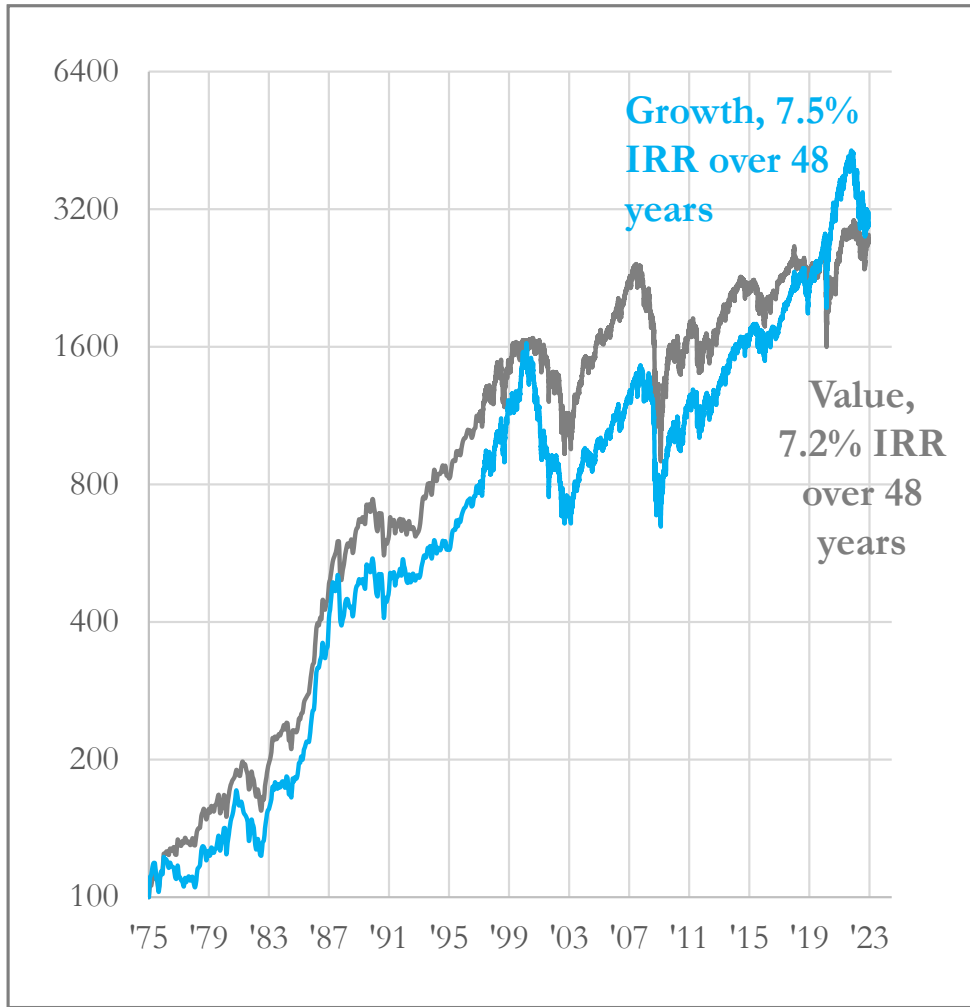
*A Few Final Thoughts for the 2020s-2030s*

# THE LEXICON OF ASSET MANAGEMENT IS FULL OF PLAUSIBLE, BUT PERHAPS OVERLY SIMPLISTIC, DICHOTOMIES

## Growth vs. Value

MSCI World Growth Index vs. MSCI World Value Index

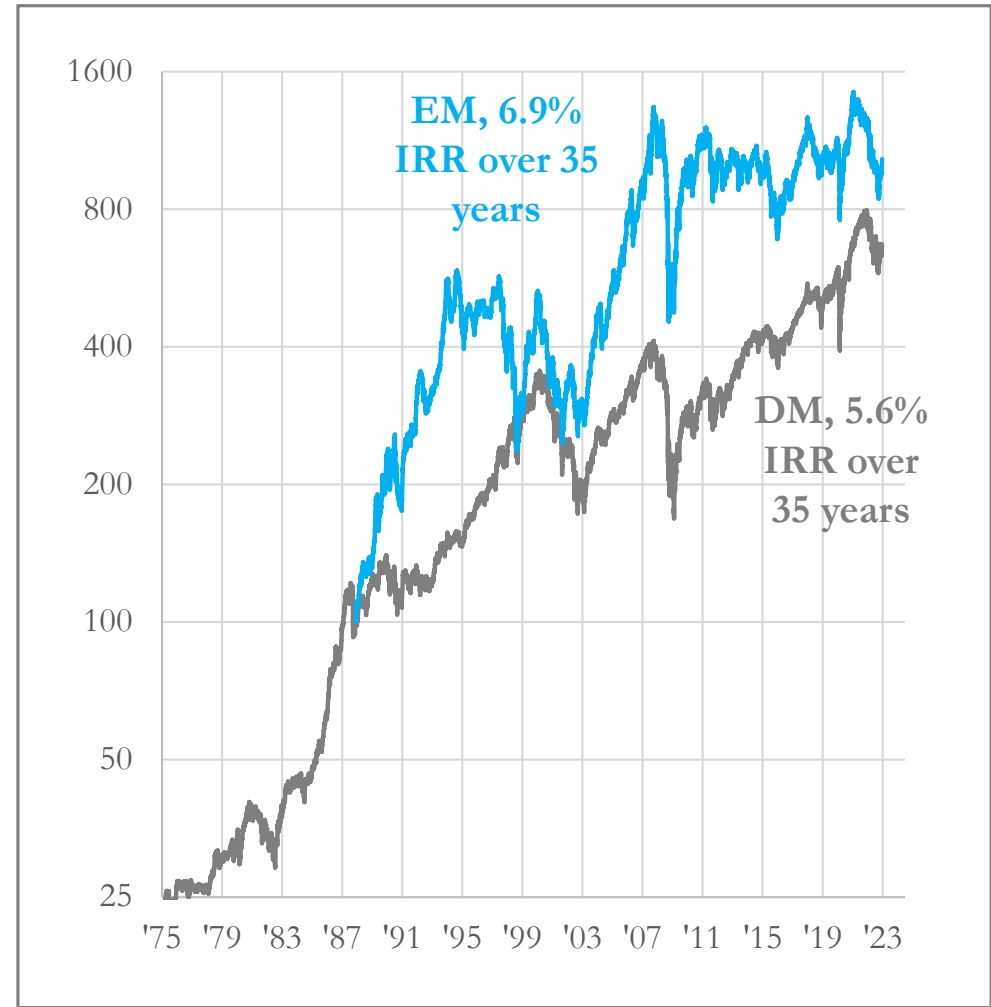
Jan 1975 = 100, \$US Terms, Log Axis



## Developed vs. Emerging Markets (DM vs EM)

MSCI World<sup>(a)</sup> Index vs. MSCI Emerging Market Index

Dec 1987 = 100, \$US Terms, Log Axis



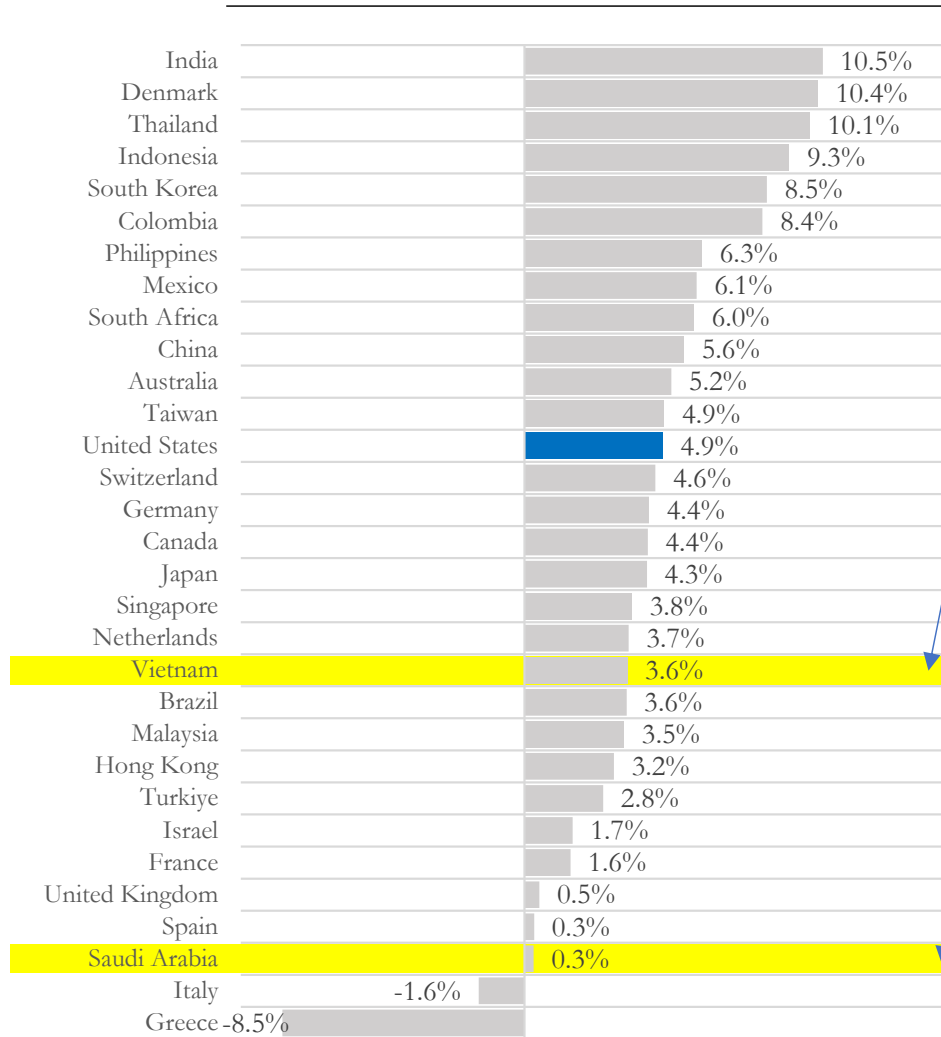
(a) Counterintuitively, the MSCI World Index only includes developed markets. It is the MSCI All-Country World Index that includes both DM and EM.

Source: Bloomberg, Jan 2023

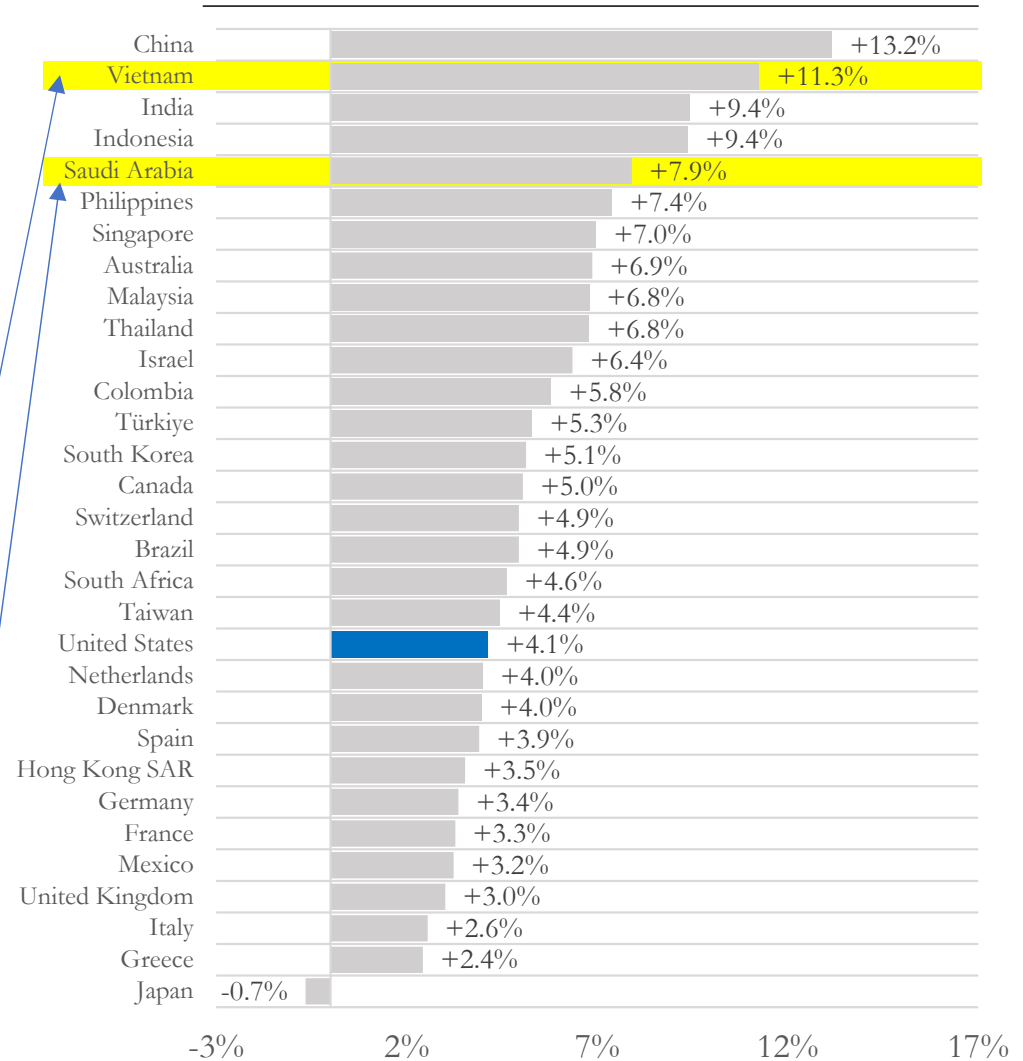
# THOSE FRAMEWORKS DON'T CAPTURE WHY SOME HIGH GROWTH COUNTRIES HAVE HISTORICALLY HAD LOW RETURNS

2000-2022 Data, \$US Terms; USA Highlighted in Dark Blue

### Nominal Equity IRR Over 22 Years



### Nominal GDP growth Over 22 Years



Note: Includes not just companies traded in home country, but also companies traded on international exchanges

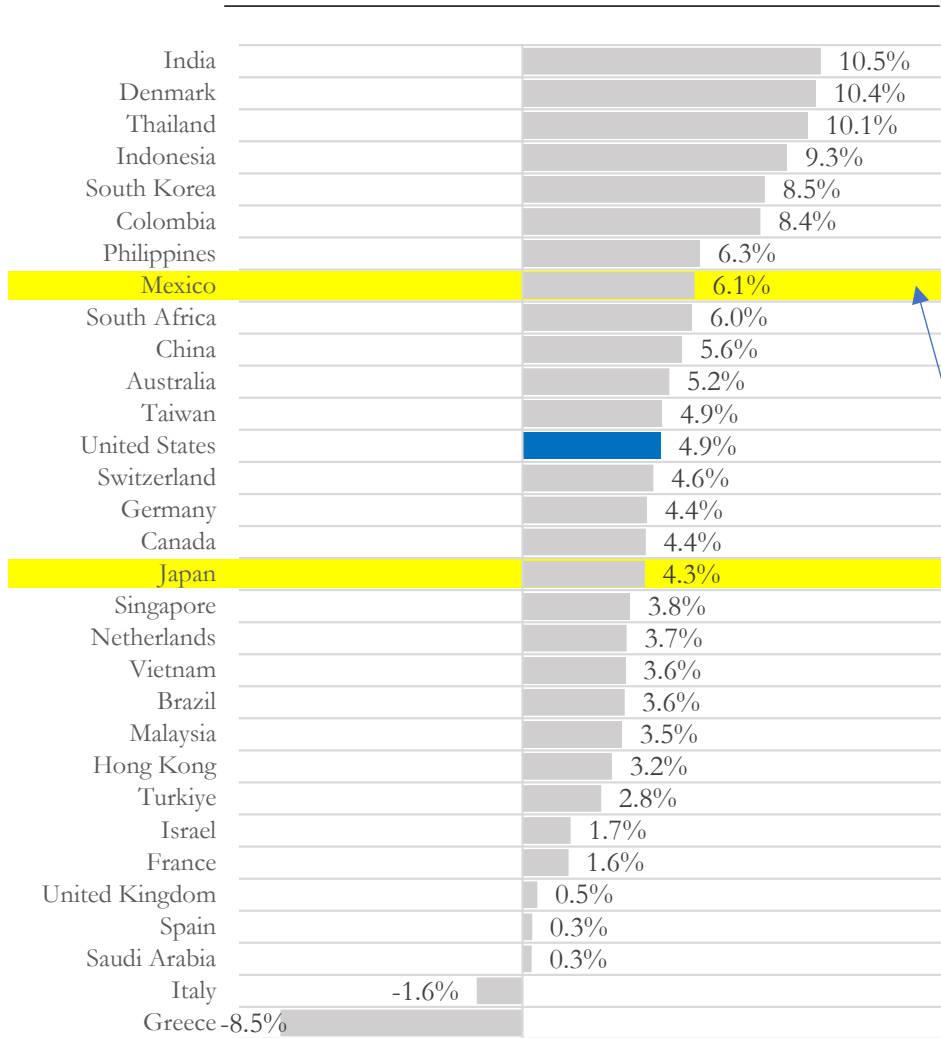
Source: World Bank, Bloomberg, Asia Partners Analysis



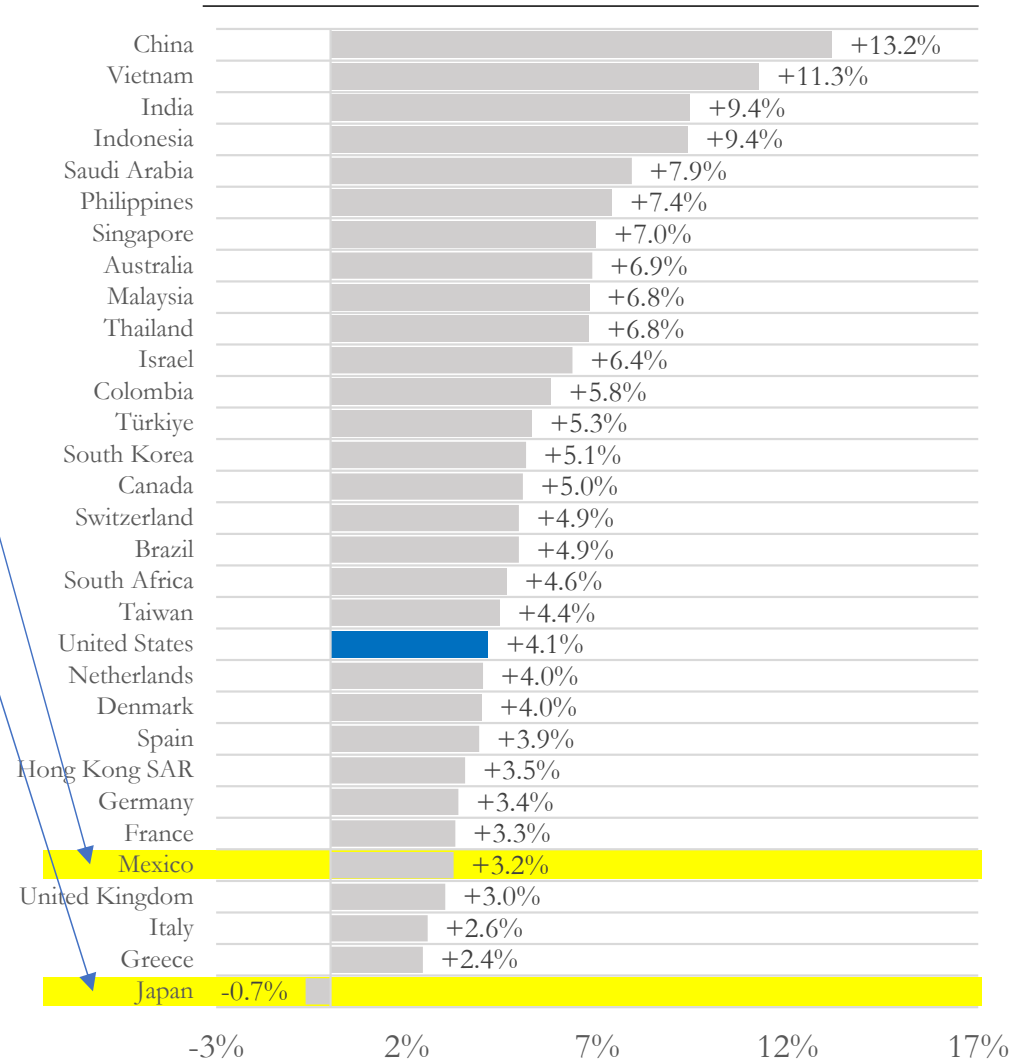
# AND, IN CONTRAST, WHY SOME LOW GDP GROWTH COUNTRIES GENERATE SURPRISINGLY HIGH EQUITY RETURNS

2000-2022 Data, \$US Terms; USA Highlighted in Dark Blue

### Nominal Equity IRR Over 22 Years



### Nominal GDP growth Over 22 Years

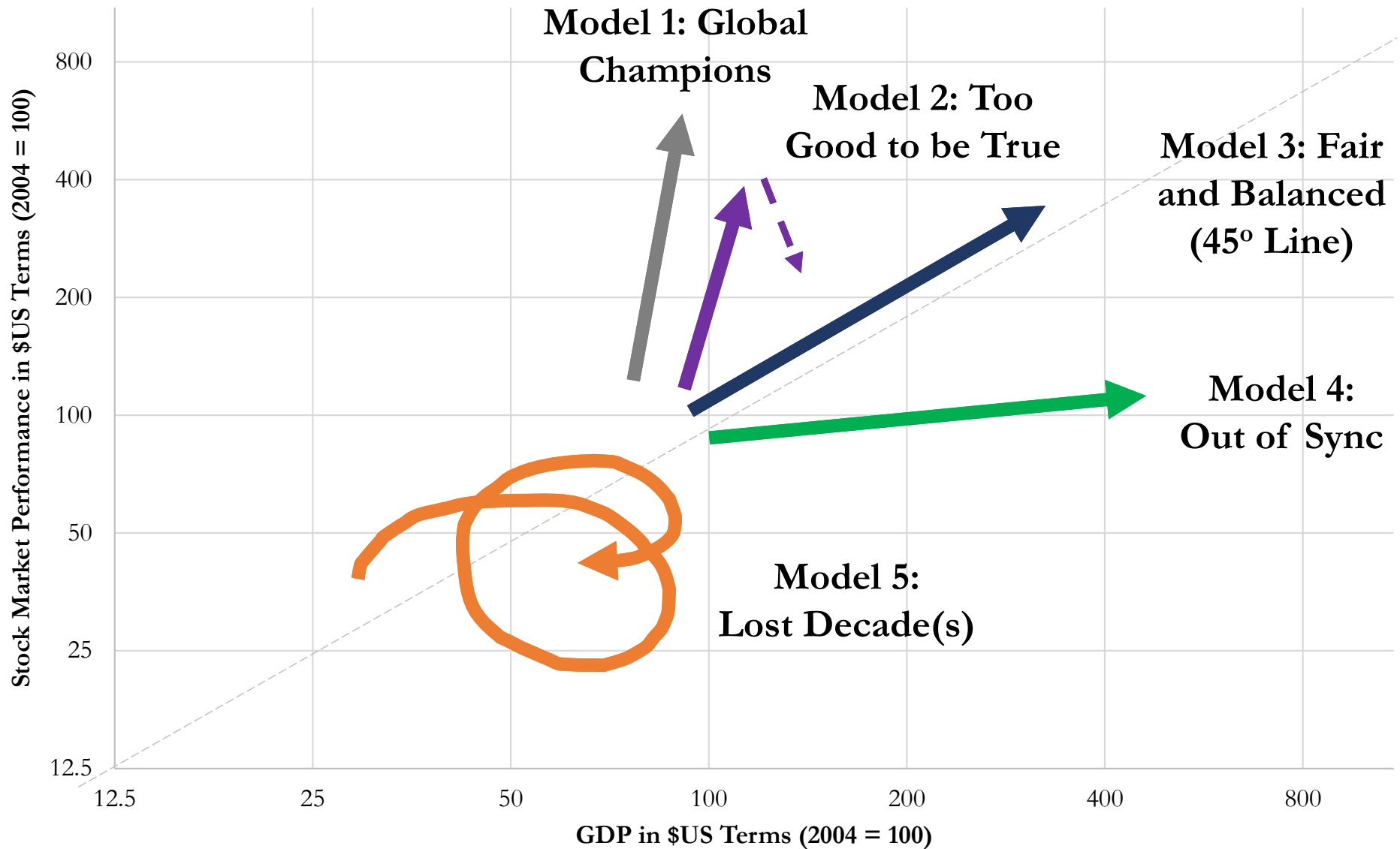


Note: Includes not just companies traded in home country, but also companies traded on international exchanges

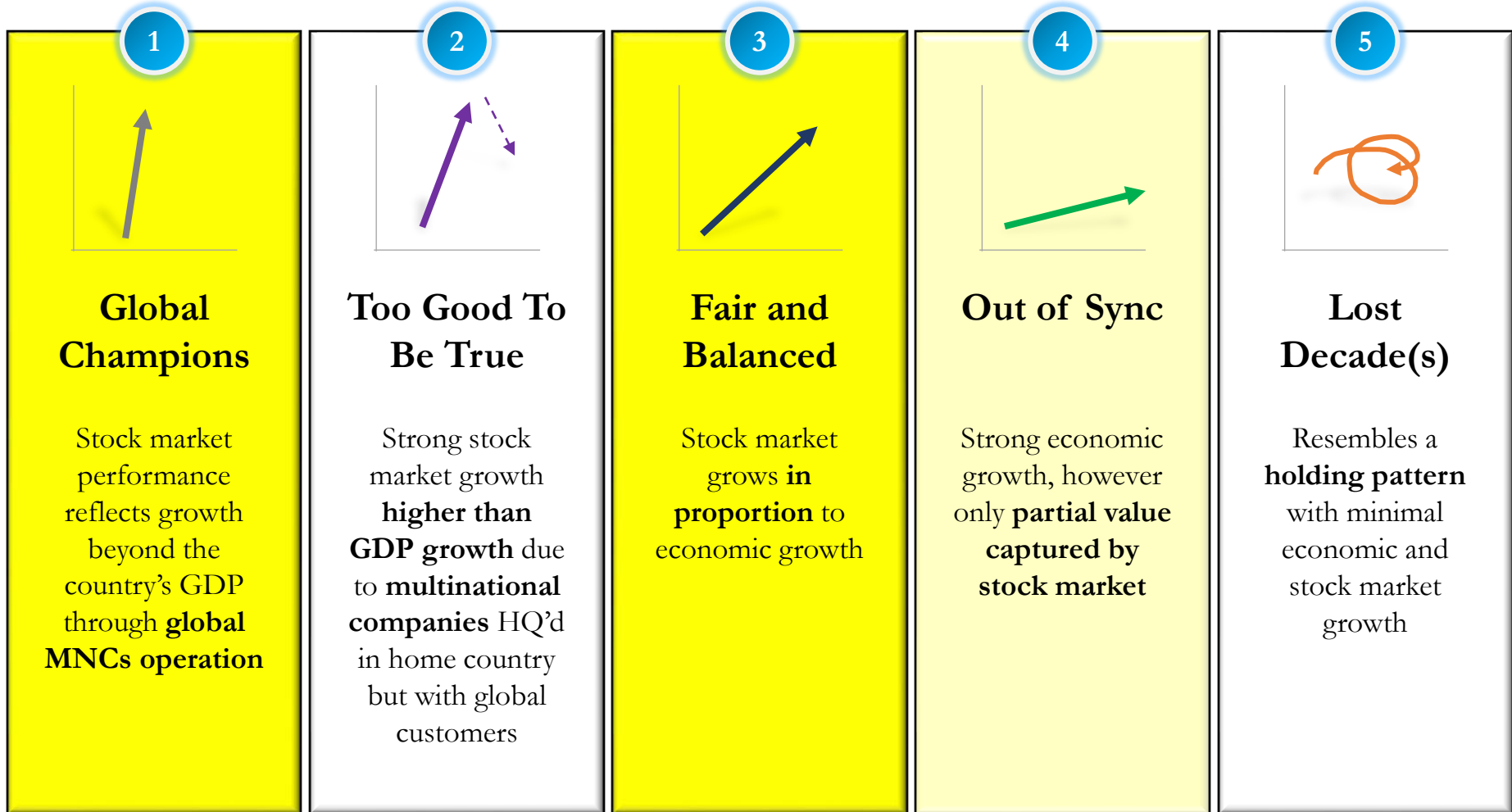
Source: World Bank, Bloomberg, Asia Partners Analysis

# THERE IS AN INTERESTING RELATIONSHIP BETWEEN GDP GROWTH AND EQUITY RETURNS, WITH 5 MODELS

*Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1995 –2022*



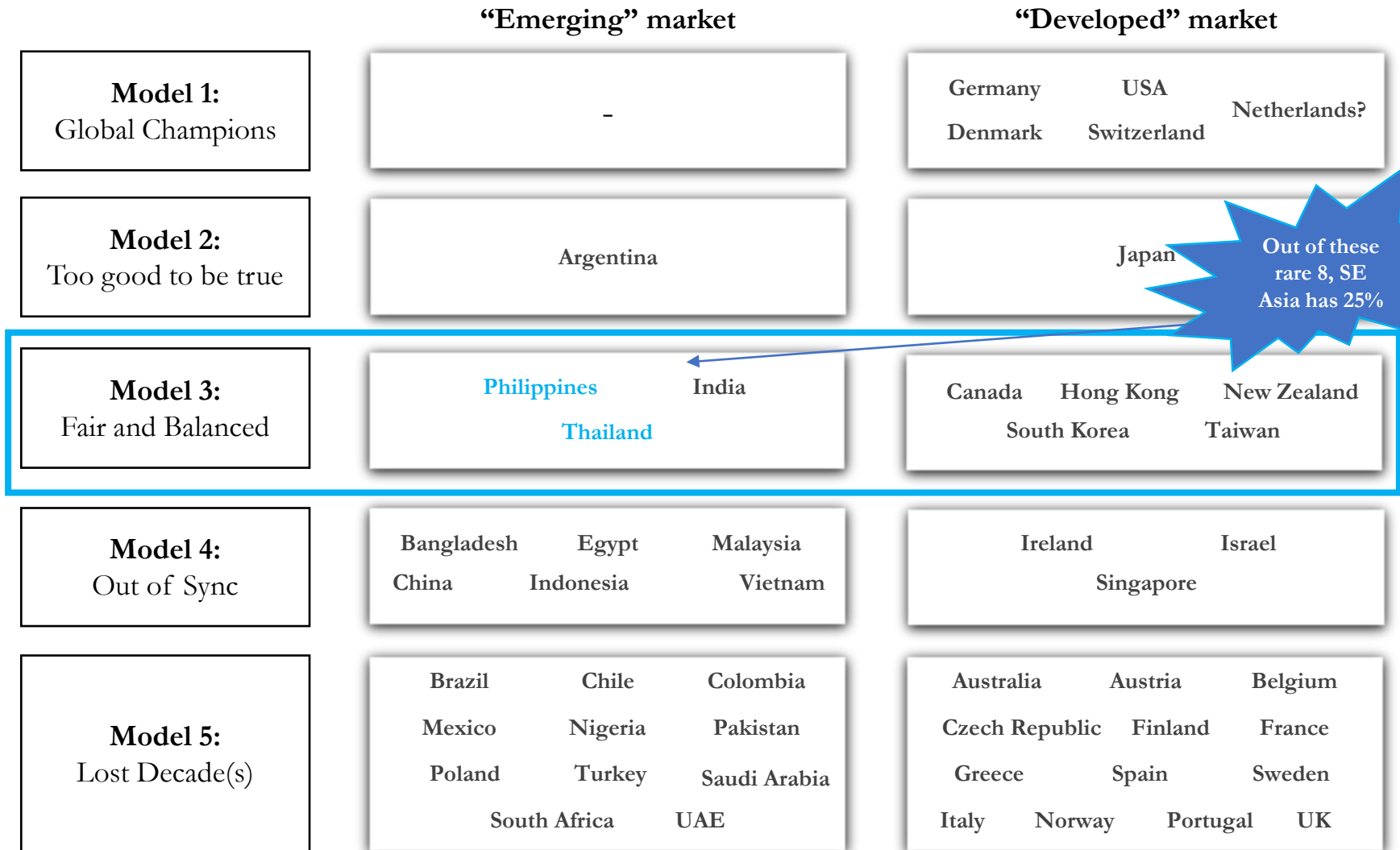
**... AND SOME OF THESE MODELS ARE, OBJECTIVELY, MORE DESIRABLE THAN THE OTHERS – MODELS 1 AND 3 ARE BEST, FOLLOWED BY MODEL 4**



Current star – Popular ideal profile

Potential star - Lesser-known ideal profile

# WE THINK THAT THE 5 MODELS PRESENT A MORE USEFUL WAY TO CATEGORIZE THE WORLD THAN THE CANONICAL “EM/DM”



Out of these rare 8, SE Asia has 25%

# OF THE VERY RARE 8 MODEL 3 COUNTRIES, 1/4 OF THEM ARE IN SOUTHEAST ASIA



# ALTHOUGH WE CLASSIFY THE WORLD'S LARGEST ECONOMIES THIS WAY TODAY, CLASSIFICATIONS CHANGE OVER TIME



Japan experienced a famous “Too Good To Be True” period between 1980-1989

...experienced two “Lost Decades” from 1989-2009

And since then has experienced another even more extreme “Too Good to Be True” period, with an almost vertical slope



Malaysia started with a “Too Good To Be True” period between 1990-1996...

... and managed to rebalance itself into a solid Model 3 (Fair and Balanced)...

... and is currently a Model 4 (Out of Sync) from 2010 until now



Bangladesh was a Model 2 (Too good to be true) between 1998-2010...

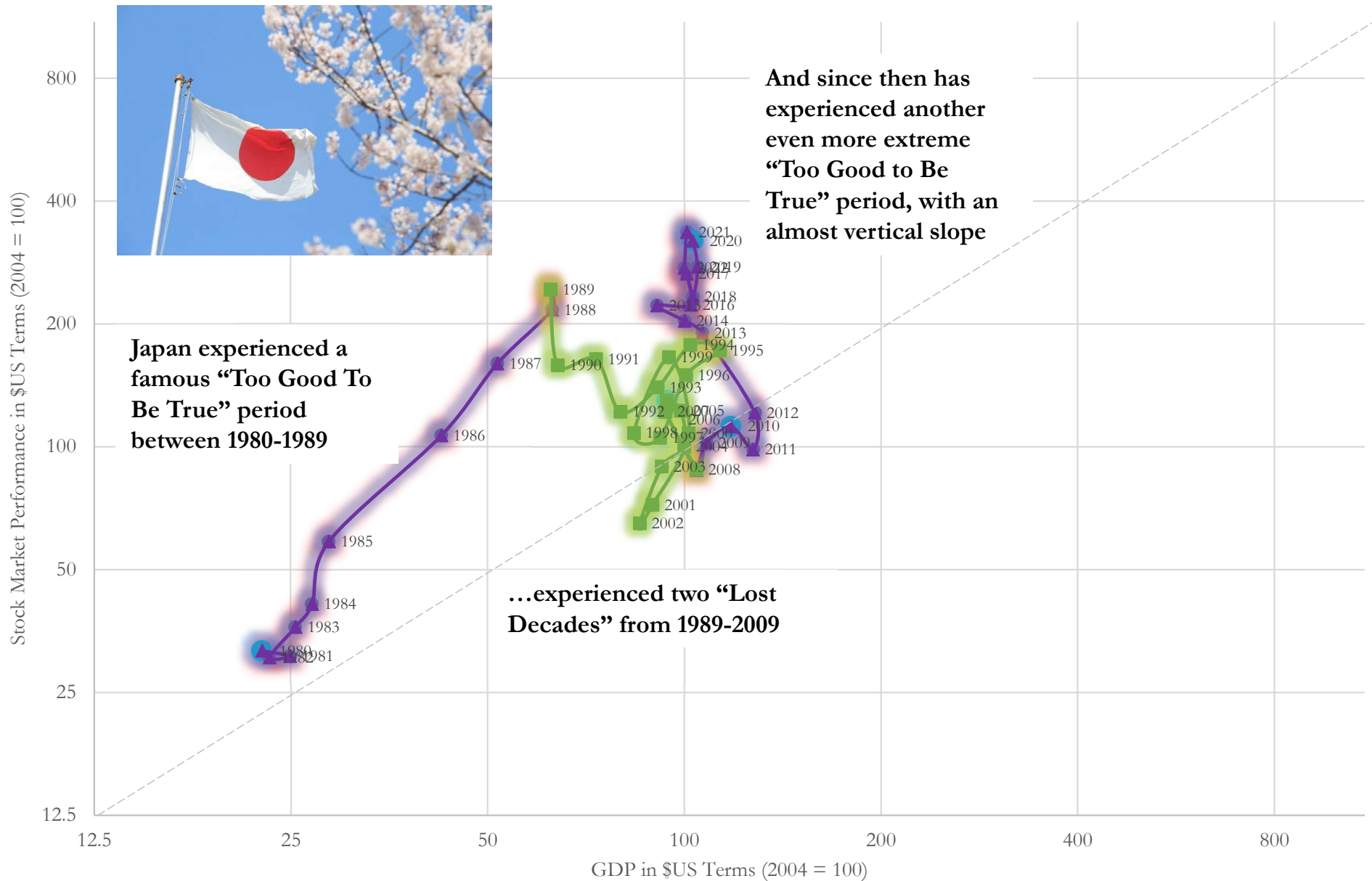
... before shifting to Model 4 (Out of Sync) from 2011 until now



Egypt was also a Model 2 (Too good to be true) between 2002-2010...

... before shifting to Model 4 (Out of Sync) from 2011 until now

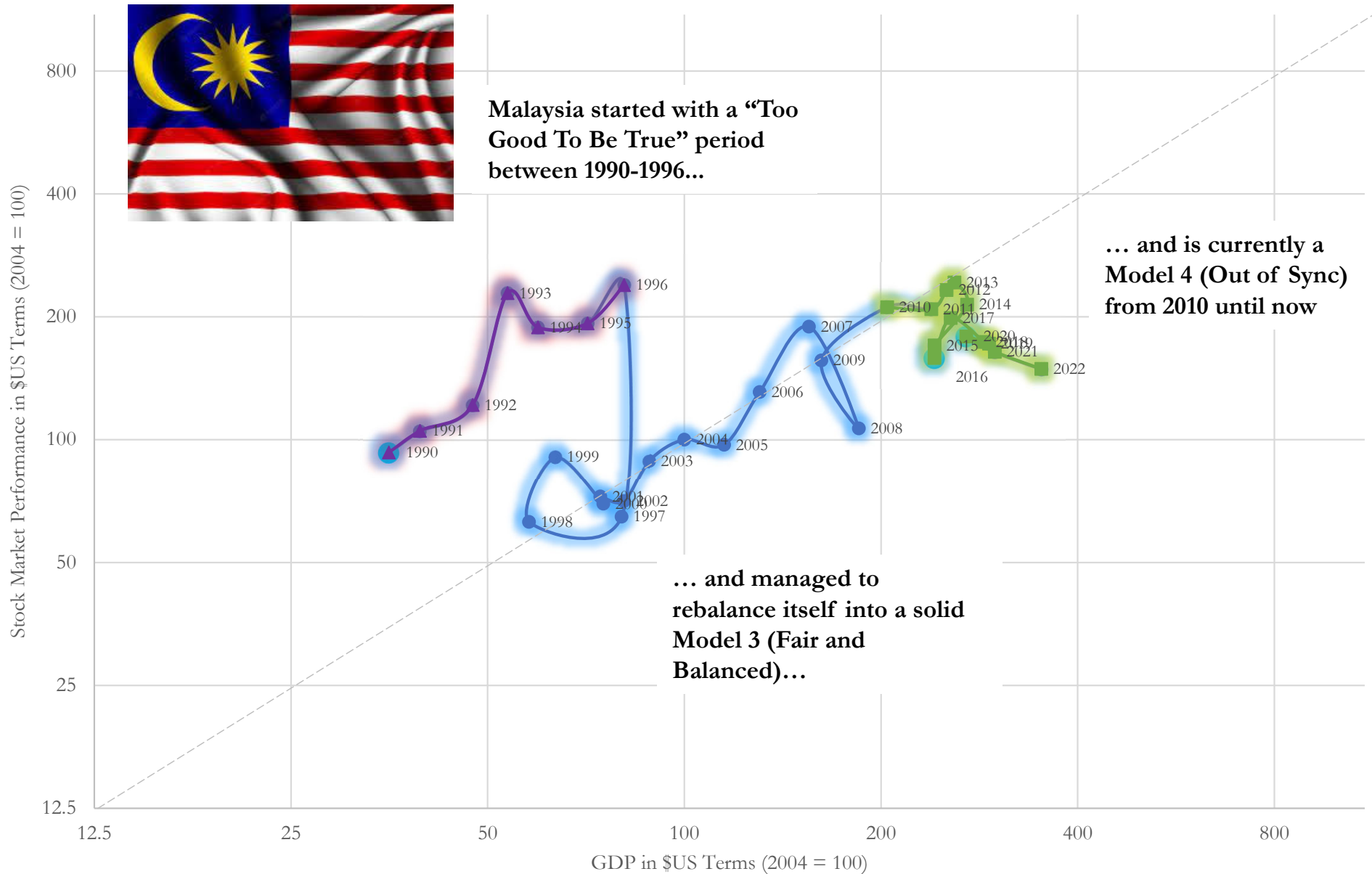
# JAPAN IS A FASCINATING CASE OF TOO GOOD TO BE TRUE *TWICE*, WITH TWO LOST DECADES IN THE MIDDLE



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

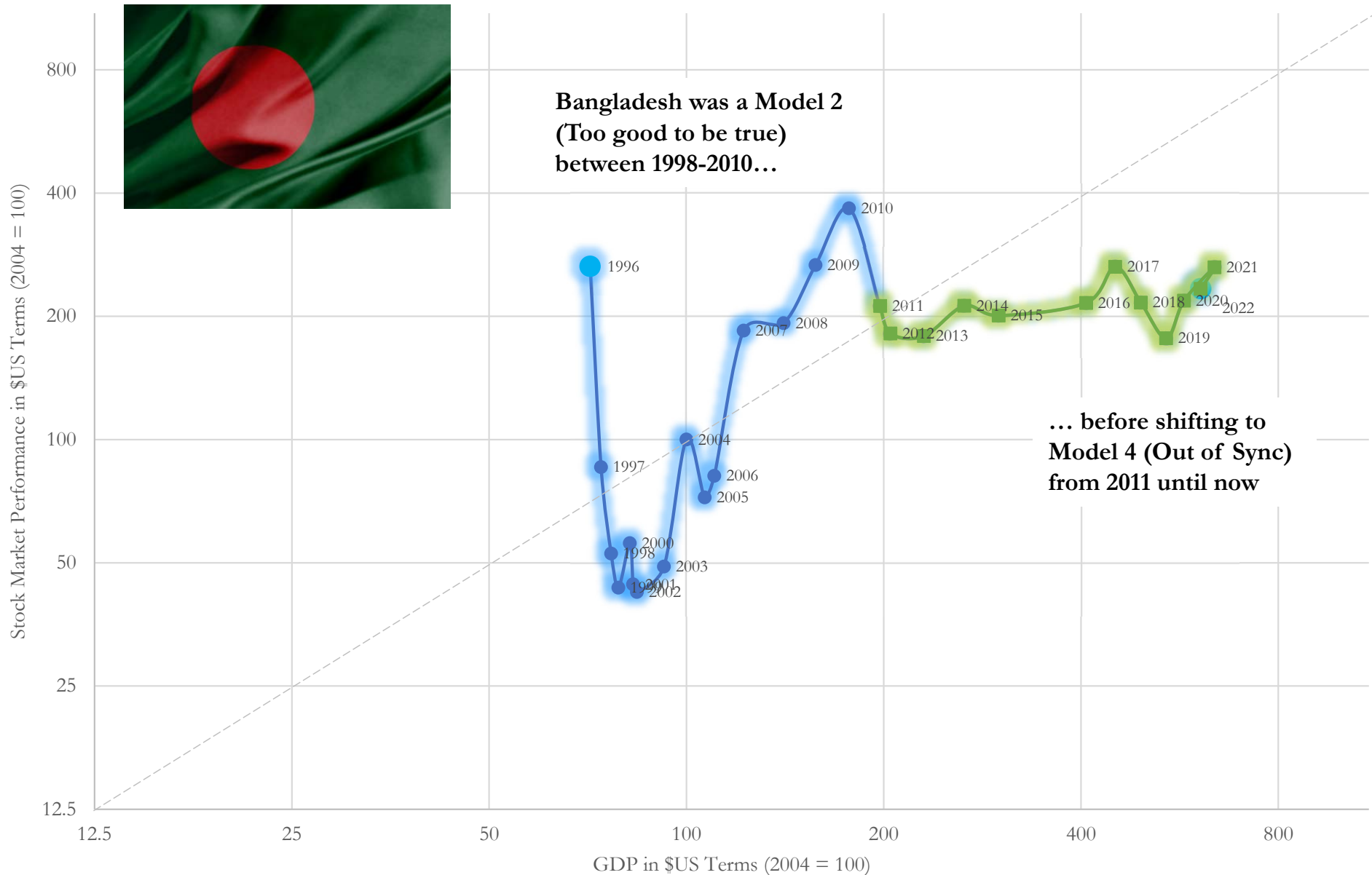


# MALAYSIA IS A RATHER UNIQUE CASE, SEEING THREE MODELS IN THE PAST 32 YEARS



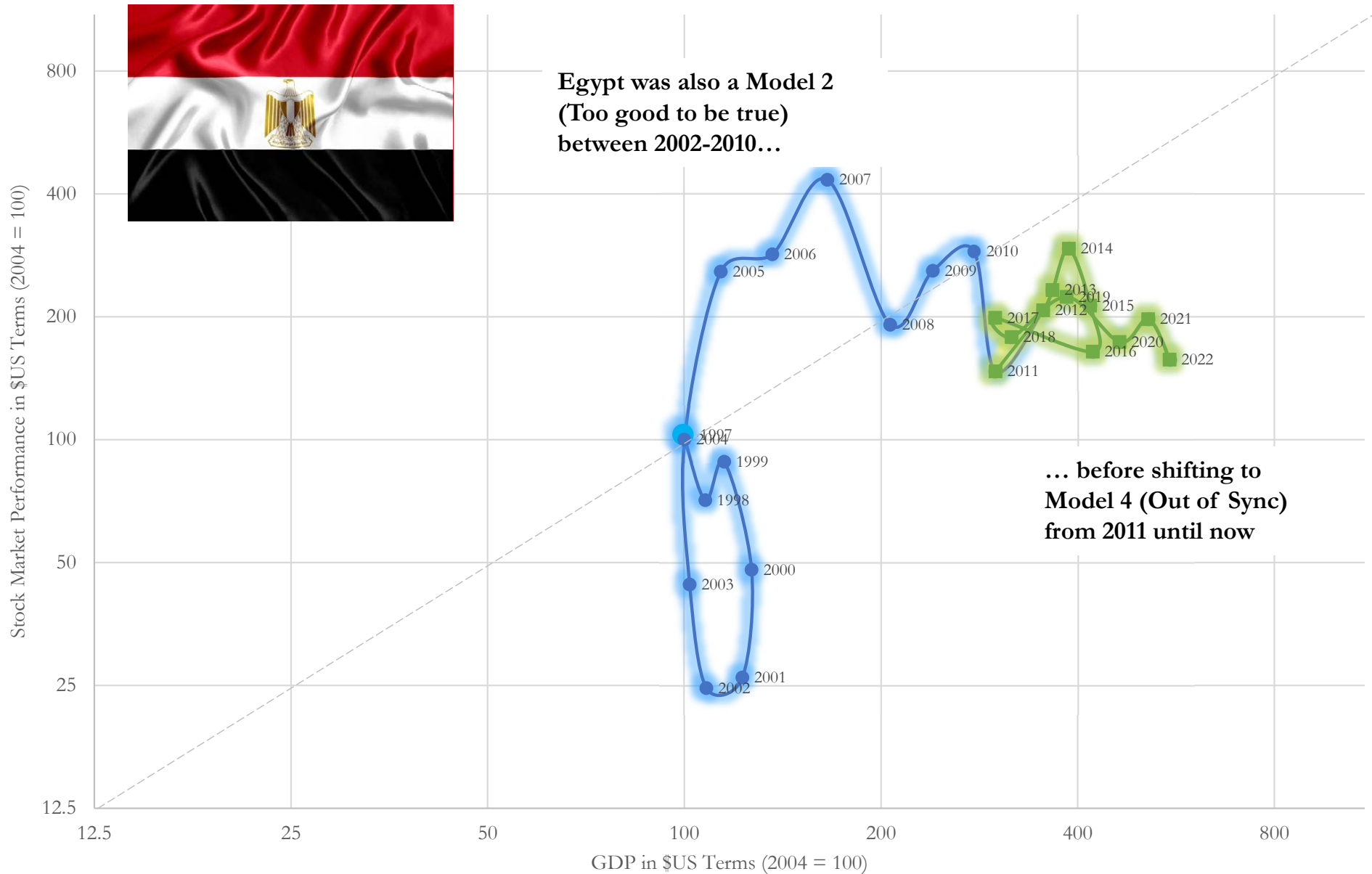
Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

# FOR EXAMPLE, BANGLADESH WENT FROM AN OVER-VALUED MODEL 2 TO AN OUT-OF-SYNC MODEL 4



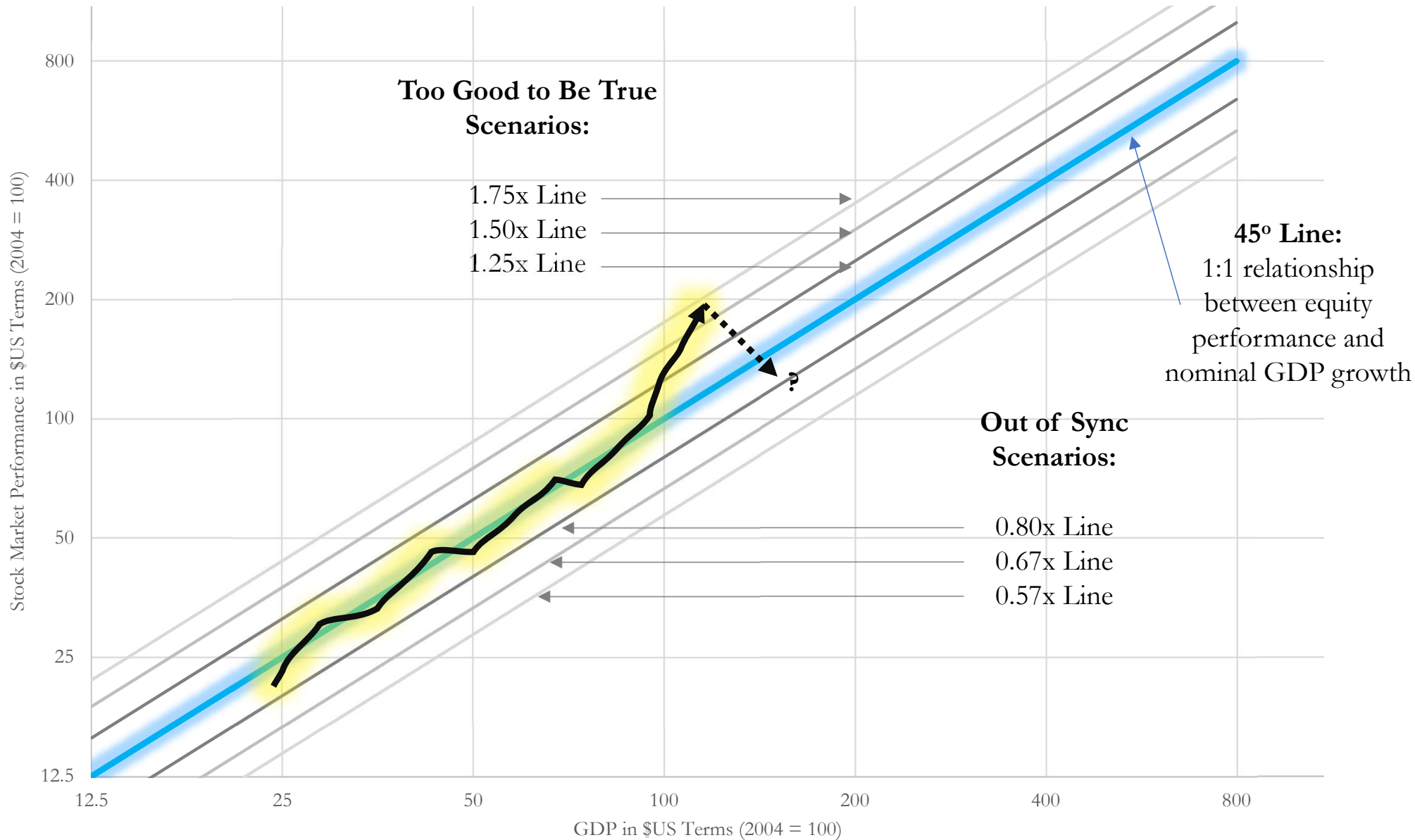
Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

# EGYPT IS ANOTHER EXAMPLE OF THE MODEL 2 TO MODEL 4 DOWNGRADE



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

# JAPAN'S EXAMPLE RAISES A TESTABLE HYPOTHESIS: IF A COUNTRY VEERS FAR ABOVE THE 45° LINE, IS IT RIPE FOR A CORRECTION?

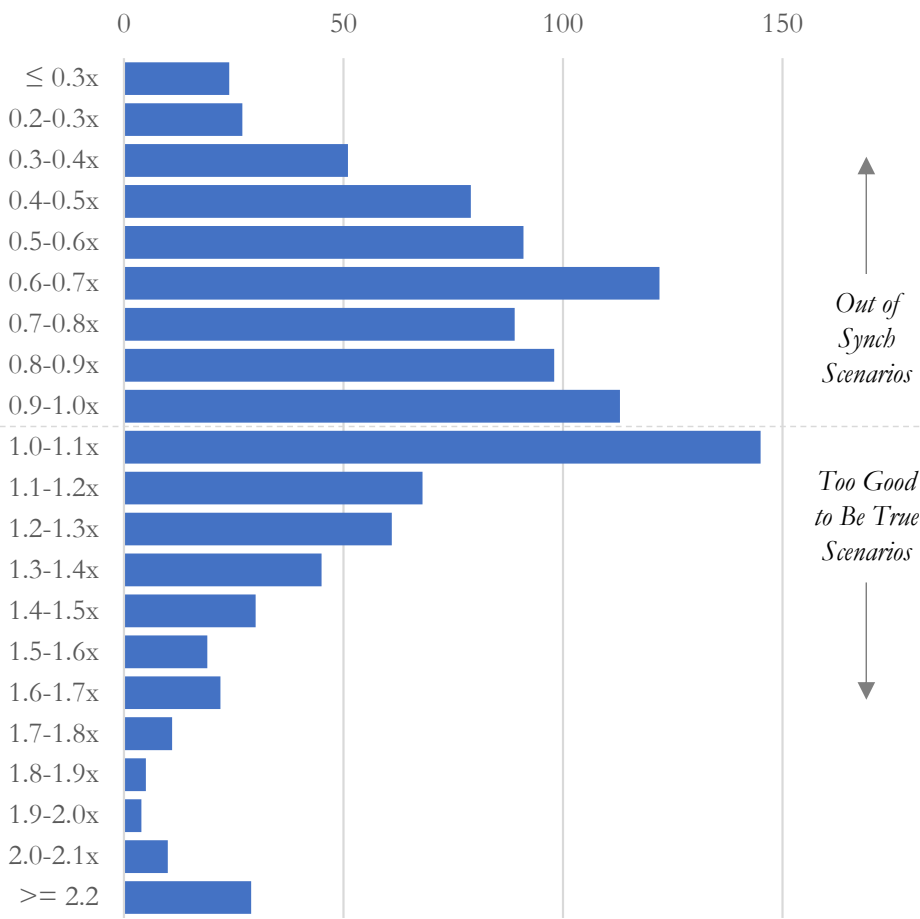


# THE QUICK ANSWER: STATISTICALLY SPEAKING, YES

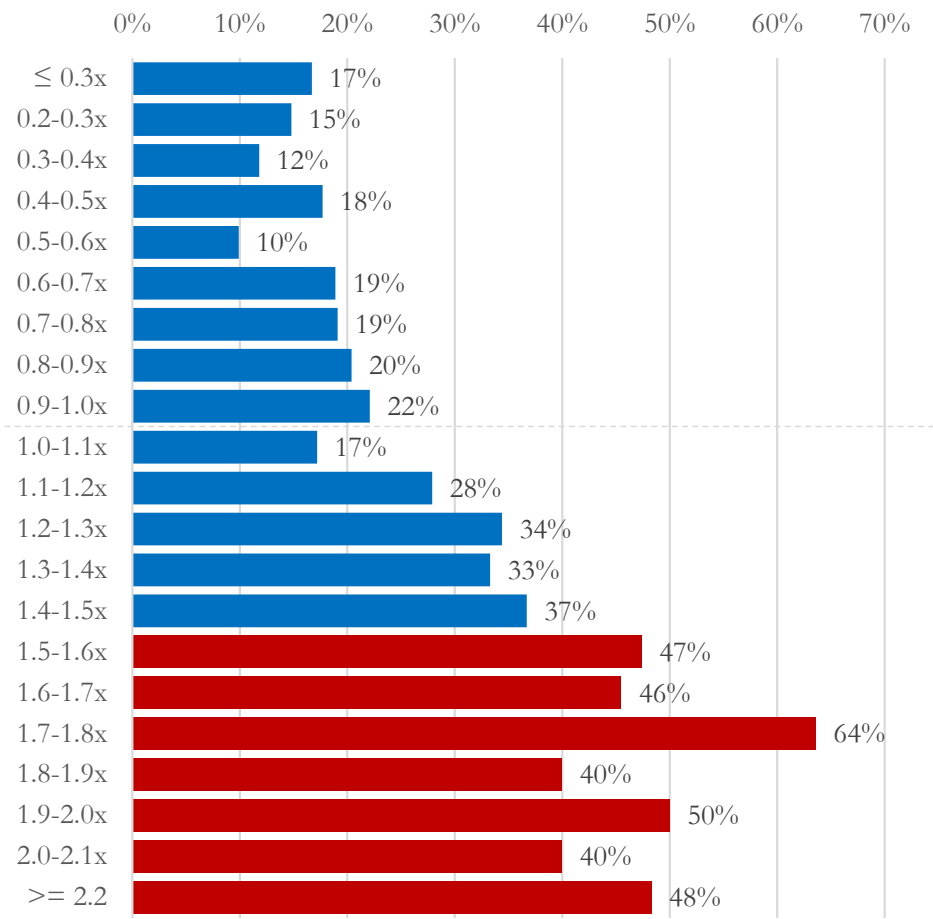
*We looked at all countries with at least \$200M of GDP and considered over 1,100 data points between 2000-2022, measuring how far above or below the 45° line the country was each year, and whether the next year saw a downward correction in the market index.*

## How Often Do Countries Fall Above or Below the 45° Line?

*Above > 1.0x, Below < 1.0x, n = 1,121 from 2000-2022*



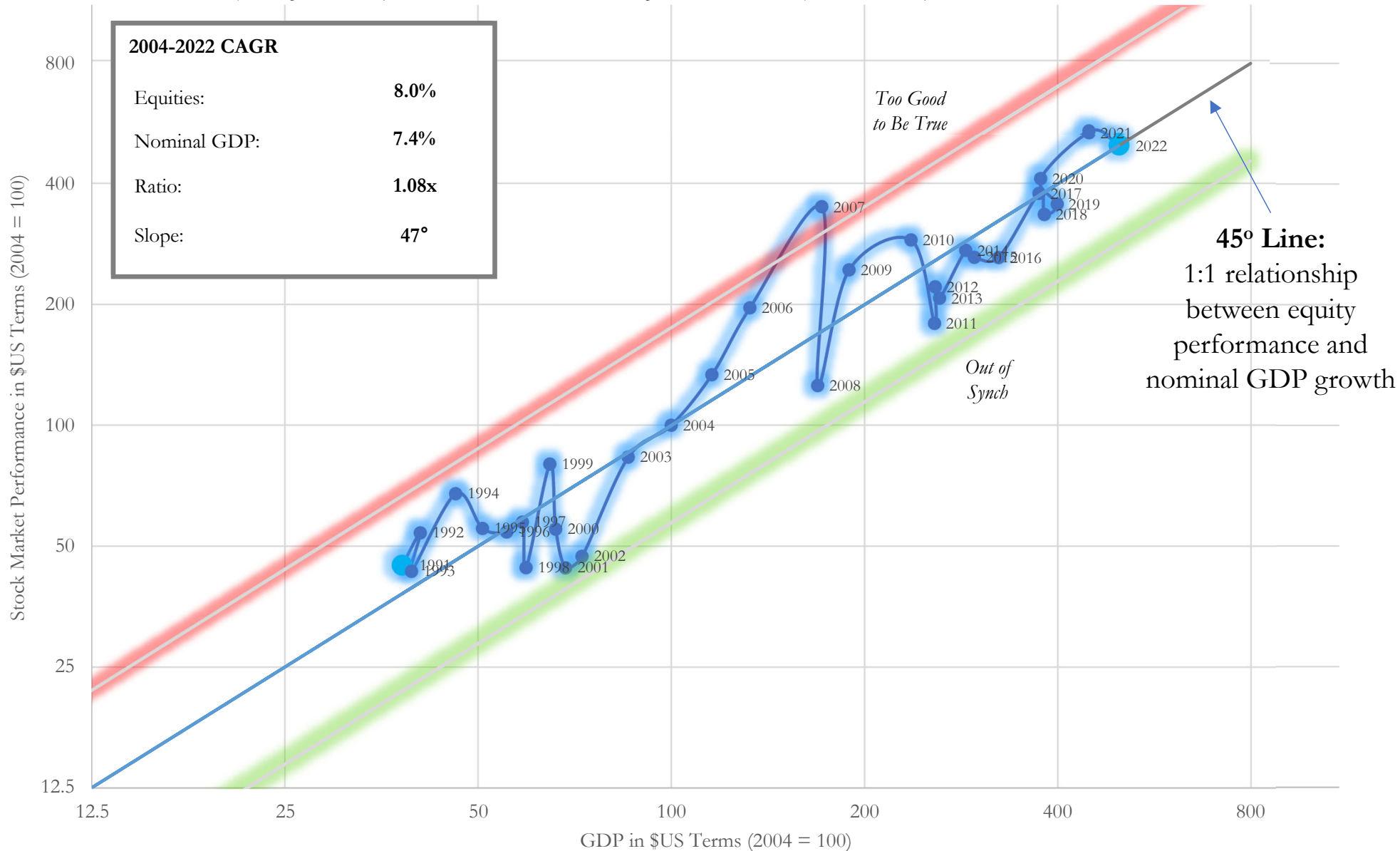
## Depending on How Far Above or Below, What Percent of Situations Had a Correction the Next Year (% , ≥ 40% chance highlighted)



*Note: For this purpose, we define a correction as a subsequent year of negative stock market return after a year of positive stock market return*

# INDIA IS A CASE IN POINT AND CLASSIC 'MODEL 3', ADJUSTING DEPENDING ON ITS DEVIATION FROM THE CENTRAL 45° LINE

Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1991 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

# AROUND THE WORLD IN 47 CHARTS: APPLYING THIS FRAMEWORK TO THE WORLD'S LARGEST ECONOMIES

1

## Model 1: Global Champions

*Equity growth supported by home-grown global MNCs*



2

## Model 2: Too Good To Be True

*Strong equity growth, decoupled from actual economic growth*



3

## Model 3: Fair and Balanced

*Value from economic growth fully captured by shareholders*



4

## Model 4: Partial Reward to Shareholders

*Strong economic growth with partial shareholder value capture*



5

## Model 5: Going in Circles

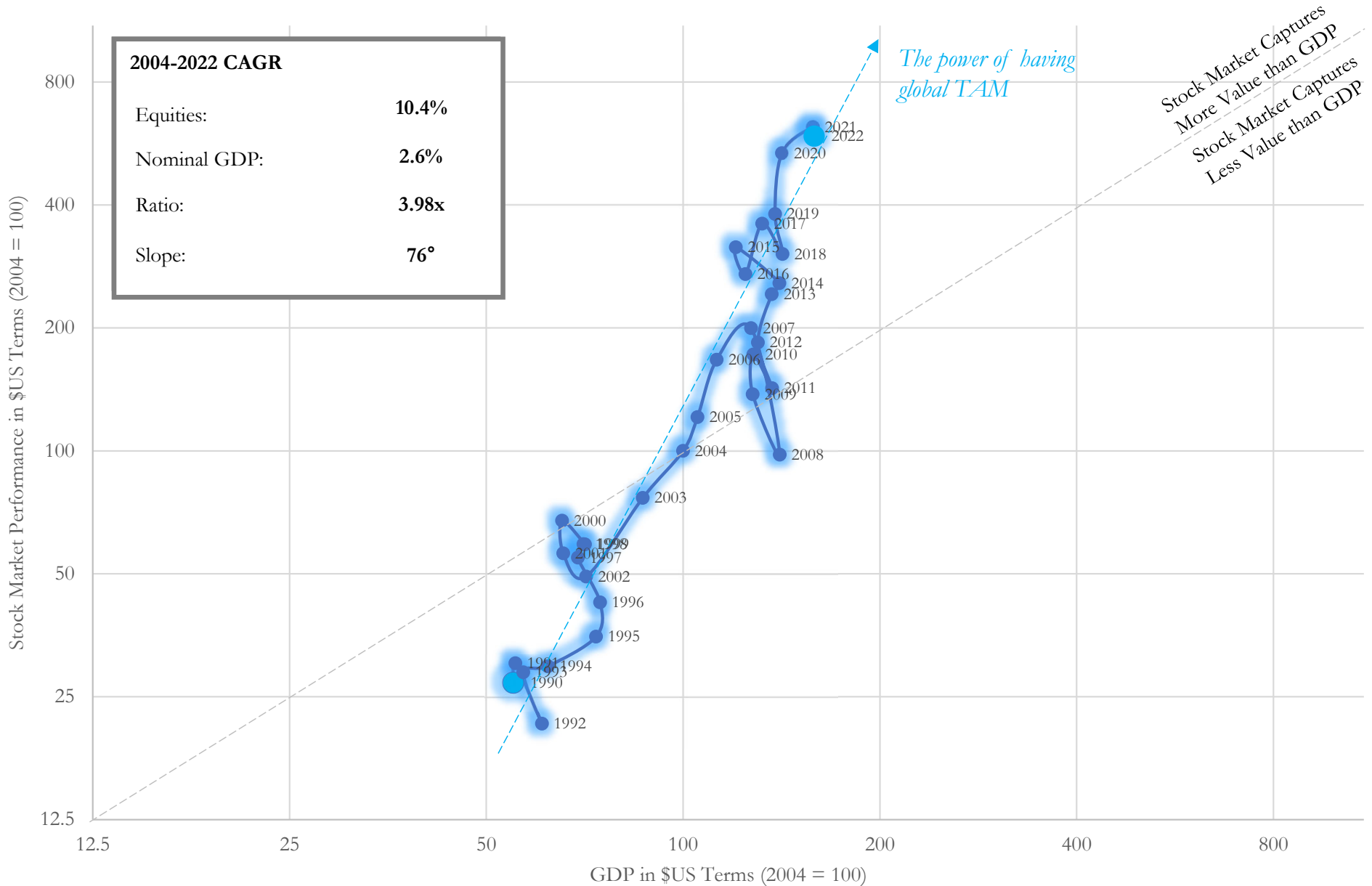
*Holding pattern – minimal growth and value generation*





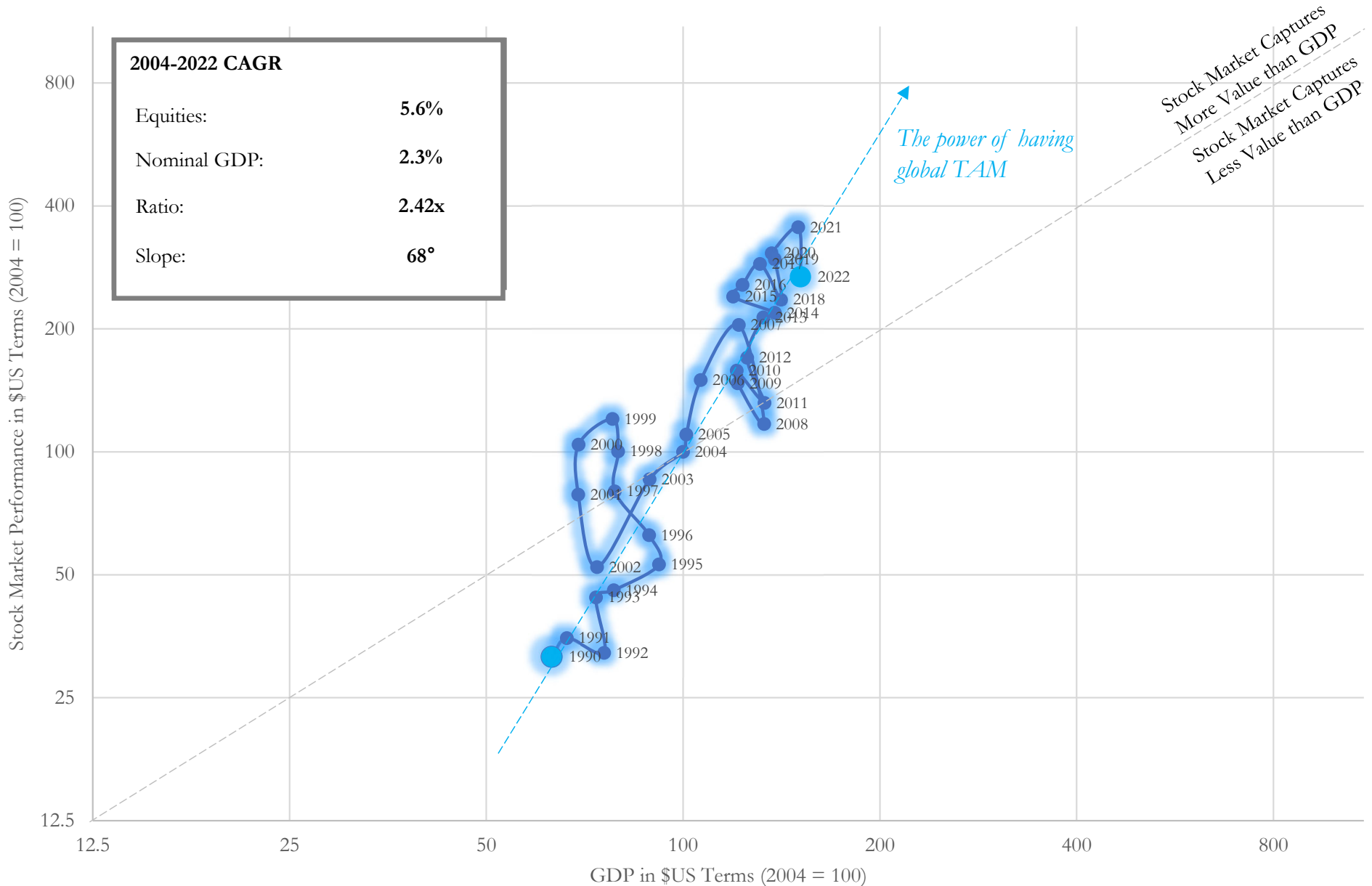
# 1 DENMARK

Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1990 – 2022



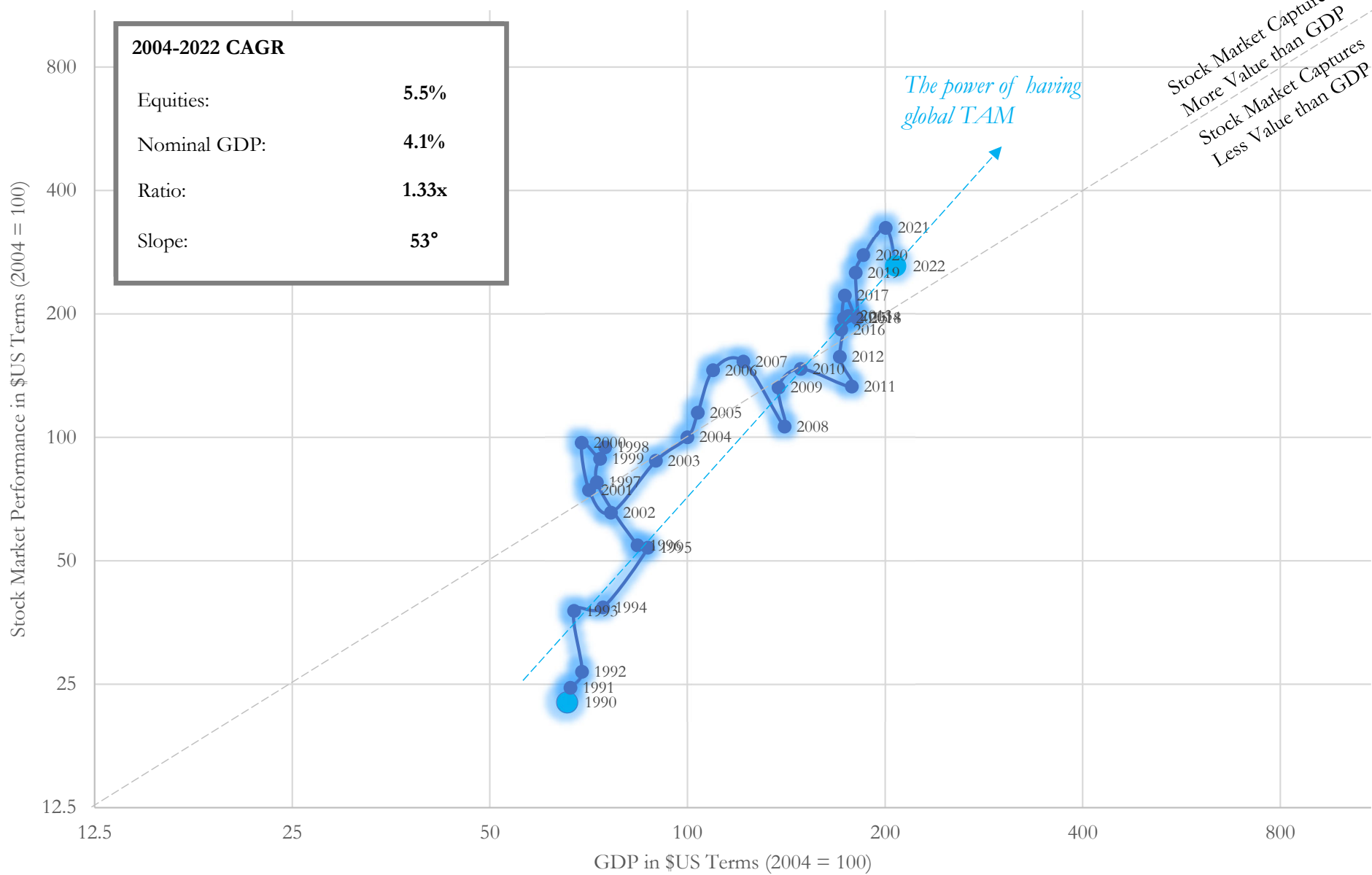
Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1990 – 2022



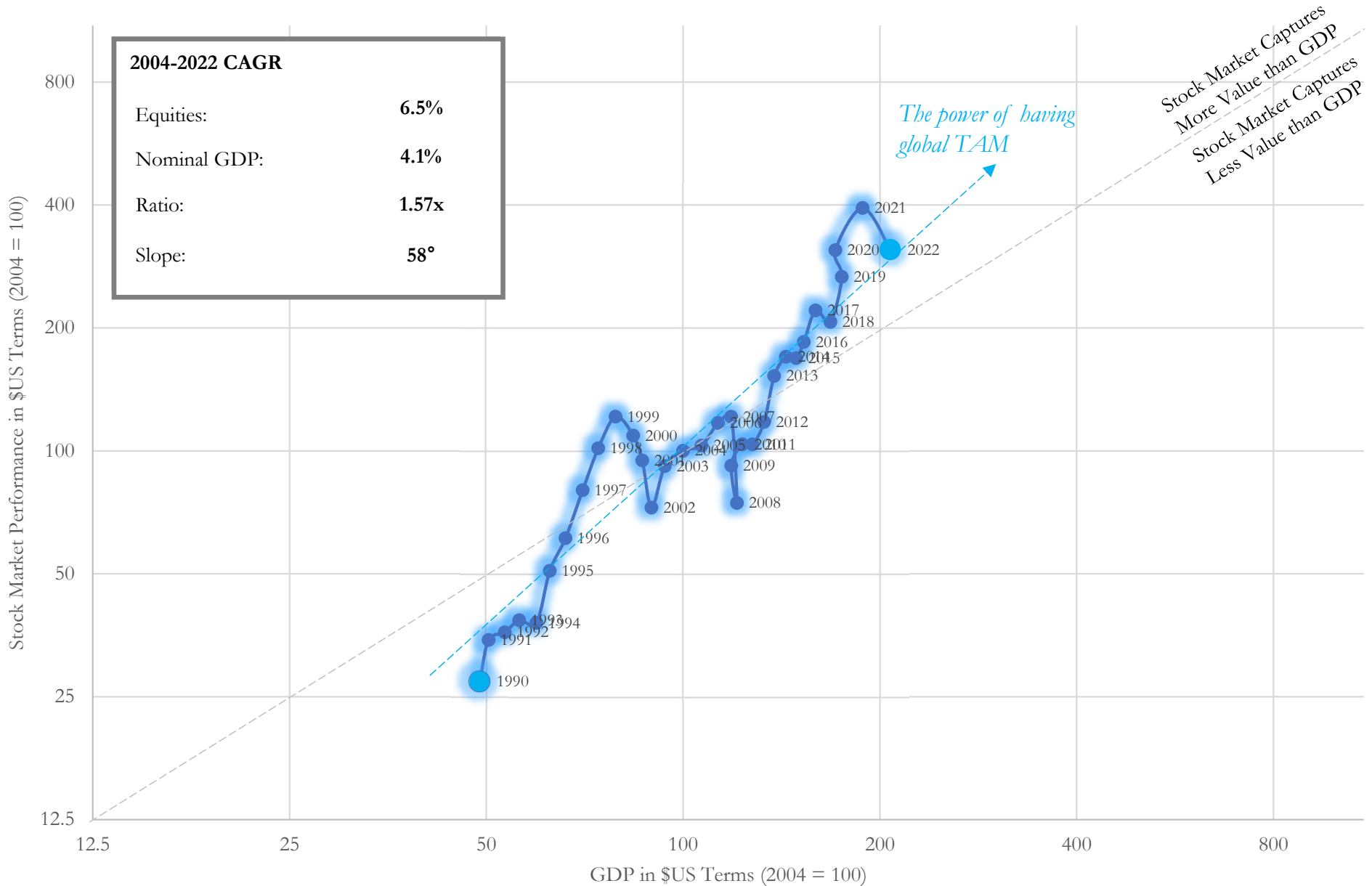
Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1990 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

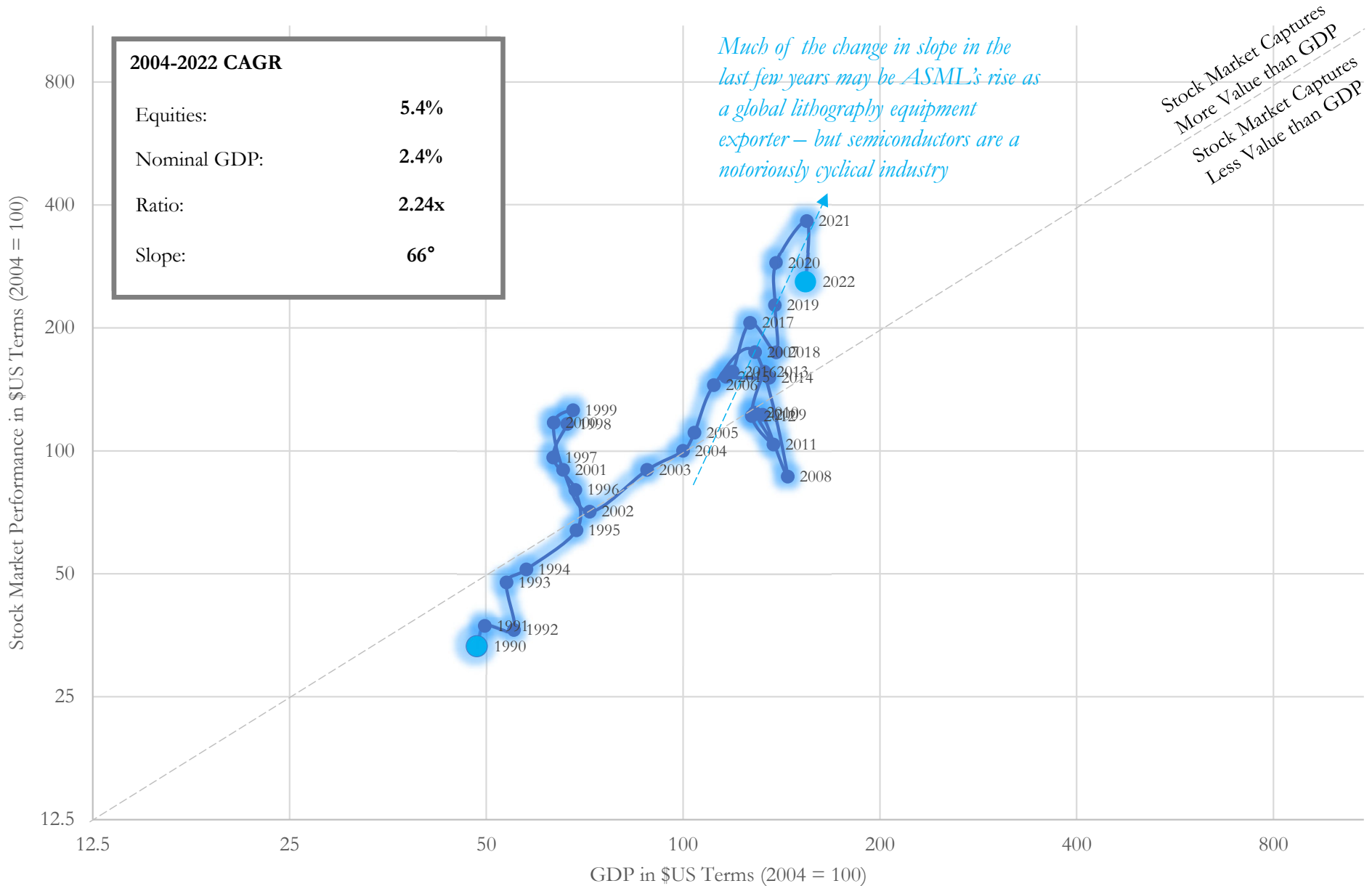
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1990 – 2022



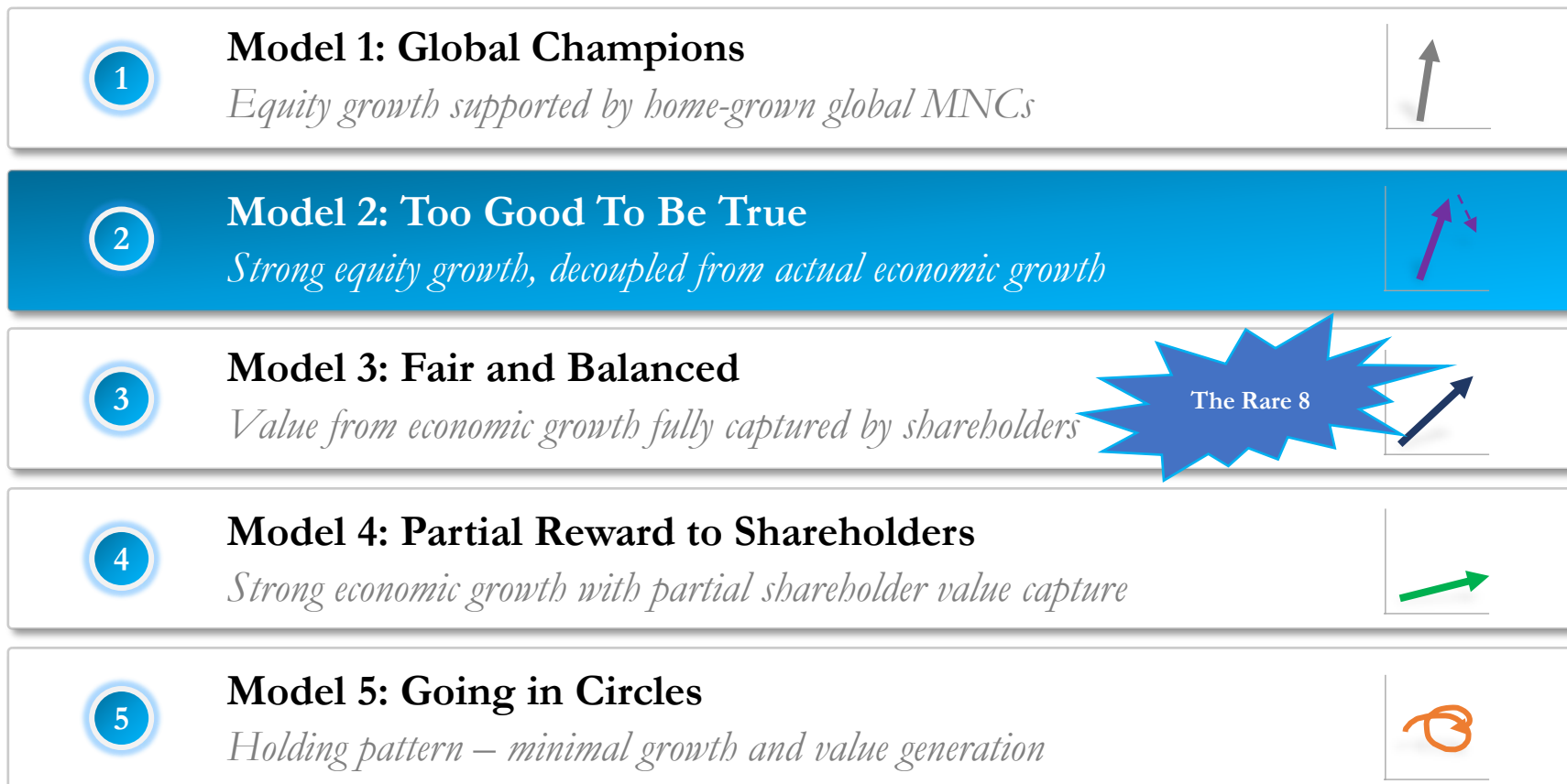
Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

# NETHERLANDS WAS A MODEL 3 BUT WITH SEMICONDUCTORS MAY BE TURNING INTO A MODEL 1

Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1990 – 2022

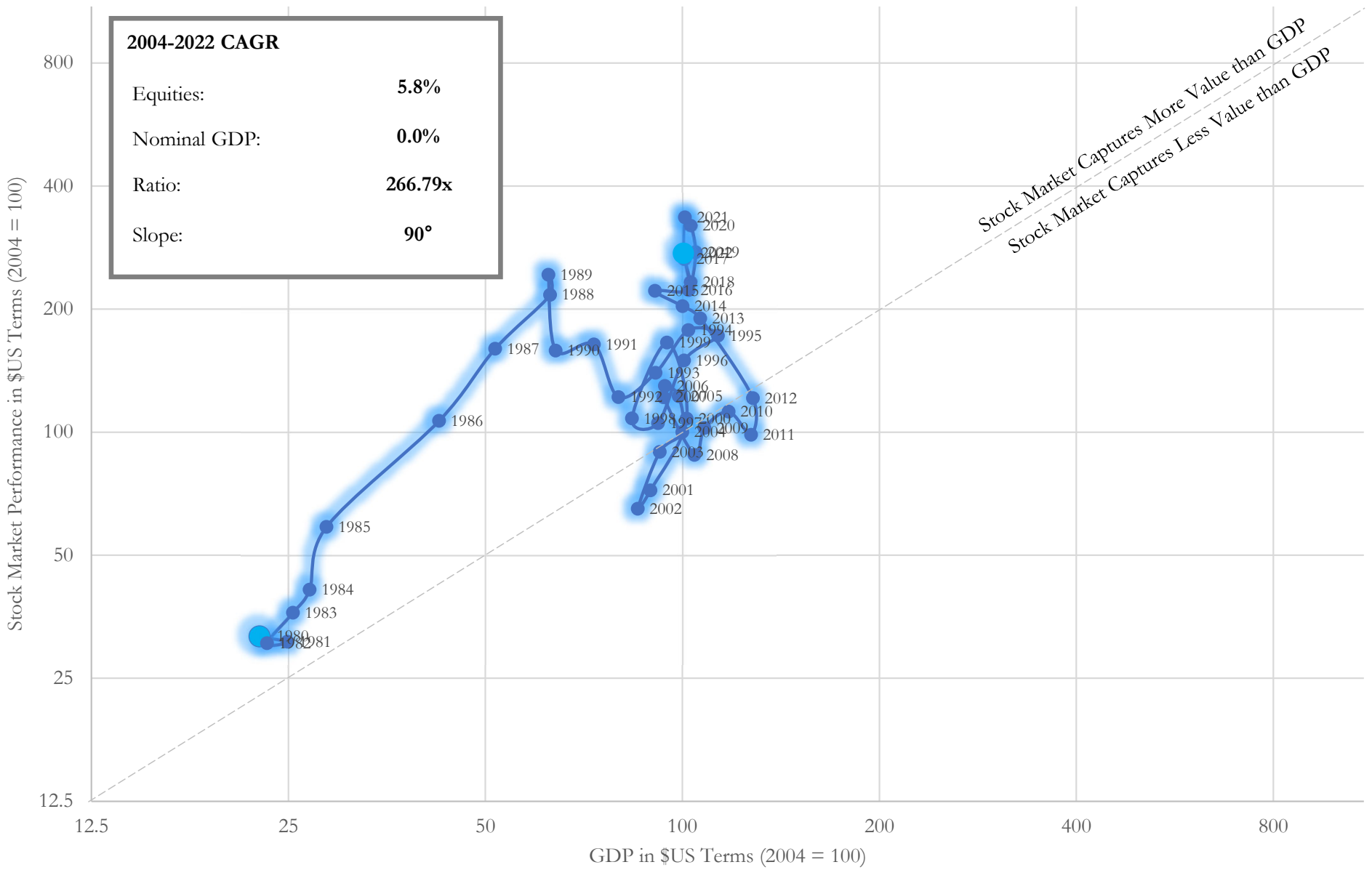


Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis



# JAPAN: THE MOST EXTREME EXAMPLE, WITH A 90° VERTICAL CLIMB

Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1980 – 2022

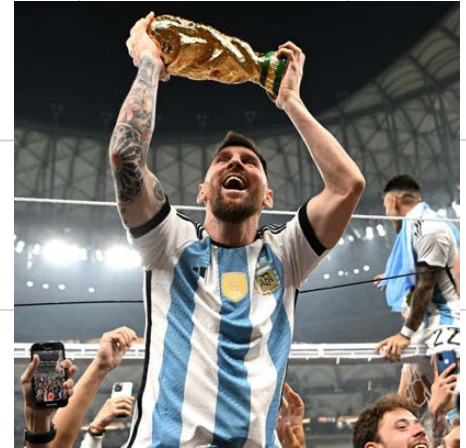
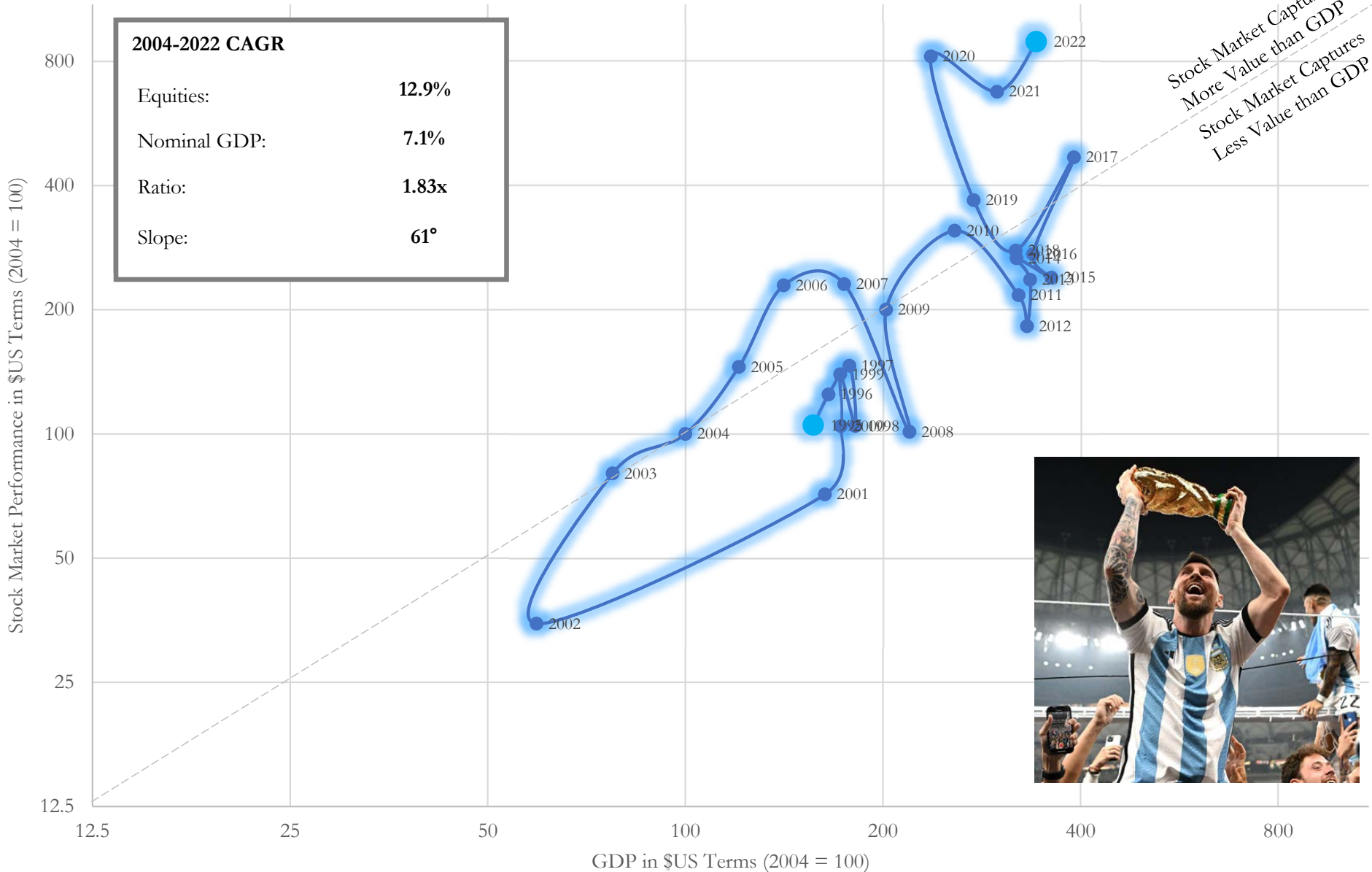


Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis



# ARGENTINA: DELIVERING THE UNEXPECTED ON BOTH FRONTS

Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1995 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

1

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*Value from economic growth fully captured by shareholders*

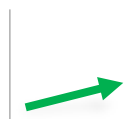
The Rare 8



4

## Model 4: Partial Reward to Shareholders

*Strong economic growth with partial shareholder value capture*



5

## Model 5: Going in Circles

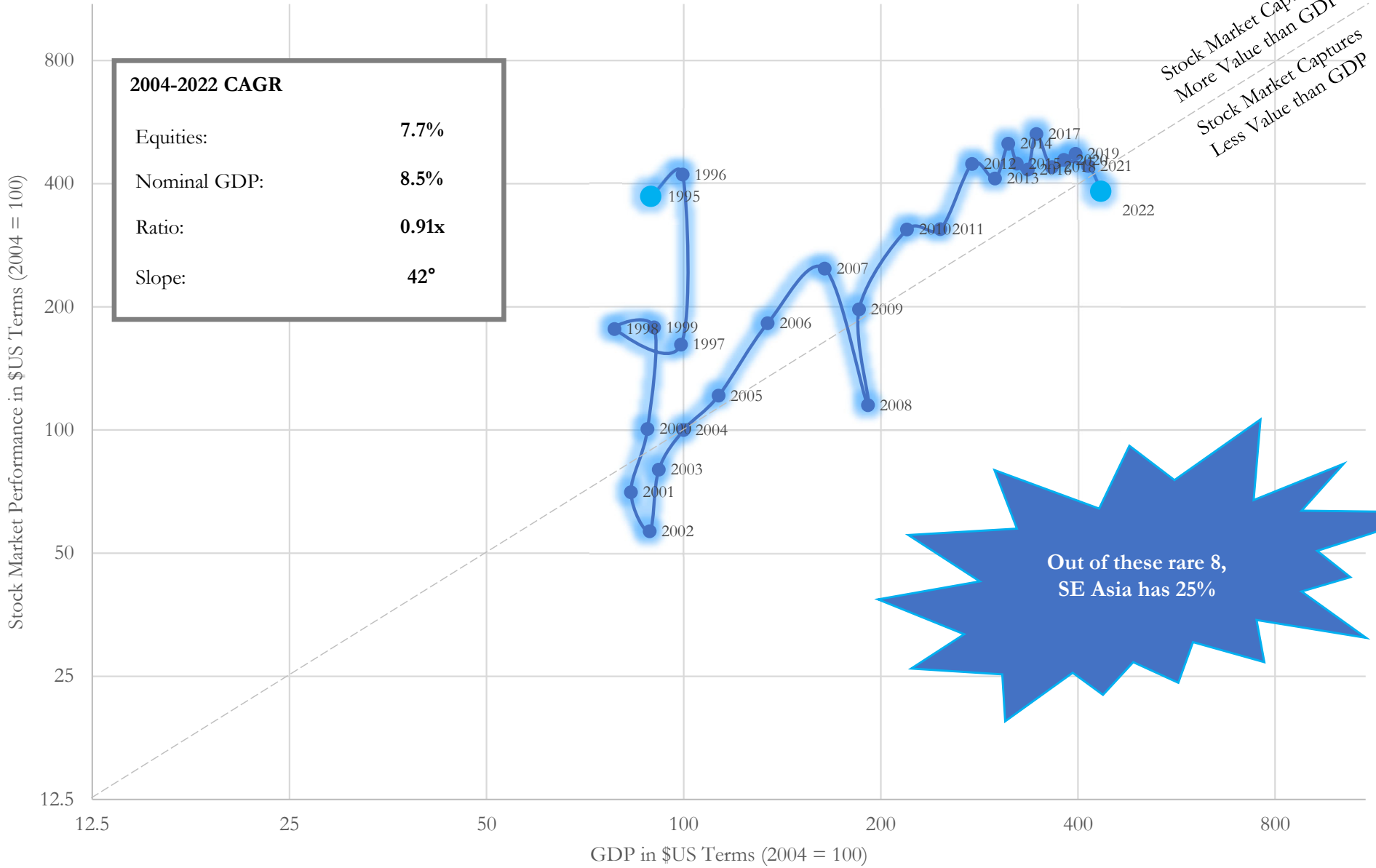
*Holding pattern – minimal growth and value generation*



3

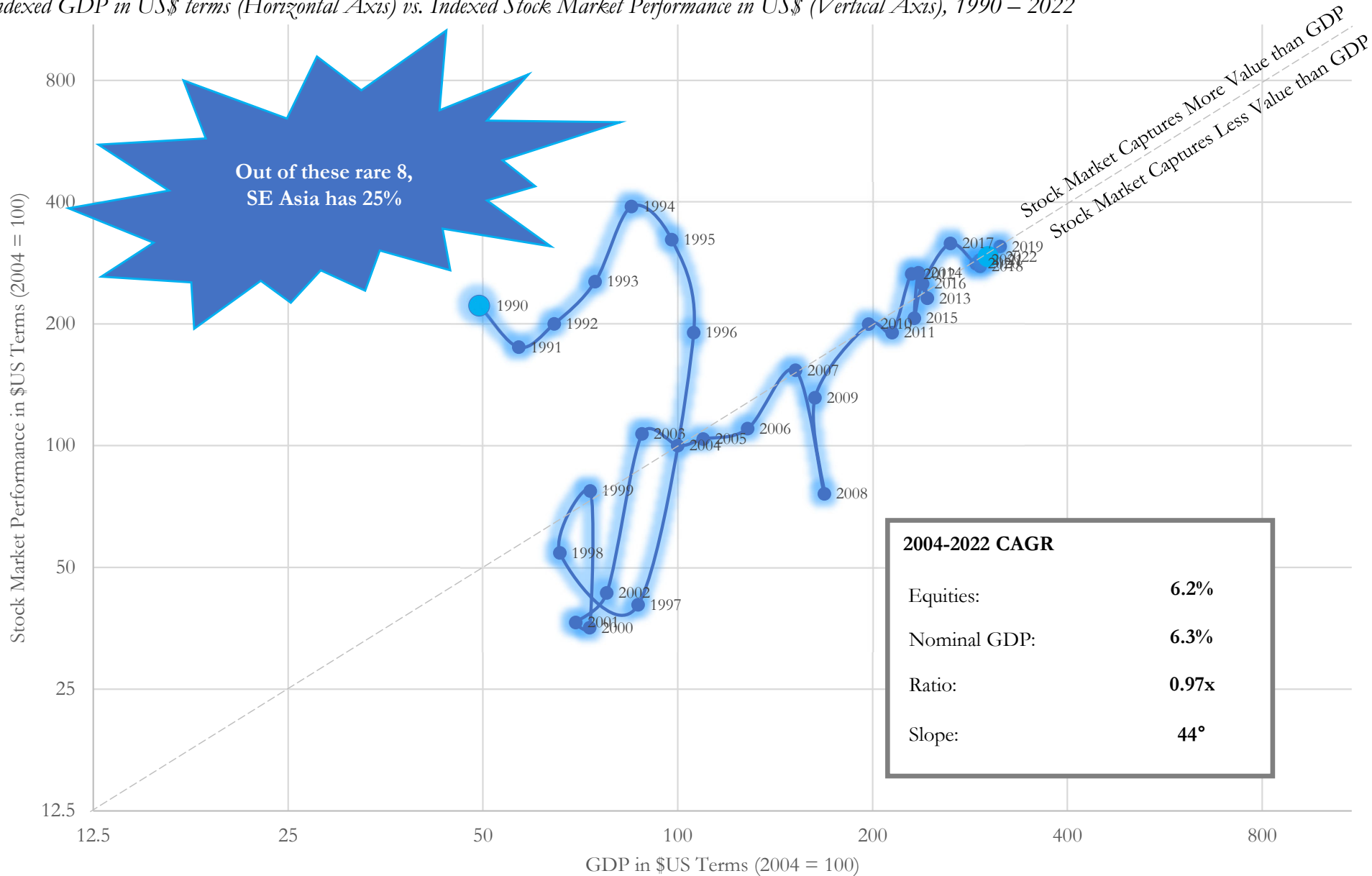
# THE PHILIPPINES HAS BEEN A SOLID MODEL 3 SINCE 2003

Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1995 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

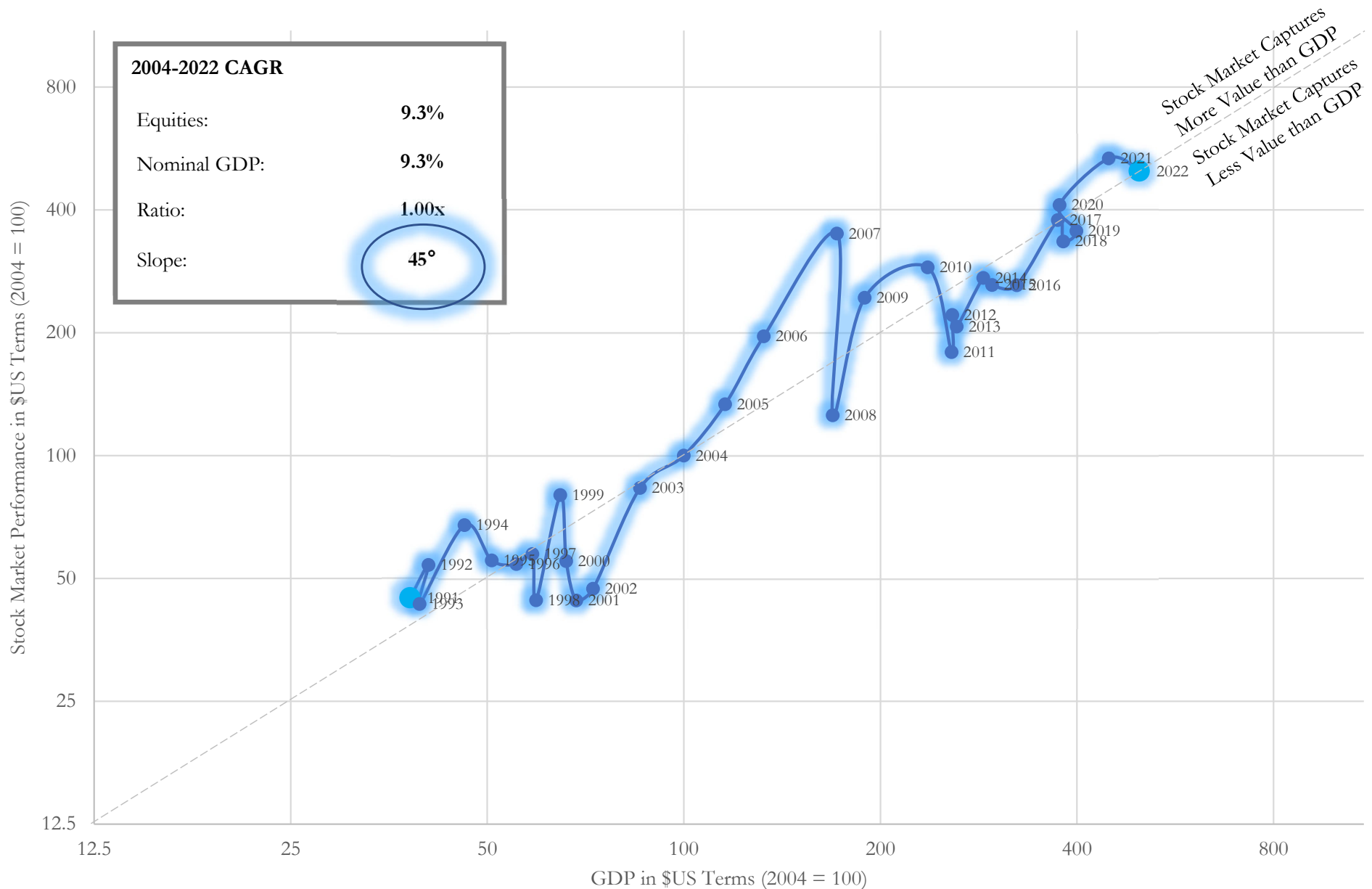
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1990 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

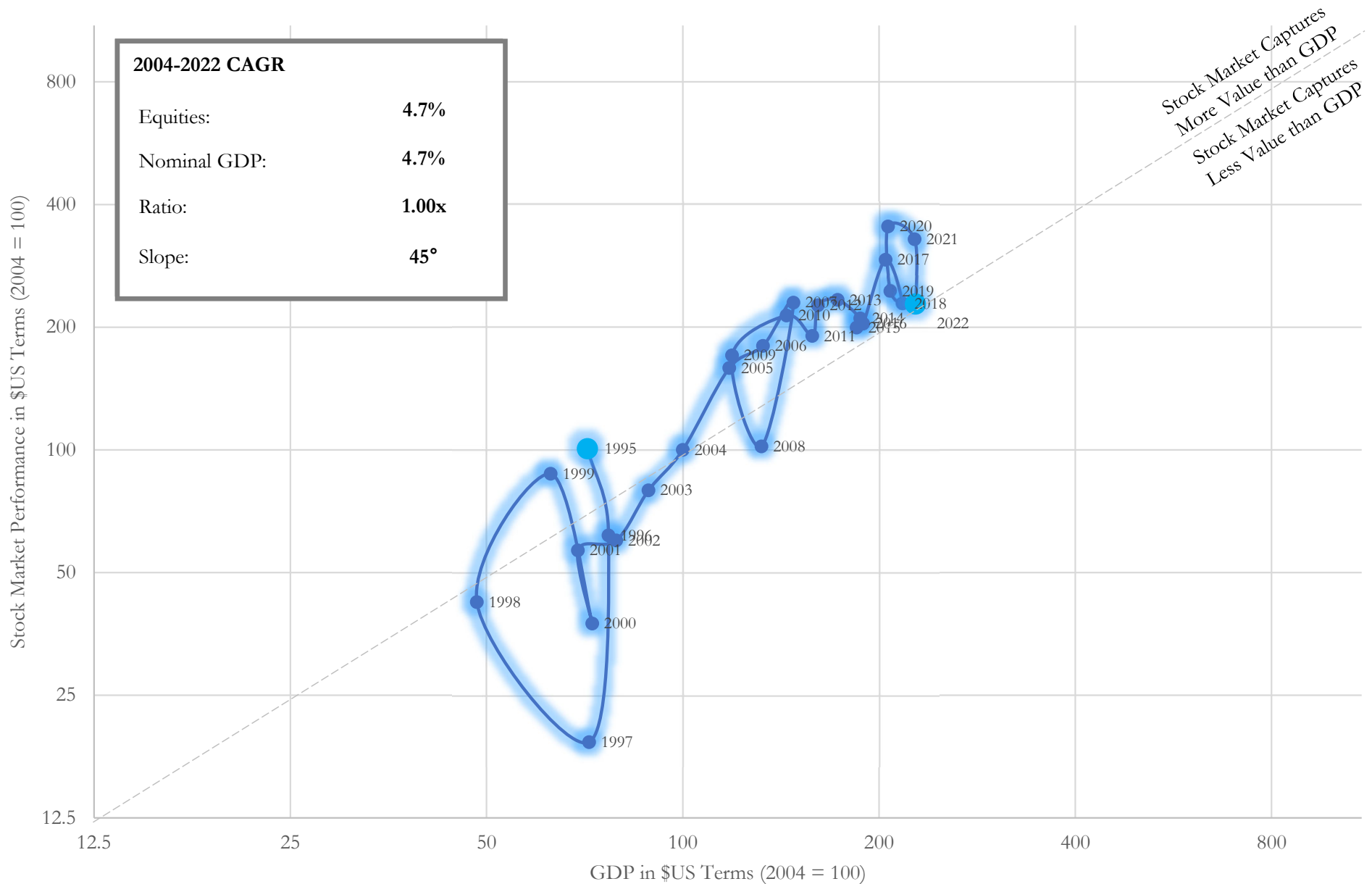
# INDIA: ECONOMIC GROWTH (ALMOST) PERFECTLY CAPTURED BY STOCK MARKET

Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1991 – 2022



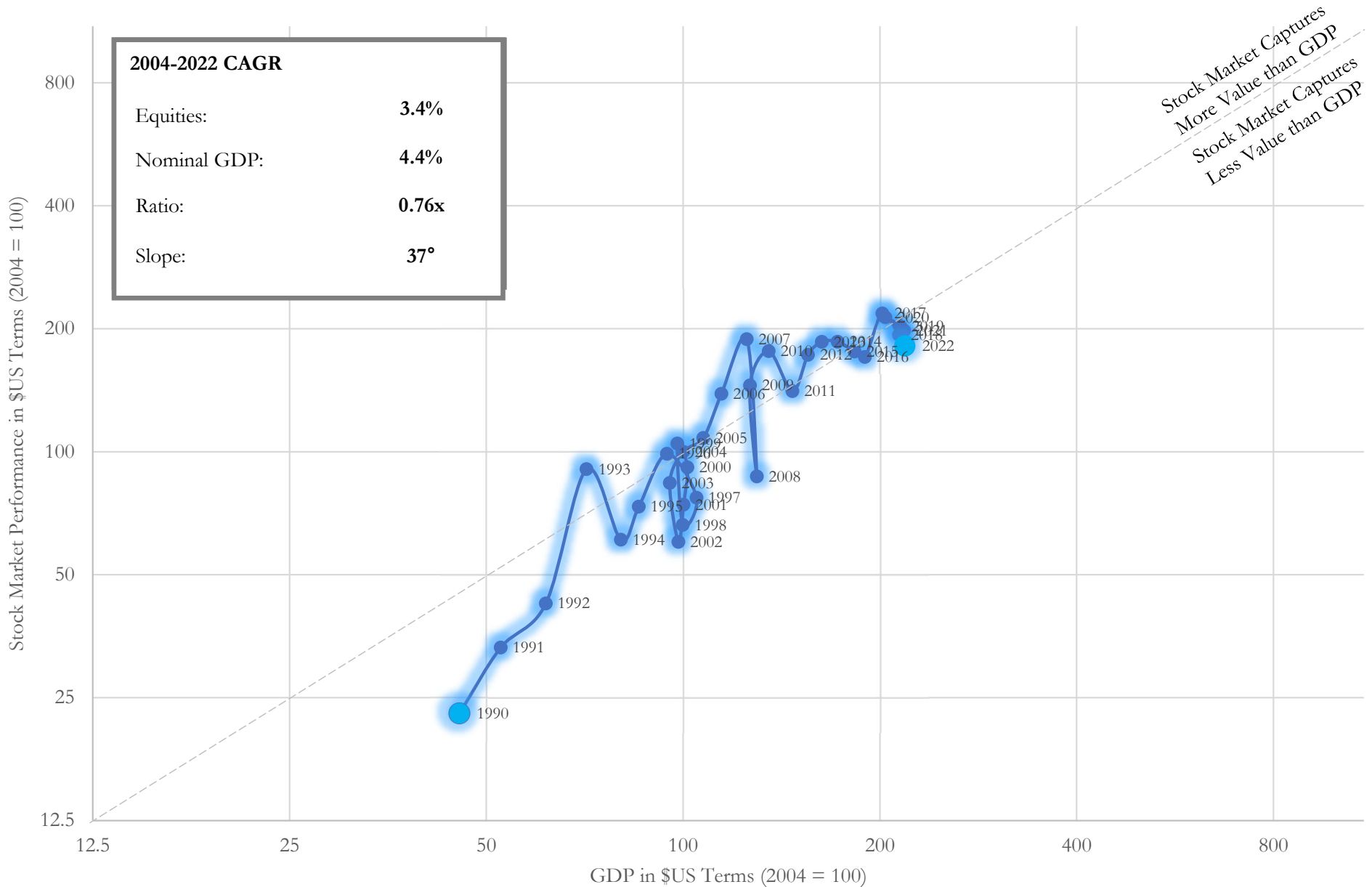
Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1995 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

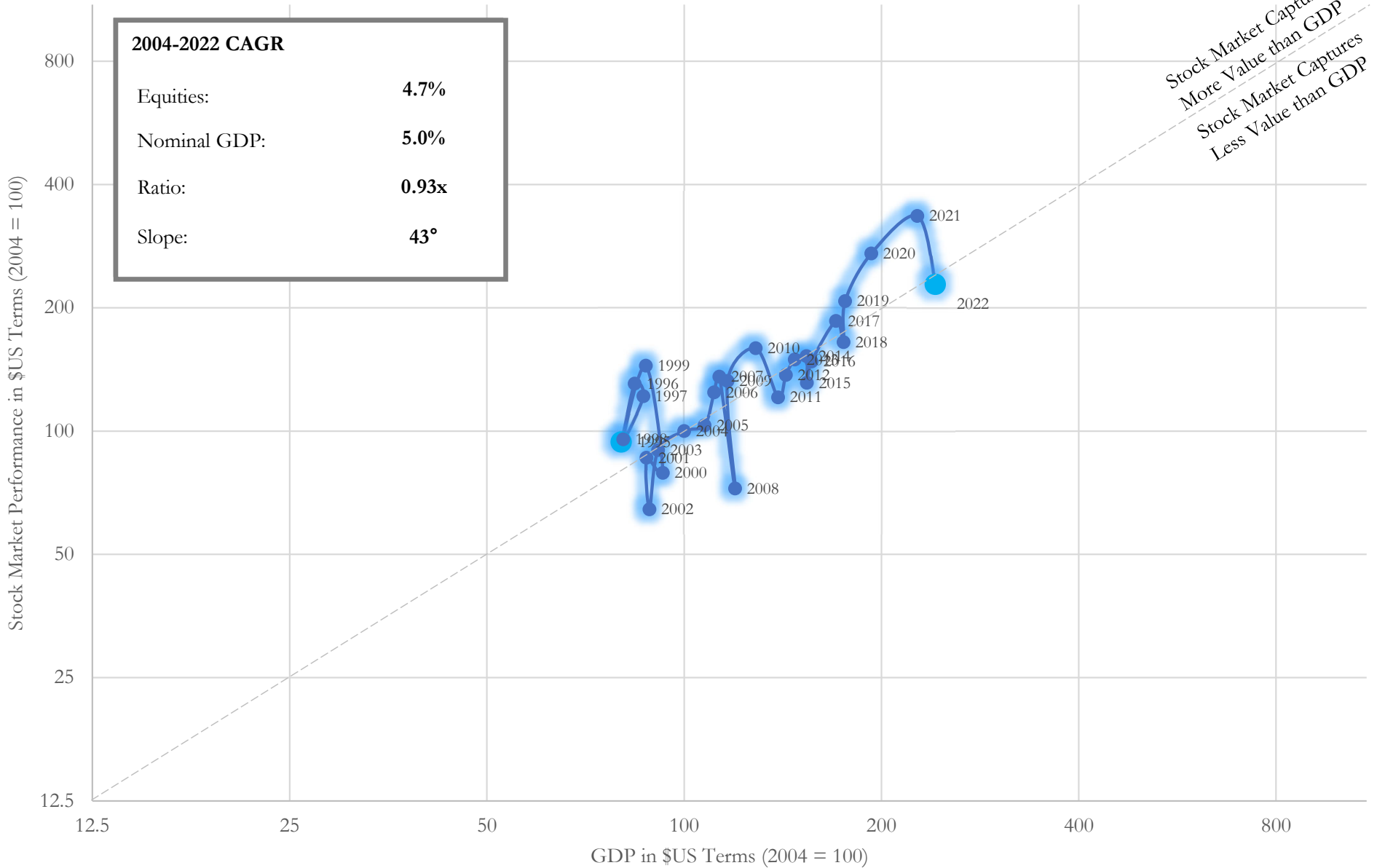
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1990 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

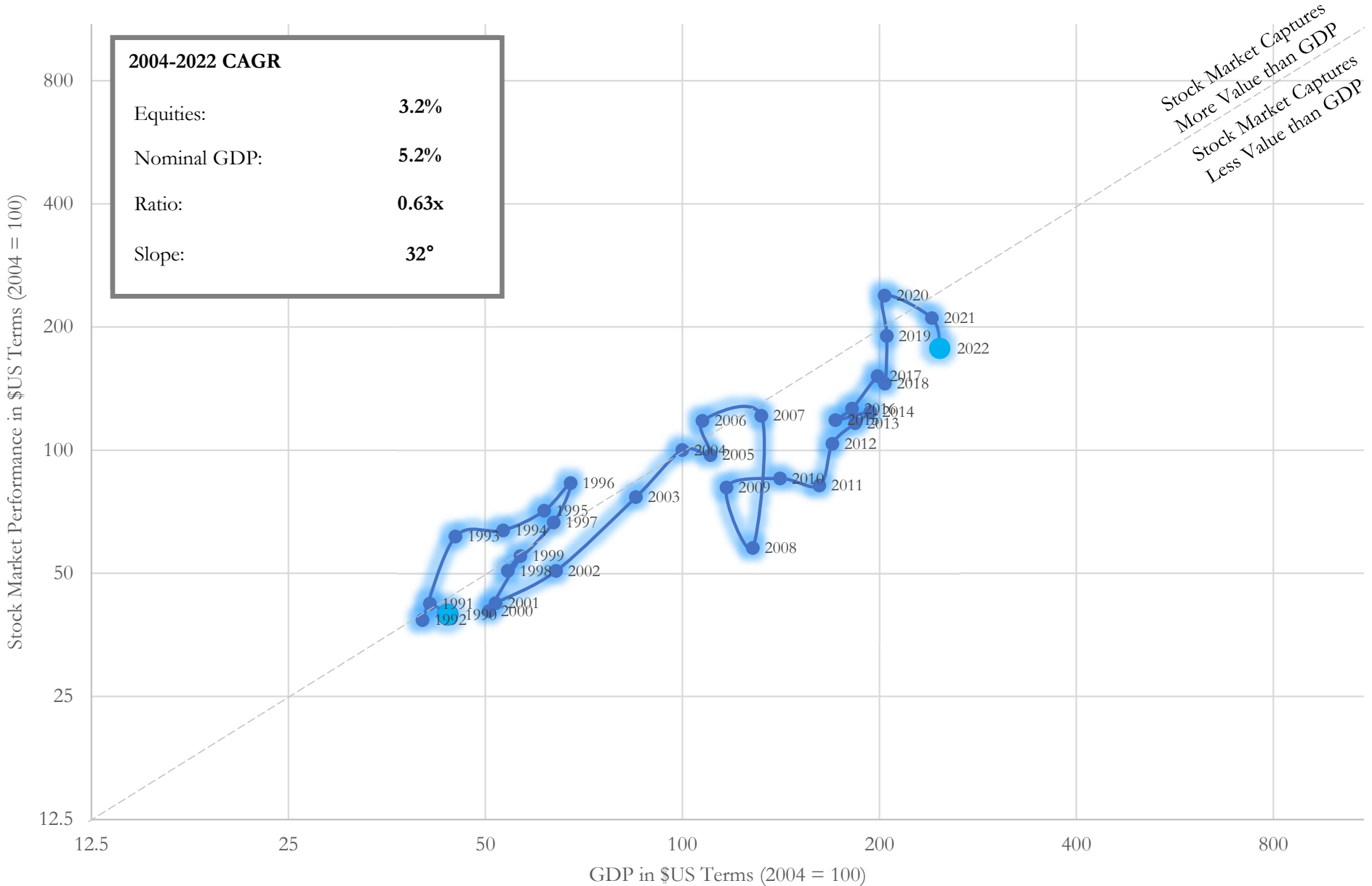


Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1995 – 2022



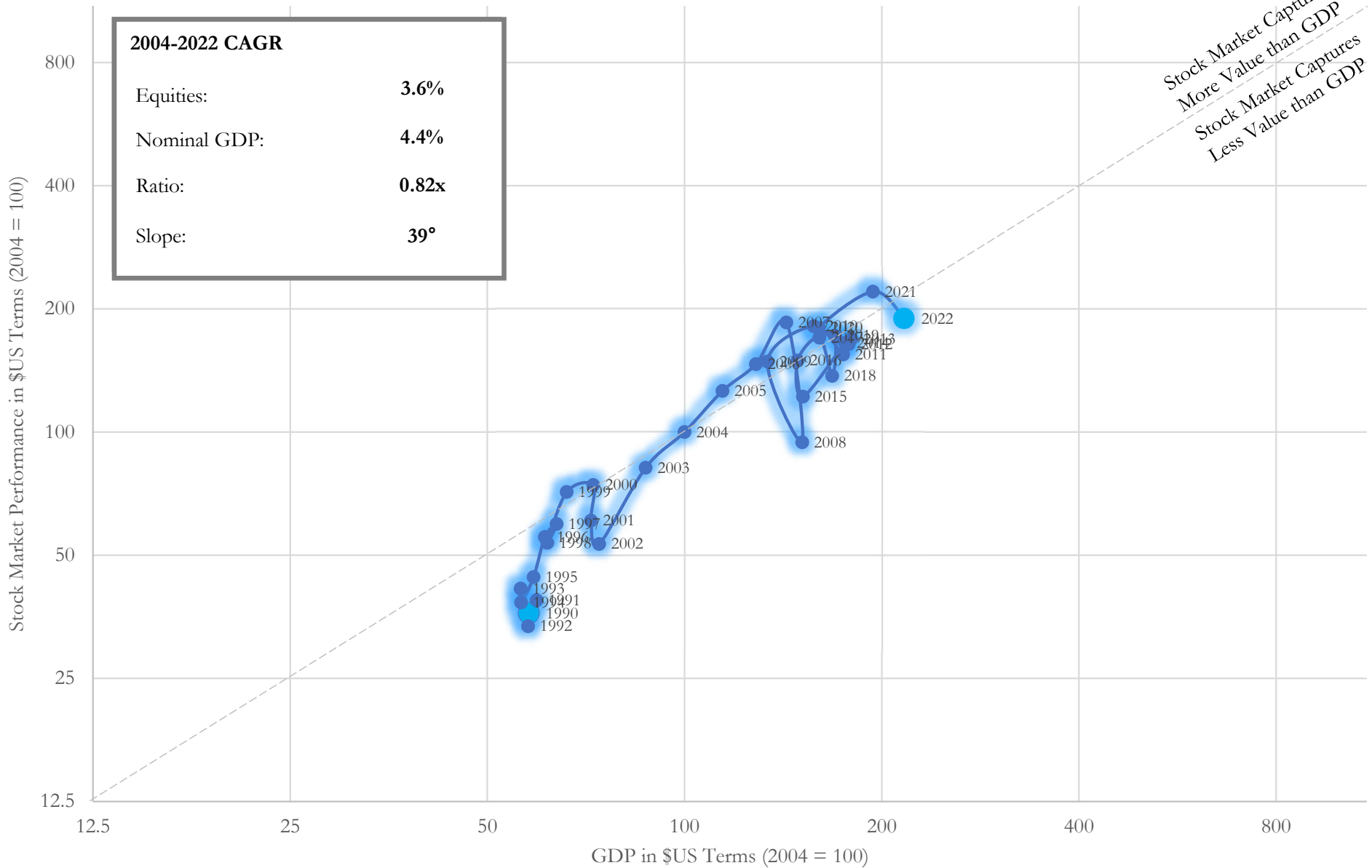
Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1990 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1990 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

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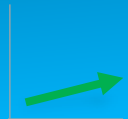
*Value from economic growth fully captured by shareholders*



4

## Model 4: Partial Reward to Shareholders

*Strong economic growth with partial shareholder value capture*



5

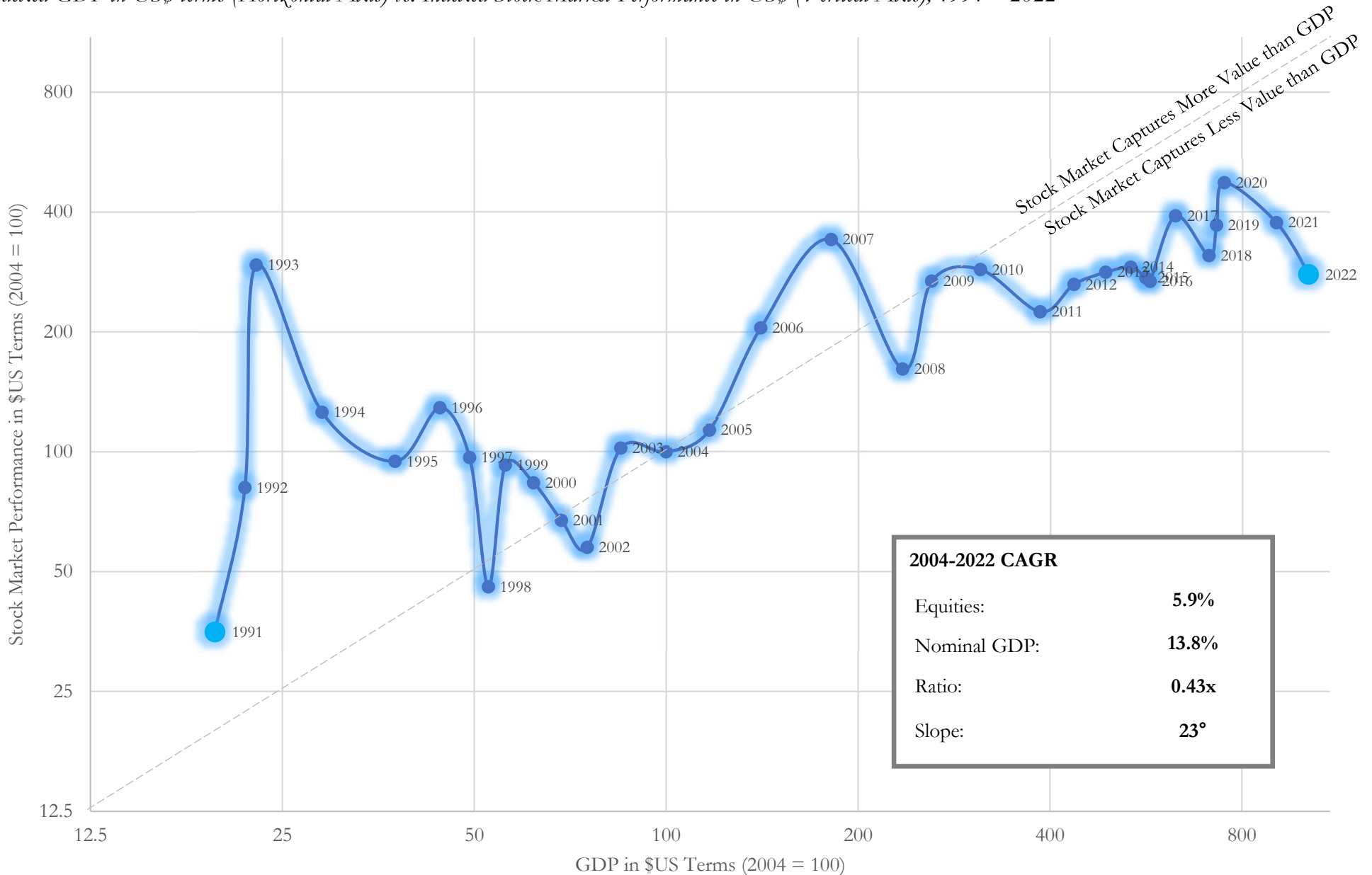
## Model 5: Going in Circles

*Holding pattern – minimal growth and value generation*



# CHINA: COUNTERINTUITIVELY, DESPITE RAPID GDP GROWTH, THE COUNTRY HAS BEEN MORE OF A MODEL 4

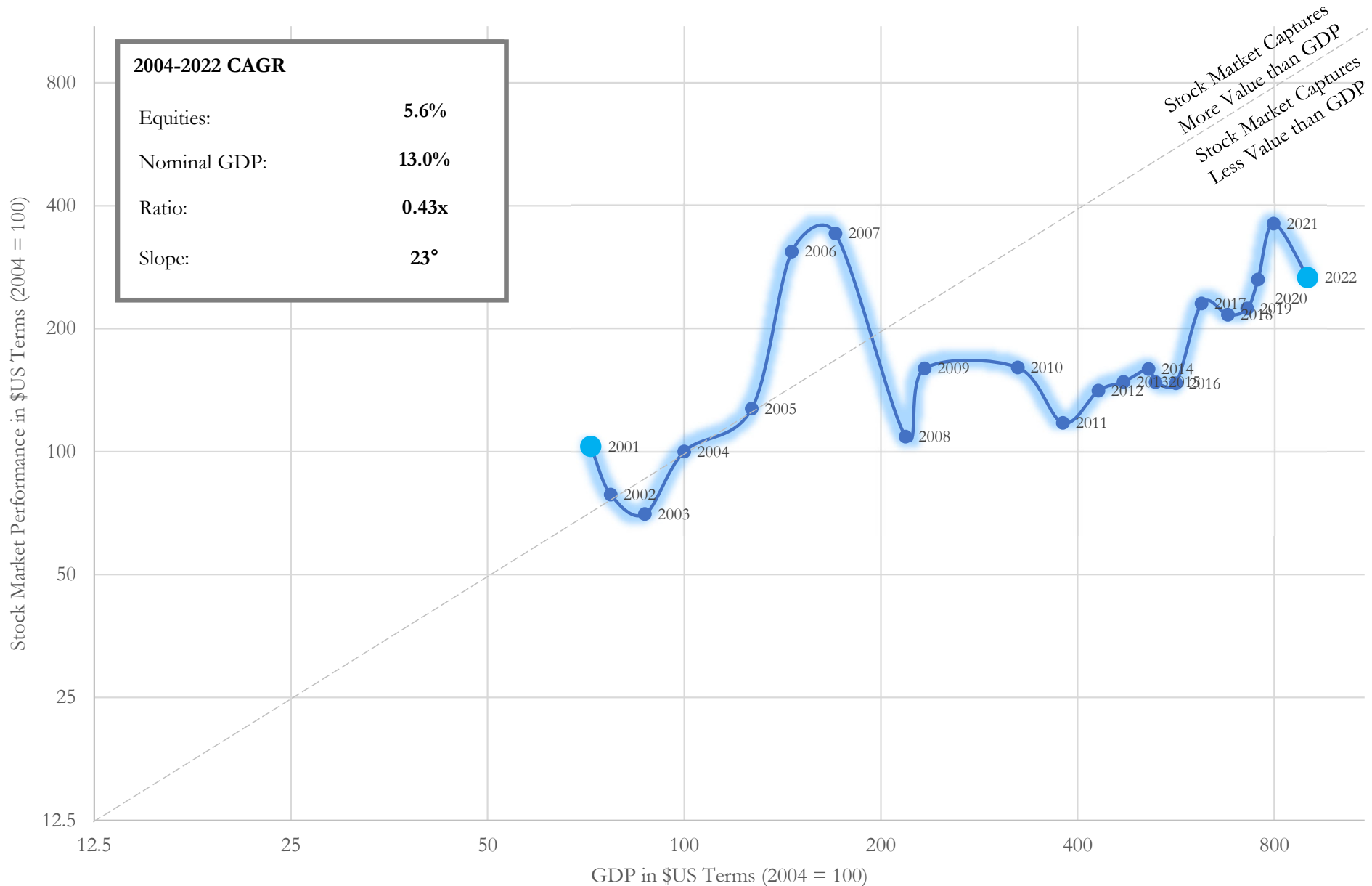
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1991 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

# 4 VIETNAM IS ONE OF THE MOST SURPRISING MODEL 4s

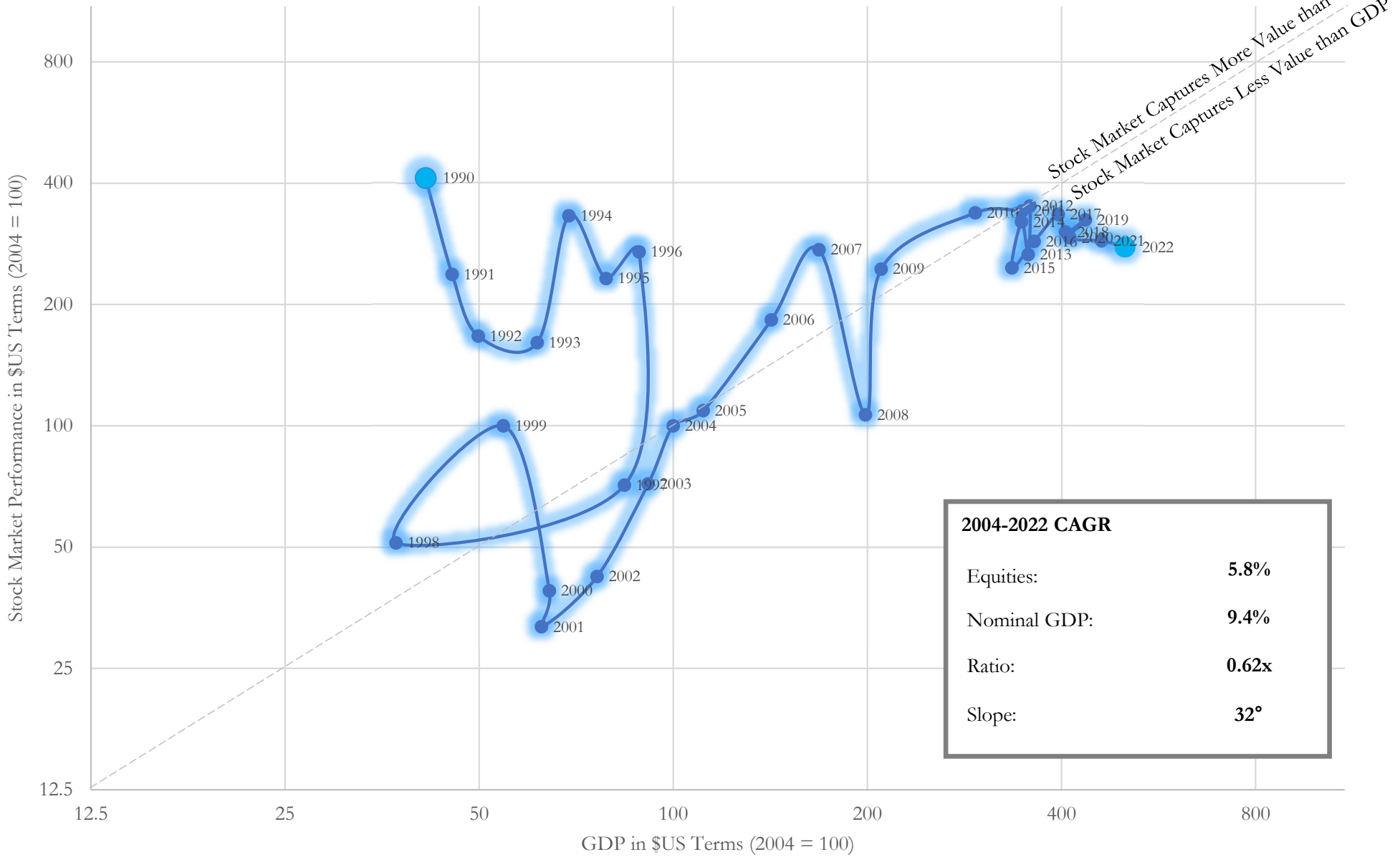
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 2001 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

# INDONESIA WAS A MODEL 3 2001-09, BUT MORE RECENTLY A MODEL 4

Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1990 – 2022



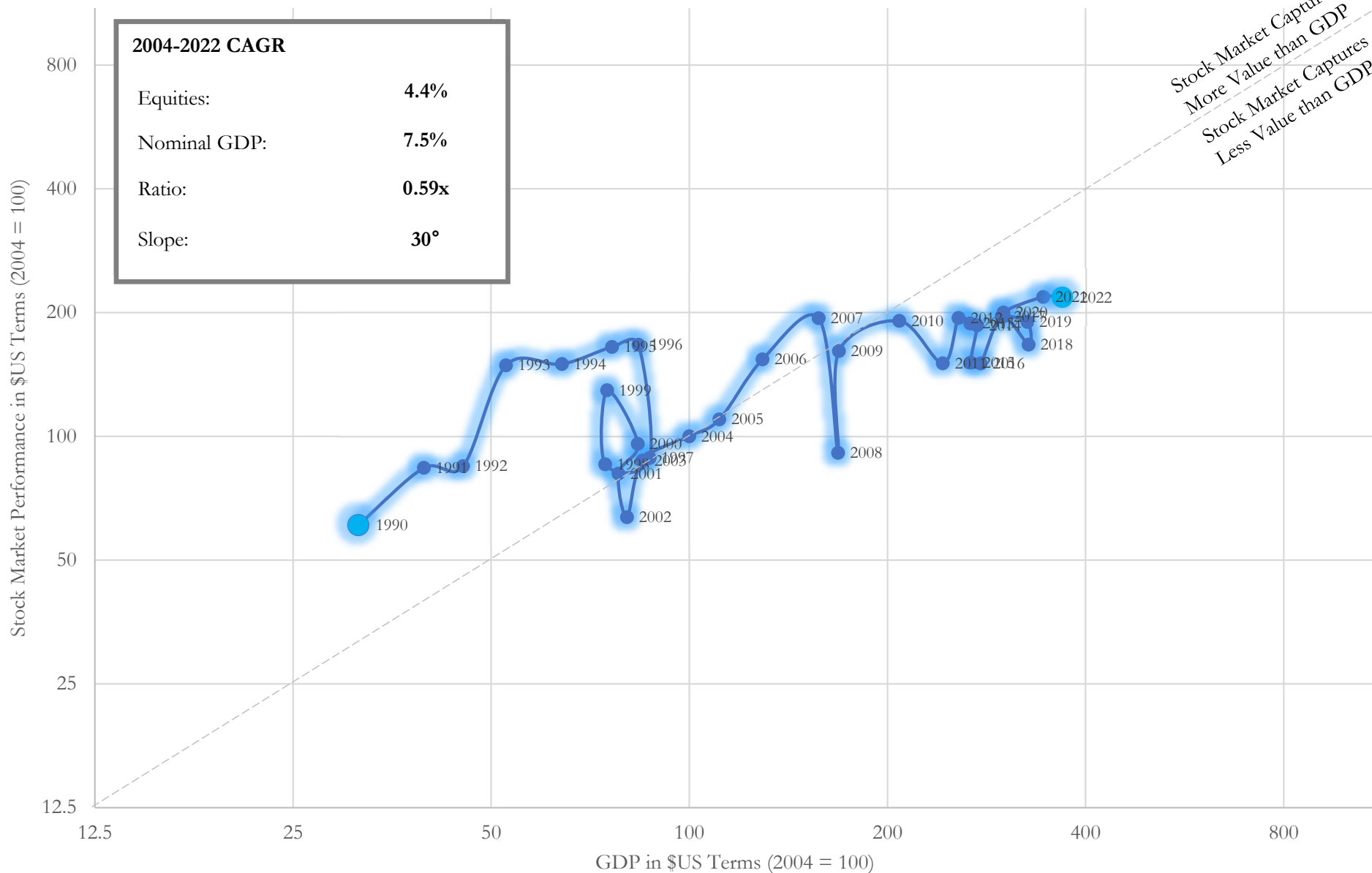
Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis



4

# LIKEWISE FOR SINGAPORE

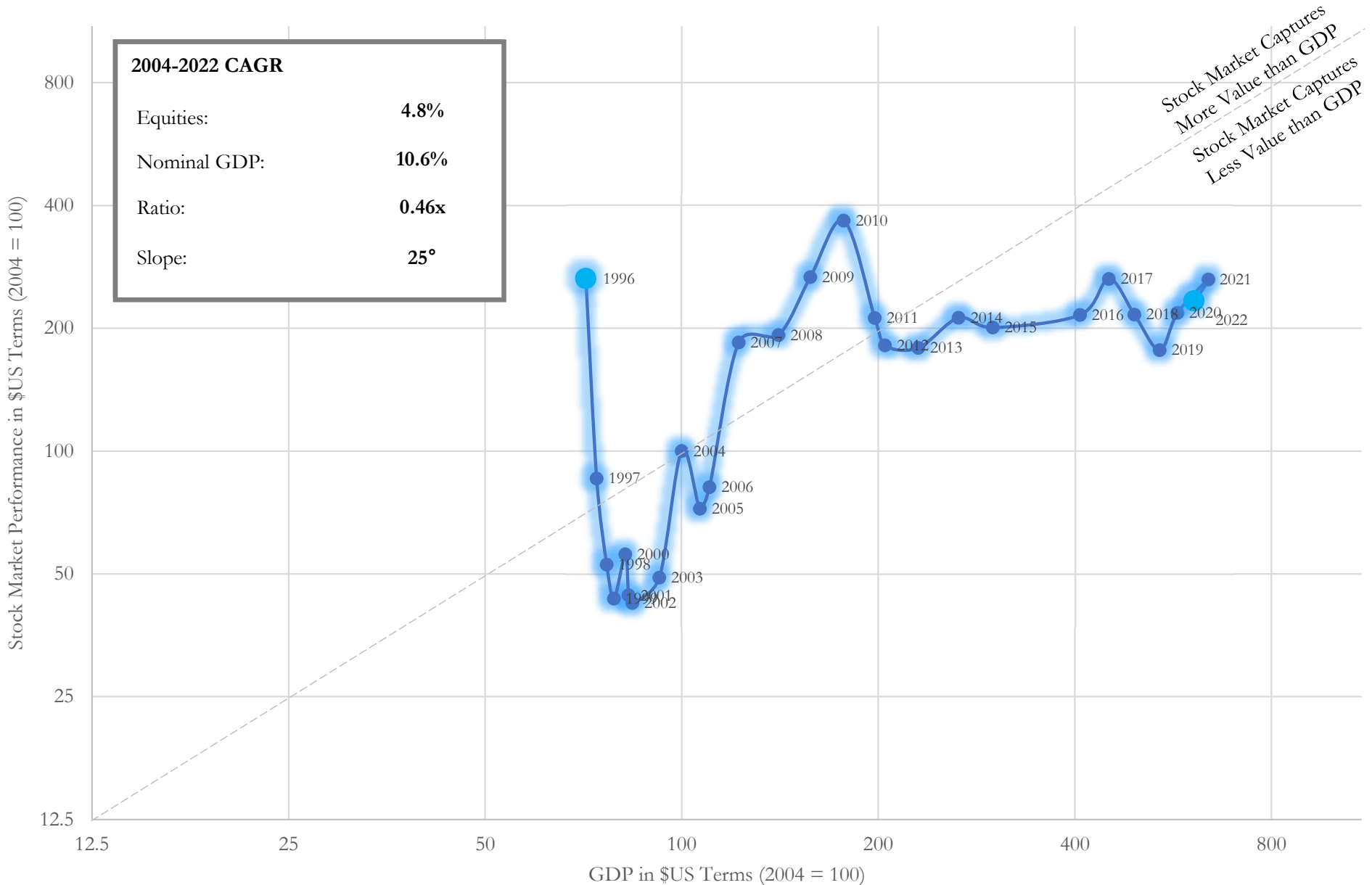
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1990 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

# BANGLADESH: A DRAMATIC SHIFT FROM TOO GOOD TO BE TRUE TO OUT OF SYNC

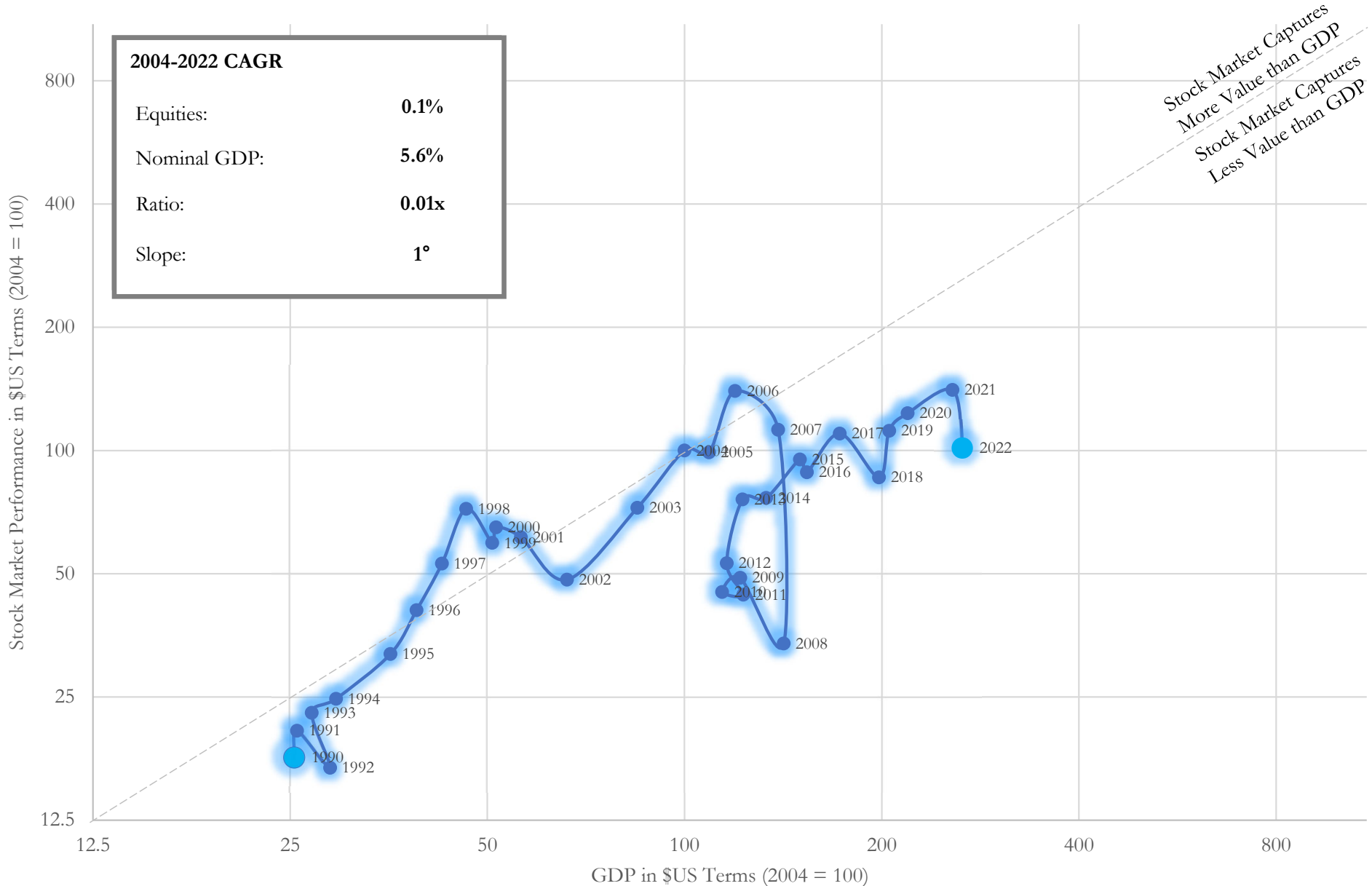
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1996 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

# IRELAND WAS ALSO A MODEL 3 FROM 1990-2007, BUT NOW A 4

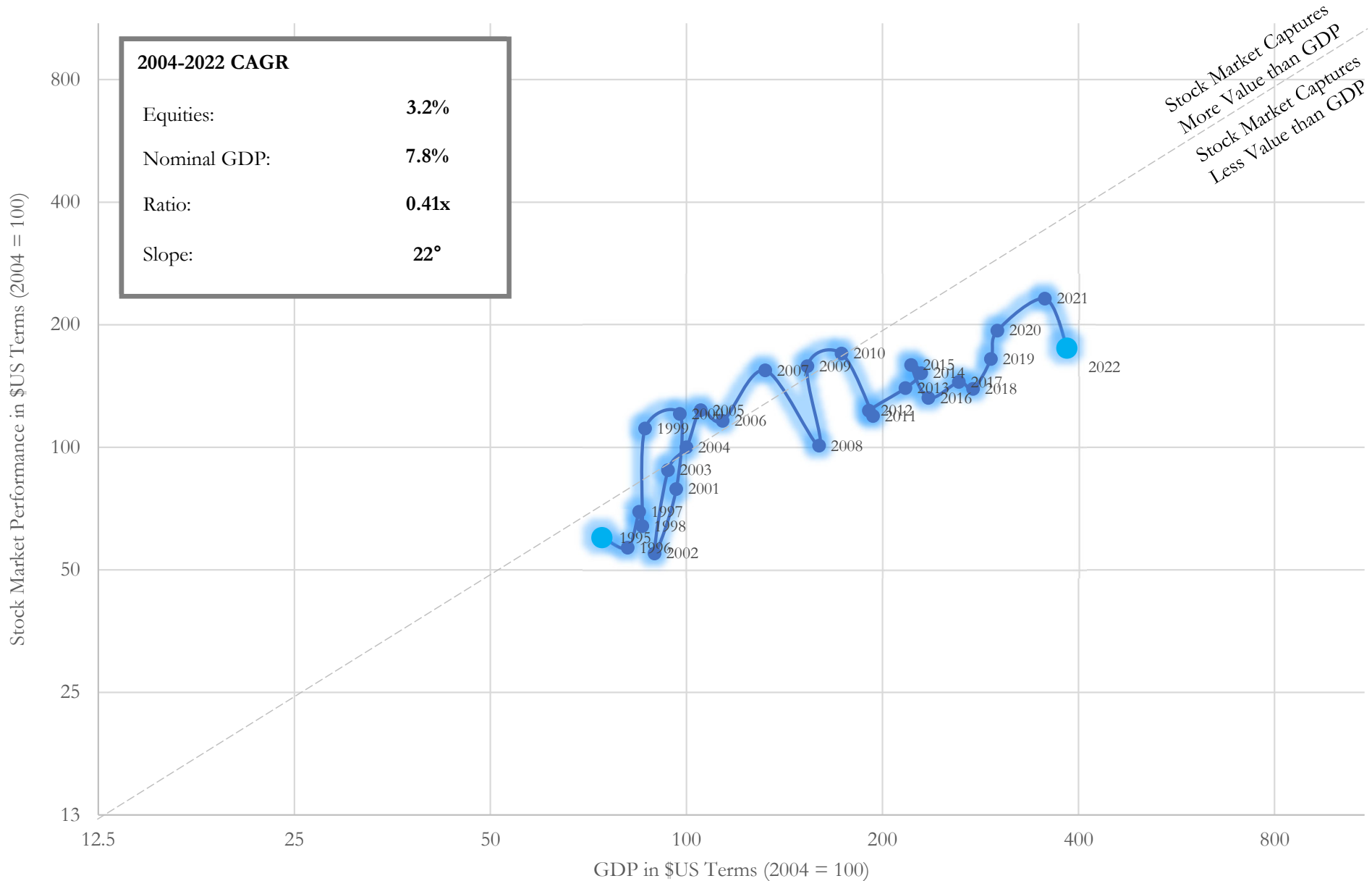
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1990 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

# 4 ISRAEL WAS A MODEL 3 UNTIL 2010, BUT HAS DRIFTED TO 4

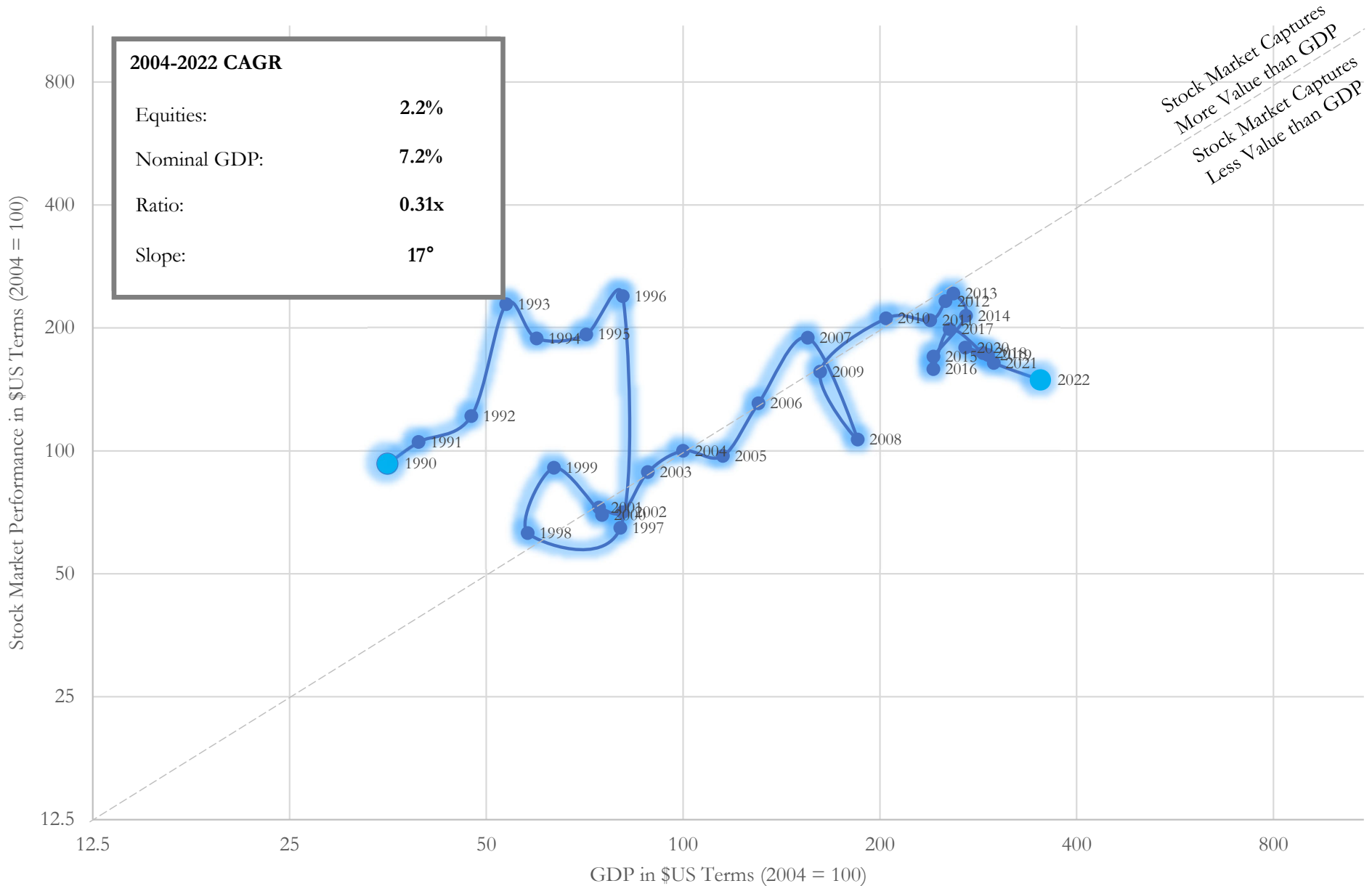
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1995 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

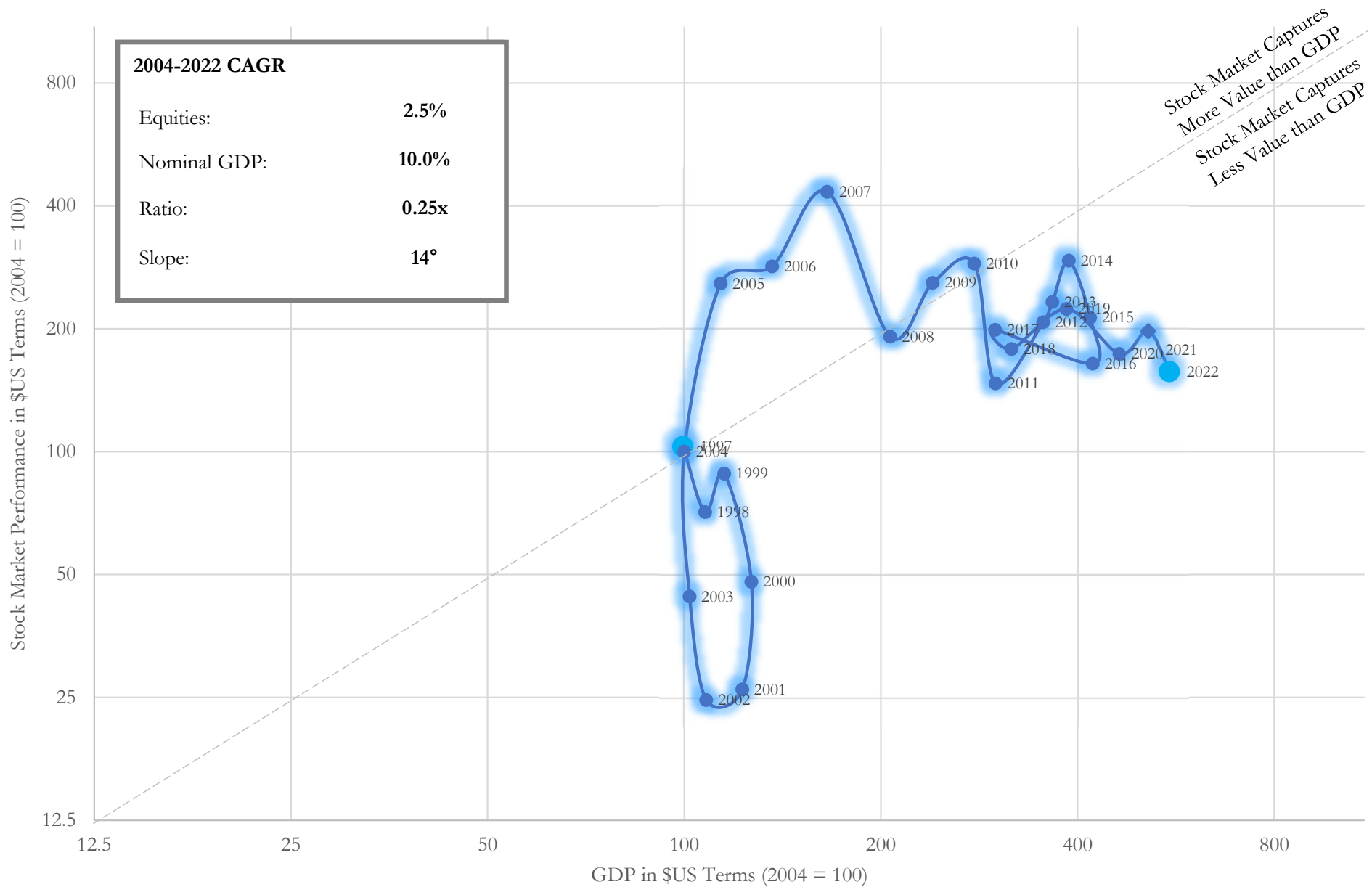
# 4 MALAYSIA WAS A MODEL 3 FROM 1998 BUT NOW A 4

Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1990 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1997 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

1

## Model 1: Global Champions

*Equity growth supported by home-grown global MNCs*



2

## Model 2: Too Good To Be True

*Strong equity growth, decoupled from actual economic growth*



3

## Model 3: Fair and Balanced

*Value from economic growth fully captured by shareholders*



4

## Model 4: Partial Reward to Shareholders

*Strong economic growth with partial shareholder value capture*



5

## Model 5: Going in Circles

*Holding pattern – minimal growth and value generation*

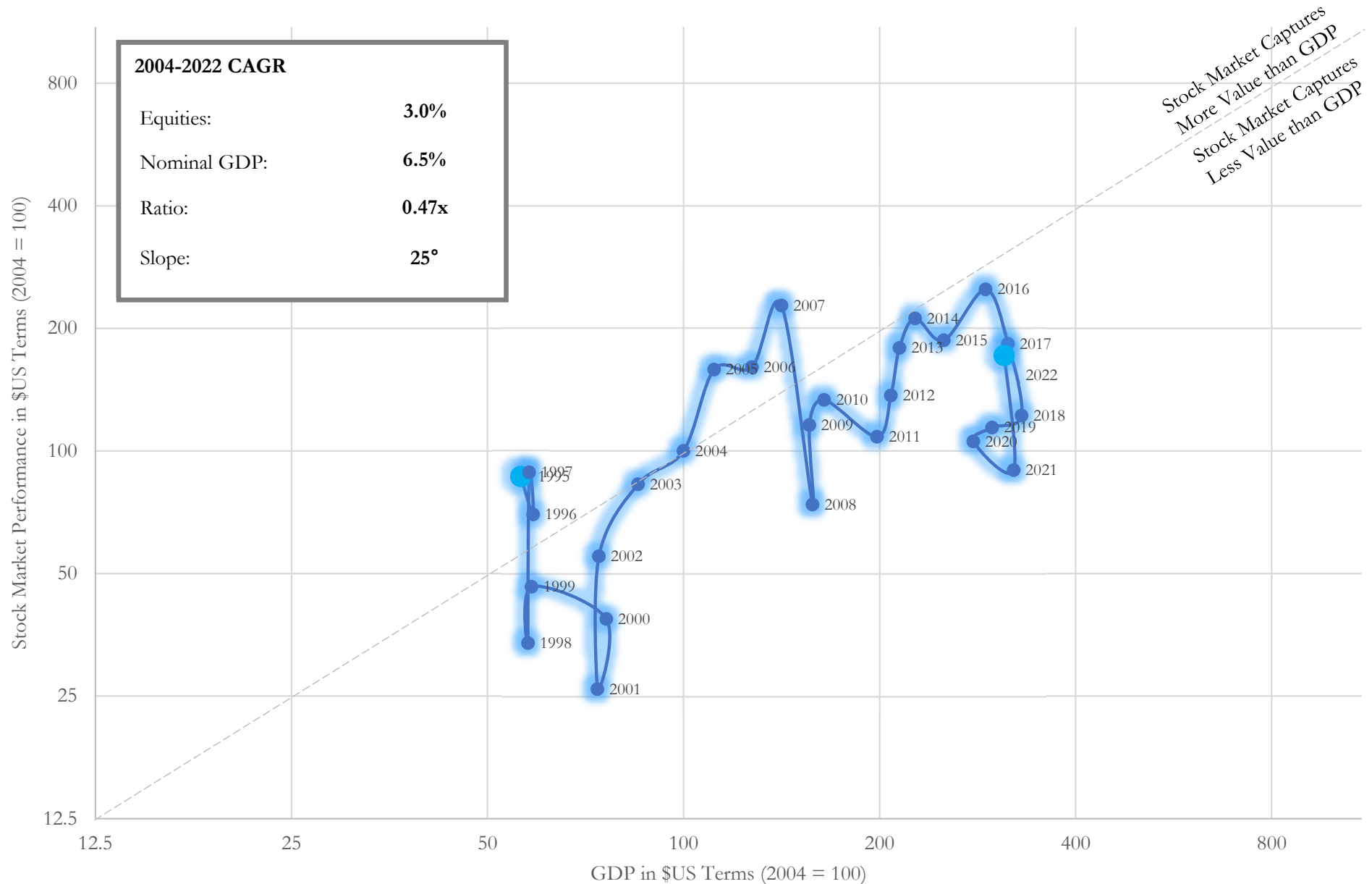




5

# PAKISTAN IS ON THE FENCE BETWEEN MODELS 4 AND 5

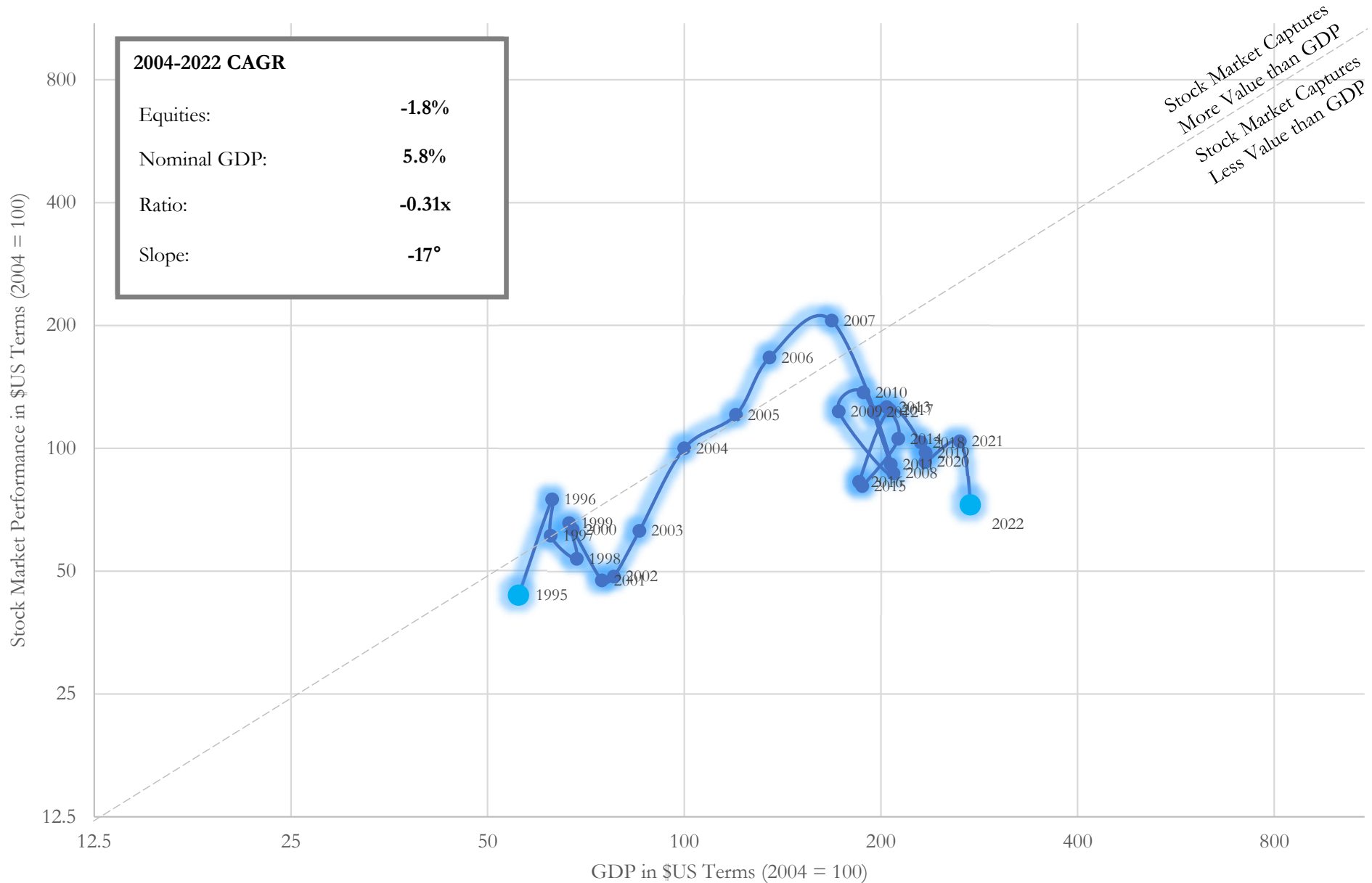
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1995 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

# 5 POLAND SHOWS SIGNS OF MOVING FROM 5 BACK TO 4

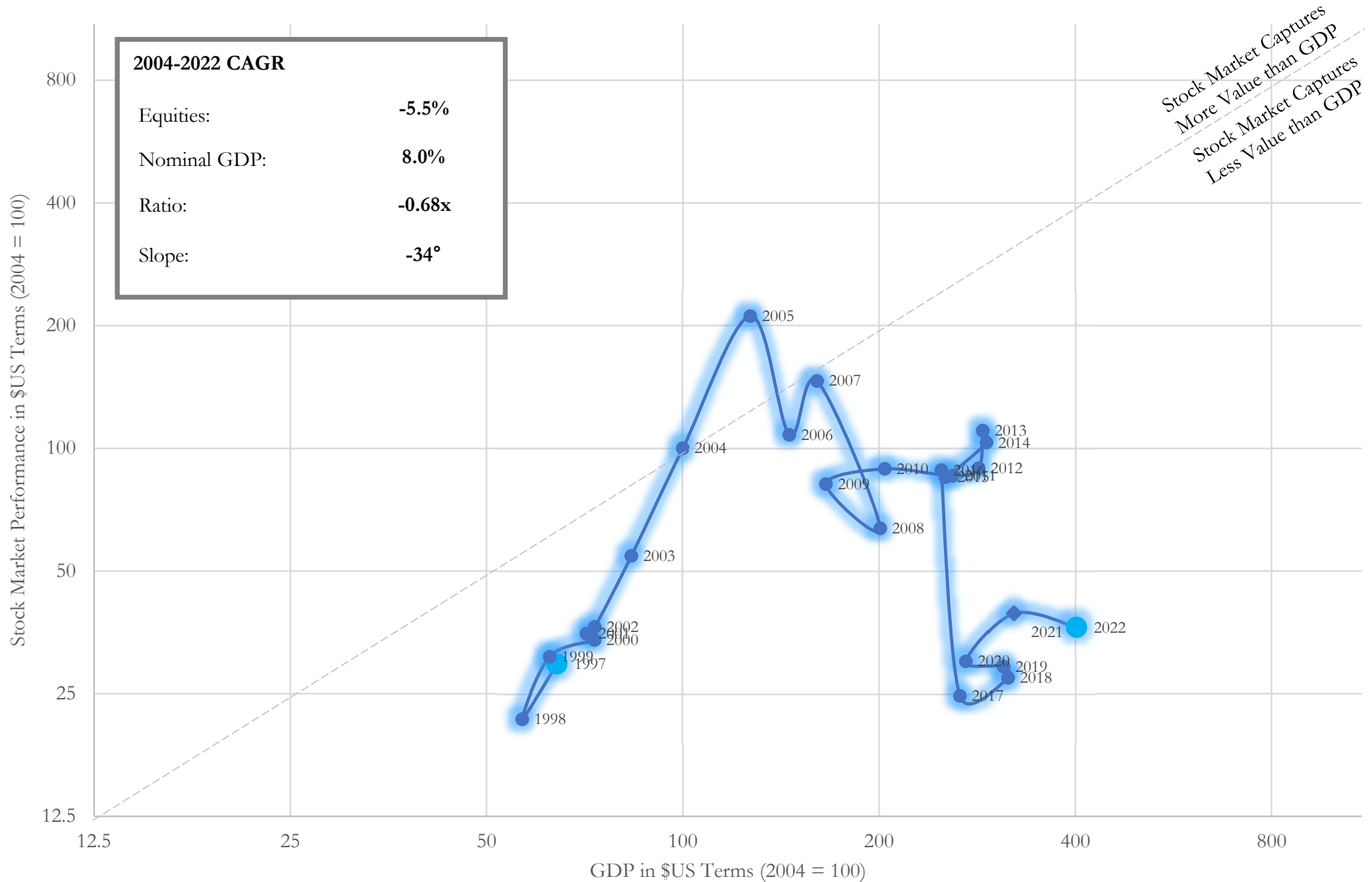
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1995 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

# SAUDI ARABIA GOES FROM 4 TO 5 BASED ON THE OIL PRICE

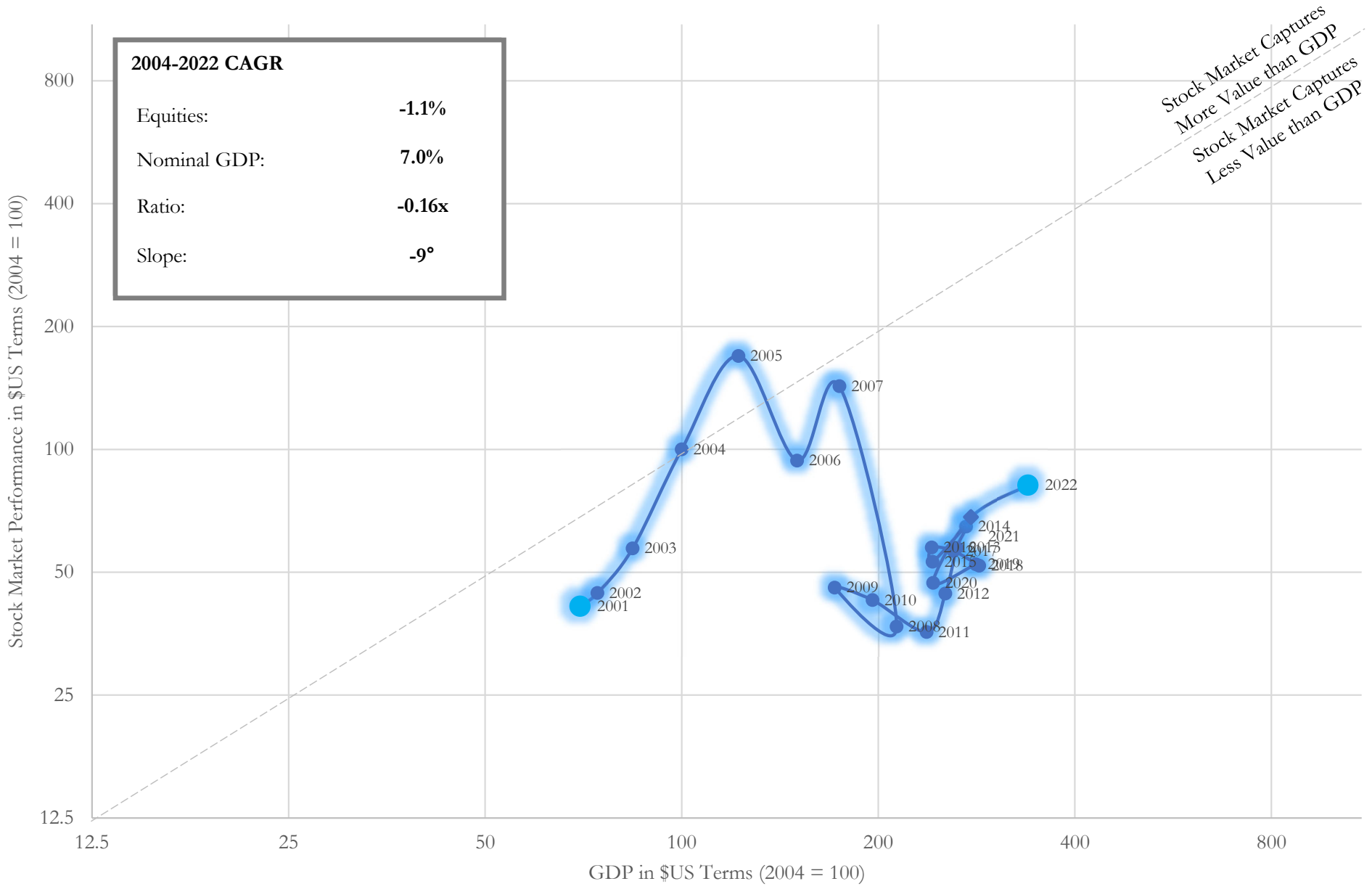
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1997 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

# SIMILARLY FOR THE UNITED ARAB EMIRATES

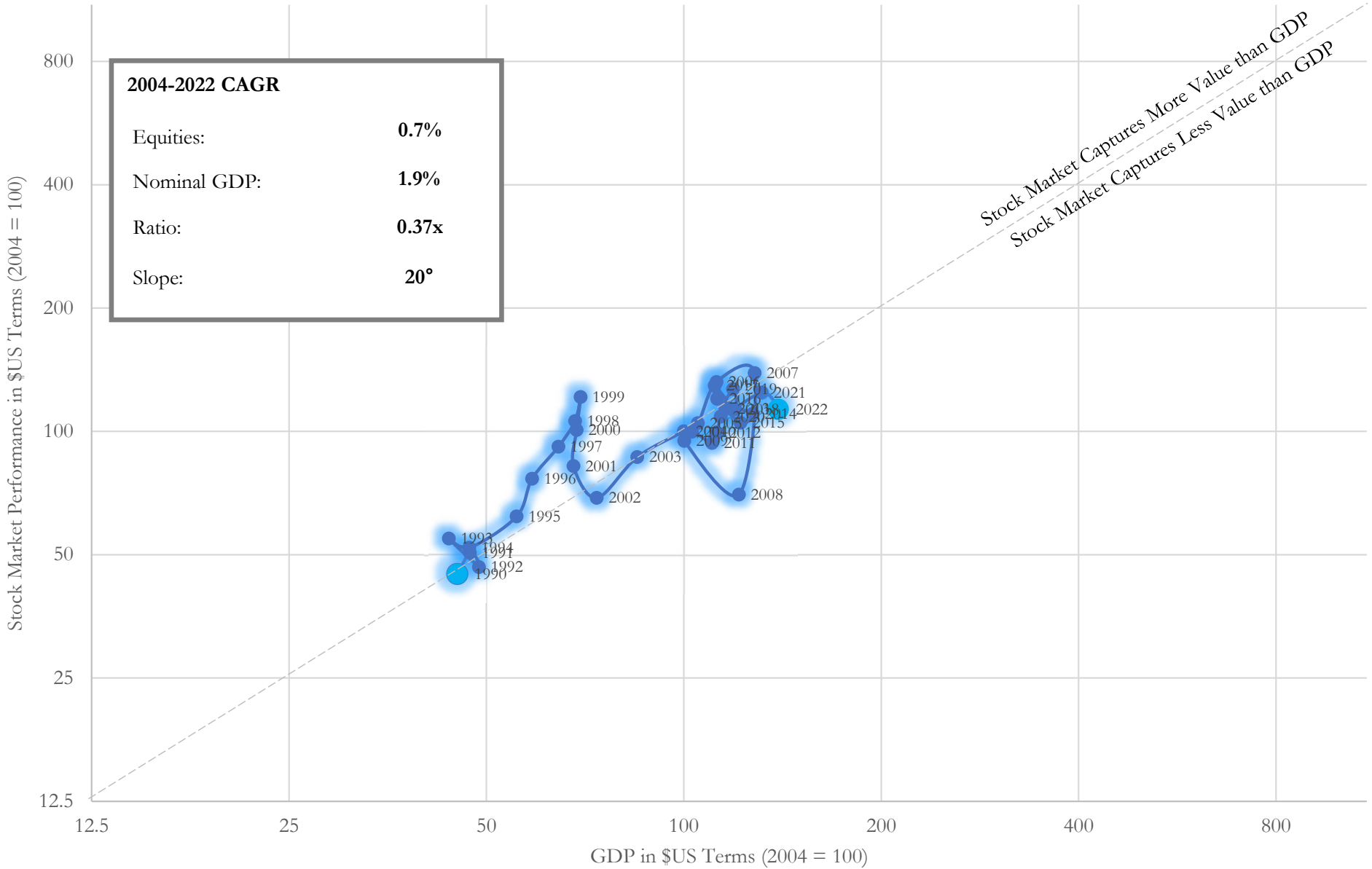
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 2001 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

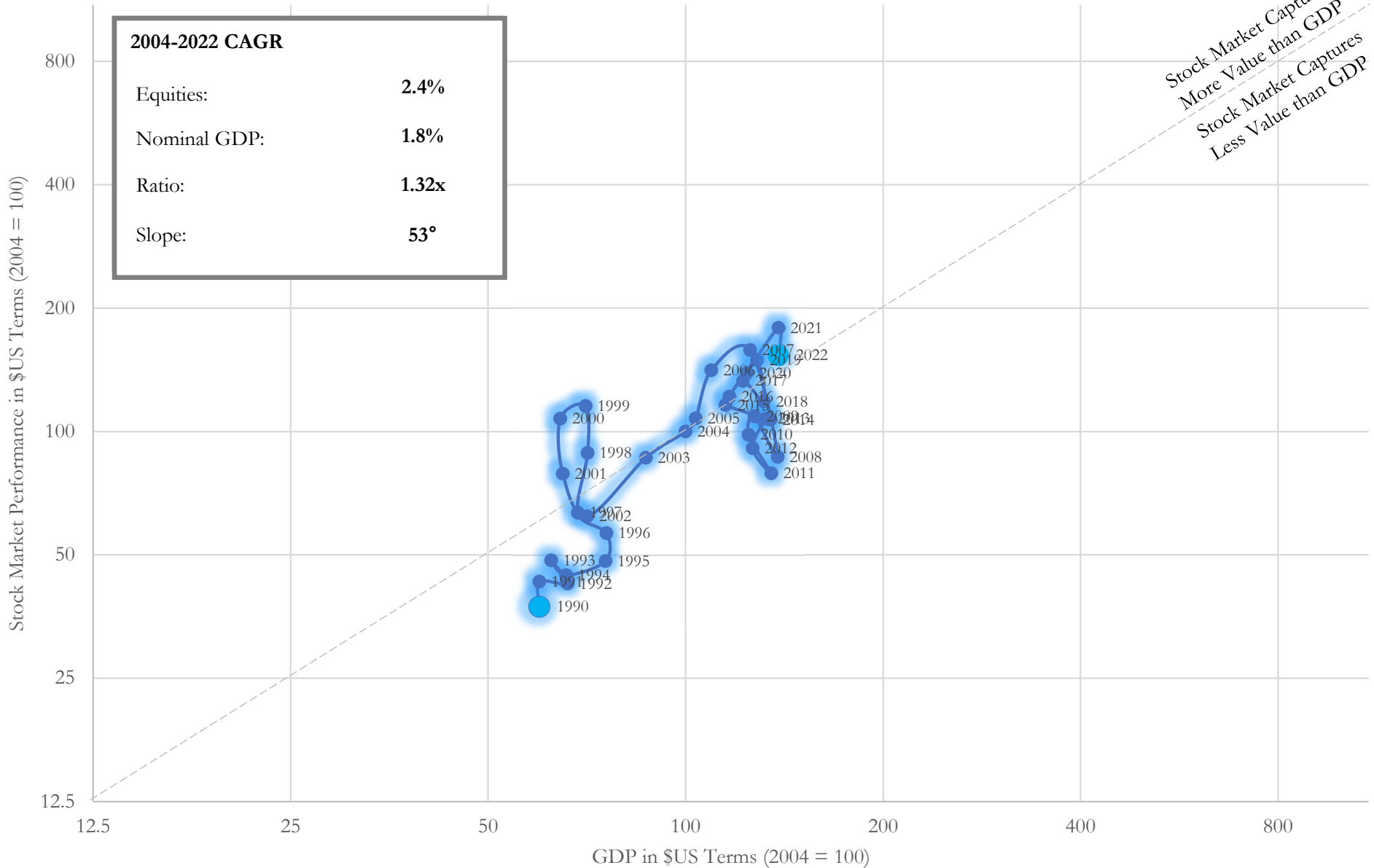
# WHEREAS THE UNITED KINGDOM IS A MORE UNEQUIVOCAL MODEL 5, GOING IN CIRCLES

Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1990 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1990 – 2022

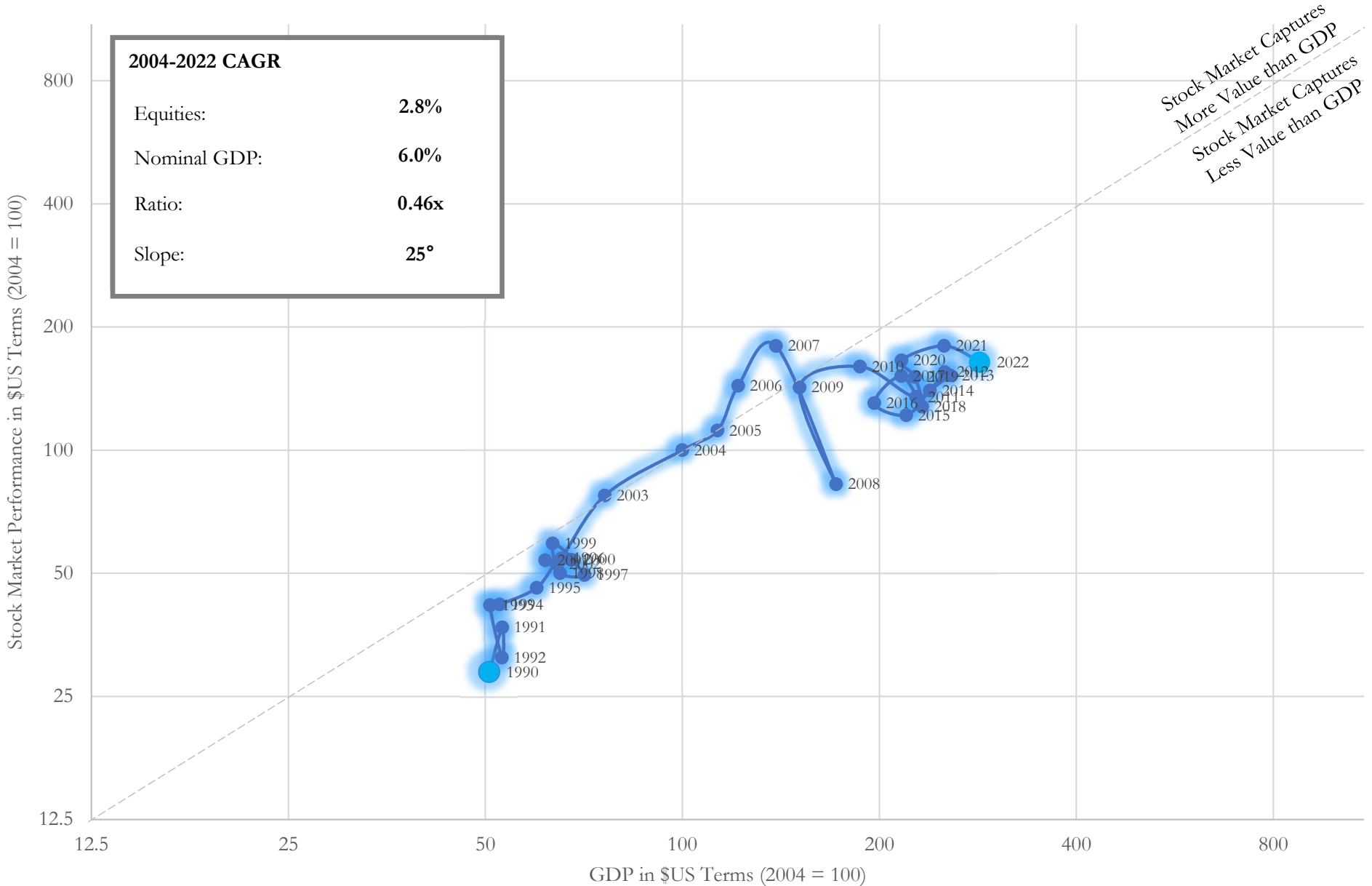


Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

5

# AUSTRALIA WAS A MODEL 3 UNTIL 2007, BUT NOW A 5

Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1990 – 2022



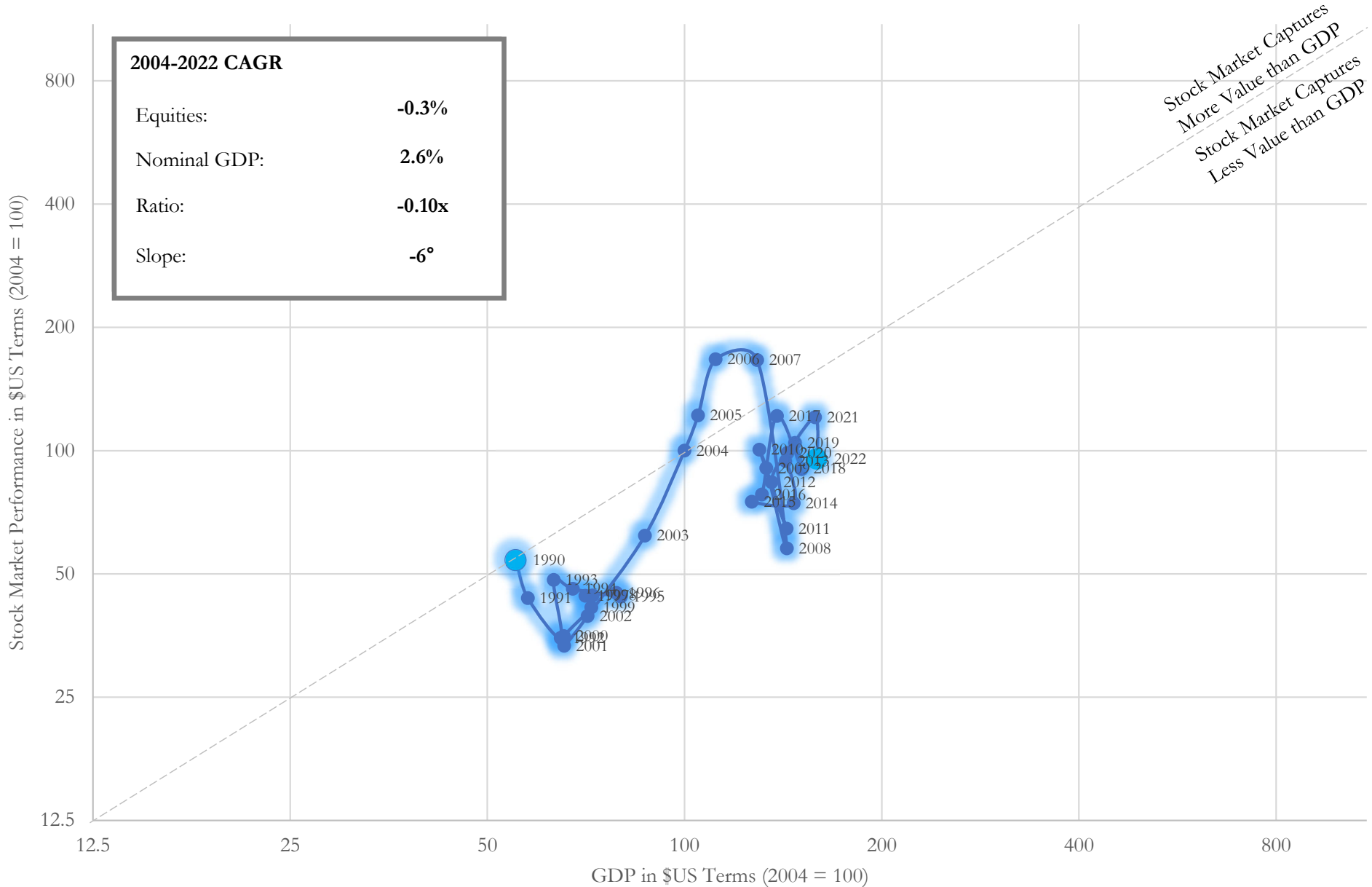
Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis



5

# AUSTRIA WAS TOO GOOD TO BE TRUE UNTIL 2007, NOW 5

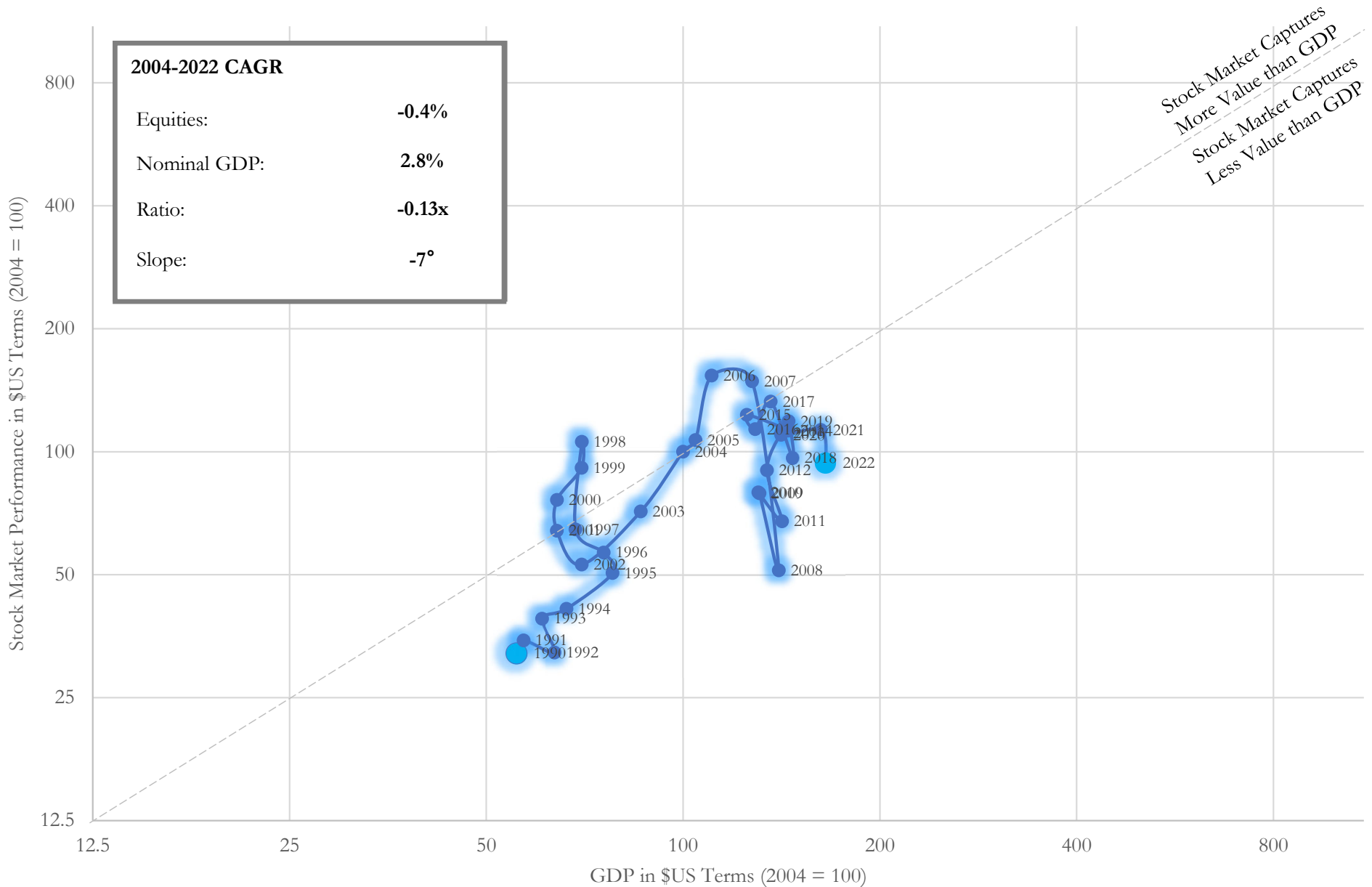
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1990 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

# 5 BELGIUM

Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1990 – 2022

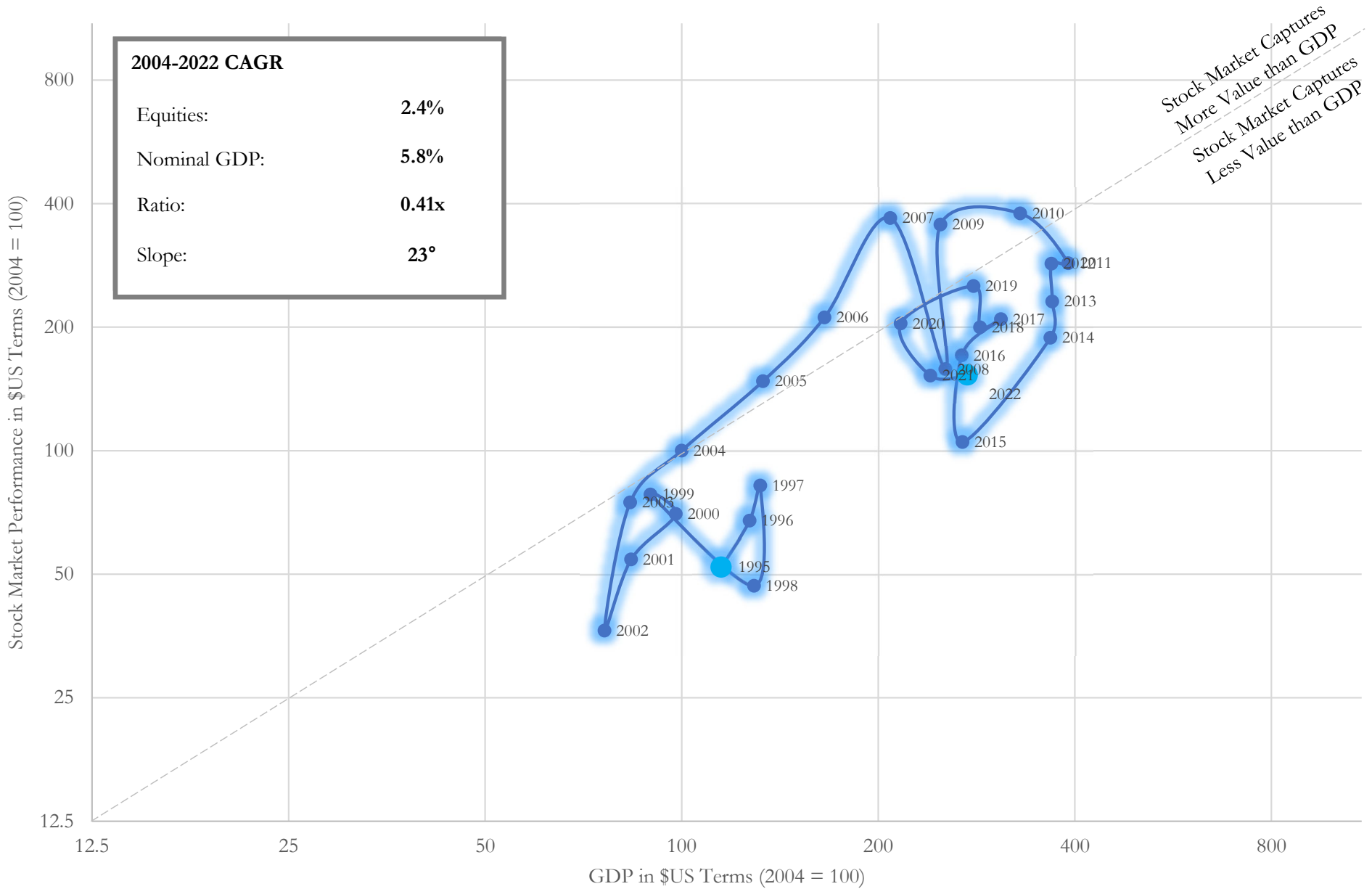


Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

5

# BRAZIL WAS TOO GOOD TO BE TRUE IN 2007, NOW A 5

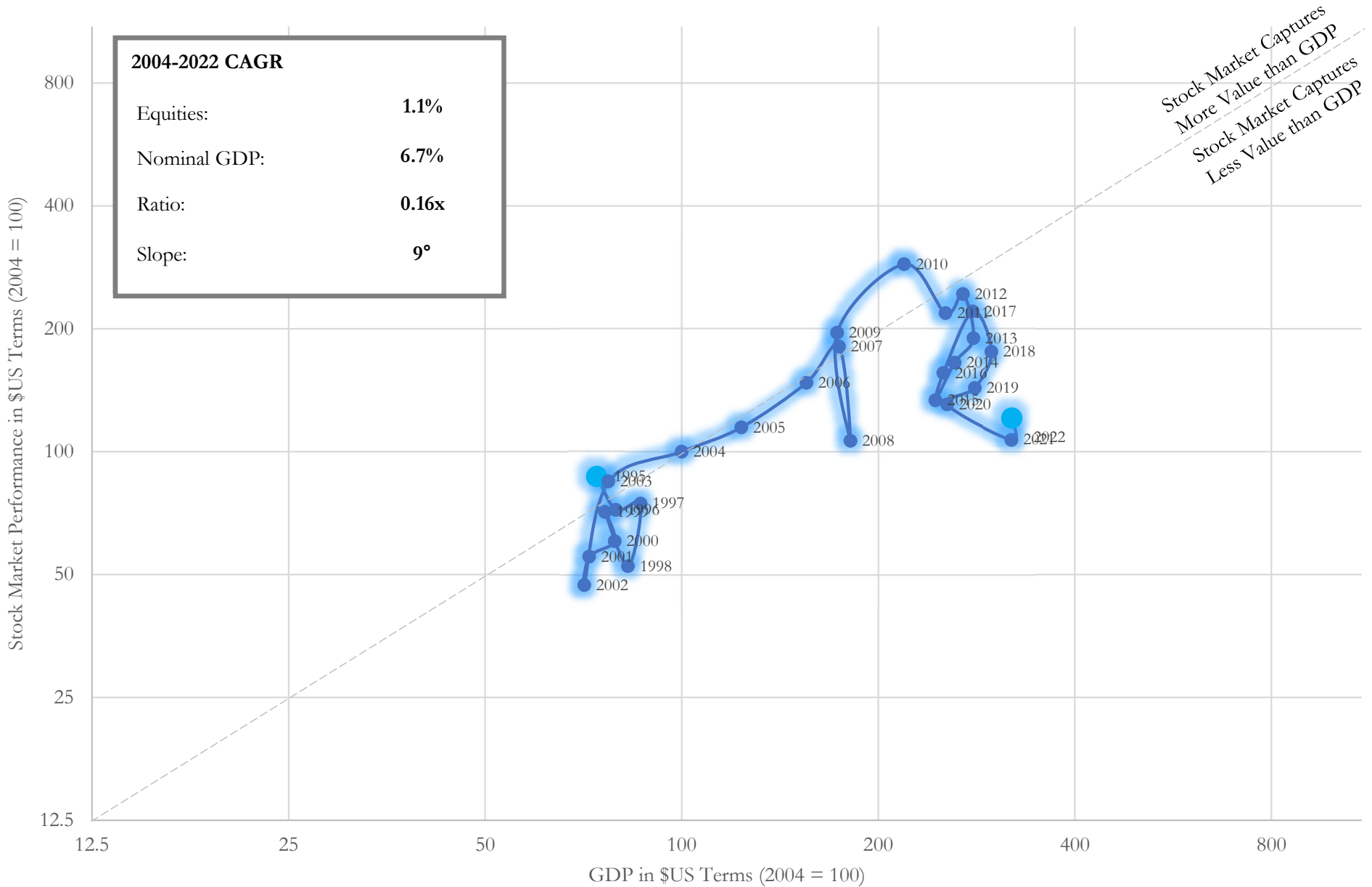
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1995 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

# CHILE WAS A MODEL 3, BUT AFTER A TOO GOOD TO BE TRUE 2010 HAS BECOME A 5

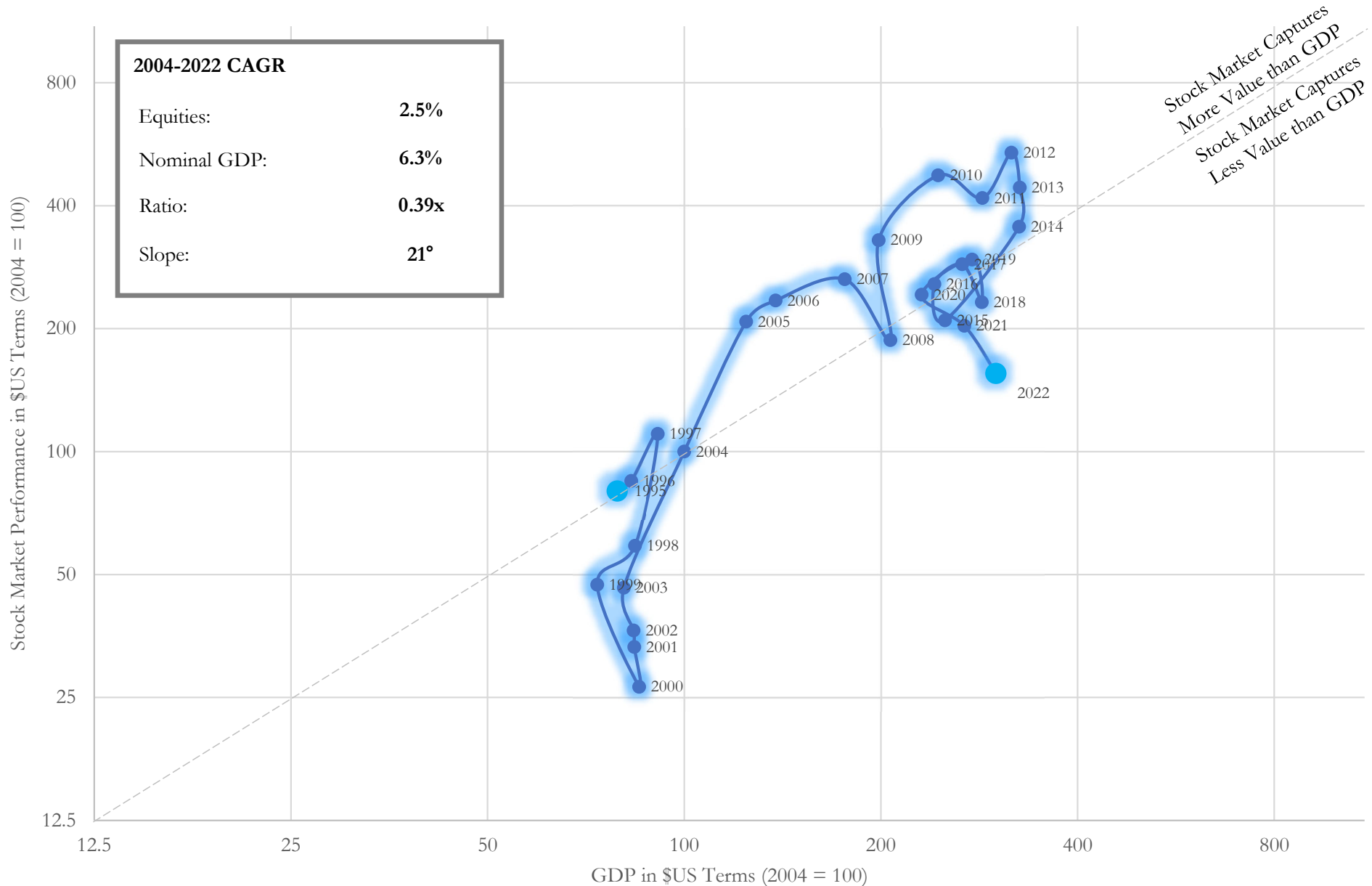
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1995 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

# COLOMBIA WAS TOO GOOD TO BE TRUE AND FELL INTO 5

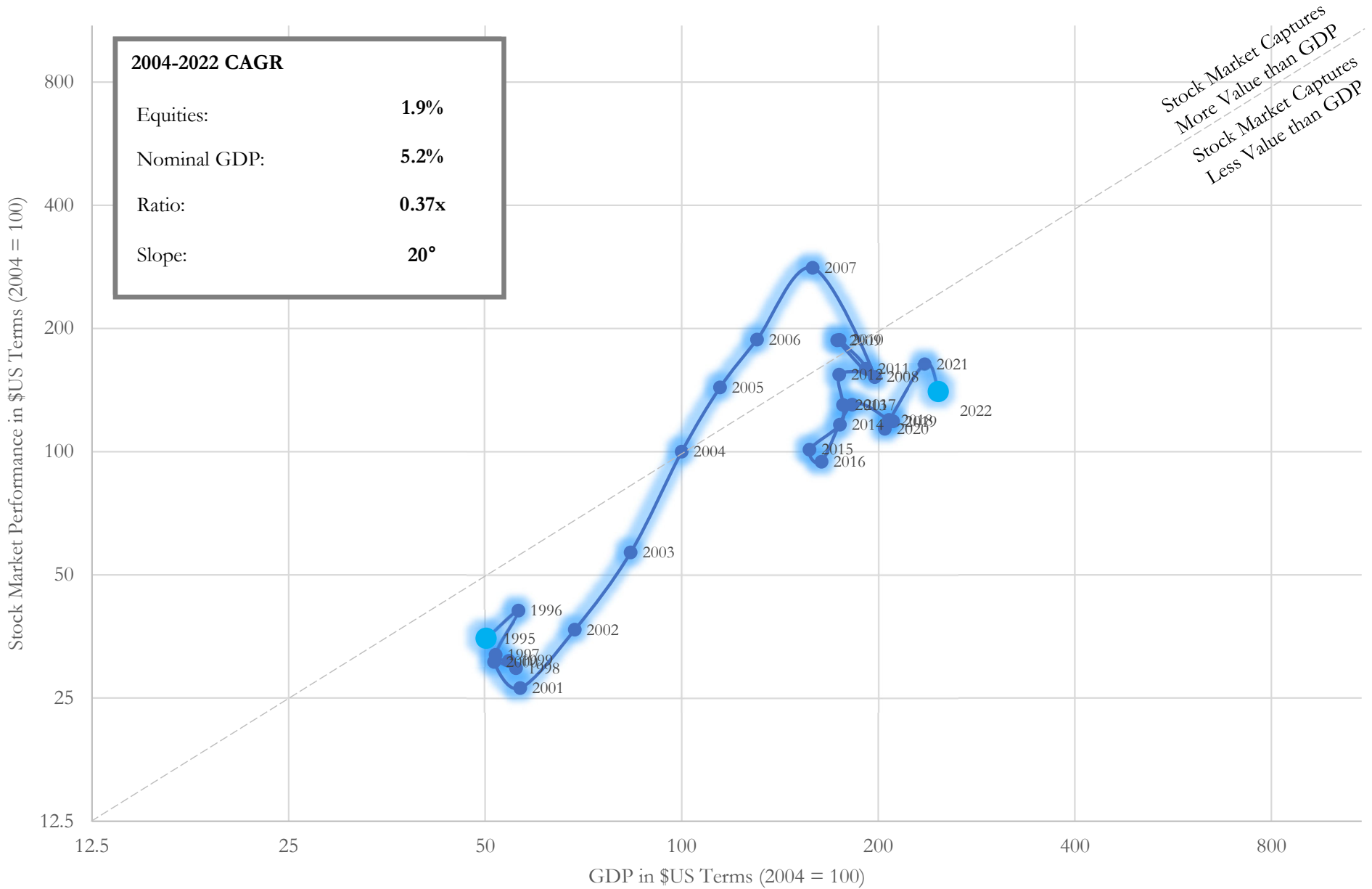
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1995 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

# THE CZECH REPUBLIC WAS TOO GOOD TO BE TRUE IN 2007 AND THEN FELL INTO A 5

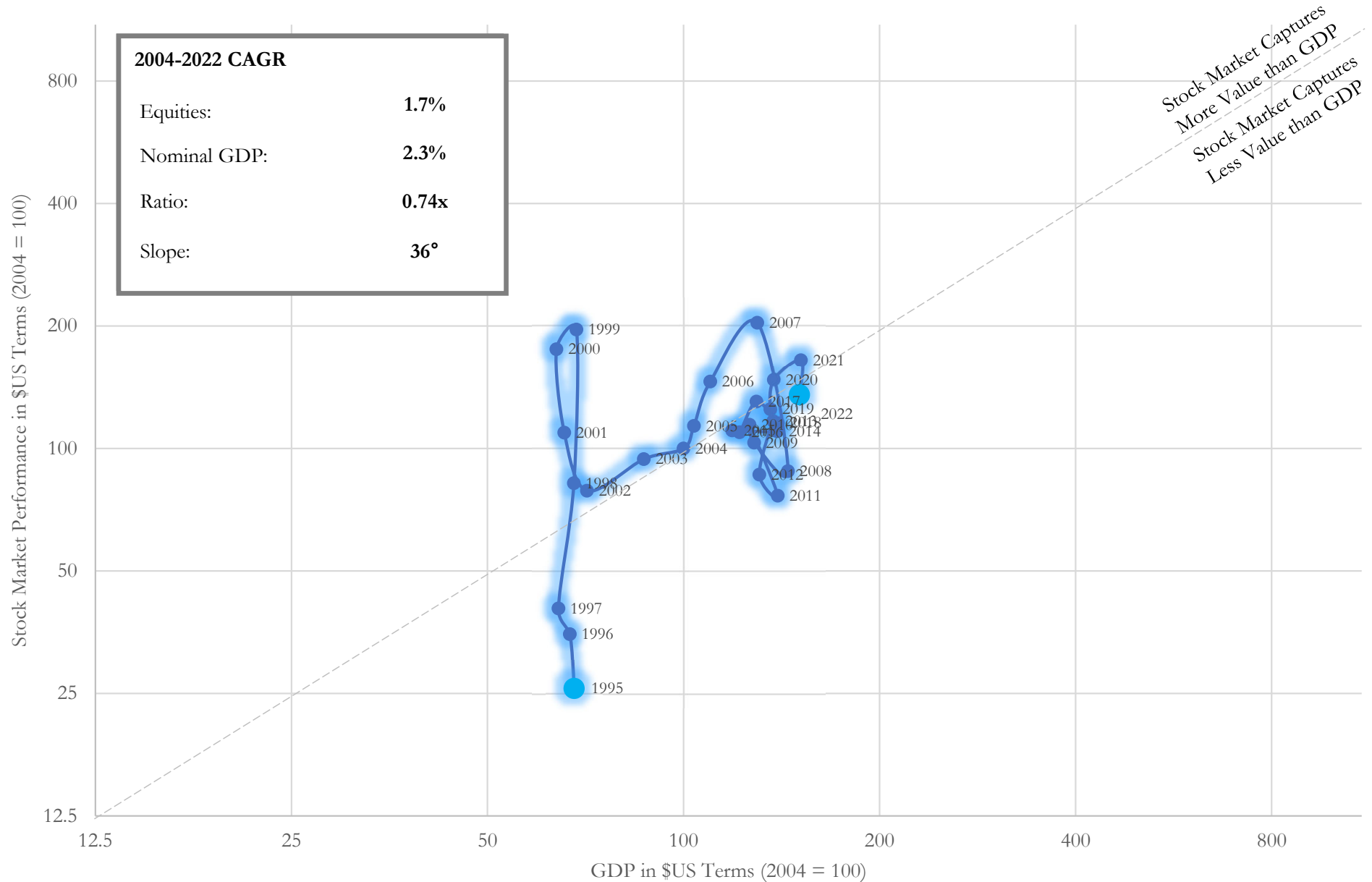
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1995 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

# AFTER ITS TOO GOOD TO BE TRUE NOKIA YEARS, FINLAND IN MORE RECENT YEARS HAS BEEN A 5

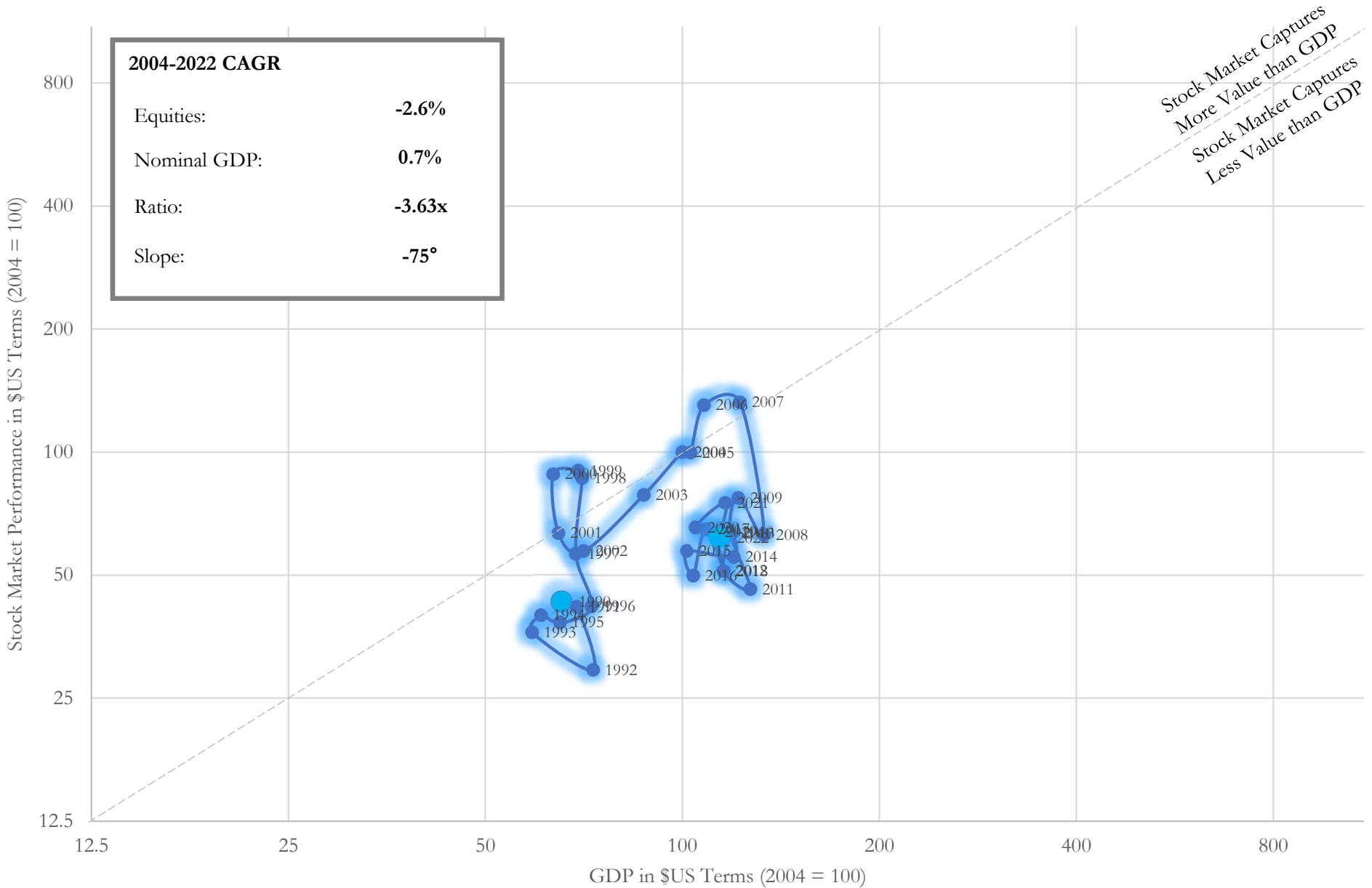
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1995 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis



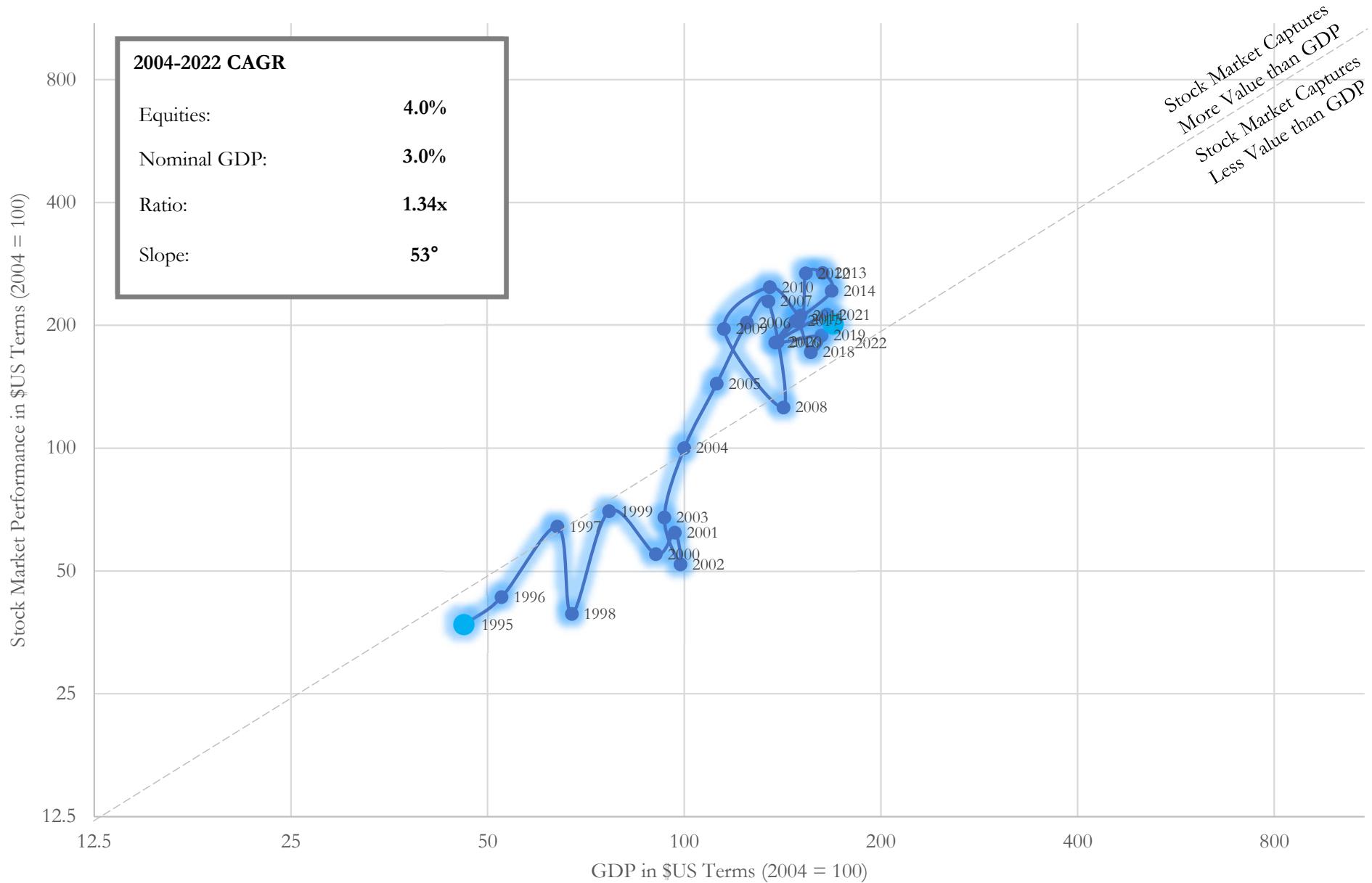
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1990 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

# AFTER A TOO GOOD TO BE TRUE PERIOD, MEXICO HAS FALLEN INTO MODEL 5

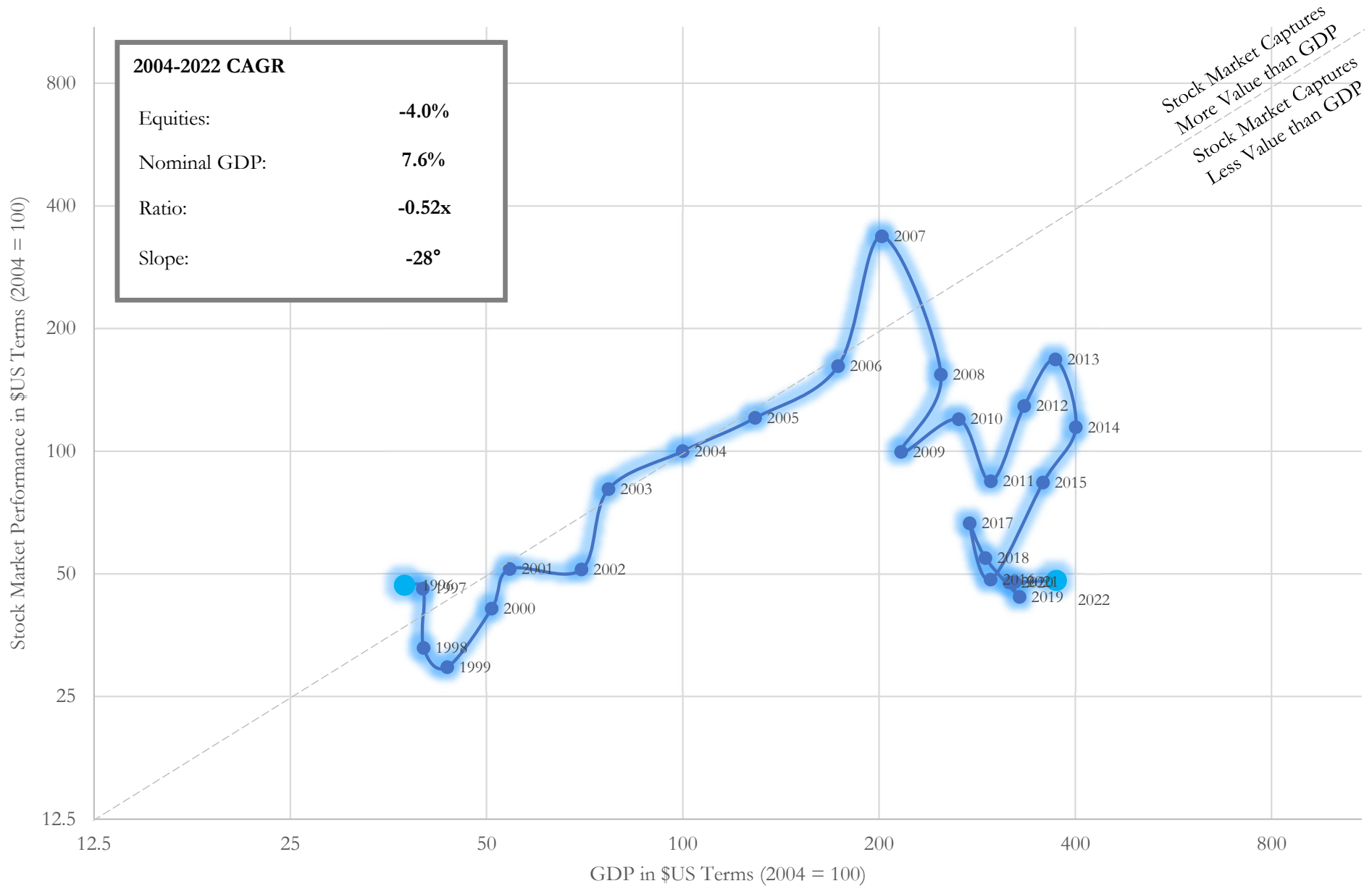
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1995 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

# 5 NIGERIA

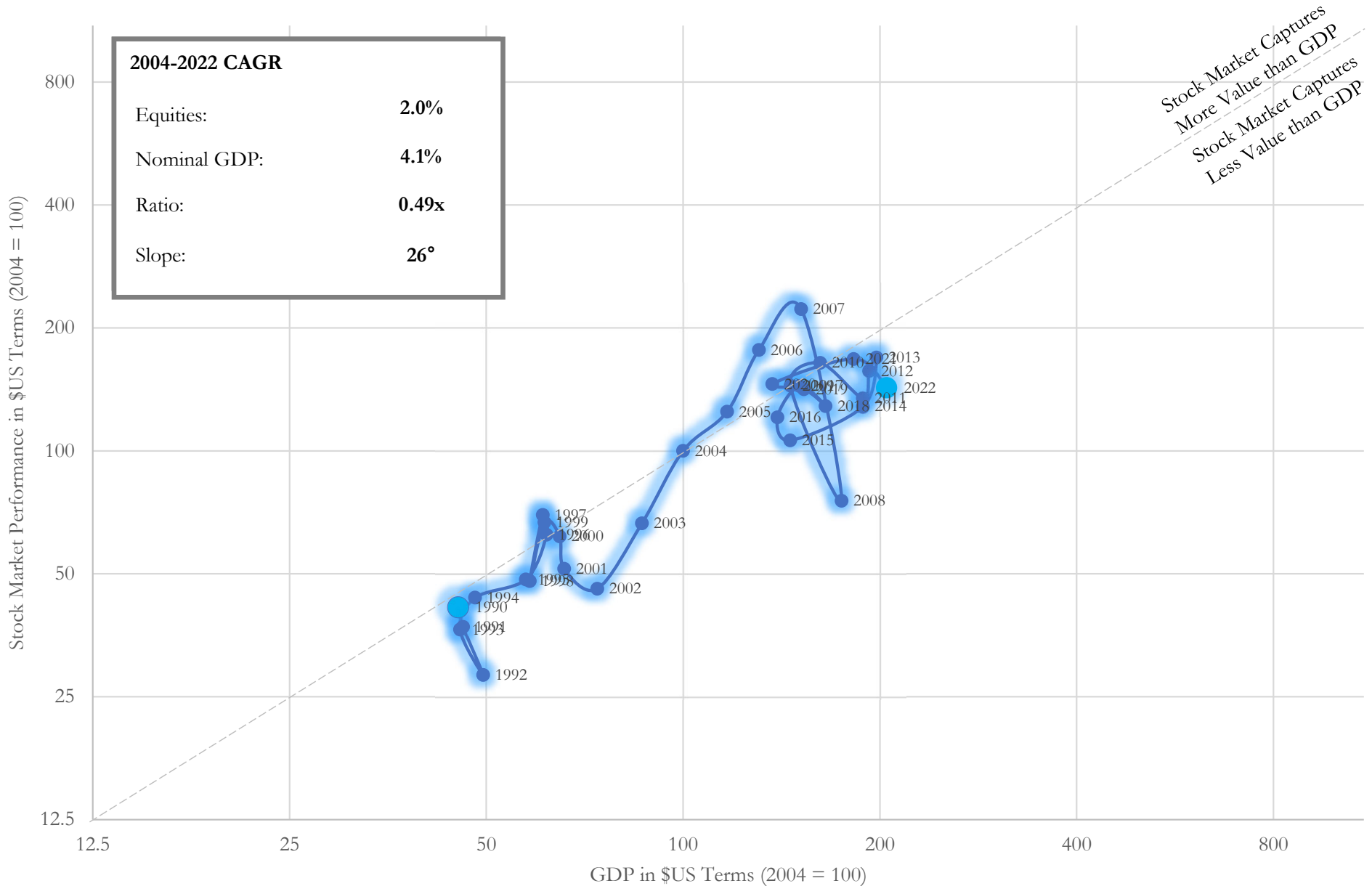
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1996 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

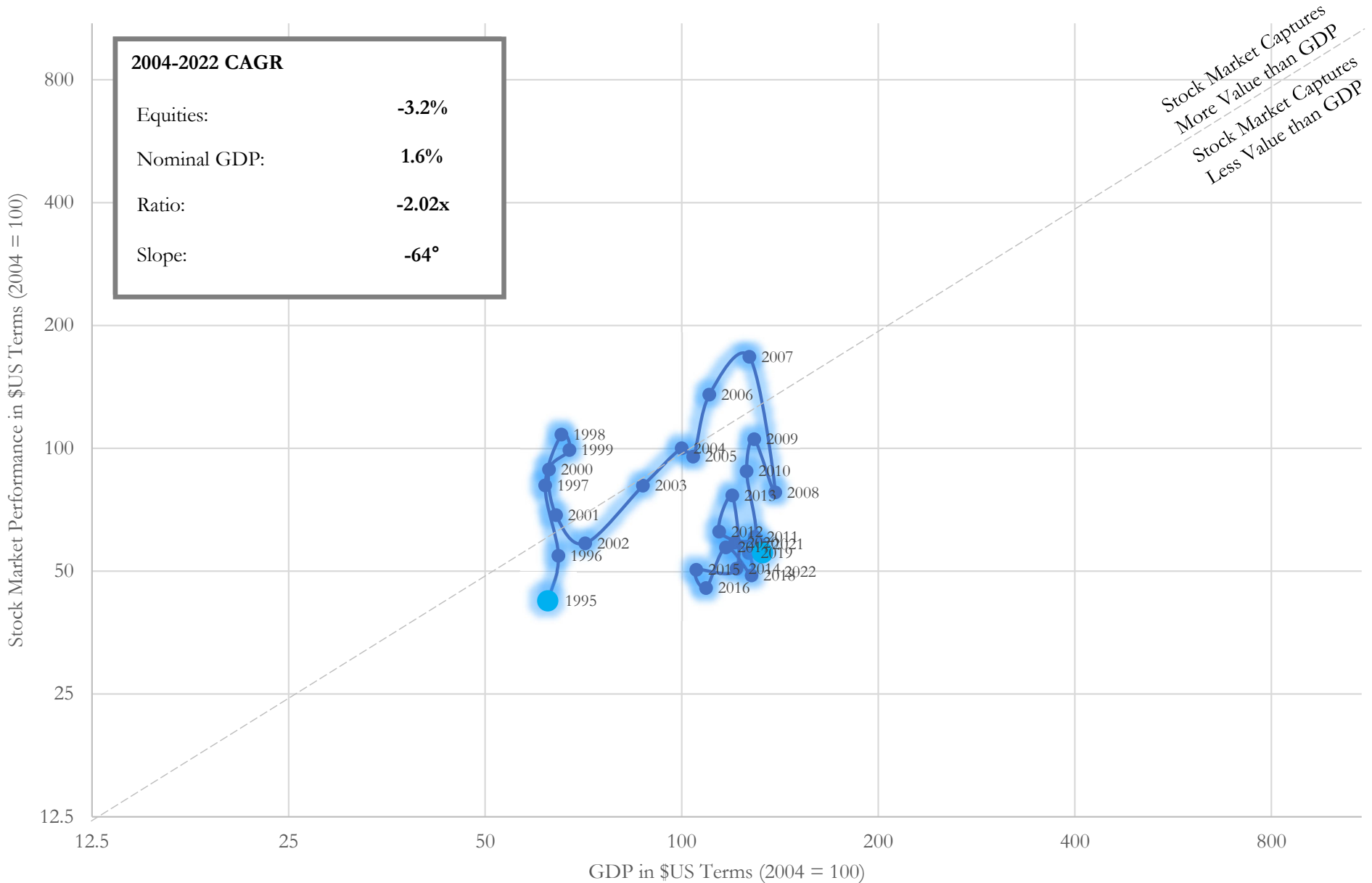
# 5 NORWAY

Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1990 – 2022



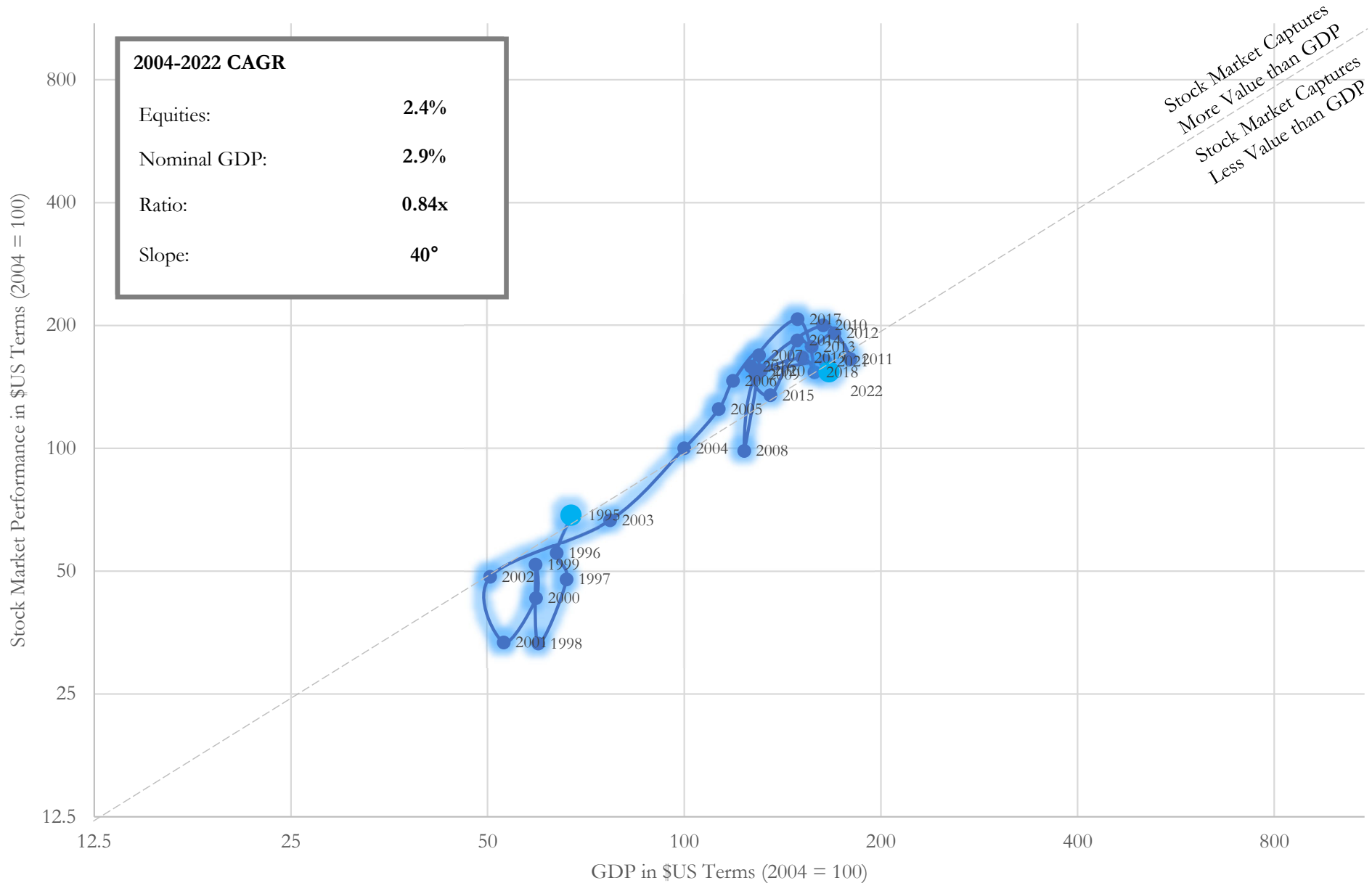
Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1995 – 2022



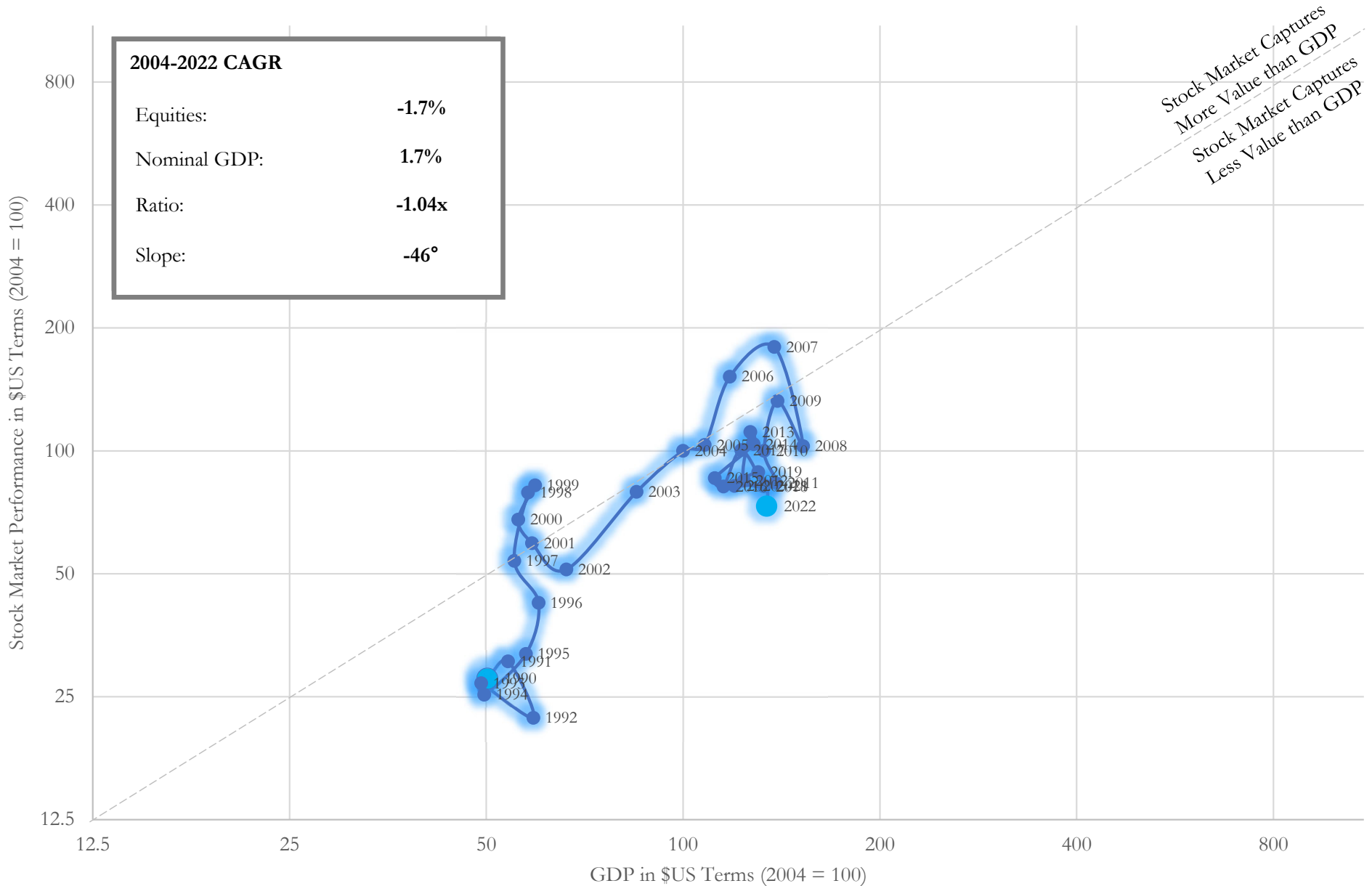
Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1995 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

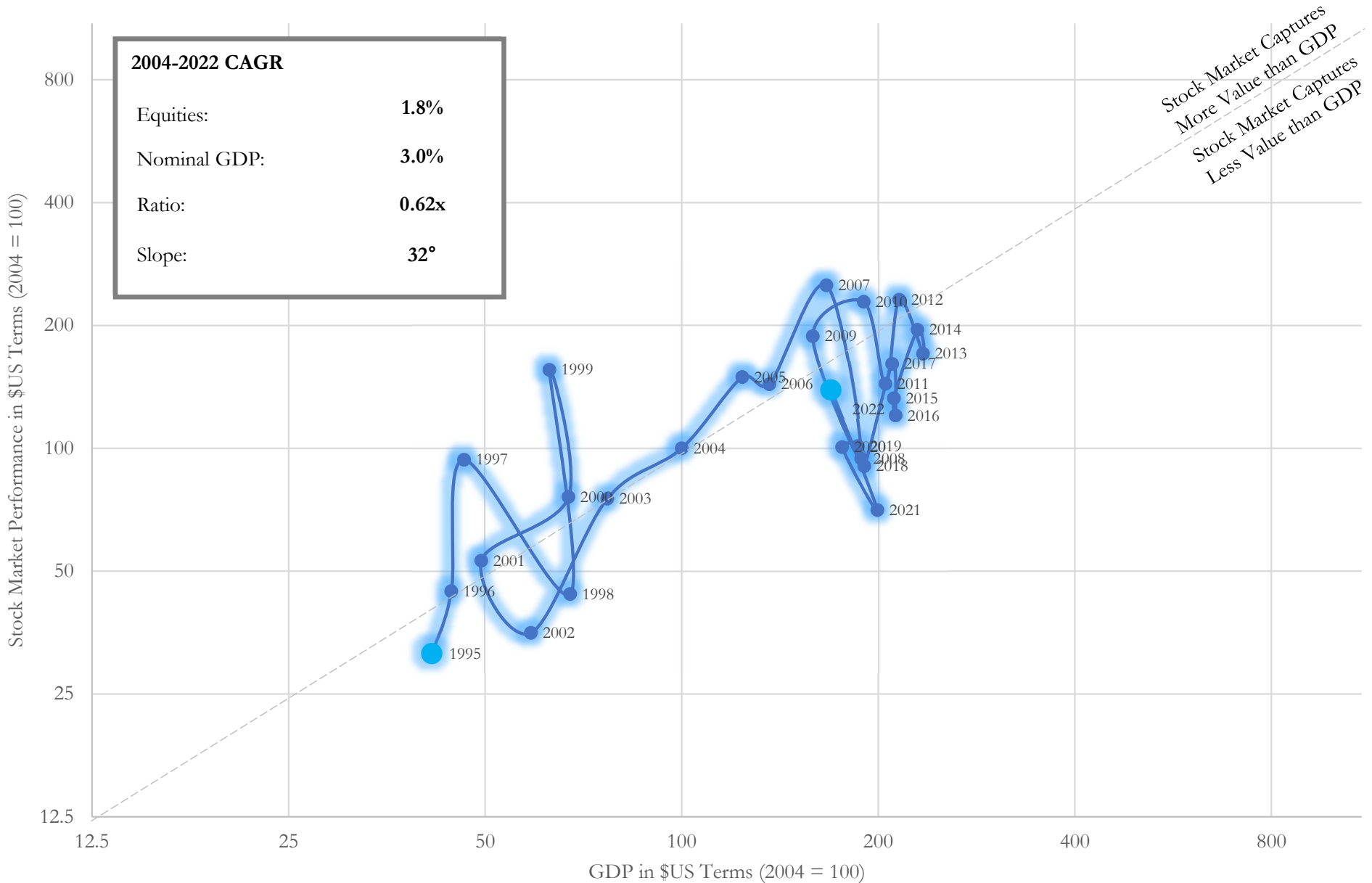
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1990 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis



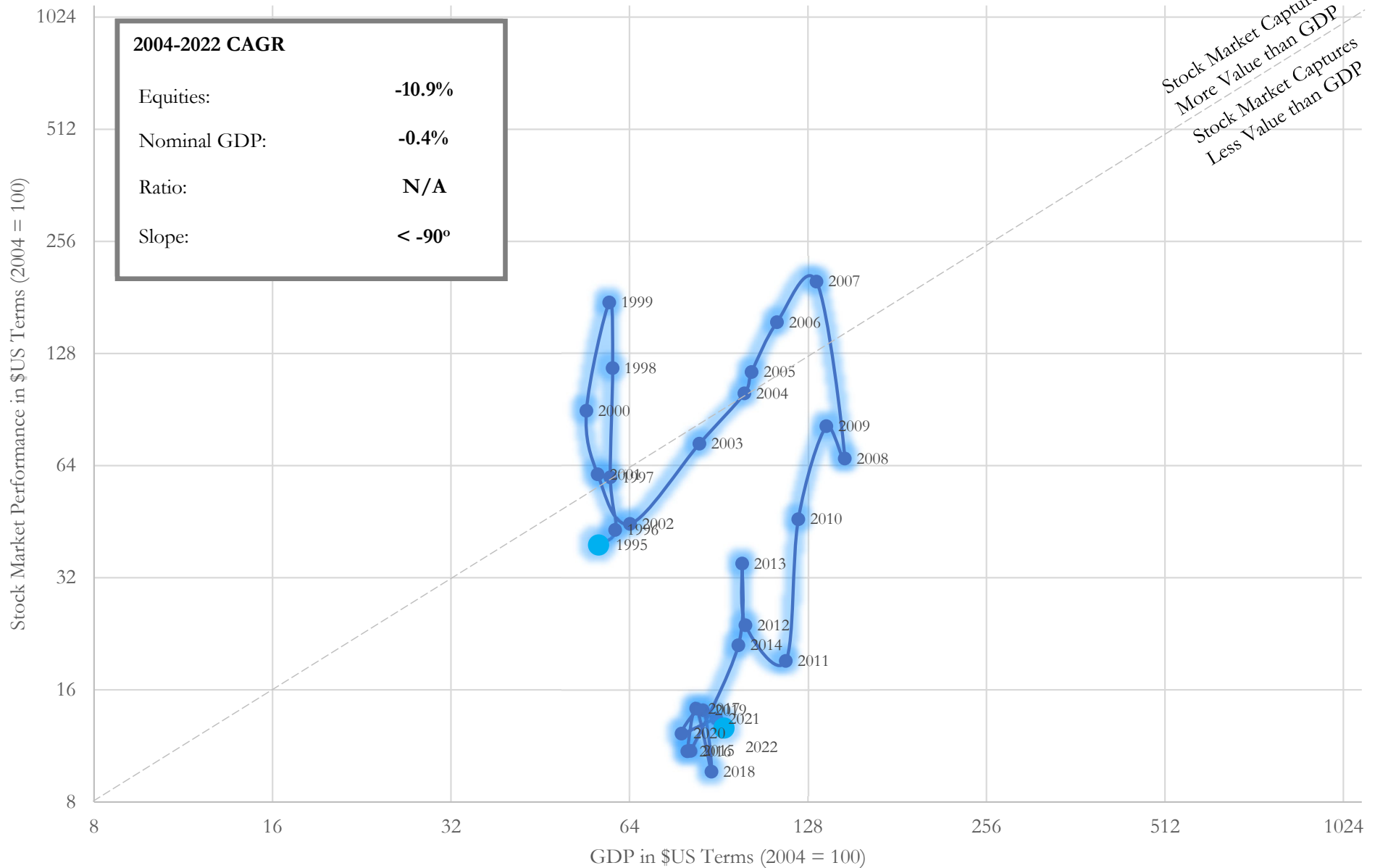
Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1995 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis

# SADLY, GREECE PROBABLY NEEDS ITS OWN CATEGORY

Indexed GDP in US\$ terms (Horizontal Axis) vs. Indexed Stock Market Performance in US\$ (Vertical Axis), 1995 – 2022



Source: IMF WEO October 2022, World Bank, Bloomberg, Asia Partners Analysis, Wikipedia

*Southeast Asia's Moment*

**The Case for Southeast Asia in a Global Portfolio**

*Plan vs. Actual*

**Revisiting Our Predictions from 2019**

*You are What You Eat*

**Talent Flows in Southeast Asia's Innovation Ecosystem**

*The Elephant in the Room*

**Where Are We in the Macro Cycle? When will IPOs Return?**

*Around the World in 47 Charts*

**Where and When Does GDP Growth Actually Lead to Value Creation?**

*To Each Their Own*

**Regional Specialization in Building TMT Equity Value**

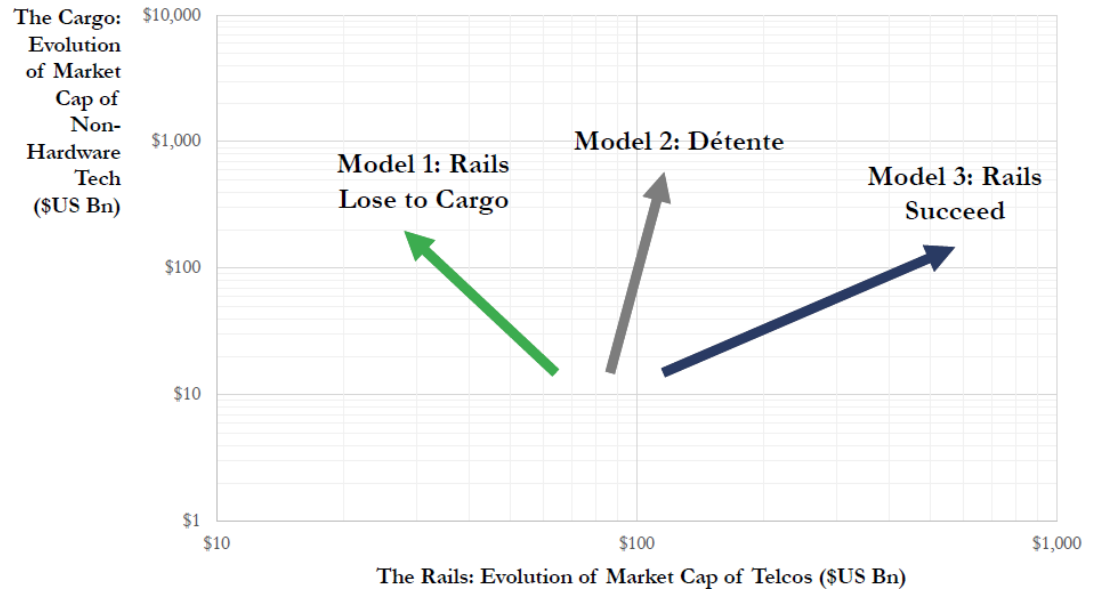
*A Few Final Thoughts for the 2020s-2030s*

# MANY INVESTORS THINK OF TECH AS B2B vs B2C, BUT THE EVEN MORE FUNDAMENTAL SEGMENTATION ON A GLOBAL BASIS IS TELCO vs NON-TELCO

We first delved into this in our 2021 report, in a section called ‘The Cargo and the Rails’

## THE STRUGGLE FOR VALUE CAPTURE BETWEEN ‘RAILS AND CARGO’ UNDERLIES EVERY TECH ECOSYSTEM

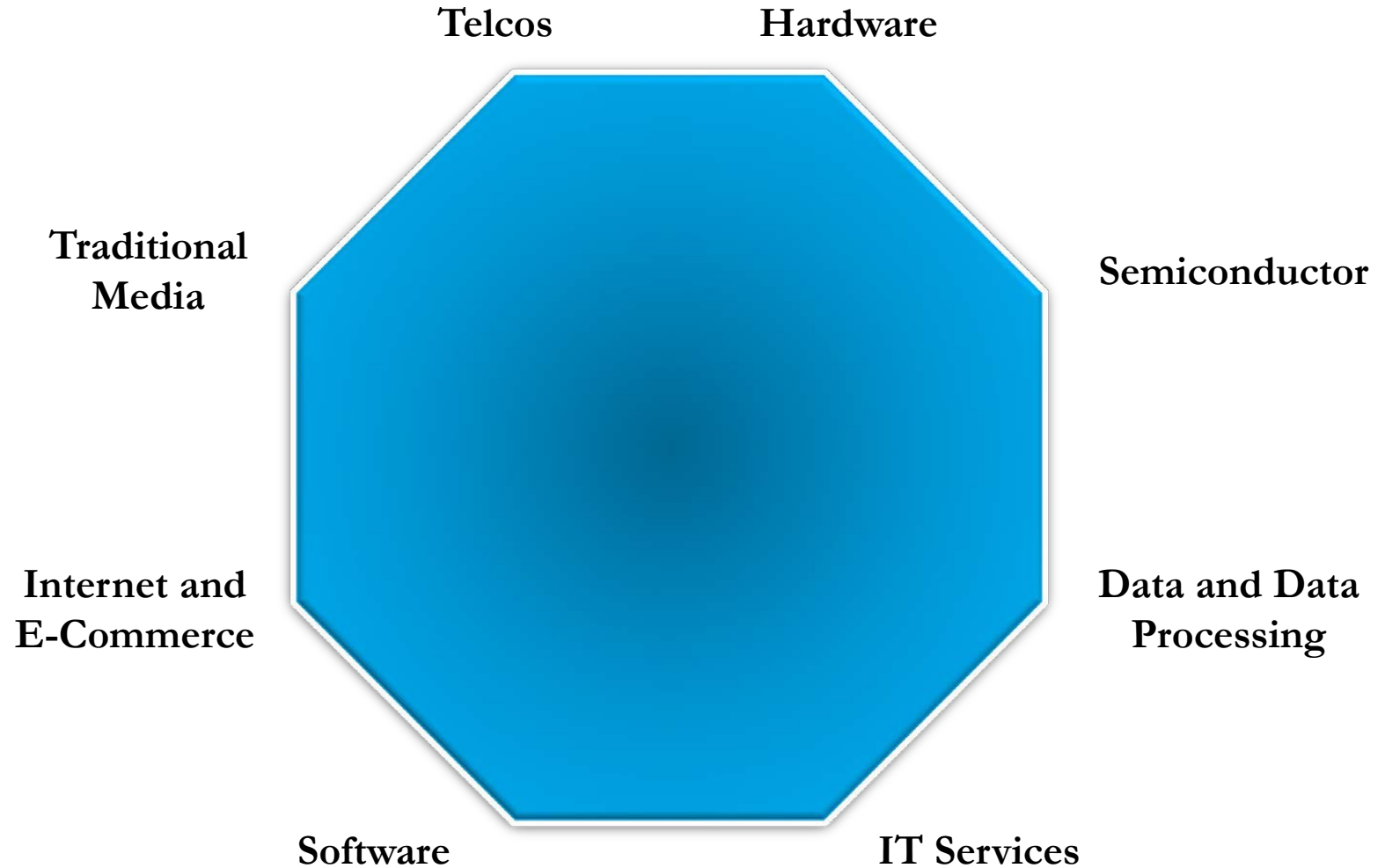
Aggregate Market Capitalization (\$US Bn): Telcos\* (Horizontal Axis) vs. Non-Hardware Tech Companies (Vertical Axis), 2005-2020



\* Telcos include wireless, wireline, and cable/satellite companies  
Source: Bloomberg, Asia Partners Analysis

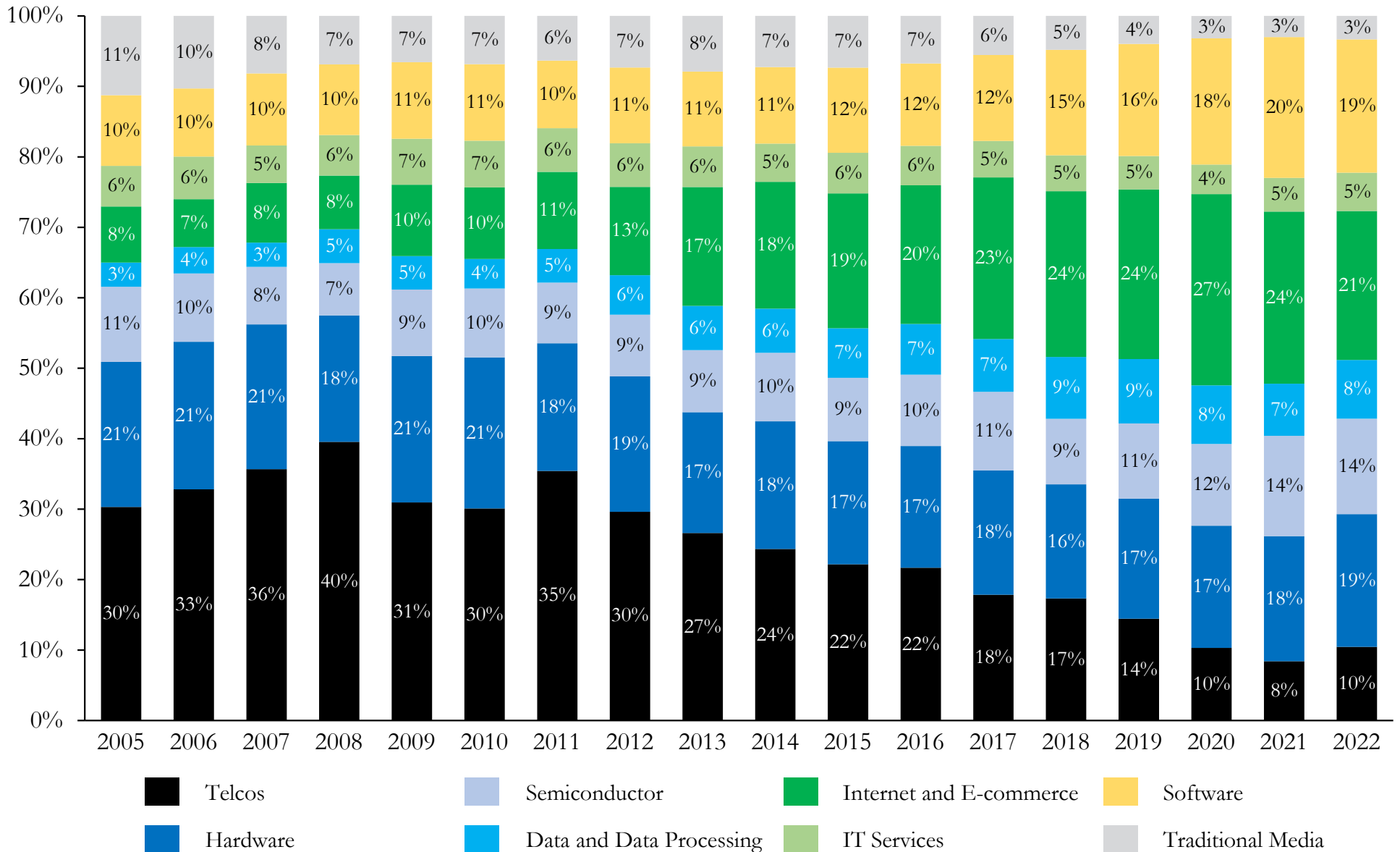
# THERE ARE 8 MAJOR SUB-CATEGORIES OF TMT ON A GLOBAL BASIS

*The 'Big 8' TMT Sectors*



# AND THEY EACH CONTRIBUTE TO THE TOTAL EQUITY VALUE OF TECH GLOBALLY

Mix of Aggregate Market Capitalization Over Time



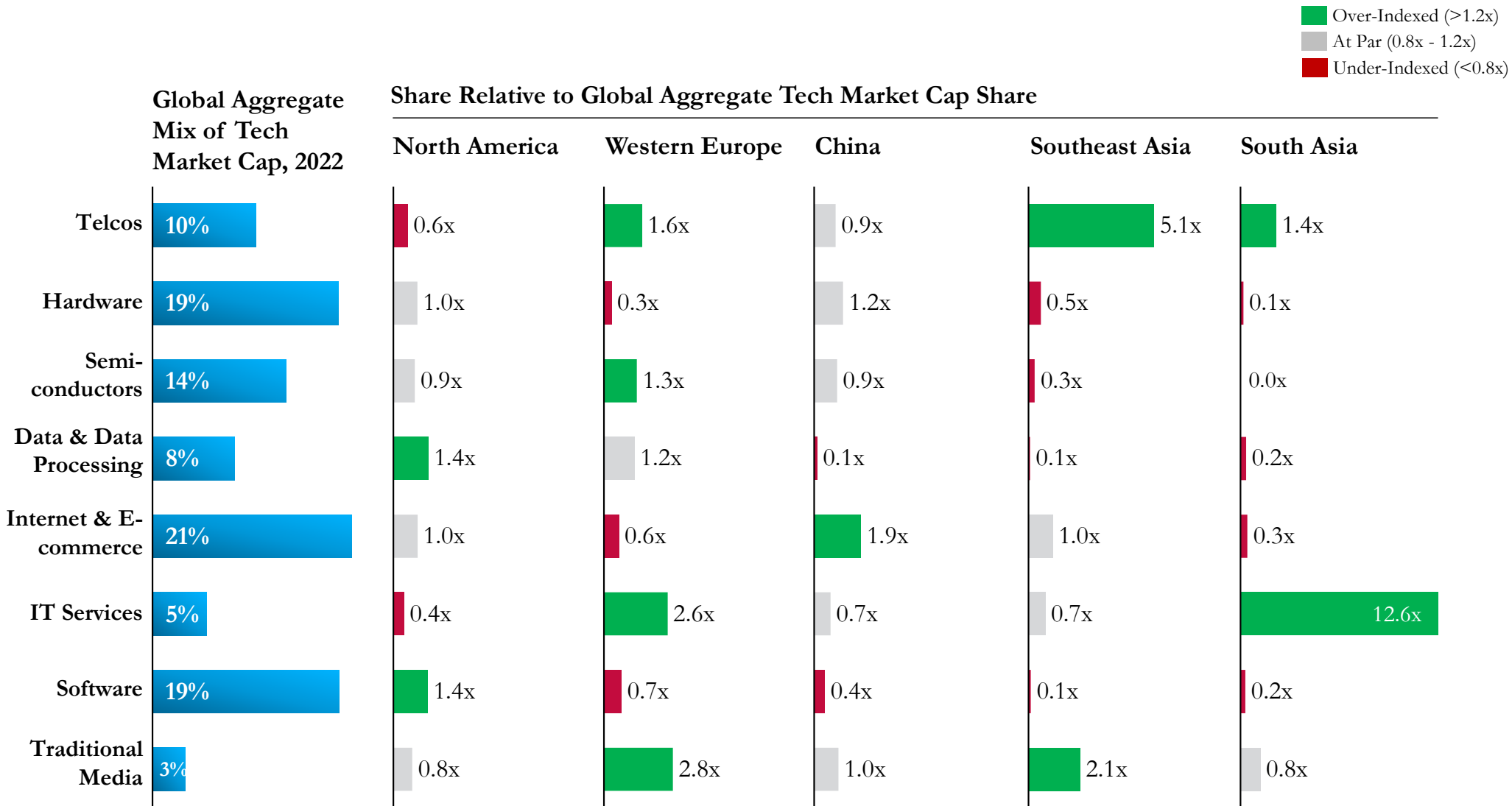
Note: Telcos include wireless, wireline, and cable/satellite companies. Internet includes games.

Source: Bloomberg, Asia Partners Analysis

Asia Partners | January 2023

# TO EACH THEIR OWN: NO PART OF THE WORLD PERFECTLY MATCHES THE GLOBAL MIX, WITH SOME QUITE DIFFERENT

Percent of Market Cap Across the 'Big 8' Sub-Categories (Global), and Over-Indexing vs. Under-Indexing by Region



Note: Telcos include wireless, wireline, and cable/satellite companies. Internet includes games.

Source: Bloomberg, Asia Partners Analysis

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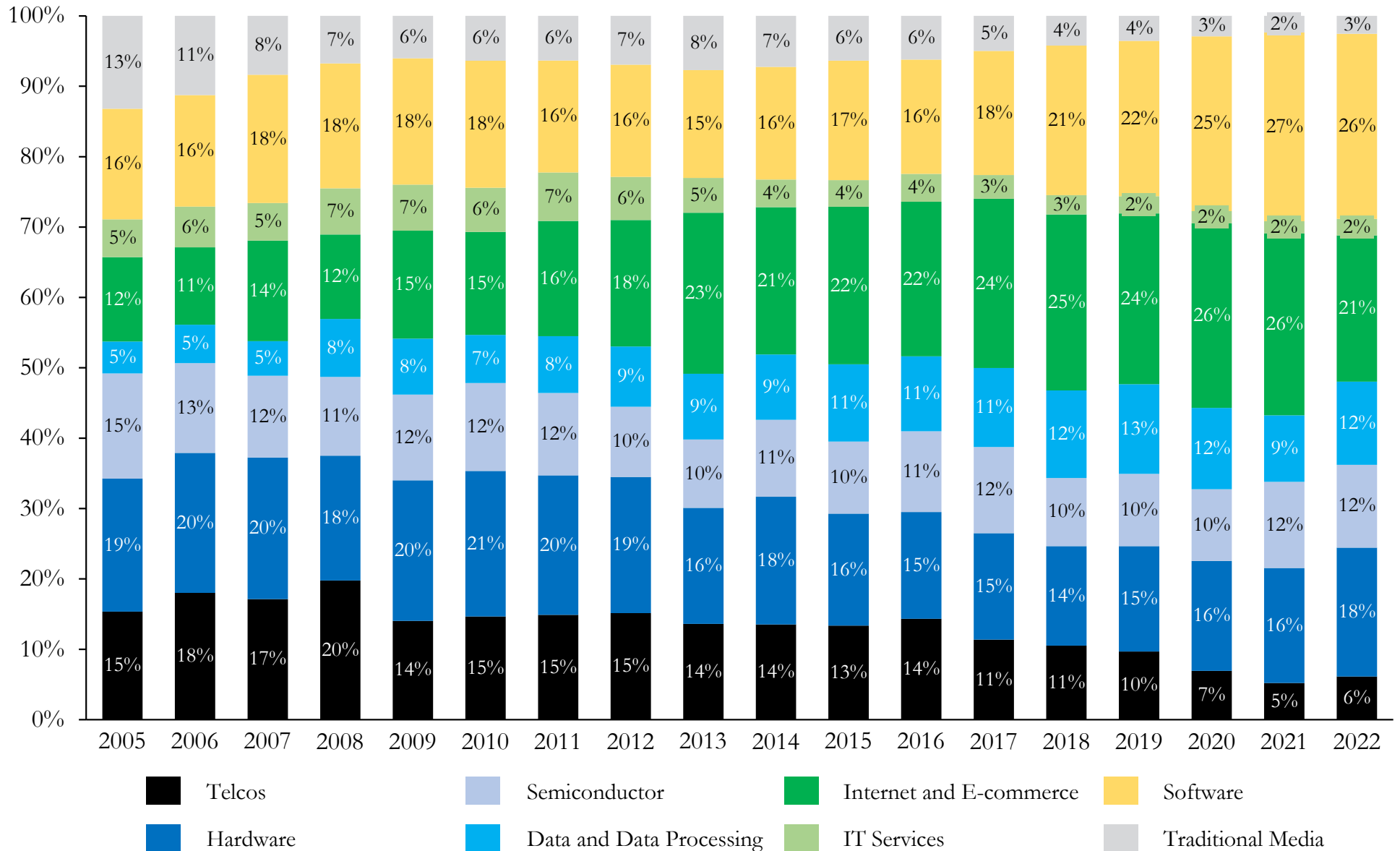


*North America is often what anchors global investor assumptions about what tech value creation looks like*



# NORTH AMERICA ECOSYSTEM IS WELL DIVERSIFIED AND OVER-INDEXES ON SOFTWARE AND DATA/PROCESSING

North America Ecosystem Development, Mix of Aggregate Market Capitalization Over Time, 2005-2022



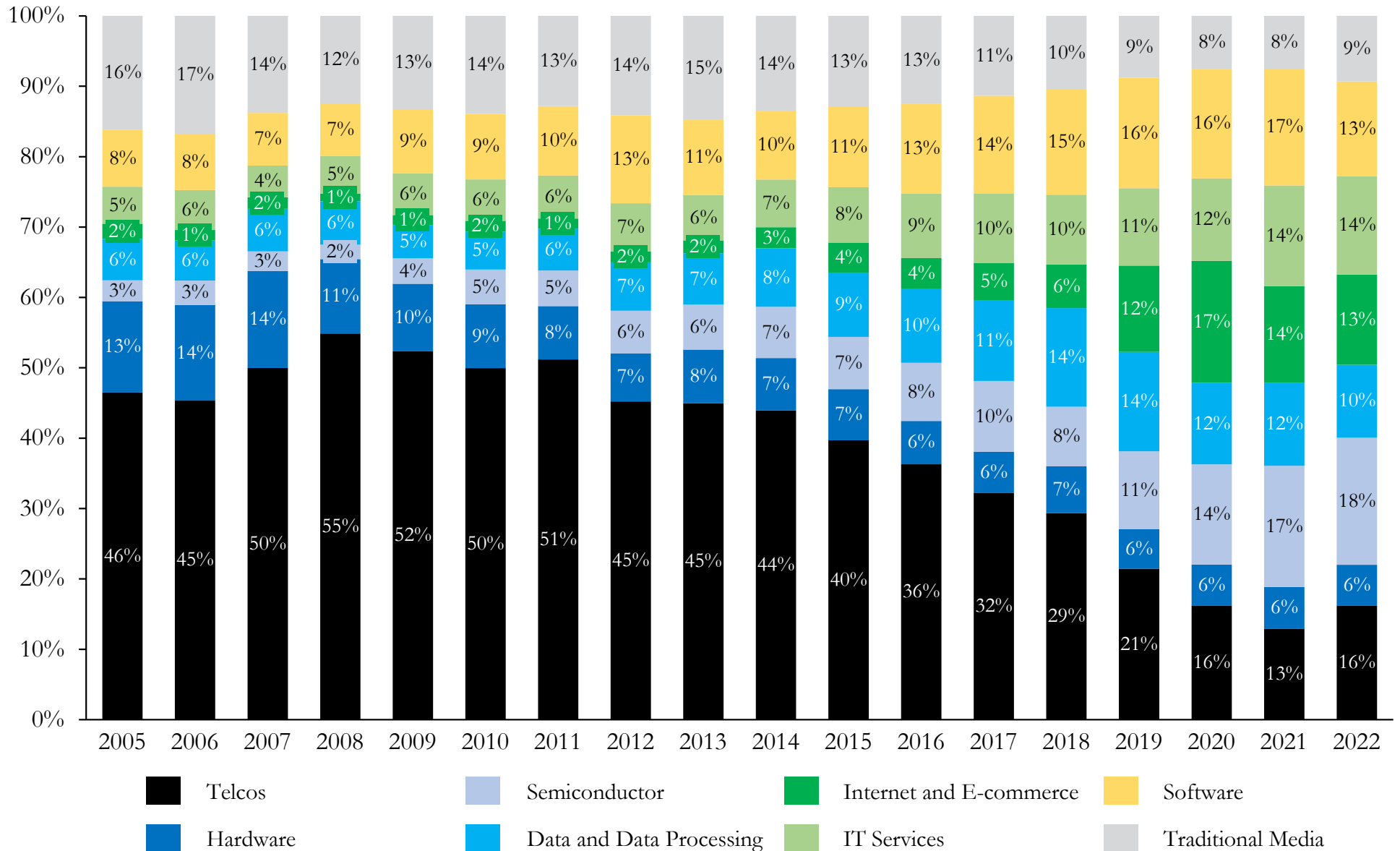
Note: Telcos include wireless, wireline, and cable/satellite companies. Internet includes games.

Source: Bloomberg, Asia Partners Analysis

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# BUT EUROPE INDEXES HIGHER THAN NORTH AMERICA ON TELCOS, IT SERVICES, AND MEDIA, AND LOWER ON INTERNET

Western Europe Ecosystem Development, Mix of Aggregate Market Capitalization Over Time, 2005-2022



Note: Telcos include wireless, wireline, and cable/satellite companies. Internet includes games.

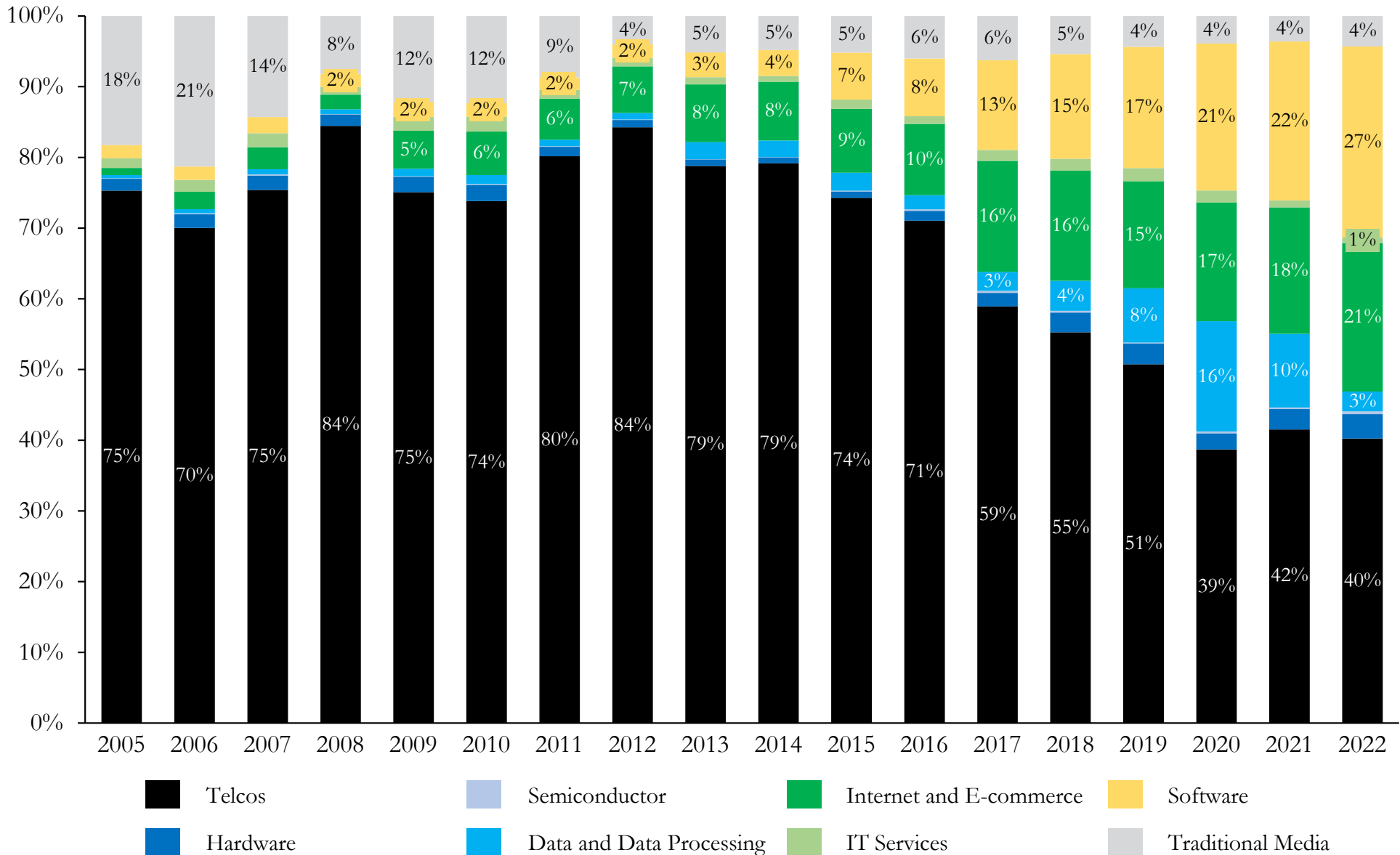
Source: Bloomberg, Asia Partners Analysis

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# ... WHEREAS ANZ IS STILL QUITE OVER-INDEXED ON TELCOS AND IS MORE RECENTLY OVER-INDEXING ON SOFTWARE

ANZ Ecosystem Development, Mix of Aggregate Market Capitalization Over Time, 2005-2022



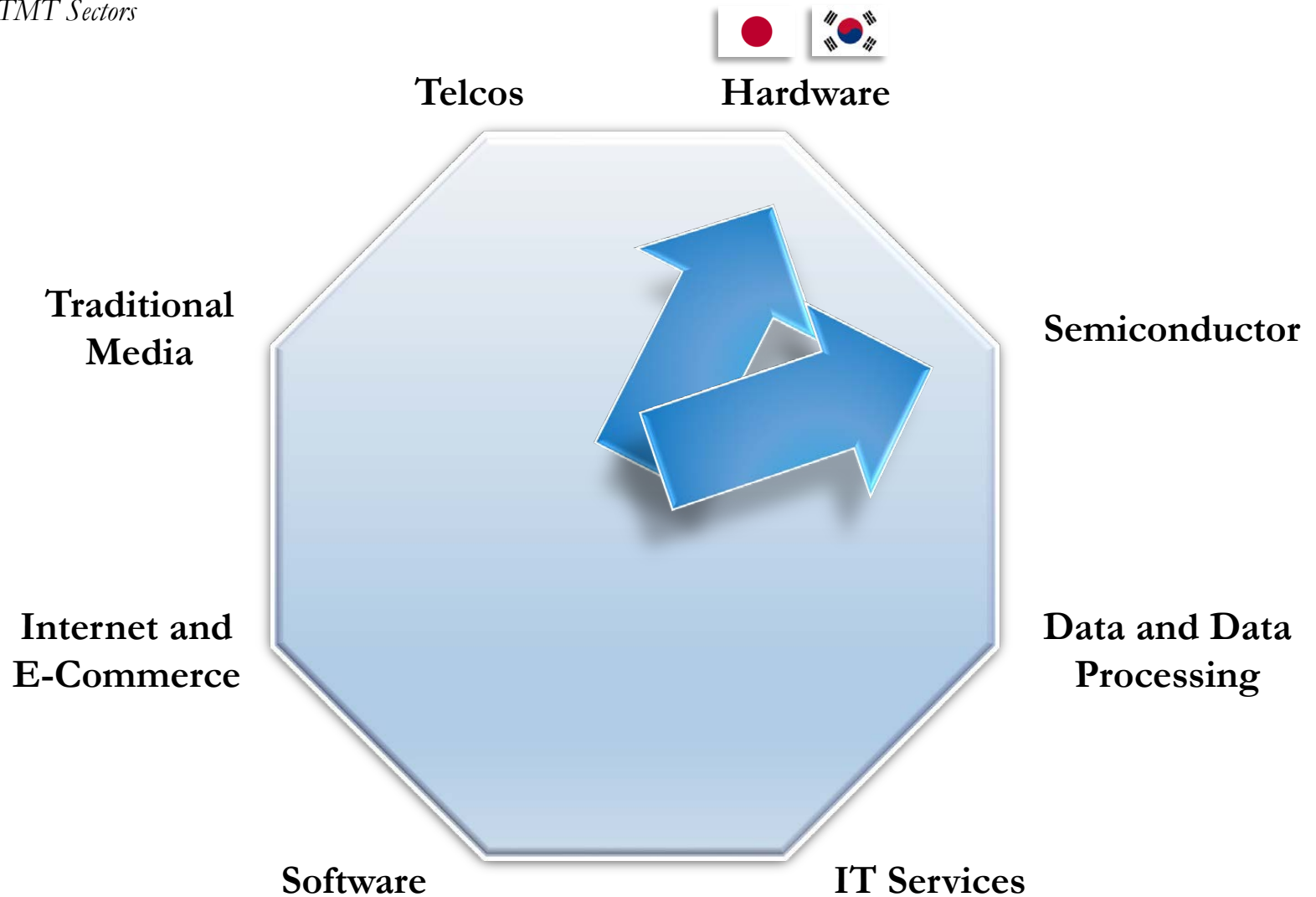
Note: Telcos include wireless, wireline, and cable/satellite companies. Internet includes games.

Source: Bloomberg, Asia Partners Analysis

Asia Partners | January 2023

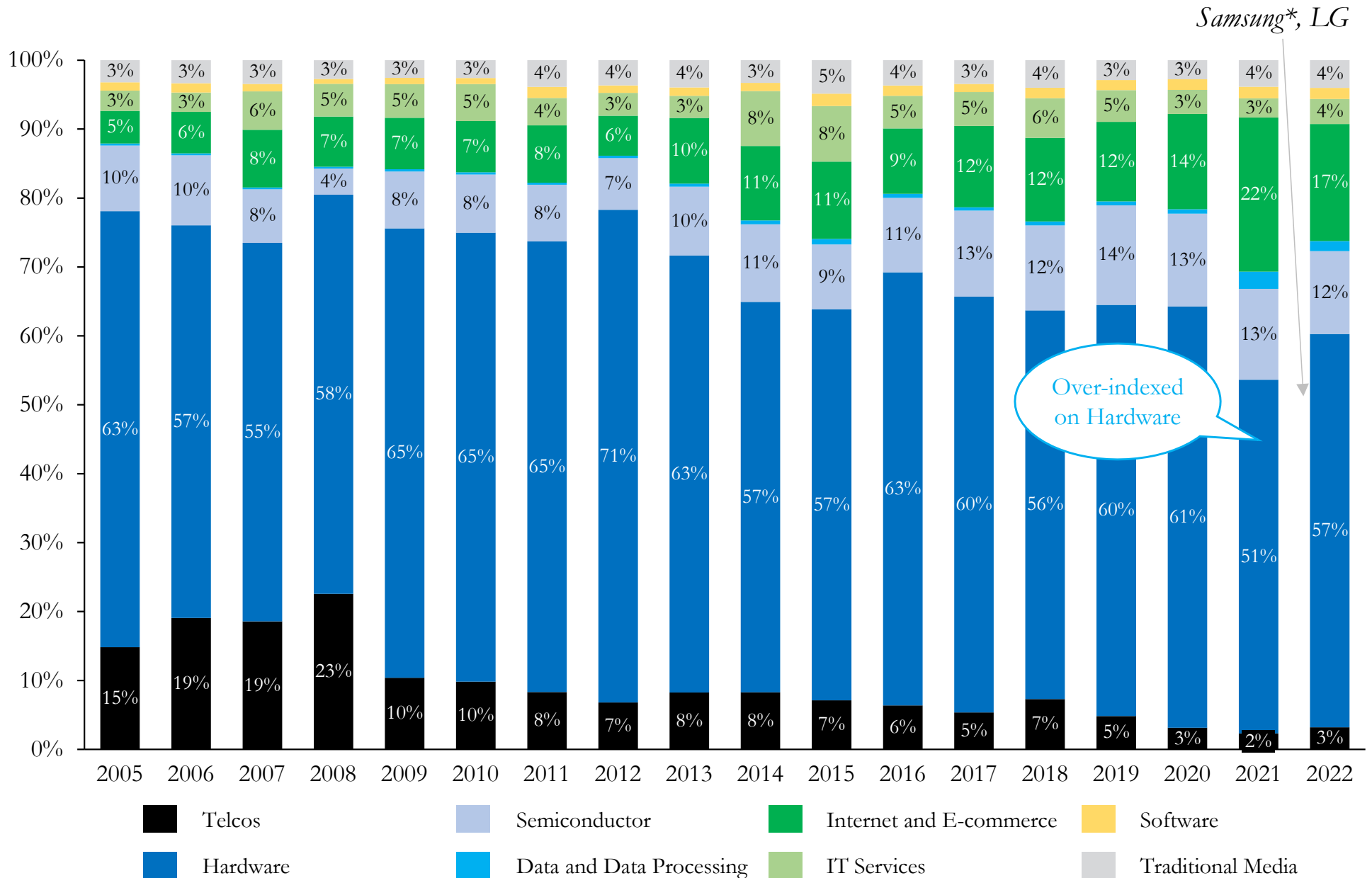
# OTHER NON-WESTERN MARKETS HAVE CHARTED THEIR OWN PATHS: JAPAN AND KOREA ARE SPECIALISTS IN HARDWARE/SEMI

*The 'Big 8' TMT Sectors*



# SOUTH KOREA ECOSYSTEM DEVELOPMENT: 2005-2022

Mix of Aggregate Market Capitalization Over Time



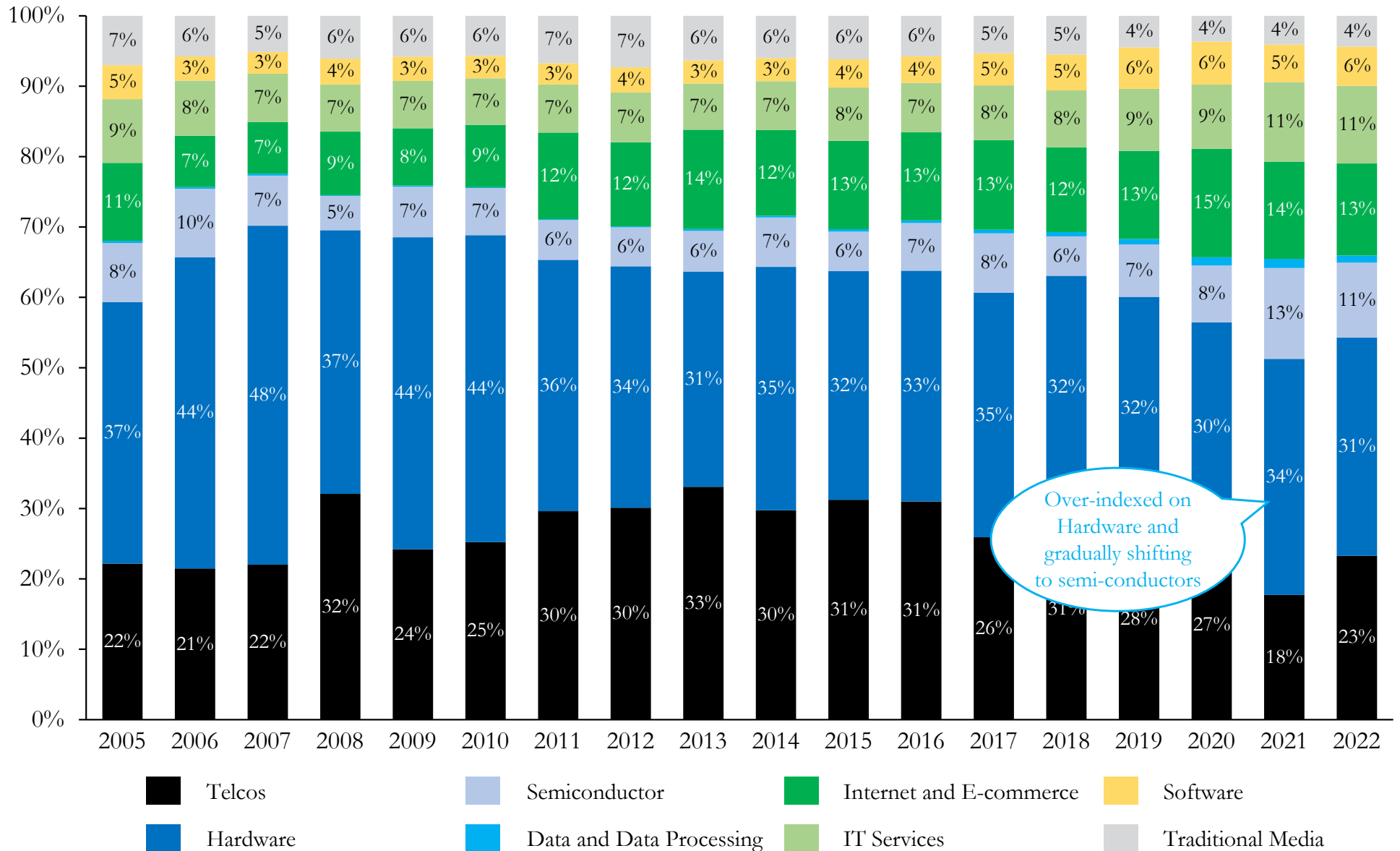
Note: Telcos include wireless, wireline, and cable/satellite companies. Internet includes games.

\*Samsung electronics included under hardware

Source: Bloomberg, Asia Partners Analysis

# JAPAN ECOSYSTEM DEVELOPMENT: 2005-2022

Mix of Aggregate Market Capitalization Over Time



Note: Telcos include wireless, wireline, and cable/satellite companies. Internet includes games.

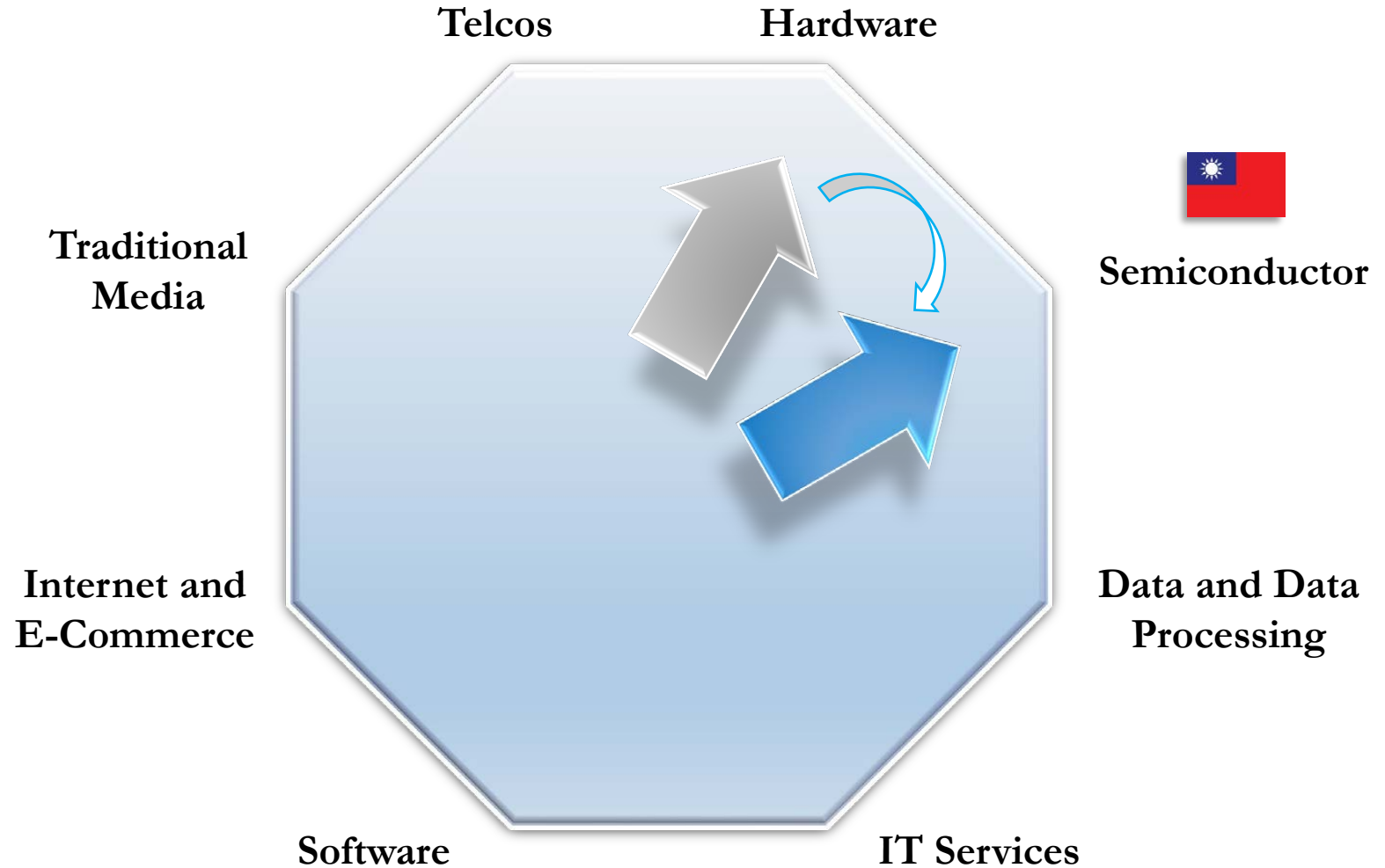
Source: Bloomberg, Asia Partners Analysis

Asia Partners | January 2023



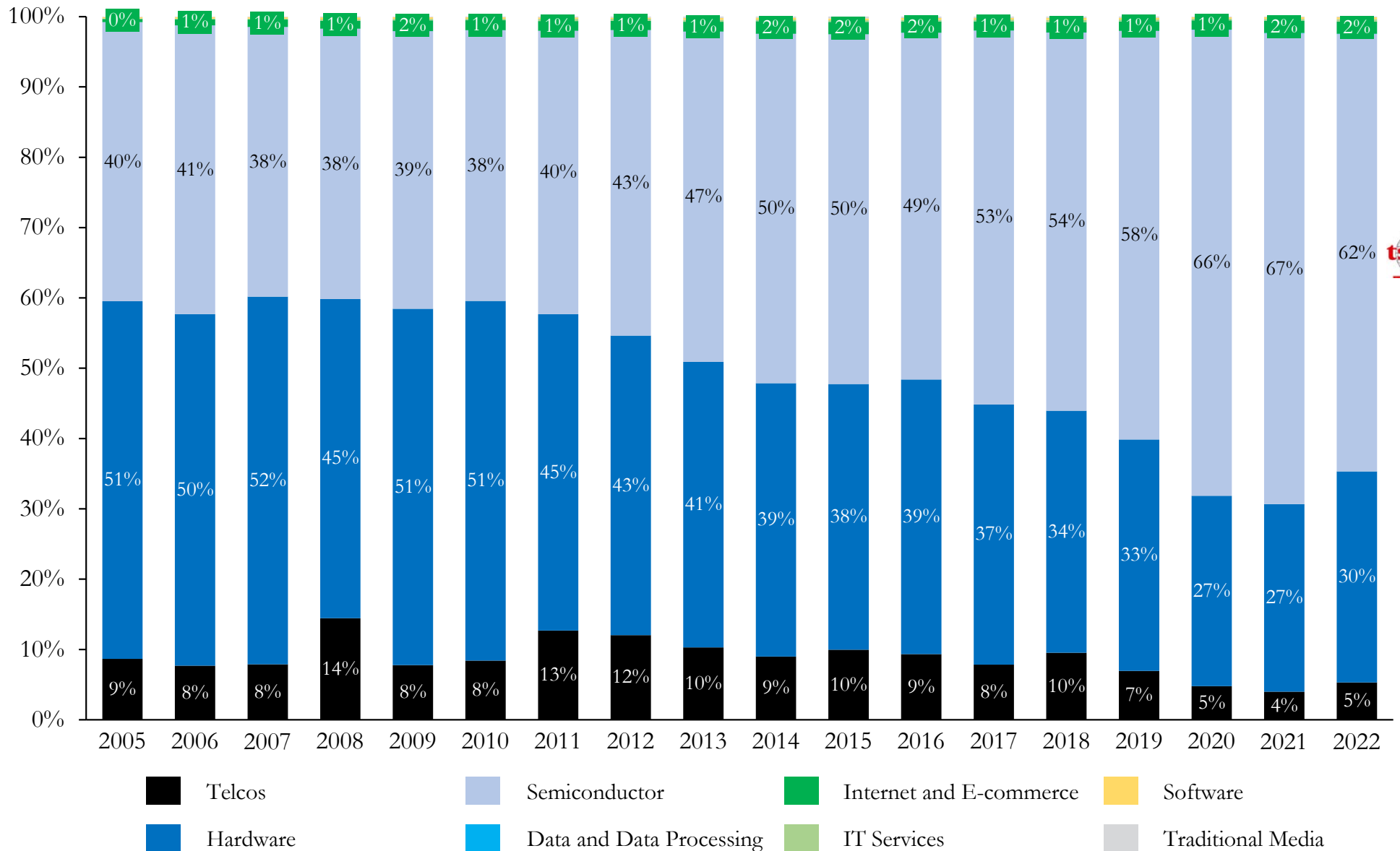
# TAIWAN IS AN EXAMPLE OF A SEMICONDUCTOR SPECIALIST

*The 'Big 8' TMT Sectors*



# TAIWAN ECOSYSTEM DEVELOPMENT: 2005-2022

Mix of Aggregate Market Capitalization Over Time



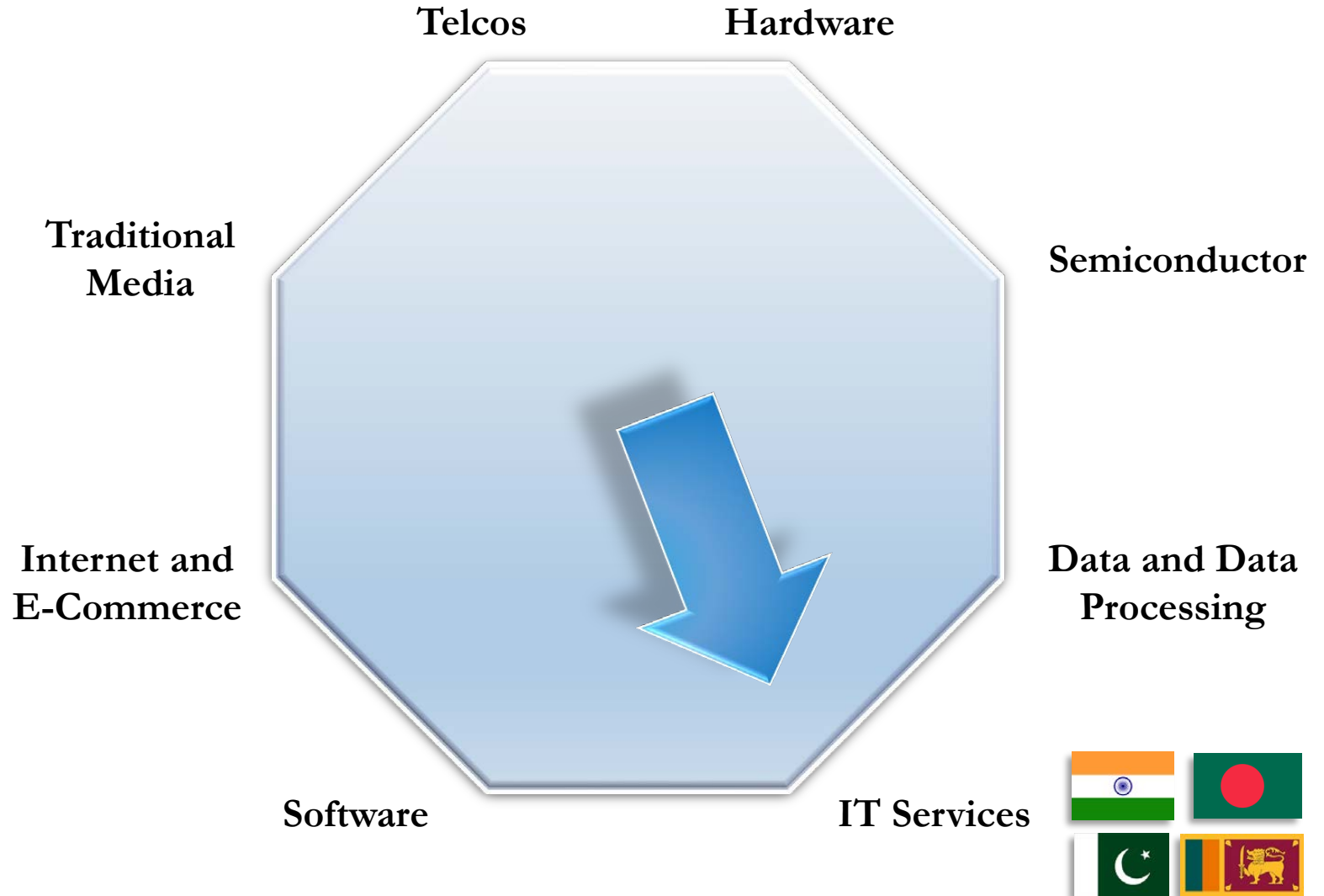
Note: Telcos include wireless, wireline, and cable/satellite companies. Internet includes games.

Source: Bloomberg, Asia Partners Analysis

Asia Partners | January 2023

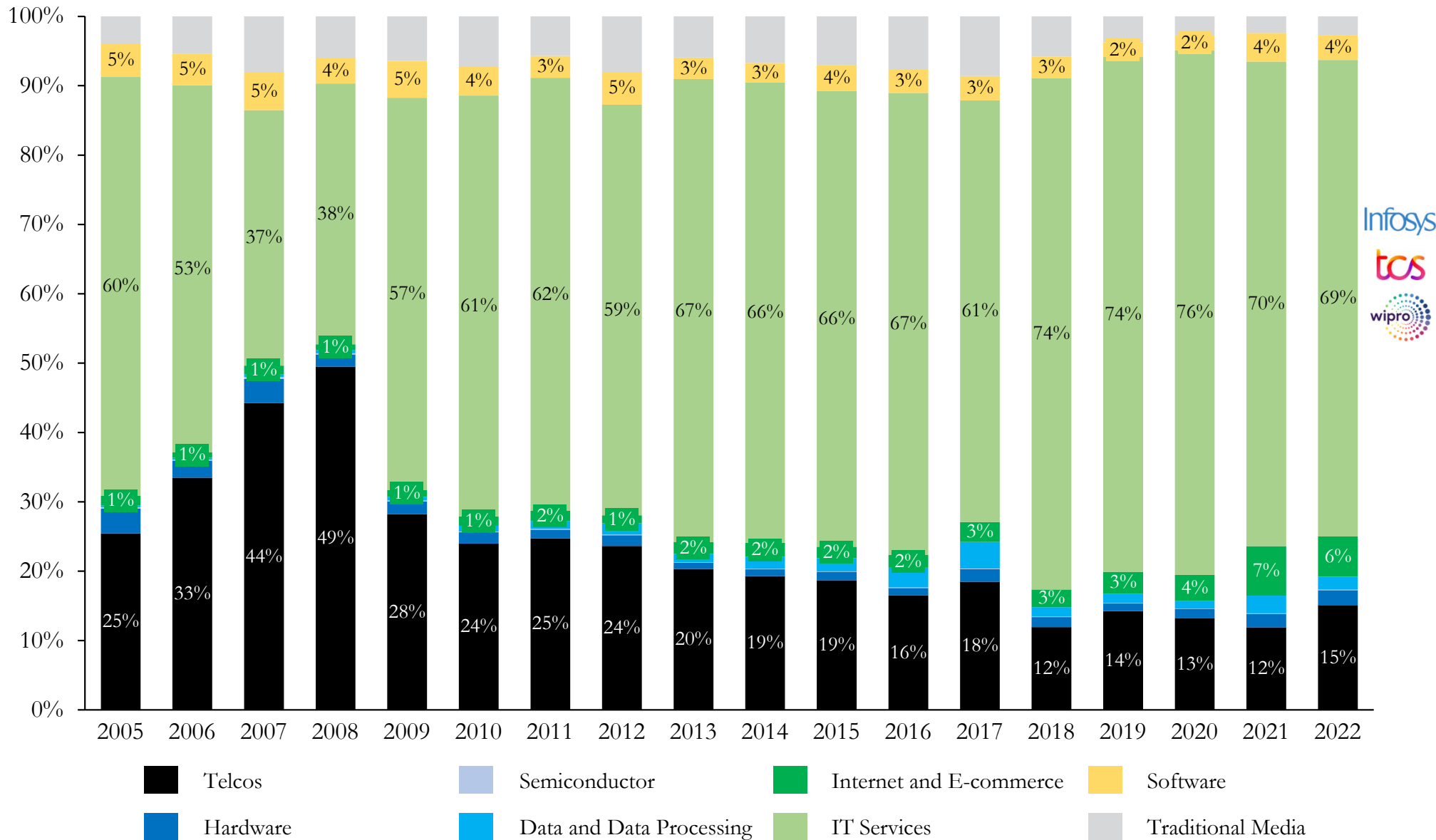
# SOUTH ASIA IS A SPECIALIST IN IT SERVICES

*The 'Big 8' TMT Sectors*



# SOUTH ASIA ECOSYSTEM DEVELOPMENT: 2005-2020

Mix of Aggregate Market Capitalization Over Time



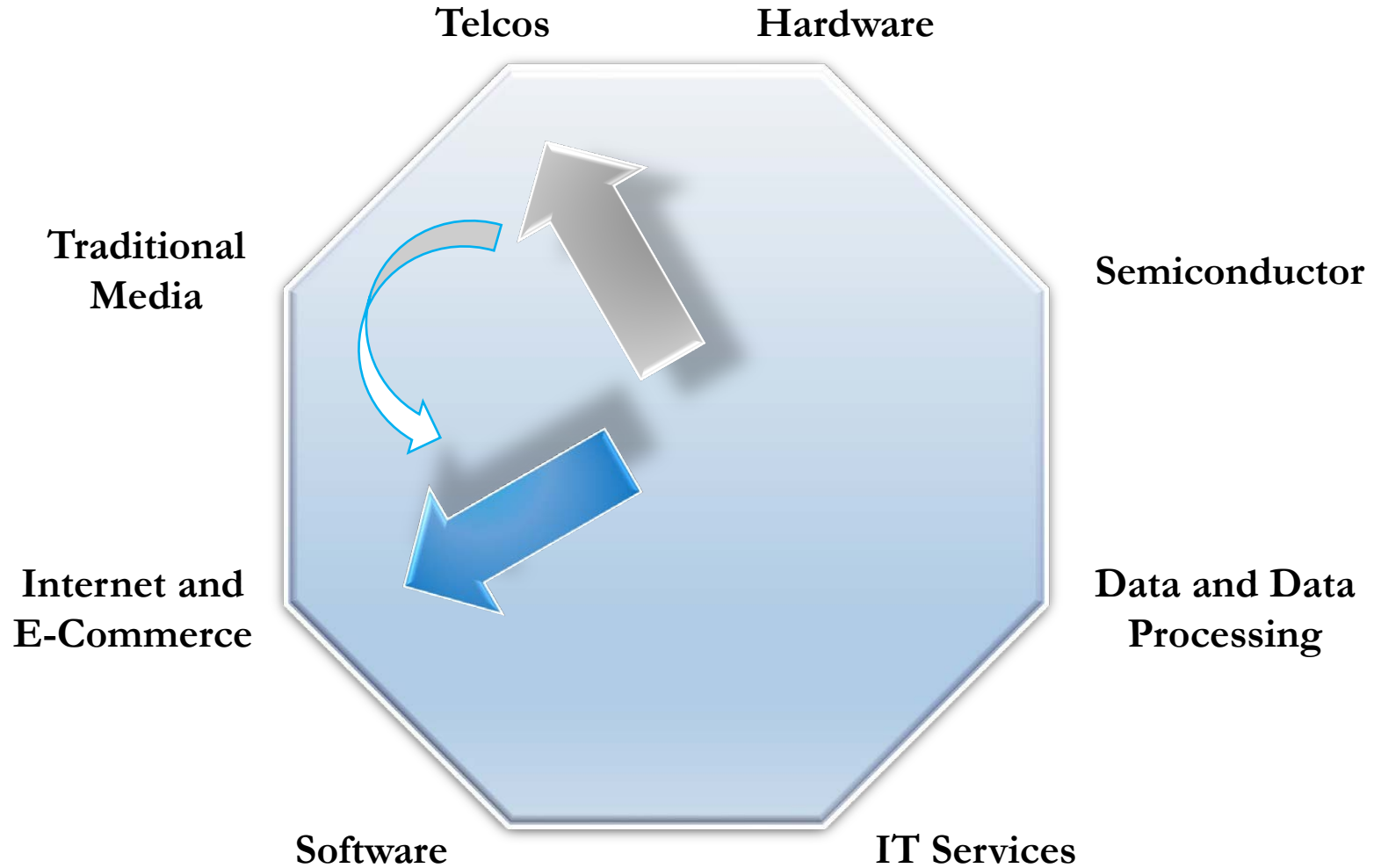
Note: Telcos include wireless, wireline, and cable/satellite companies. Internet includes games.

Source: Bloomberg, Asia Partners Analysis

Asia Partners | January 2023

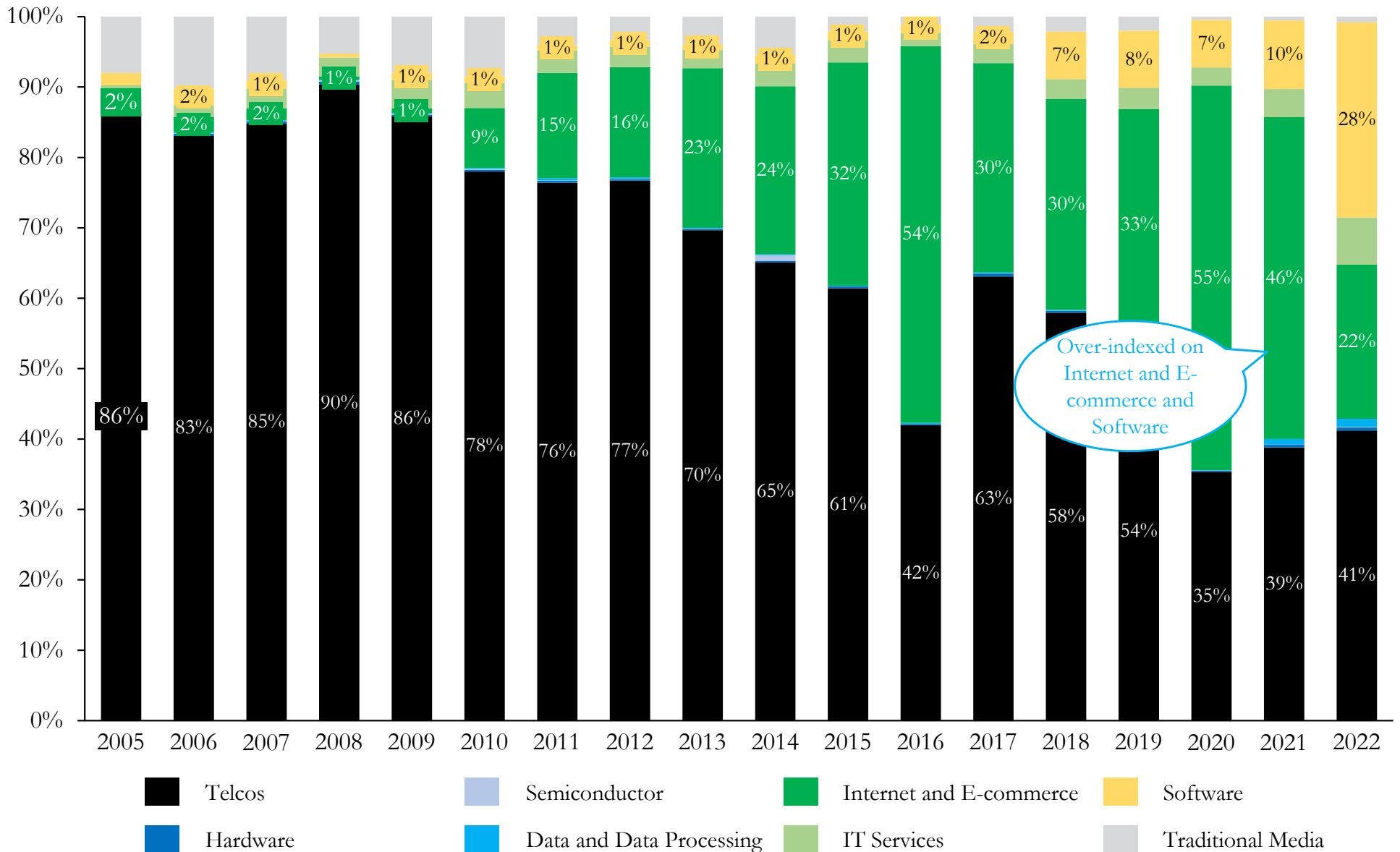
# MANY EMERGING MARKETS ARE CLASSIC 'MODEL 1's WITH TELCO LOSING GROUND TO CONSUMER INTERNET

*The 'Big 8' TMT Sectors*



# EASTERN EUROPE ECOSYSTEM DEVELOPMENT: 2005-2022

*Mix of Aggregate Market Capitalization Over Time*



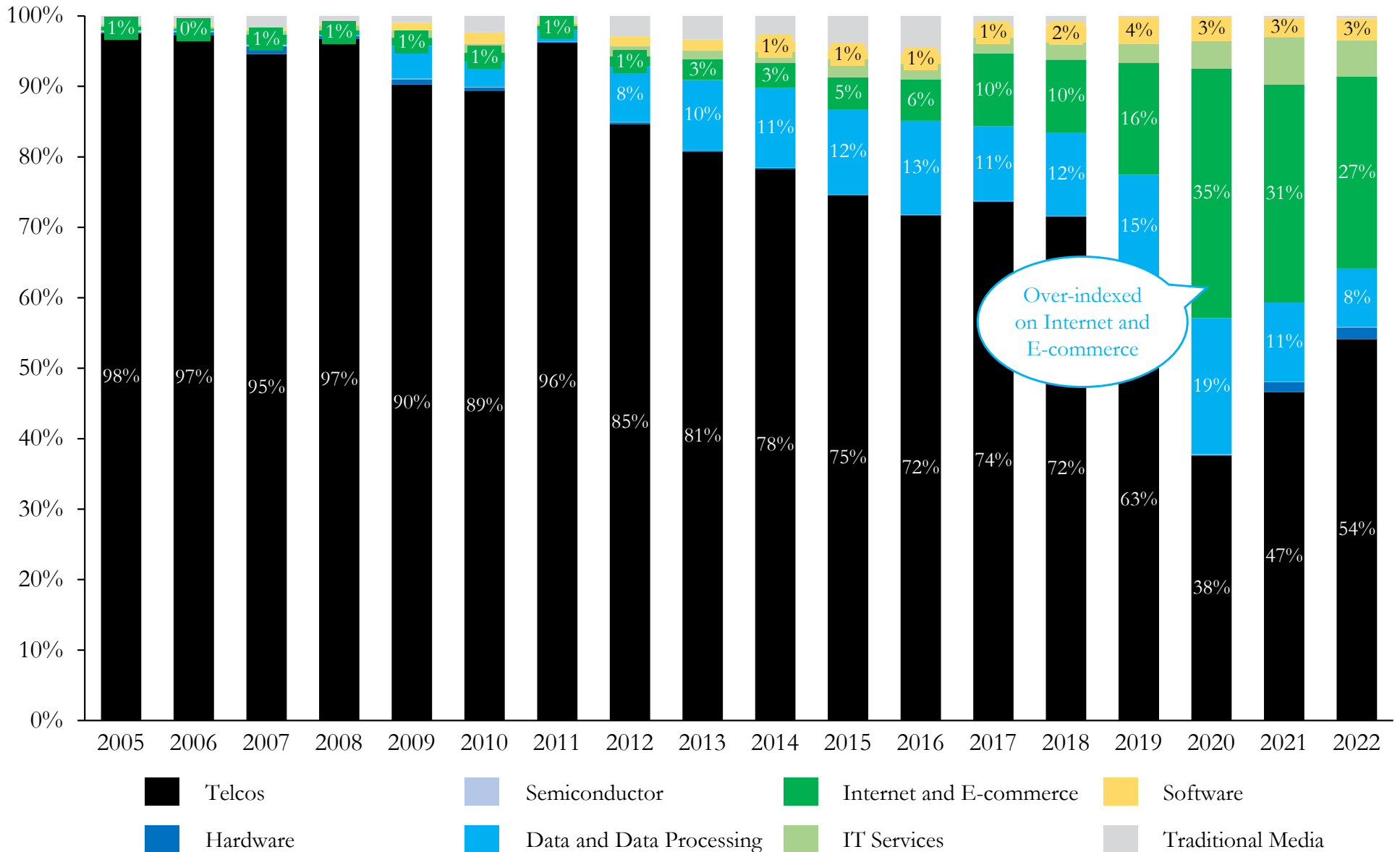
Note: Telcos include wireless, wireline, and cable/satellite companies. Internet includes games.

Source: Bloomberg, Asia Partners Analysis

Asia Partners | January 2023

# LATAM ECOSYSTEM DEVELOPMENT: 2005-2022

Mix of Aggregate Market Capitalization Over Time



Note: Telcos include wireless, wireline, and cable/satellite companies. Internet includes games.

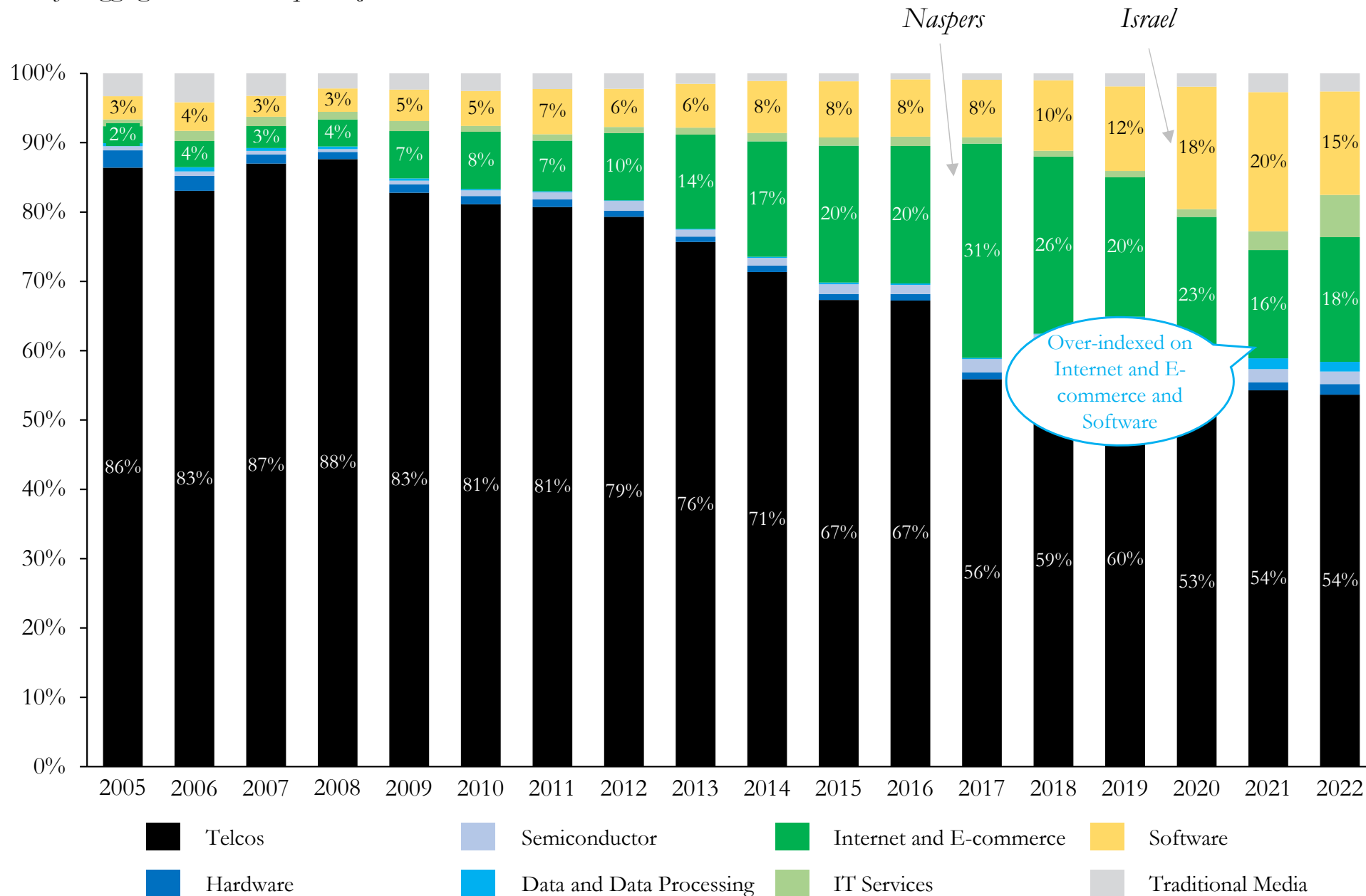
Source: Bloomberg, Asia Partners Analysis

Asia Partners | January 2023



# AFRICA/MIDDLE EAST ECOSYSTEM DEVELOPMENT: 2005-2022

Mix of Aggregate Market Capitalization Over Time



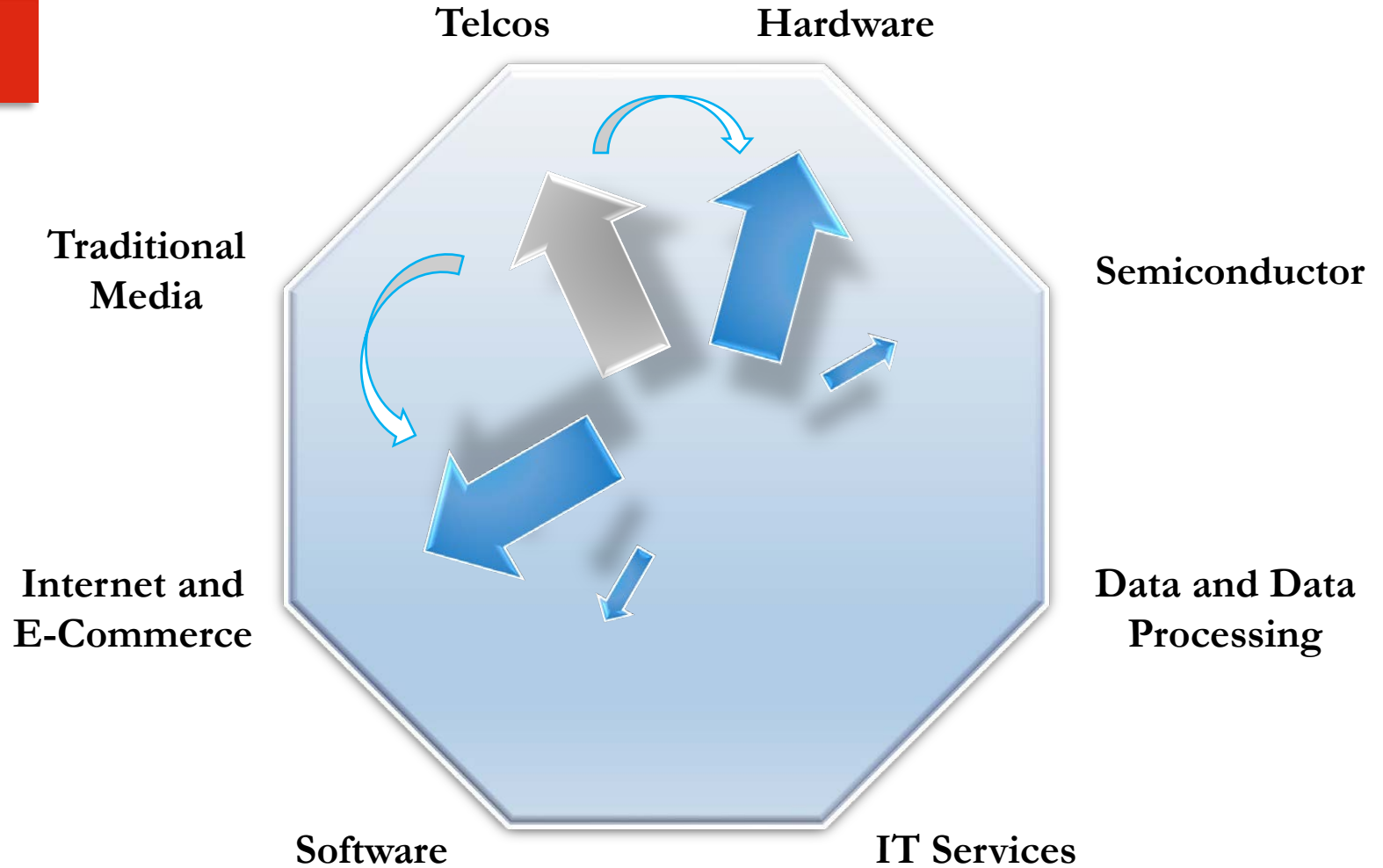
Note: Telcos include wireless, wireline, and cable/satellite companies. Internet includes games.

Source: Bloomberg, Asia Partners Analysis

Asia Partners | January 2023

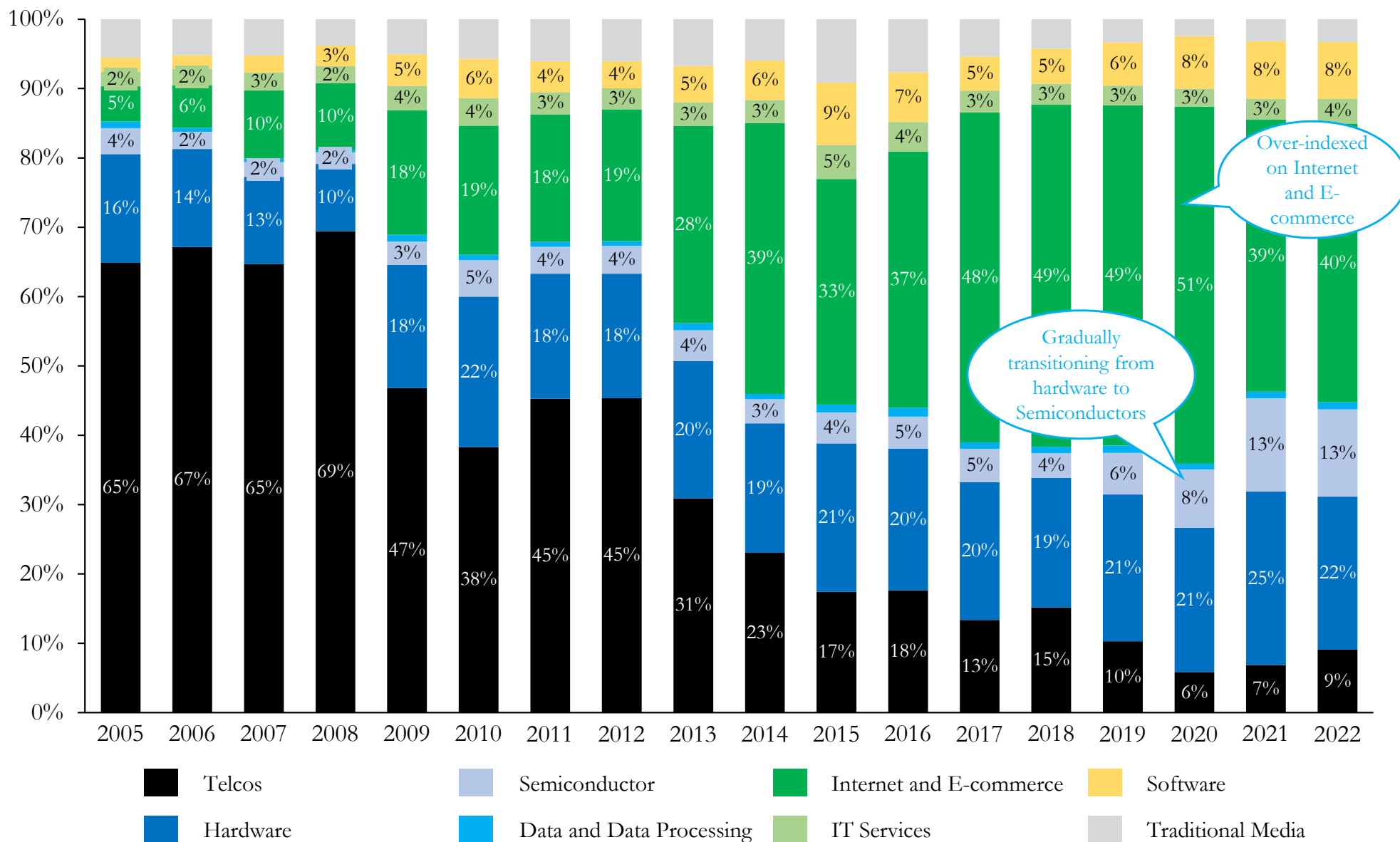
# CHINA HAS BEEN A 'MODEL 1' WITH A WELL DIVERSIFIED SHIFT AWAY FROM TELCOS

*The 'Big 8' TMT Sectors*



# CHINA/HK ECOSYSTEM DEVELOPMENT: 2005-2022

Mix of Aggregate Market Capitalization Over Time



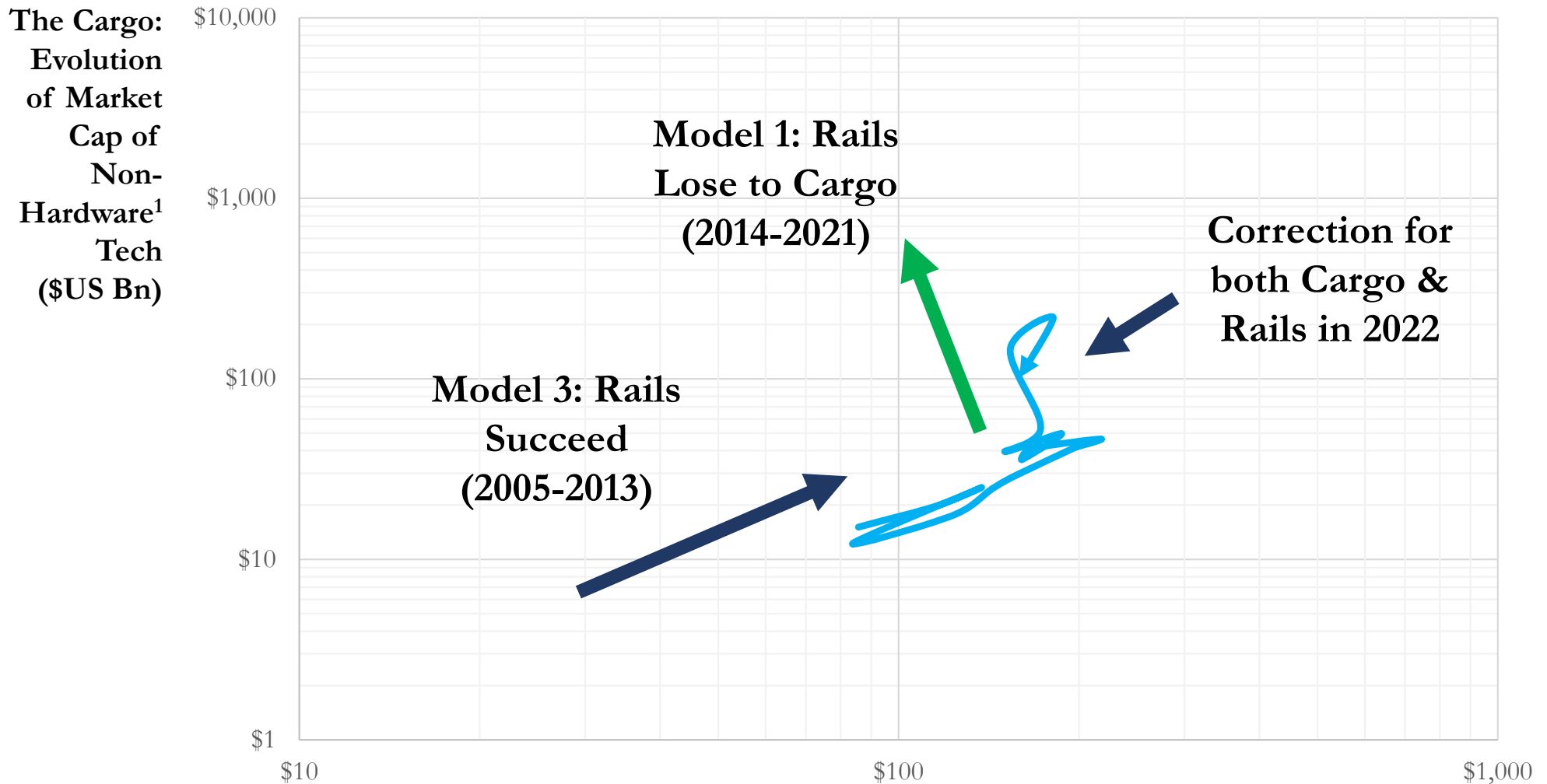
Note: Telcos include wireless, wireline, and cable/satellite companies. Internet includes games.

Source: Bloomberg, Asia Partners Analysis

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# SOUTHEAST ASIA'S EVOLUTION FROM RAILS TO CARGOS

Aggregate Market Capitalization (\$US Bn): Telcos\* (Horizontal Axis) vs. Non-Hardware Tech Companies (Vertical Axis), 2005-2022



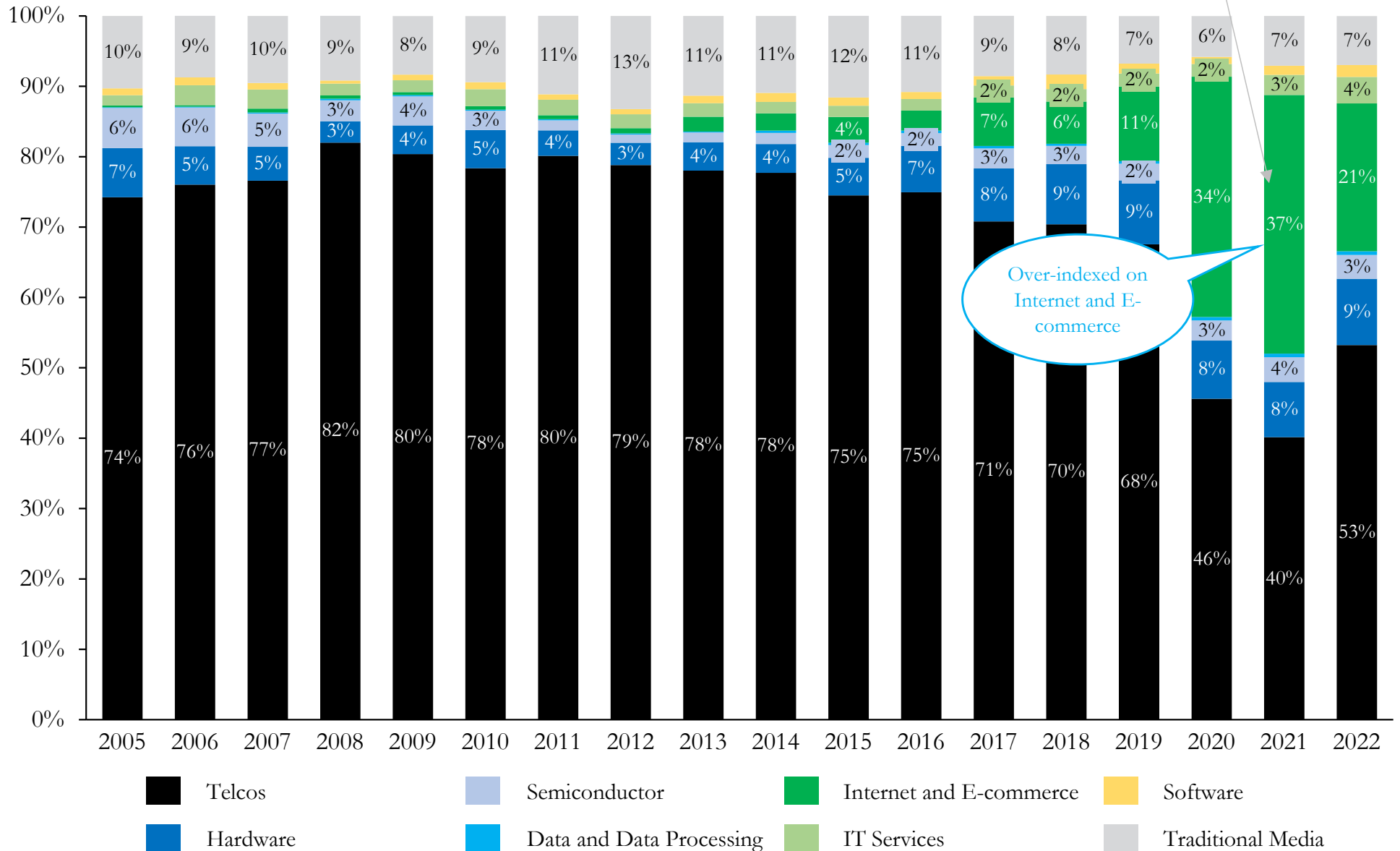
\*Telcos include wireless, wireline, and cable/satellite companies

<sup>1</sup>Non-hardware Tech excludes Semiconductors

Source: Bloomberg, Asia Partners Analysis

# SOUTHEAST ASIA'S ECOSYSTEM DEVELOPMENT: 2005-2022

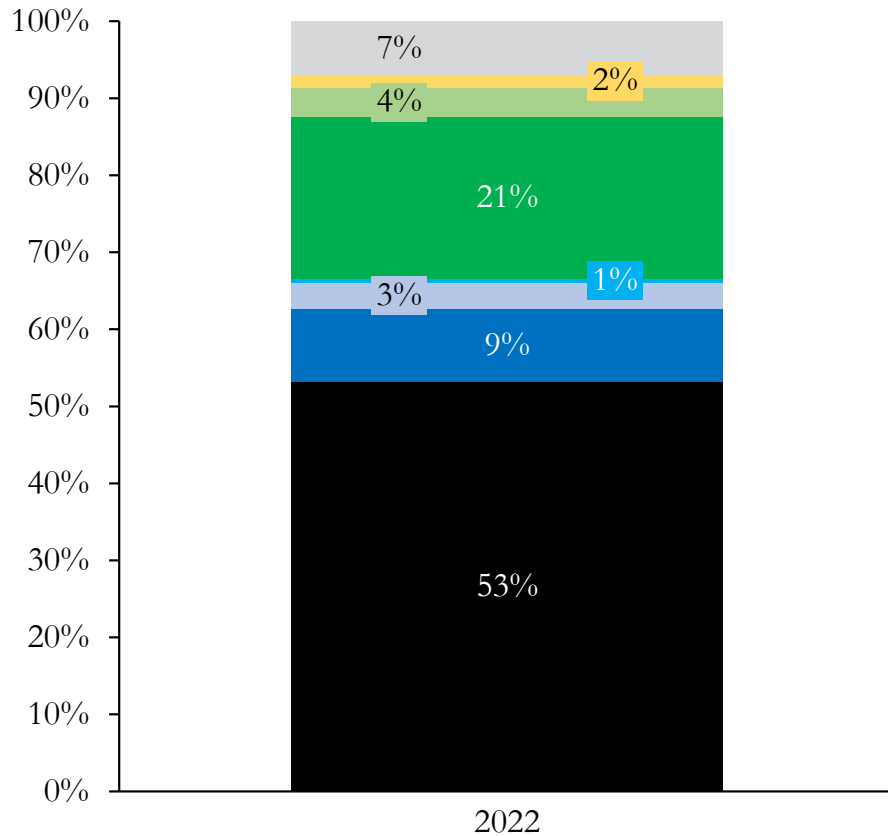
Mix of Aggregate Market Capitalization Over Time



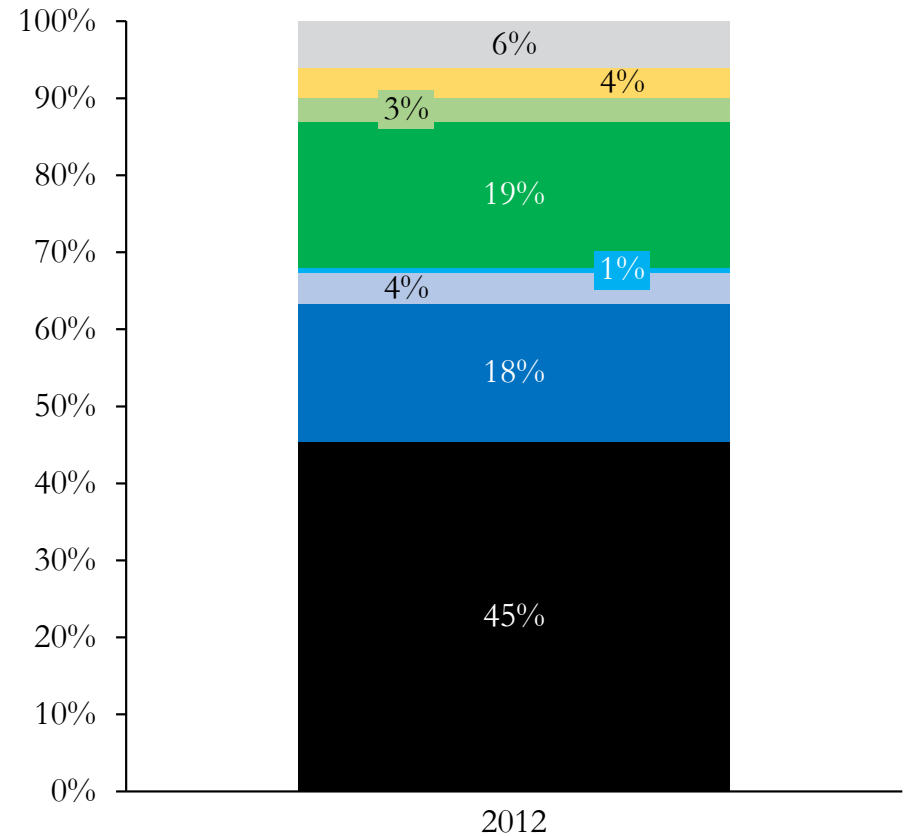
# SOUTHEAST ASIA'S 2022 LOOKS REMARKABLY LIKE CHINA 2012

*Mix of Aggregate Market Capitalization Over Time*

**Southeast Asia 2022  
("Episode VII")**



**China/HK 2012  
("Episode IV")**



- Telcos
- Semiconductor
- Internet and E-commerce
- Software
- Hardware
- Data and Data Processing
- IT Services
- Traditional Media

*Southeast Asia's Moment*

**The Case for Southeast Asia in a Global Portfolio**

*Plan vs. Actual*

**Revisiting Our Predictions from 2019**

*You are What You Eat*

**Talent Flows in Southeast Asia's Innovation Ecosystem**

*The Elephant in the Room*

**Where Are We in the Macro Cycle? When will IPOs Return?**

*Around the World in 47 Charts*

**Where and When Does GDP Growth Actually Lead to Value Creation?**

*To Each Their Own*

**Regional Specialization in Building TMT Equity Value**

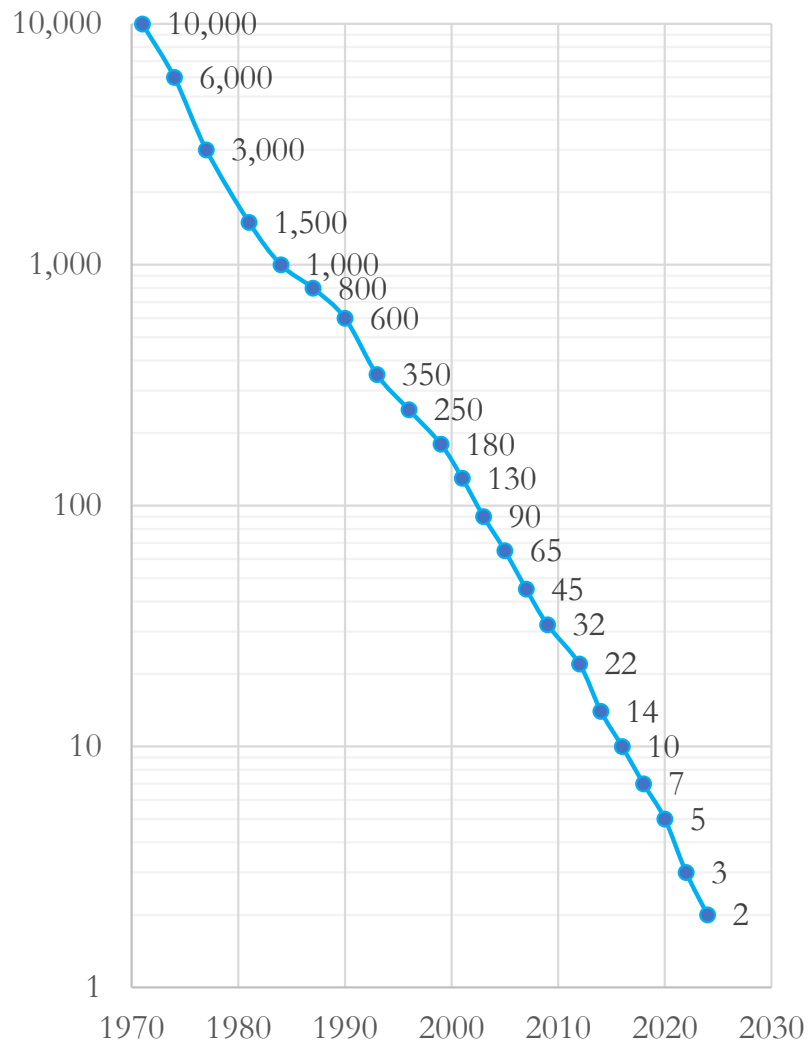
*A Few Final Thoughts for the 2020s-2030s*



# Southeast Asia's Coming Semiconductor Boom

# SOUTHEAST ASIA IS ALREADY THE WORLD'S 2<sup>ND</sup> LARGEST EXPORTER OF SEMICONDUCTORS

## MOSFET Scaling (nanometers)



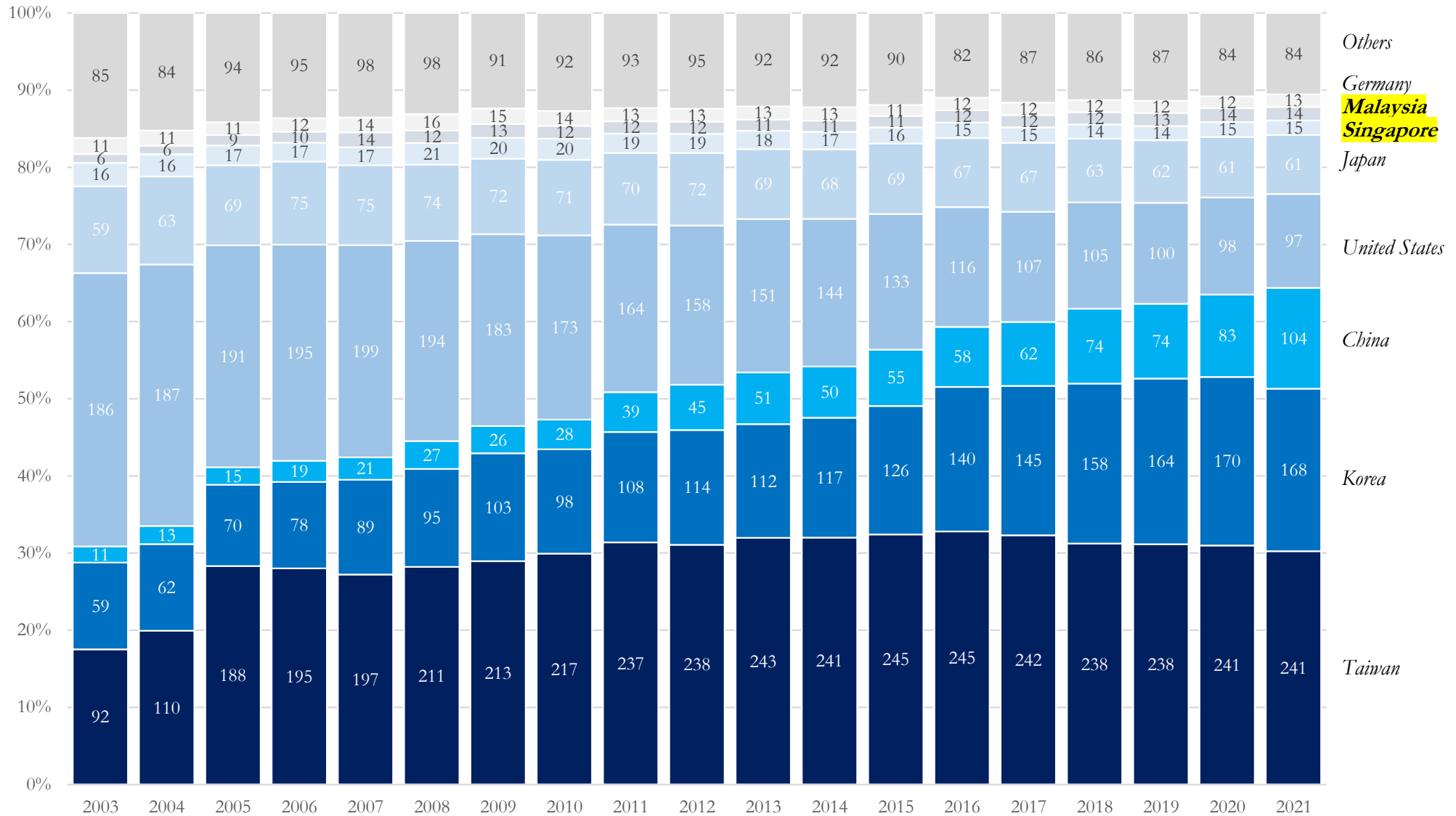
## Semiconductor Exports (\$US Billions), *SE Asia Highlighted*

Country	2000	2020	CAGR
China	\$1.9	\$35.8	16%
<b>ASEAN</b>	<b>\$8.3</b>	<b>\$23.7</b>	<b>5%</b>
Japan	\$8.6	\$9.6	1%
Malaysia	\$2.7	\$8.7	6%
Germany	\$2.2	\$6.3	5%
Chinese Taipei	\$1.7	\$5.5	6%
Singapore	\$2.6	\$5.3	4%
United States	\$5.6	\$5.0	-1%
South Korea	\$1.3	\$4.9	7%
Vietnam	\$0.0	\$4.2	41%
Thailand	\$1.0	\$2.9	6%
Philippines	\$1.8	\$2.2	1%
Netherlands	\$0.5	\$1.9	7%
France	\$1.0	\$1.2	1%
Hong Kong	\$1.3	\$1.0	-1%
Italy	\$0.2	\$0.9	8%
Austria	\$0.3	\$0.8	4%
Mexico	\$0.8	\$0.8	0%
United Kingdom	\$1.0	\$0.6	-2%

Note: MOSFET stands for metal-oxide-semiconductor field-effect transistor. Sources: Wikipedia, OEC.world. ASEAN total includes Indonesia and Cambodia

# HISTORICALLY, THOUGH, MOST OF THE WORLD'S PUBLICLY TRADED SEMI FIRMS HAVE BEEN HQ'D OUTSIDE SE ASIA

Number and Percentage of Total Public Companies by Number, Annually

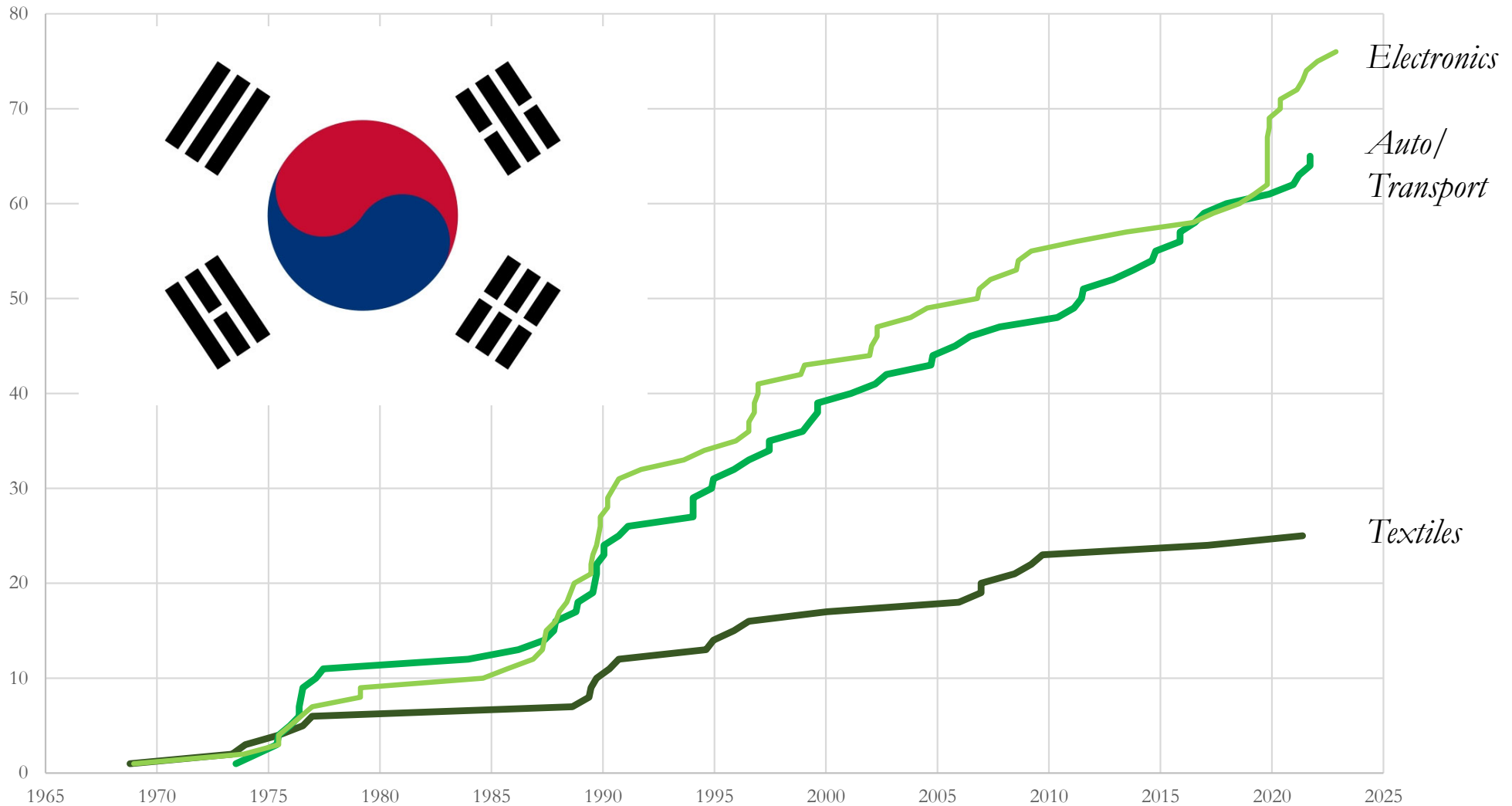


Source: Bloomberg (Nov 2022), Asia Partners Analysis

# BUT HISTORY ALSO SUGGESTS THAT COUNTRIES THAT BUILD TEXTILE INDUSTRIES THEN MIGRATE INTO AUTO AND SEMIS

## When Korea's Textile, Auto, and Electronics Companies Went Public

*Cumulative Number of Current Publicly Traded Companies in Korea by IPO Year and by Industry*

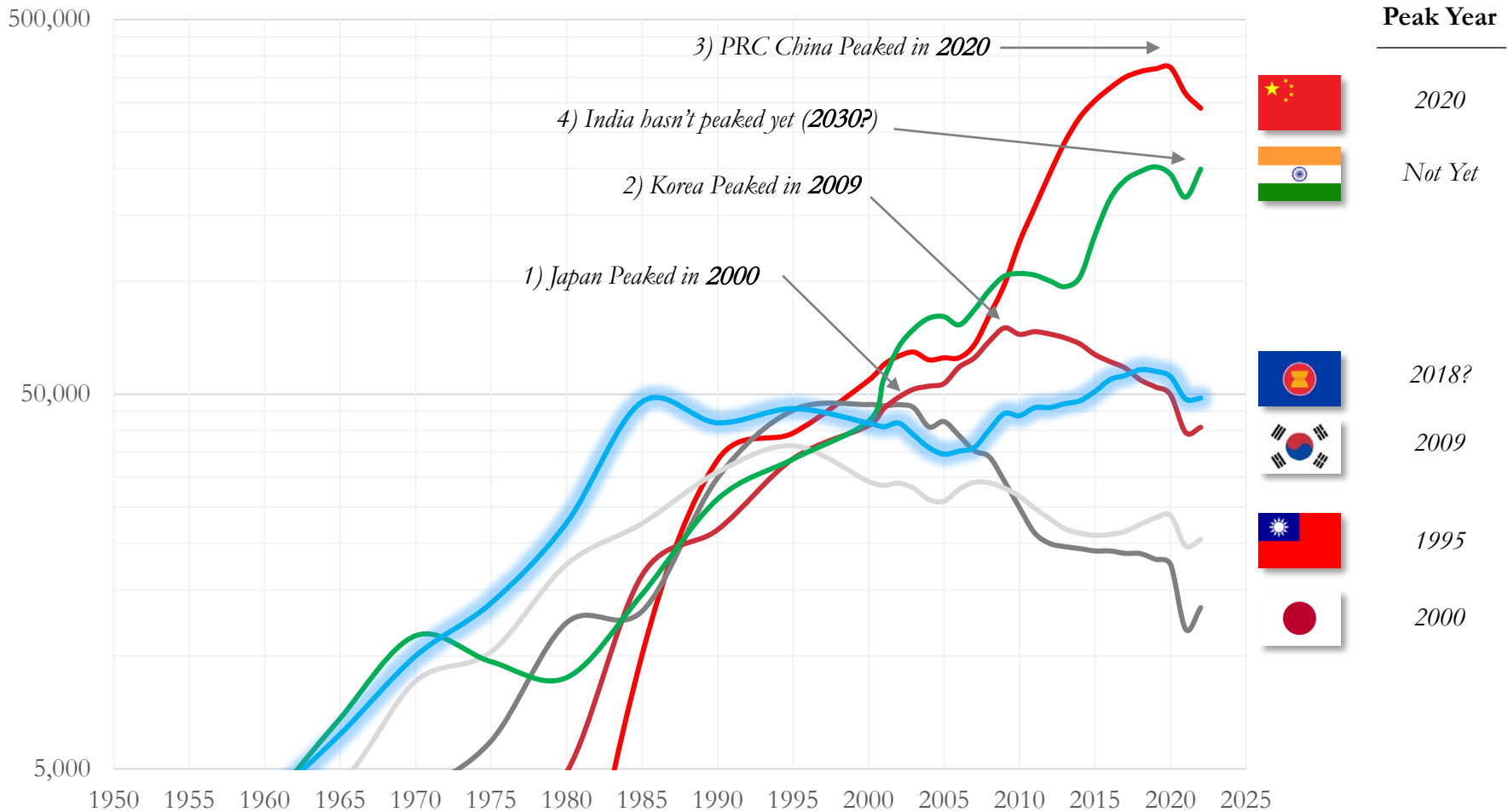


Source: KRX, Asia Partners Analysis; note that this does not account for survivor bias (e.g., excludes delisted or acquired companies)

# Watch the Vietnamese Sea Turtles

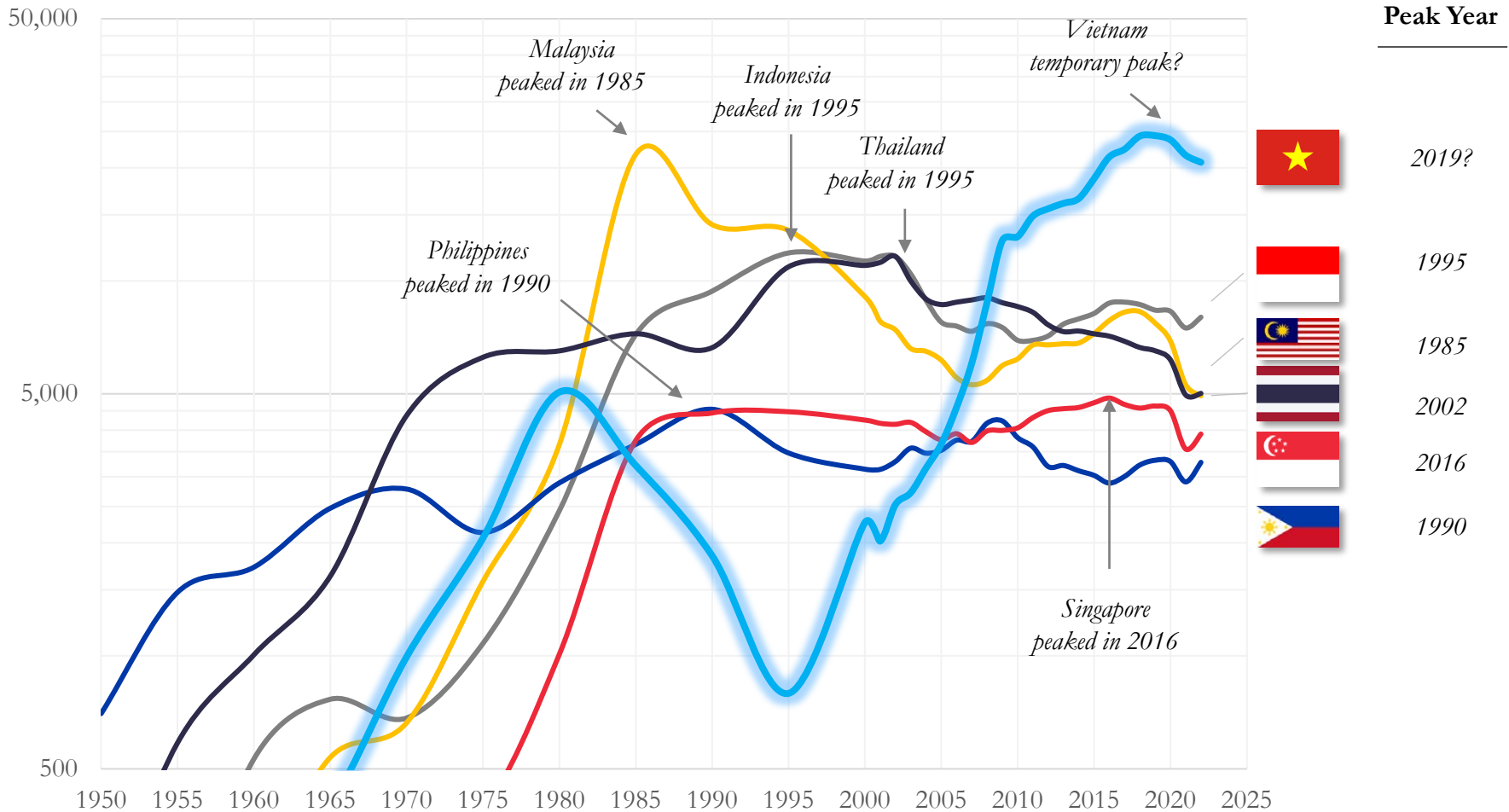
# ASIA HAS SENT WAVES OF STUDENTS TO THE USA FOR HIGHER EDUCATION, SEQUENCED BY AFFLUENCE

Number of Studying Abroad in United States for Higher Education, 1950-2022, *Log Scale*



# SOUTHEAST ASIA HAS HAD A SET OF MINI-WAVES OF STUDENTS IN THE USA; THE NEXT 10 YEARS WILL BE INTERESTING TO WATCH

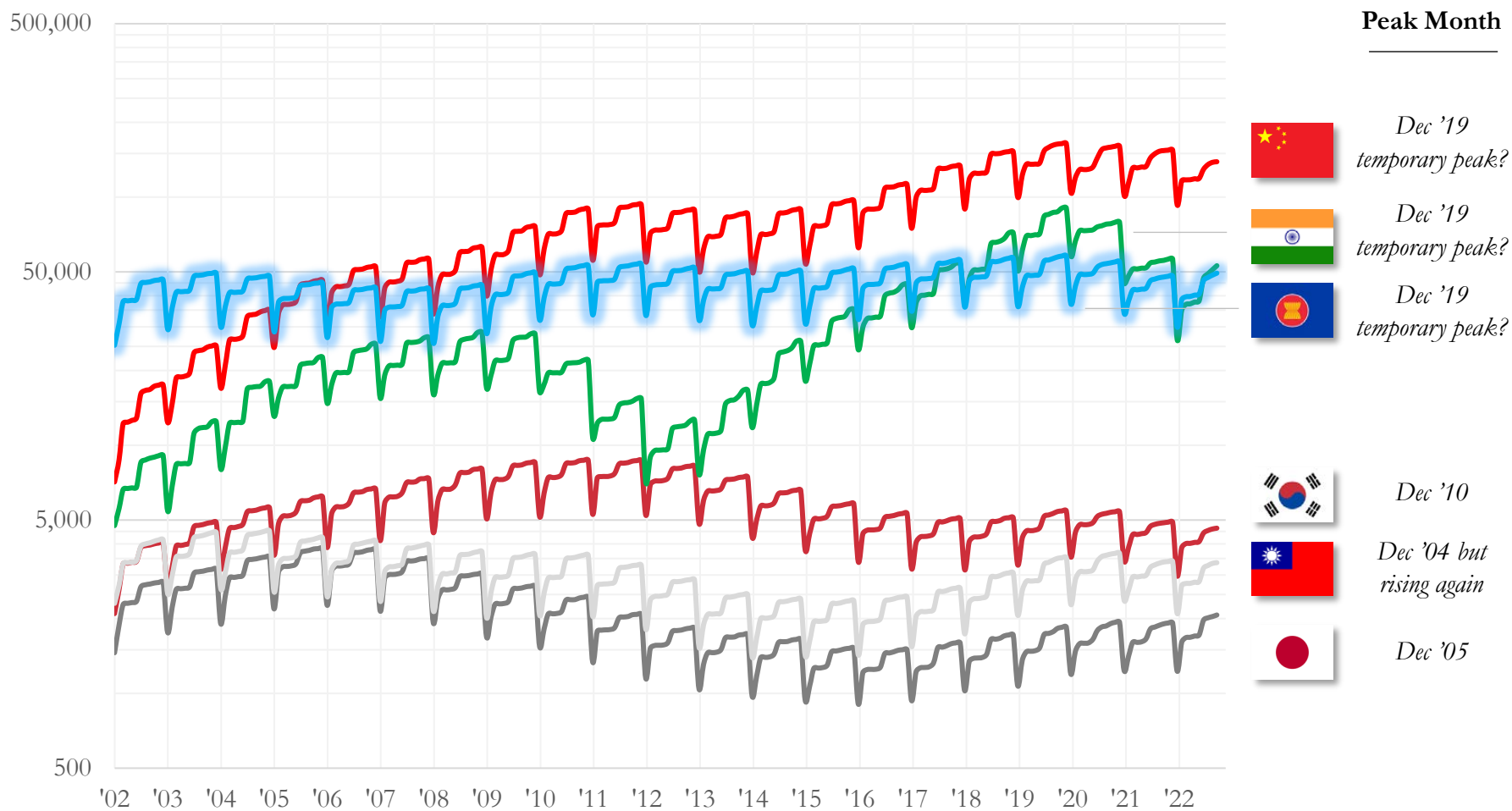
Number of Studying Abroad in United States for Higher Education, 1950-2022, *Log Scale*





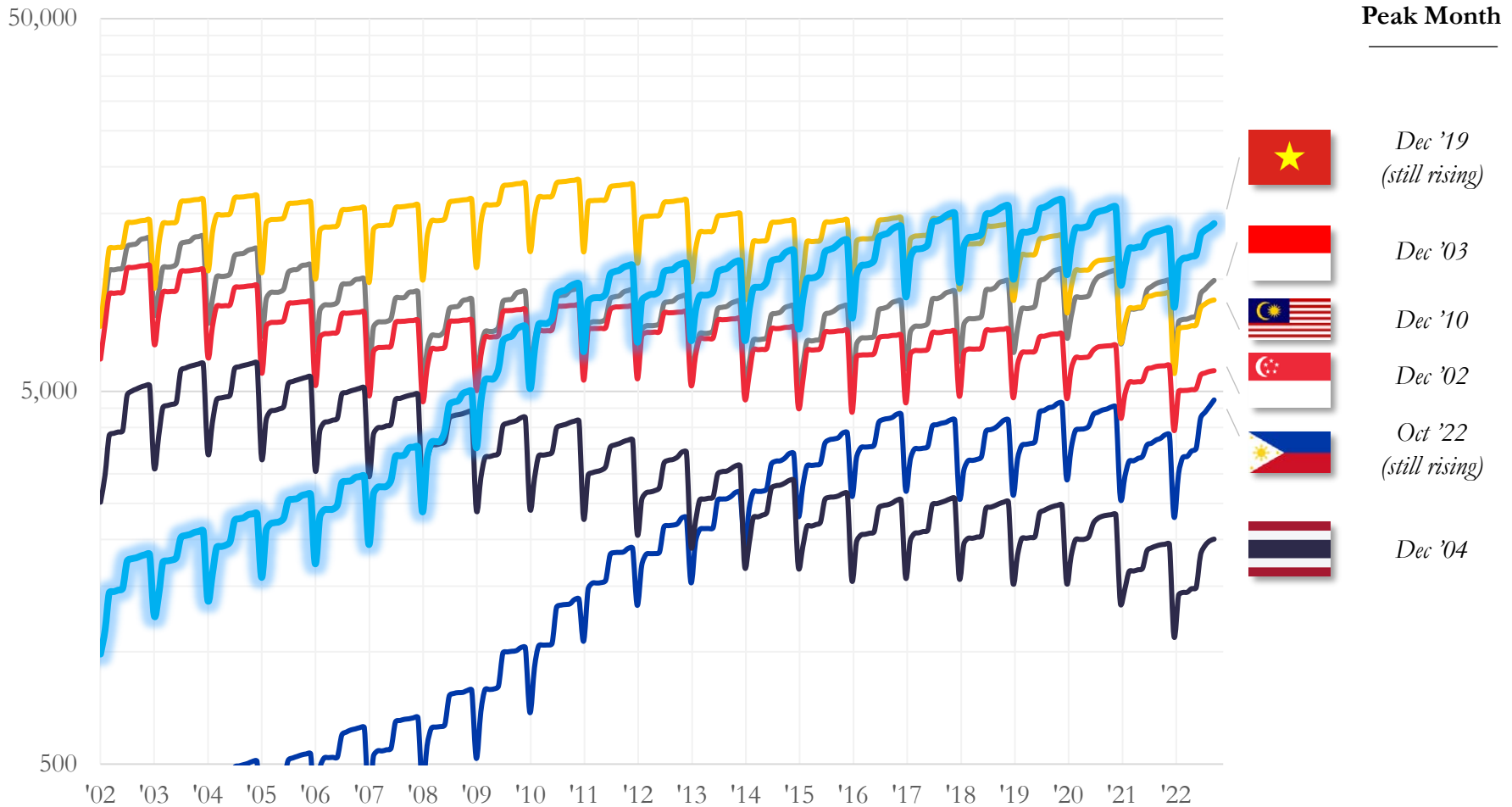
# THE PATTERN ACROSS ASIA IS SIMILAR FOR STUDENTS GOING TO AUSTRALIA FOR HIGHER EDUCATION

Number of Studying Abroad in Australia for Higher Education, 2002-2022 Monthly, *Log Scale*



# JUST LIKE THE UNITED STATES, VIETNAMESE STUDENTS ARE THE LARGEST PART OF THE SE ASIAN CONTINGENT IN AUSTRALIA

Number of Studying Abroad in Australia for Higher Education, 2002-2022, *Log Scale*



# Watch the ByteDance Alumni in SE Asia



ByteDance has become one of the largest talent magnets in our region, but only has an alumni to current headcount ratio of 0.28x – watch this space and what their alumni do next, including founding new startups



## Nutrition Facts (Input) "Where Talent Comes From"

### Bytedance

**SE Asia Headcount:** **~10,000**

Per LinkedIn (Dec 2022)

#### Alma Maters of Current SE Asia-Based Headcount (>1% Highlighted):

	#	% Total		#	% Total
<b>Global Tech Majors</b>	<b>478</b>	<b>4.78%</b>	<b>Semiconductors</b>	<b>37</b>	<b>0.37%</b>
Google	153	1.53%	GlobalFoundries	4	0.04%
Microsoft	59	0.59%	Micron Technology	22	0.22%
Amazon	55	0.55%	Intel	11	0.11%
Facebook	152	1.52%	<b>Telcos</b>	<b>151</b>	<b>1.51%</b>
Oracle	15	0.15%	Singtel	94	0.94%
Apple	44	0.44%	Telkom Indonesia	57	0.57%
<b>China's BAT 2.0</b>	<b>133</b>	<b>1.33%</b>	<b>Big 4 Accounting Firms</b>	<b>150</b>	<b>1.50%</b>
Bytedance	N/A	N/A	Deloitte	44	0.44%
Tencent	60	0.60%	EY	65	0.65%
Alibaba	73	0.73%	PwC	31	0.31%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>1,589</b>	<b>15.89%</b>	KPMG	10	0.10%
Sea	966	9.66%	<b>Management Consulting</b>	<b>50</b>	<b>0.50%</b>
Grab	279	2.79%	Bain	7	0.07%
Lazada	286	2.86%	BCG	21	0.21%
Zalora	58	0.58%	McKinsey	22	0.22%
<b>Indonesia Internet 1st Gen</b>	<b>273</b>	<b>2.73%</b>	<b>IT Services</b>	<b>566</b>	<b>5.66%</b>
Gojek	70	0.70%	IBM	69	0.69%
Tokopedia	112	1.12%	Accenture	497	4.97%
Bukalapak	39	0.39%	<b>Global FMCG</b>	<b>184</b>	<b>1.84%</b>
Traveloka	52	0.52%	Unilever	71	0.71%
<b>SE Asia Internet 2nd Gen</b>	<b>41</b>	<b>0.41%</b>	P&G	29	0.29%
Shopback	26	0.26%	Nestle	30	0.30%
Carsome	6	0.06%	L'Oreal	54	0.54%
RedDoorz	9	0.09%			

#### Regional Split of Headcount: (>15% Highlighted)

	#	% Total
Singapore	3,300	33%
Malaysia	2,700	27%
Indonesia	3,000	30%
Thailand	657	7%
Vietnam	958	10%
Philippines	560	6%
<b>Subtotal: Non-Singapore</b>		<b>67%</b>

Headcount only includes LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomset; KPMG includes KPMG U.S.

## Alumni Diaspora (Output) "Where Talent Goes To"

### Bytedance

**Alumni in SE Asia:** **~2,800**

Per LinkedIn (Dec 2022)

#### Alumni Working in Southeast Asia (>1% Highlighted):

	#	% of Alums		#	% of Alums
<b>Global Tech Majors</b>	<b>160</b>	<b>5.71%</b>	<b>Semiconductors</b>	<b>4</b>	<b>0.14%</b>
Google	69	2.46%	GlobalFoundries	0	0.00%
Microsoft	3	0.11%	Micron Technology	1	0.04%
Amazon	20	0.71%	Intel	3	0.11%
Facebook	52	1.86%	<b>Telcos</b>	<b>5</b>	<b>0.18%</b>
Oracle	2	0.07%	Singtel	1	0.04%
Apple	14	0.50%	Telkom Indonesia	4	0.14%
<b>China's BAT 2.0</b>	<b>24</b>	<b>0.86%</b>	<b>Big 4 Accounting Firms</b>	<b>9</b>	<b>0.32%</b>
Bytedance	N/A	N/A	Deloitte	5	0.18%
Tencent	18	0.64%	EY	2	0.07%
Alibaba	6	0.21%	PwC	2	0.07%
<b>Pan-SE Asia Internet 1st Gen</b>	<b>192</b>	<b>6.86%</b>	KPMG	0	0.00%
Sea	135	4.82%	<b>Management Consulting</b>	<b>2</b>	<b>0.07%</b>
Grab	34	1.21%	Bain	0	0.00%
Lazada	21	0.75%	BCG	2	0.07%
Zalora	2	0.07%	McKinsey	0	0.00%
<b>Indonesia Internet 1st Gen</b>	<b>26</b>	<b>0.93%</b>	<b>IT Services</b>	<b>18</b>	<b>0.64%</b>
Gojek	11	0.39%	IBM	3	0.11%
Tokopedia	13	0.46%	Accenture	15	0.54%
Bukalapak	0	0.00%	<b>Global FMCG</b>	<b>18</b>	<b>0.64%</b>
Traveloka	2	0.07%	Unilever	7	0.25%
<b>SE Asia Internet 2nd Gen</b>	<b>5</b>	<b>0.18%</b>	P&G	4	0.14%
Shopback	3	0.11%	Nestle	1	0.04%
Carsome	0	0.00%	L'Oreal	6	0.21%
RedDoorz	2	0.07%			

#### Ratio of SE Asia Alumni to Current Headcount:

0.3x

#### Career Rotation: Change in Alumni Mix vs. Input Mix

Global Tech Majors	+0.93%	Semiconductors	-0.23%
China's BAT 2.0	-0.47%	Telcos	-1.33%
Pan-SE Asia Internet 1st Gen	-9.03%	Big 4 Accounting Firms	-1.18%
Indonesia Internet 1st Gen	-1.80%	Management Consulting	-0.43%
SE Asia Internet 2nd Gen	-0.23%	IT Services	-5.02%
		Global FMCG	-1.20%

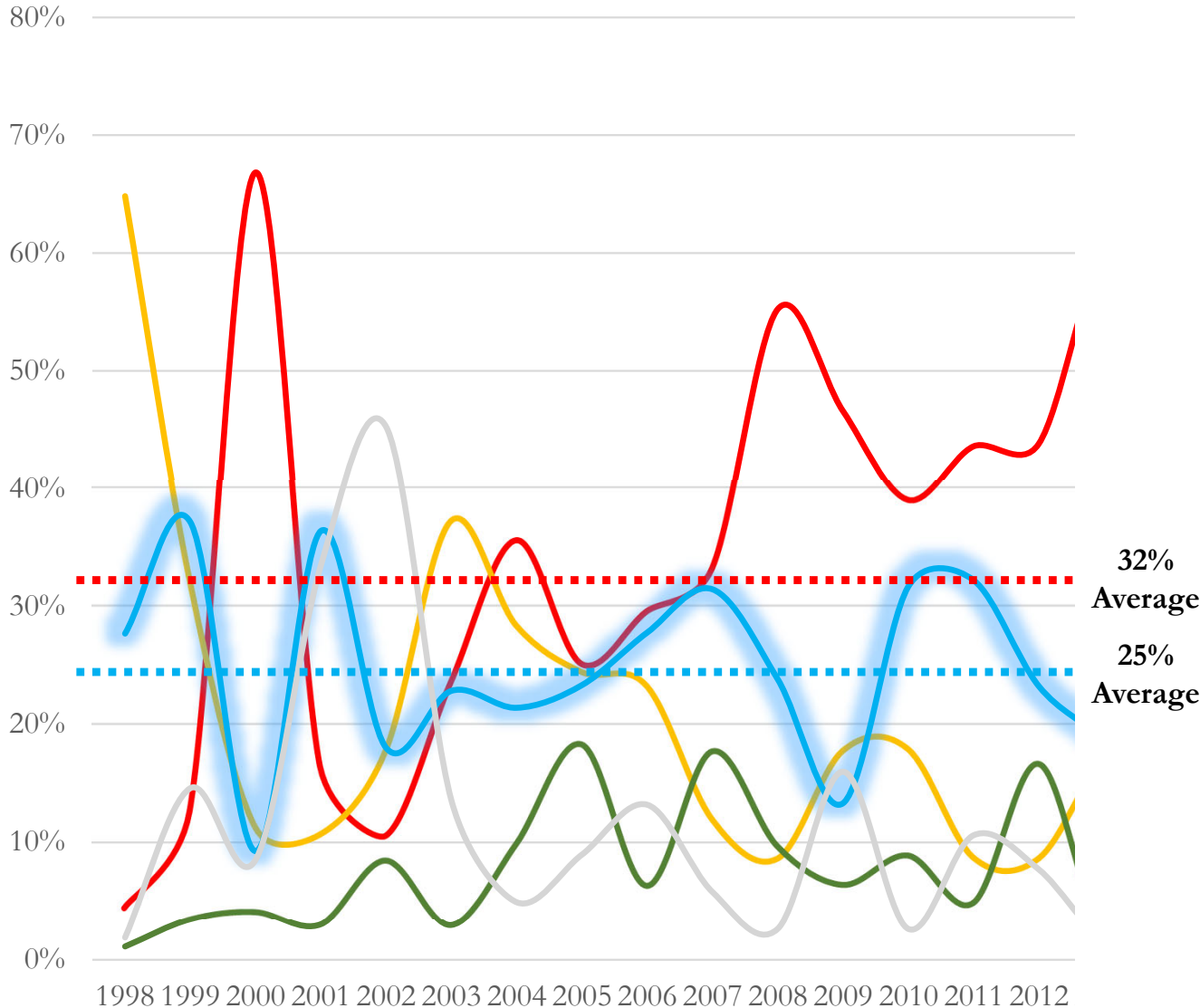
Note: >100bps Highlighted in Blue, <-100bps Highlighted in Red

Alumni only include LinkedIn profiles associated with Singapore, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Timor-Leste, Papua New Guinea and Laos, and for some companies Cambodia. Google includes YouTube; Amazon includes AWS; Facebook includes both Meta and Instagram; Bytedance includes TikTok; Tencent includes Riot Games; Alibaba includes Cloud, Alibaba.com, Tmall, and Taobao; Sea includes Garena, Shopee, ShopeePay, and SeaMoney; Gojek includes Gojek Tech; Carsome includes iCar; Telkom includes Telkomset; KPMG includes KPMG U.S.

**Southeast Asia will be  
one of the most  
important regions in  
Asia for inbound M&A**

# SOUTHEAST ASIA MADE UP 25% OF EMERGING ASIA'S M&A VOLUME FROM 1998 TO 2012, ONLY SLIGHTLY BELOW PRC CHINA

Percent of Emerging Asia M&A (%), by target region



— PRC China — Korea — South Asia — Southeast Asia — ROC Taiwan

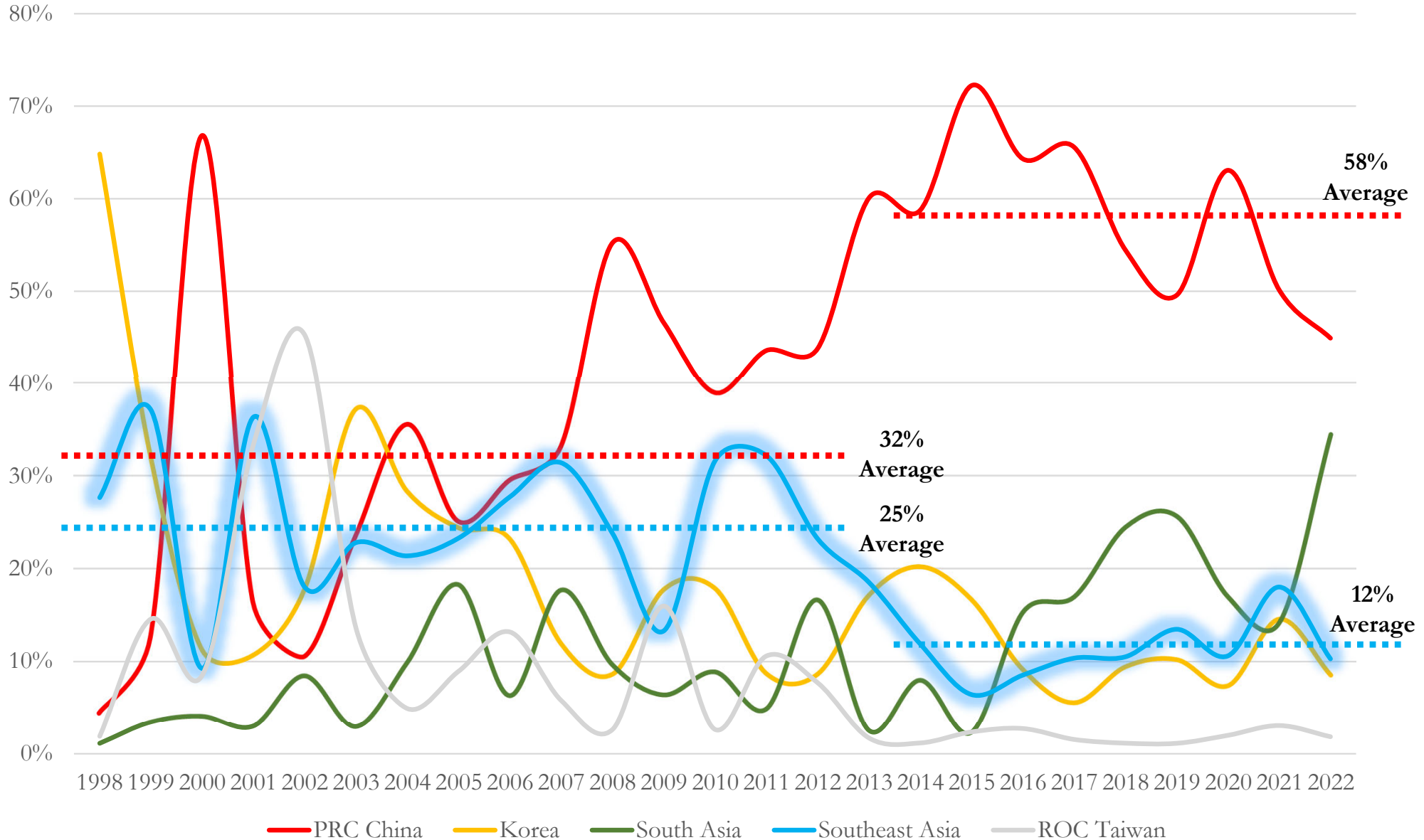
Source: Bloomberg, Asia Partners Analysis

Note: Only deals \$100m and above in size in Bloomberg, excluded deals which didn't get classified into a specific country



# ...BUT THE GAP TO CHINA WIDENED SIGNIFICANTLY OVER THE LAST DECADE

Percent of Emerging Asia M&A (%), by target region



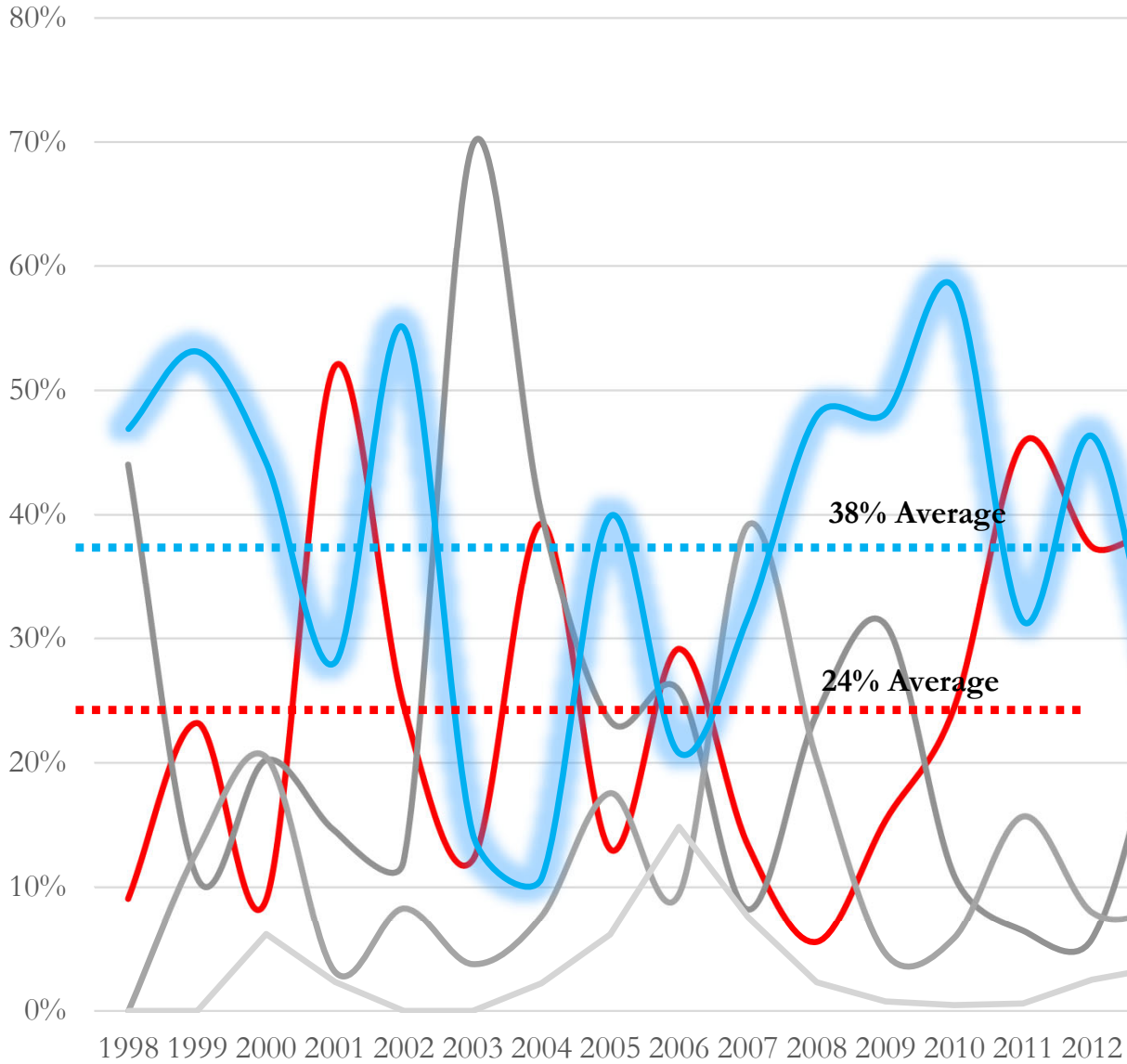
Source: Bloomberg, Asia Partners Analysis

Note: Only deals \$100m and above in size in Bloomberg, excluded deals which didn't get classified into a specific country



# SIMILARLY, SOUTHEAST ASIA MADE UP 24% OF CROSS-BORDER M&A IN EMERGING ASIA FROM 1998 TO 2012

Percent of Emerging Asia Cross-border M&A (%), by target region, excluding home region buyers (i.e. cross-region only)



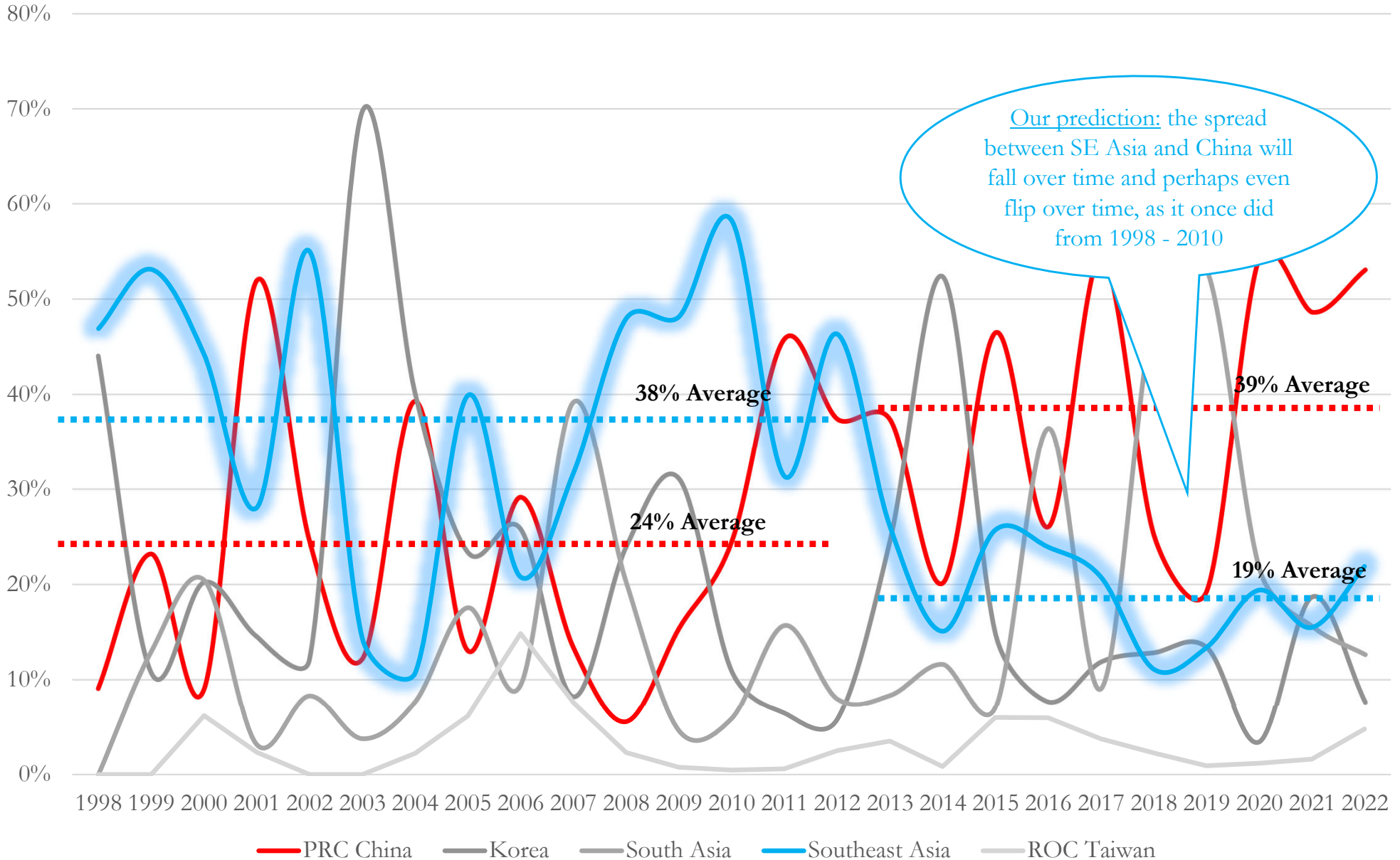
— PRC China — Korea — South Asia — Southeast Asia — ROC Taiwan

Source: Bloomberg, Asia Partners Analysis

Note: Only deals \$100m and above in size in Bloomberg, excluded deals which didn't get classified into a specific country  
Asia Partners | January 2023

# ...WHICH DECLINED TO A 19% FROM 2012 ONWARDS, MUCH LOWER THAN PRC CHINA

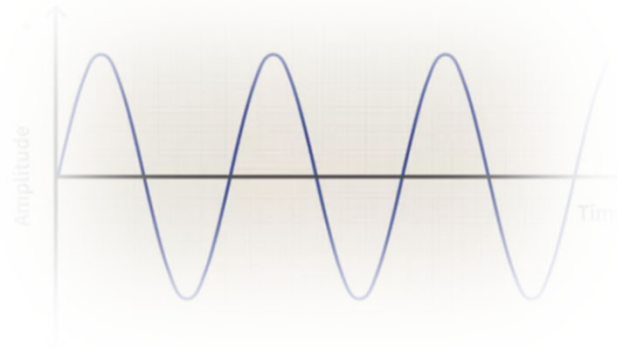
Percent of Emerging Asia Cross-border M&A (%), by target region, excluding home region buyers (i.e. cross-region only)



Source: Bloomberg, Asia Partners Analysis

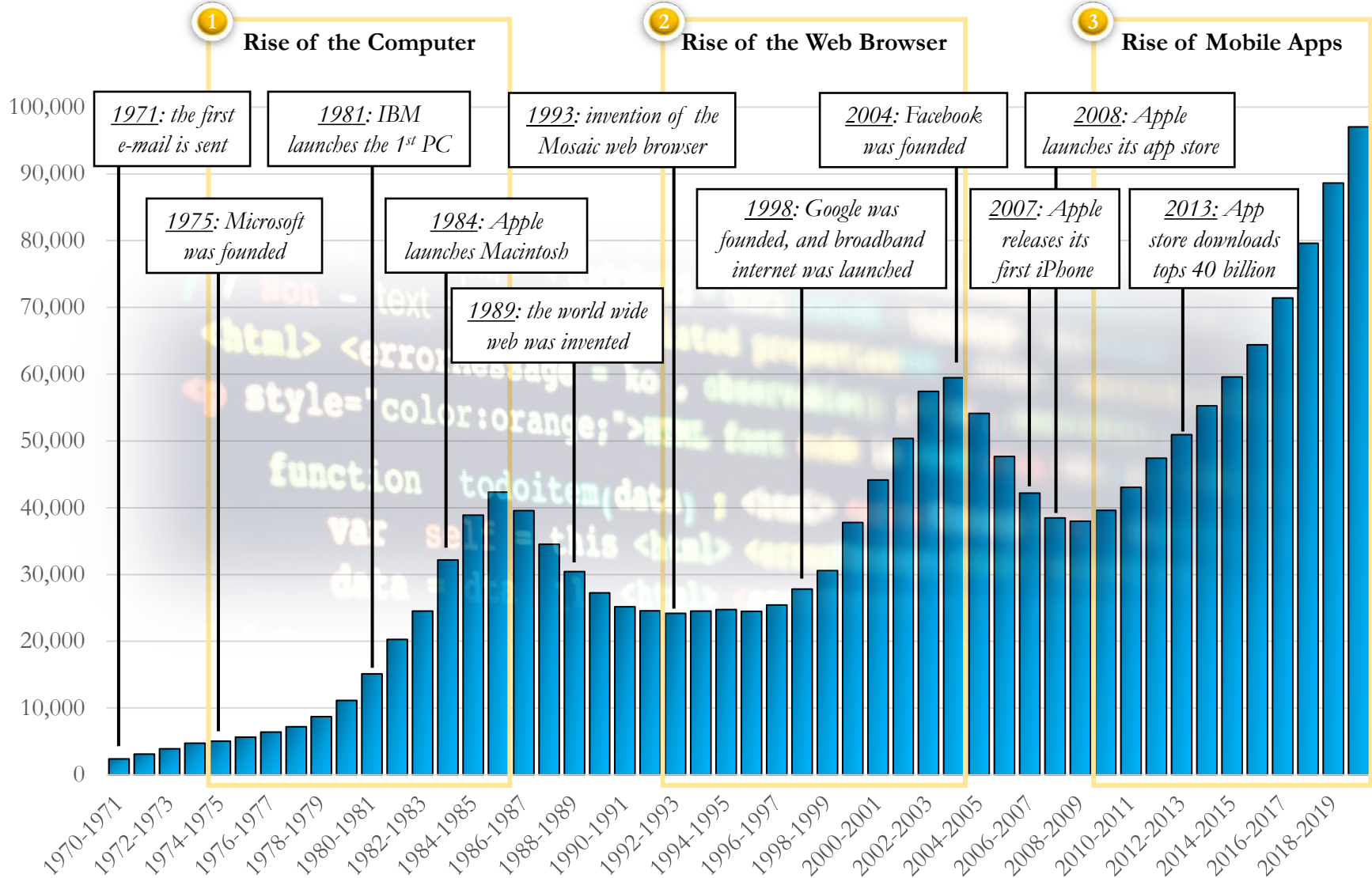
Note: Only deals \$100m and above in size in Bloomberg, excluded deals which didn't get classified into a specific country  
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# Why the founders of 2024-2032 will change the world



# COMPUTER SCIENCE HAS BEEN AN INCREASINGLY POPULAR MAJOR AND GREW OVER THE COURSE OF 3 DISTINCT STAGES

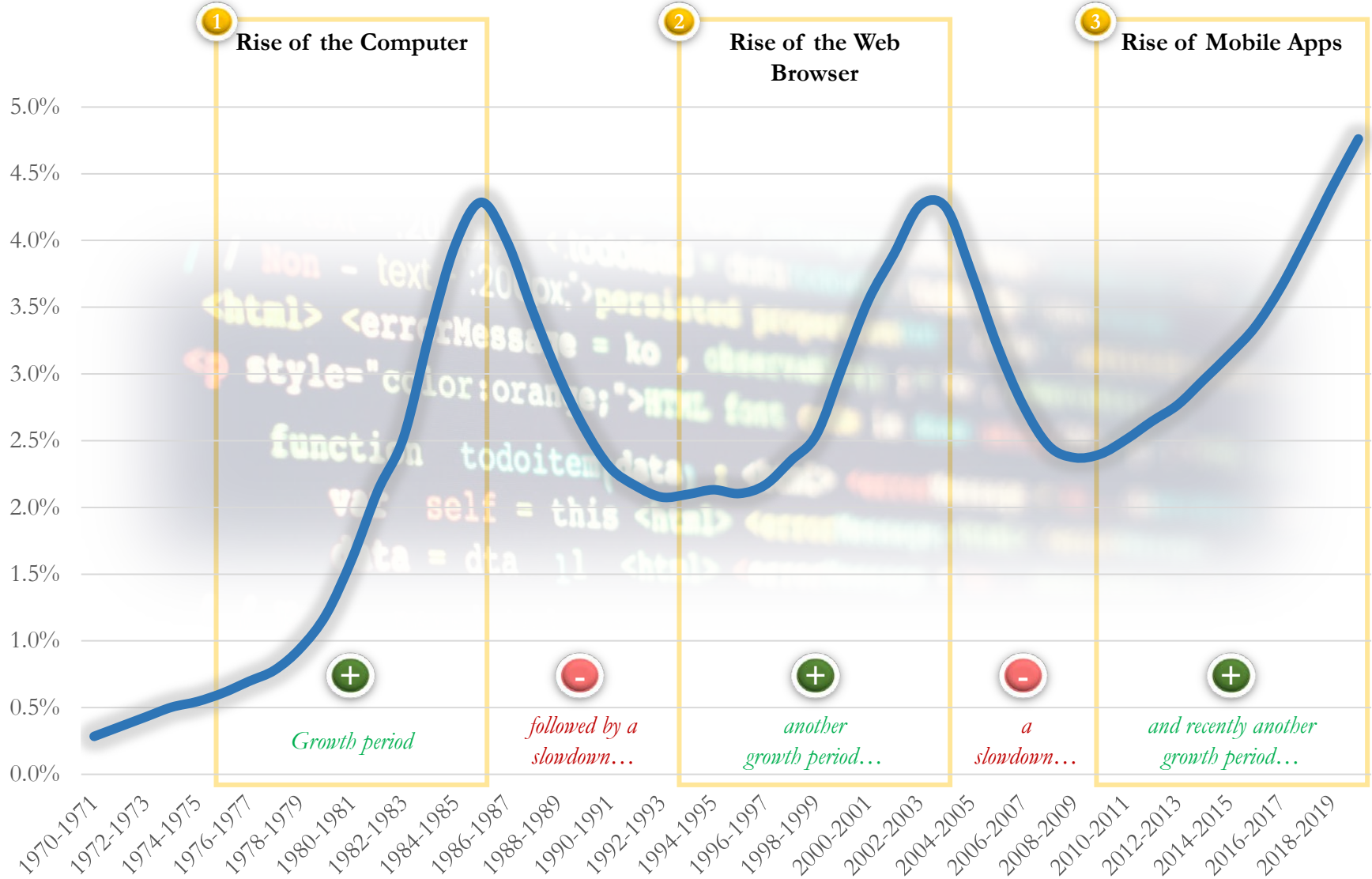
# of Computer Science Graduates by year (1970 – 2019)



Source: U.S. Dept of Education Statistics, Asia Partners Analysis; Note: Other degrees include business, social sciences, education, engineering, visual & performing arts, psychology, biological sciences, communication, and health professions

# SINCE 1970, WHEN THE MAJOR BEGAN, THE CYCLE IS VERY CLEAR – BUT WHY DOES IT FOLLOW THIS PATTERN?

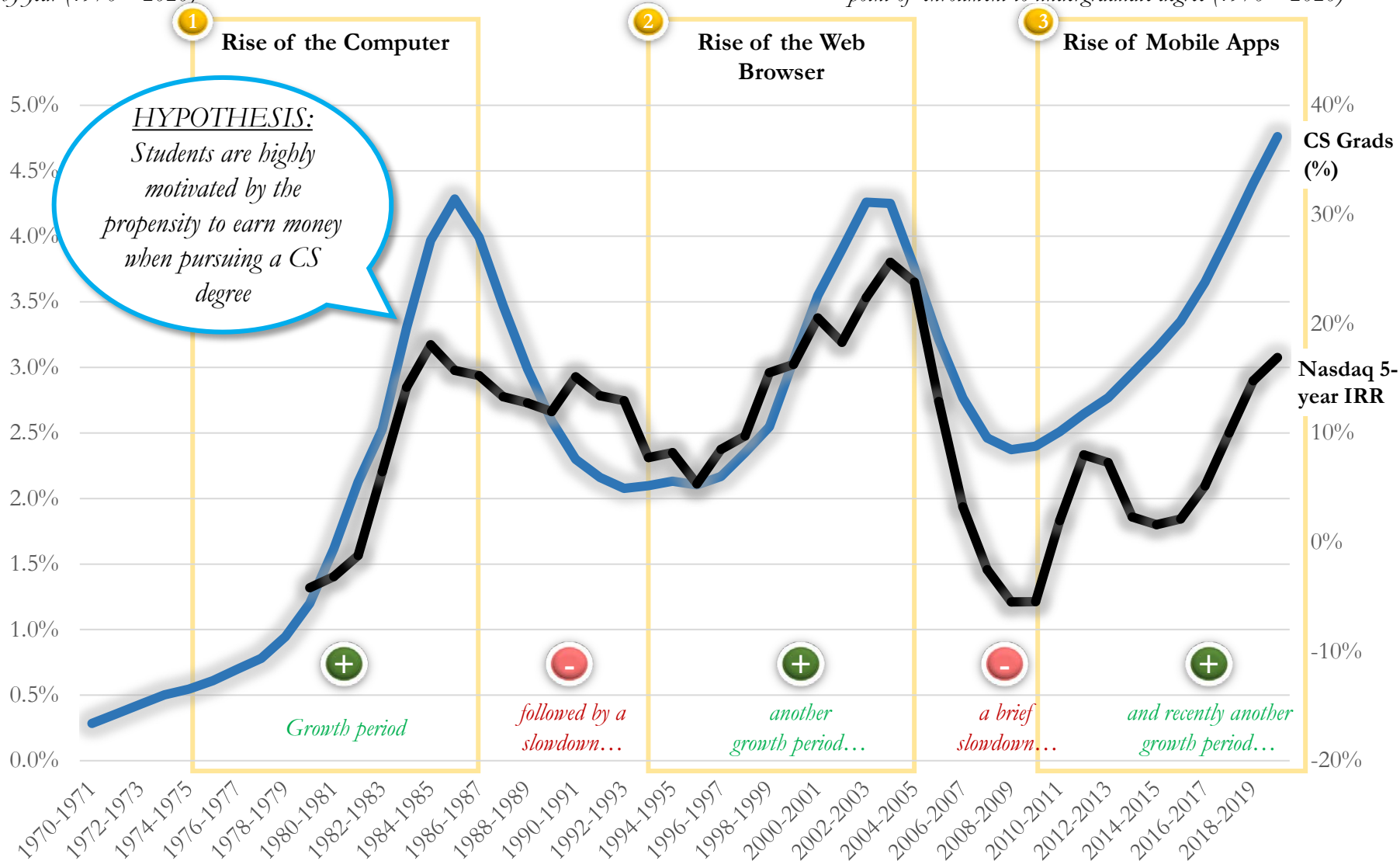
% of Computer Science Graduates as a percentage of total US graduates, by year (1970 – 2020)



# THE % OF COMPUTER SCIENCE GRADUATES FOLLOW THE 5-YEAR TRAILING IRR OF THE NASDAQ VERY CLOSELY

% of Computer Science Graduates as a percentage of total US graduates, by year (1970 – 2020)

3- year average of the trailing 5-year IRR of the NASDAQ at point of enrollment to undergraduate degree (1970 – 2020)



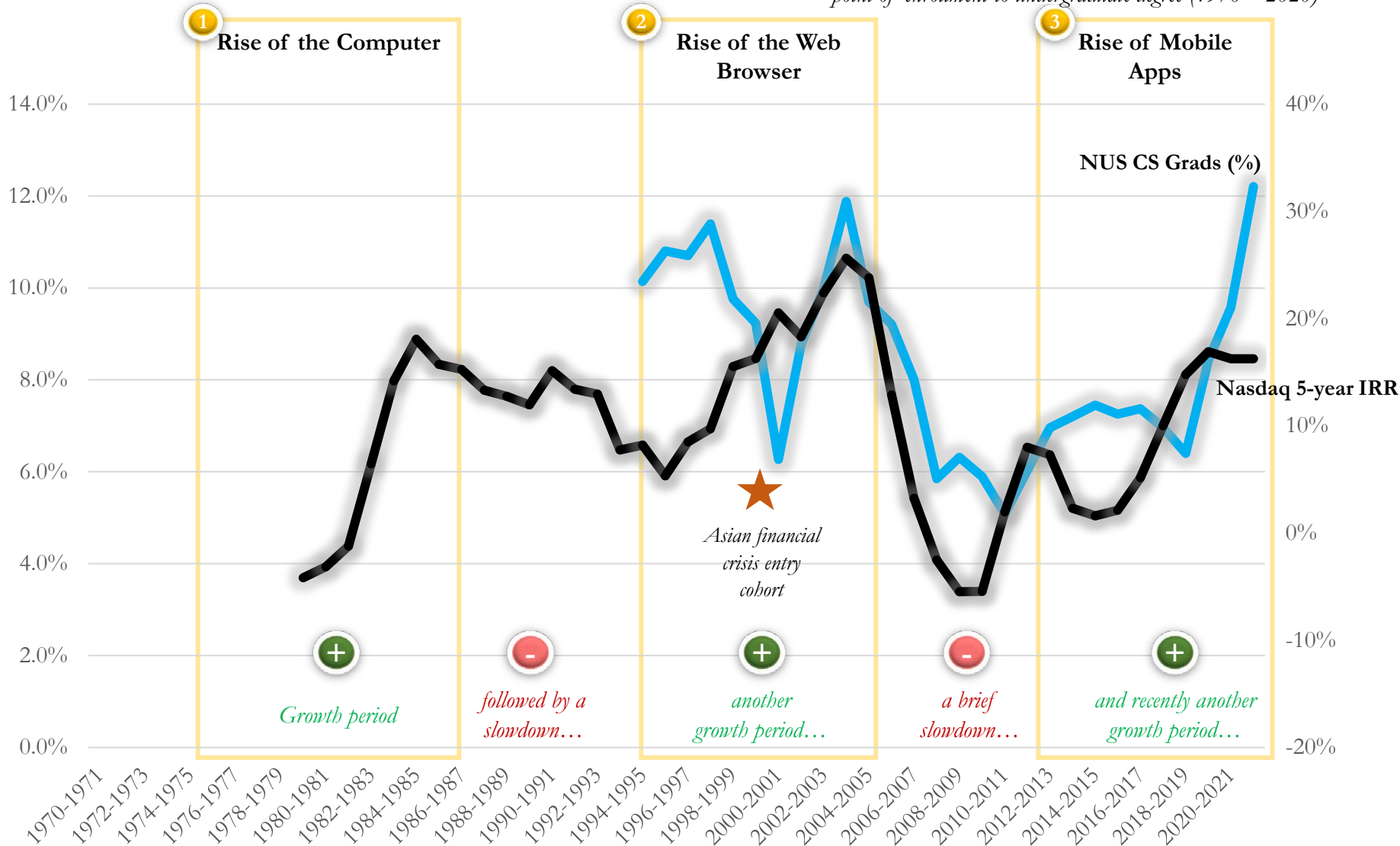
Source: U.S. Dept of Education Statistics, Bloomberg, Asia Partners Analysis; Note: Other degrees include business, social sciences, education, engineering, visual & performing arts, psychology, biological sciences, communication, and health professions  
Asia Partners | January 2023



# THE SAME TREND CAN BE OBSERVED IN SE ASIA AS WELL

*% of Computer Science Graduates as a percentage of total NUS graduates, by year (1970 – 2020)*

*3- year average of the trailing 5-year IRR of the NASDAQ at point of enrollment to undergraduate degree (1970 – 2020)*

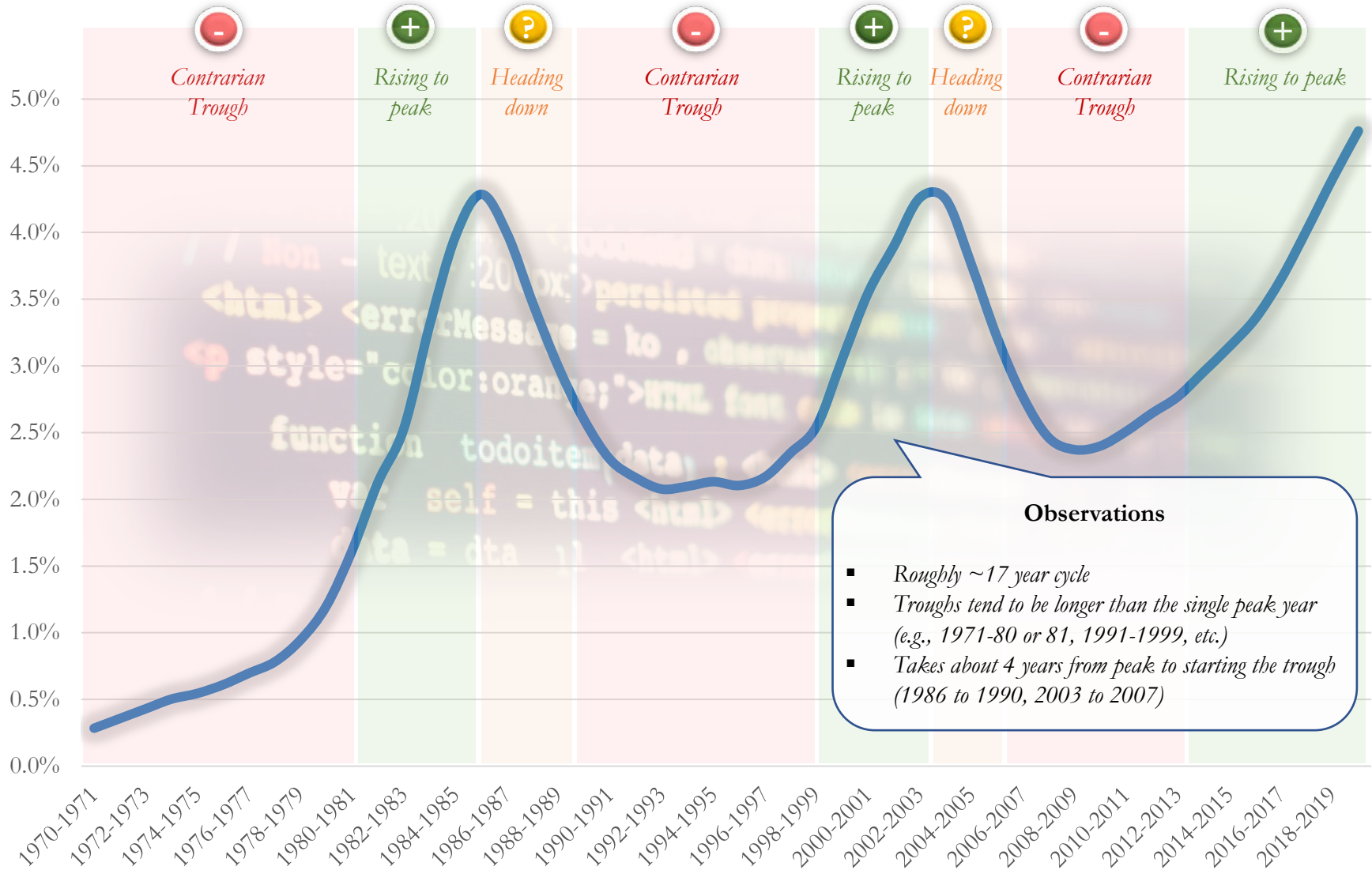


Source: Bloomberg, NUS website, Asia Partners Analysis; Note: Other degrees include business, social sciences, education, engineering, visual & performing arts, psychology, biological sciences, communication, and health professions  
Asia Partners | January 2023



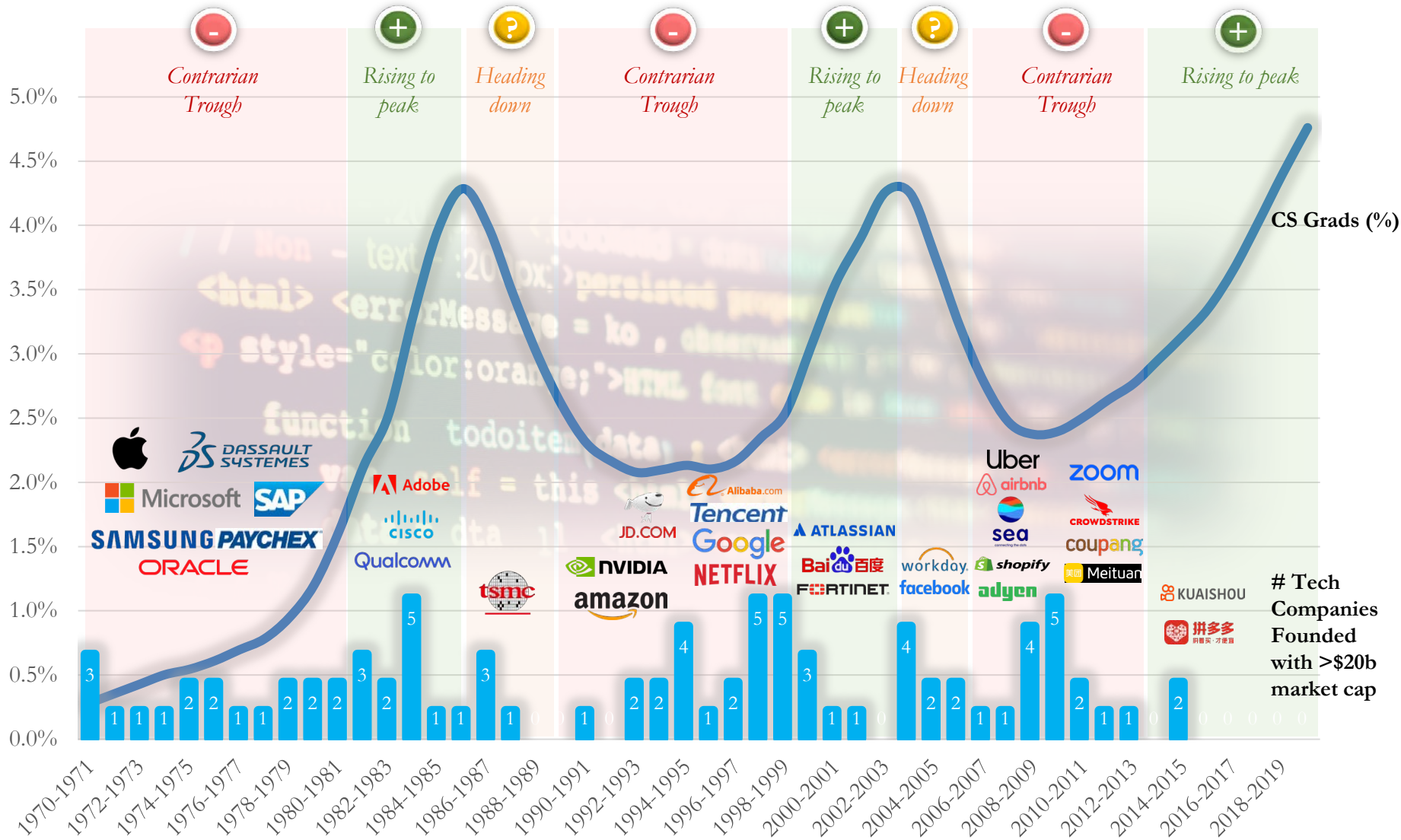
# IN ADDITION, THERE ARE A FEW INTERESTING OBSERVATIONS ABOUT THIS CYCLICITY

% of Computer Science Graduates as a percentage of total US graduates, by year (1970 – 2020)



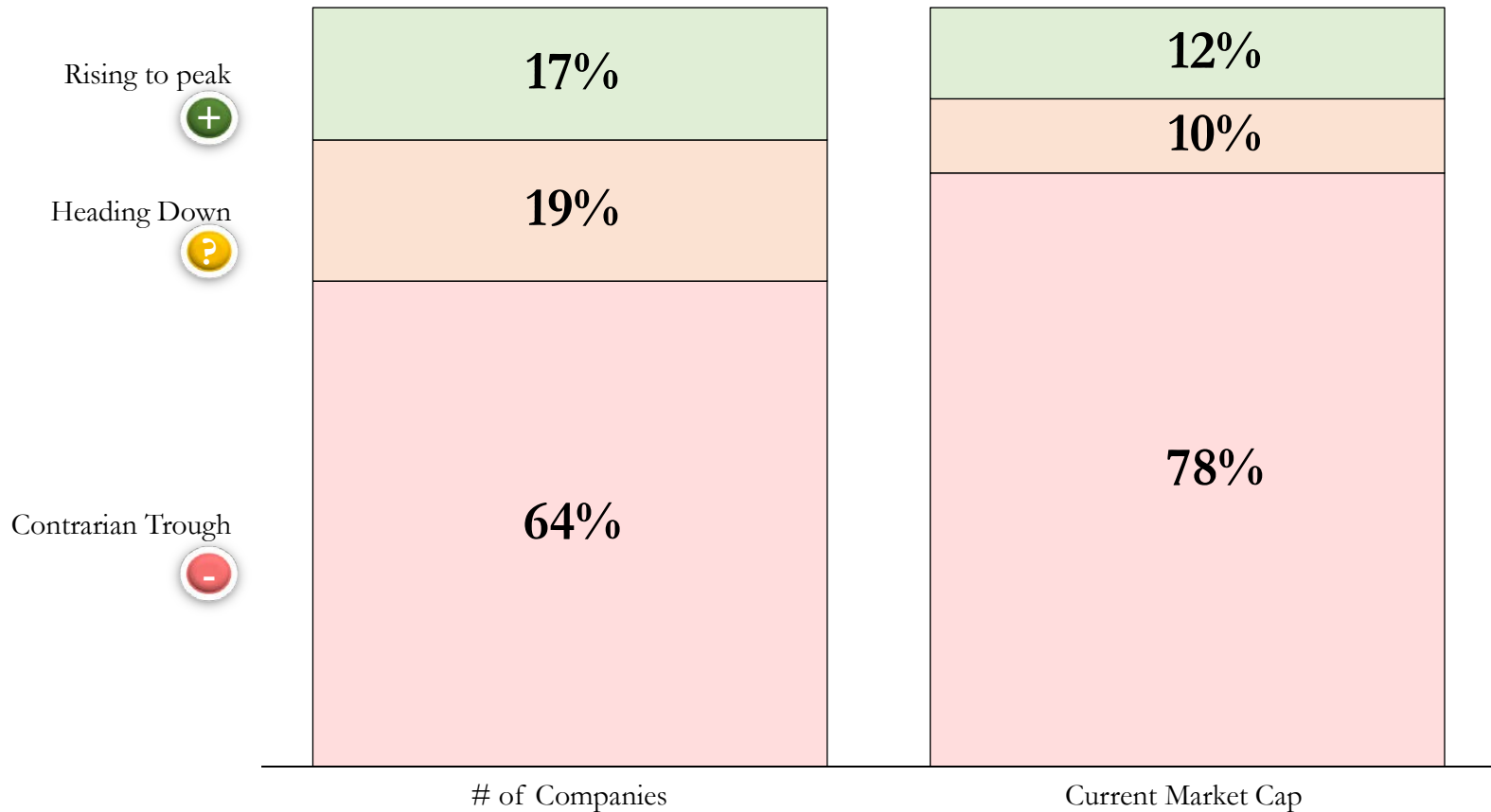
# TECH COMPANY FOUNDING DATES OVER THE PAST 50 YEARS

% of Computer Science Graduates as a percentage of total US graduates, by year (1970 – 2020) and # of Tech Companies (Non-Telco) Founded with >\$20bn Current Market Cap



# THE WORLD'S LARGEST TECH COMPANIES ARE REMARKABLY CONCENTRATED AMONG THE CONTRARIAN COHORTS

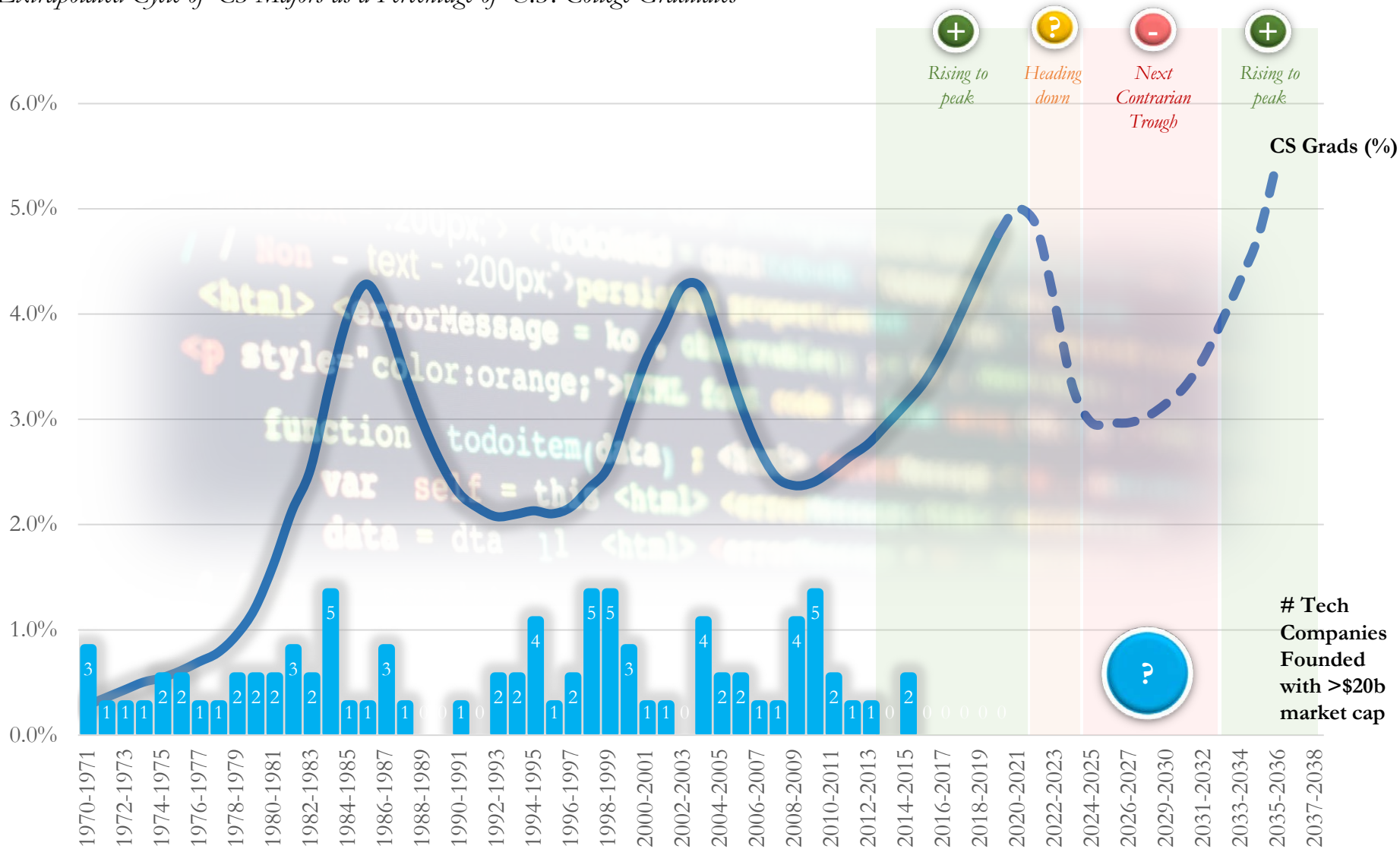
**Tech Companies<sup>(a)</sup> with Current Market Cap >\$20b**  
*Classified based on Founding Year Relative to CS Graduate Cycle*



(a) Excludes telcos/cable. Note: Market cap as of January 6<sup>th</sup> 2023  
Source: U.S. Dept of Education Statistics, Bloomberg, Asia Partners Analysis

# WHICH MAKES US EXCITED TO MEET THE NEW 'CLASSES OF 2024-2032', WHICH WE THINK WILL CHANGE THE WORLD!

Extrapolated Cycle of CS Majors as a Percentage of U.S. College Graduates





**Jill Cheong**  
Singapore



**Swapnil Chichani**  
Singapore



**Sabrina Chow**  
Singapore



**Friska Claudia**  
Jakarta



**Pitra Harun**  
Jakarta



**Nicole Lim**  
Singapore



**Melanie Mannikum**  
Singapore



**Nick Nash**  
Singapore



**Christina Neo**  
Singapore



**Kien Nguyen**  
Ho Chi Minh City



**Sean Oh**  
Singapore



**Oliver Rippel**  
Singapore



**Yin Kiat See**  
Singapore



**Kevin Simadiputra**  
Jakarta



**Brook Supanusonti**  
Singapore



**Jin Koi Yee**  
Singapore



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Our team members have invested in or helped to lead 24 companies in Southeast Asia over the past decade, and include Singaporean, Thai, Indonesian, Vietnamese, Indian, and Mauritian nationals, authentically helping our companies expand across the region.

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