
Competitiveness of the Korean technology startup ecosystem and opportunities for global corporations

REDDAL

ECCK Live Webinar presentation

Seoul, October 14, 2021

Agenda

The global startup ecosystem landscape offers a benchmark for Korea – different hotspots have different profiles, and successful hotspots build on many key elements; Seoul is still catching up

The evolution of Korean startup ecosystem has been stepwise with the government and chaebols steering various development efforts – more and more interesting technology companies are starting to emerge though

The Korean private equity players have focused on industrial and consumer goods with stable business – however, interest into technology investment growing and M&A activity is picking up

For the successful identification and acquisition of high potential Korean technology companies persistence and a rigorous process is required

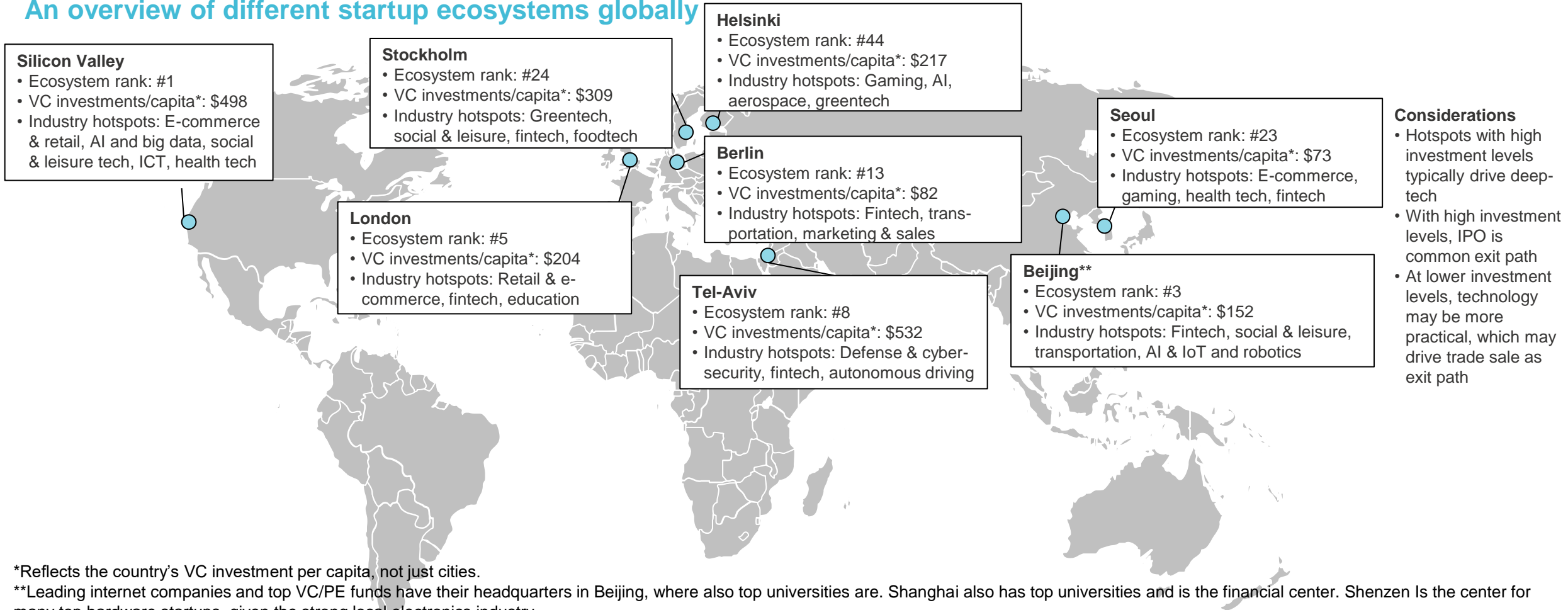
A successful startup ecosystem can be categorized through five success criteria, with highest impact coming from capital and culture

Framework for analysing the success of a startup ecosystem



Startup hotspots around the globe typically have 3-4 industries with deeper knowledge base; however, venture capital investment level varies significantly

An overview of different startup ecosystems globally



*Reflects the country's VC investment per capita, not just cities.

**Leading internet companies and top VC/PE funds have their headquarters in Beijing, where also top universities are. Shanghai also has top universities and is the financial center. Shenzhen is the center for many top hardware startups, given the strong local electronics industry.

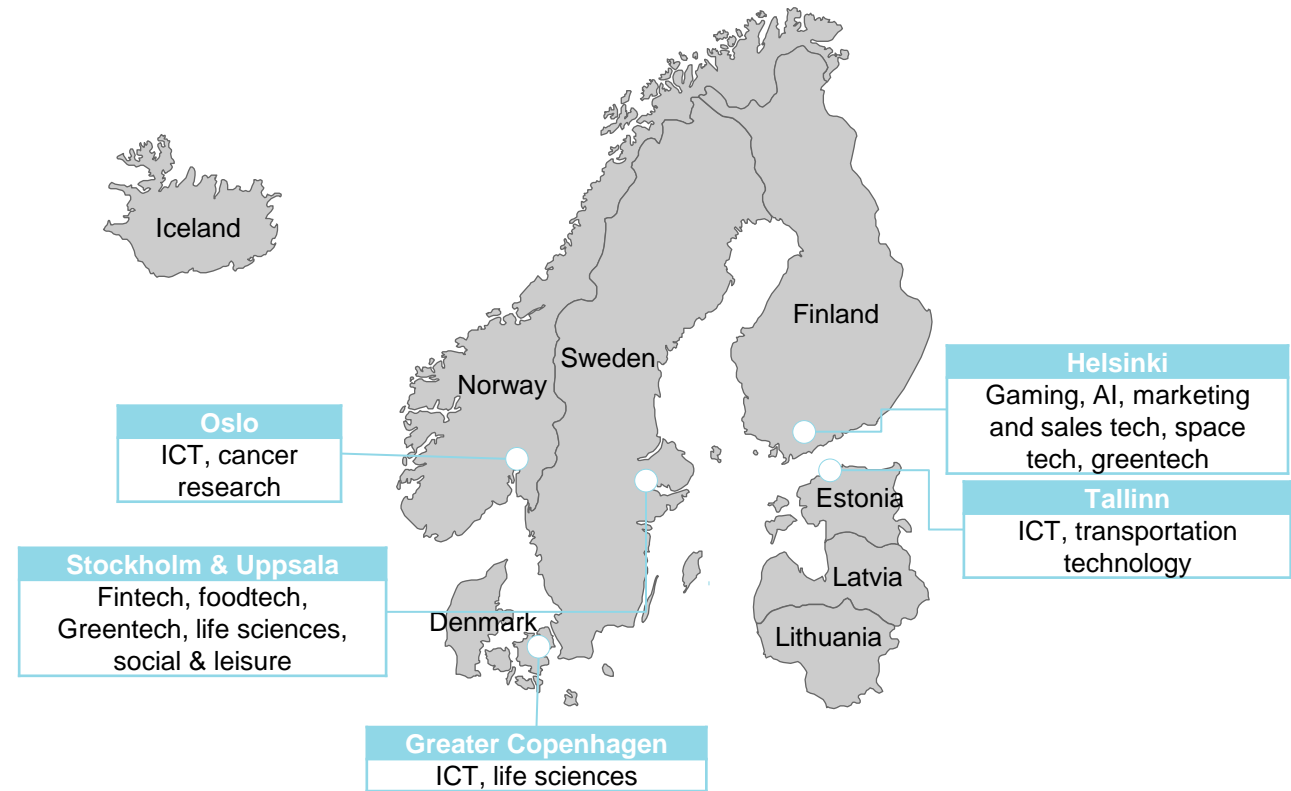
Source: StartupBlink; Global Startup Ecosystem Index 2021, PitchBook; Reddal analysis.

As an example, the Nordic startup ecosystem has become an interesting market for venture capital investing and home to a large number of startups, despite its relatively small size

An overview of the Nordic startup ecosystem

- The Nordic startup ecosystem is being disrupted, with more and more people choosing an entrepreneurial career path rather than a traditional corporate career
- The increase in Nordic local startups popping up on the global lists have woken the interest of foreign venture capital investors and created valuable local talent pools
- In 2020, the Nordics generated ~12%, or \$5.7B, of the total venture capital investments in Europe despite only having ~4% of the population, Sweden attracting most investments per capita in all of Europe
- Nordic countries' startup ecosystems are constantly being highly ranked by numerous different sources, for example Sweden has been ranked highest in the Global VC investment Index that identifies which countries were best set up to produce successful businesses
- According to the Global Startup Ecosystem Index, Finland, Estonia, and Sweden are all ranked as top 15 countries globally for their startup ecosystem
- The Nordic countries are producing one of the highest number of startups per capita, Finland generating ~2.8 times more startups per capita than the European average and Estonia (officially not part of the Nordic countries) generating ~4.6 times more than the European average
- The ecosystem hotspots within the Nordics have emerged through success stories creating talent pools in specific industries, and active public and private sector support and collaboration with startups
- Moreover, social democratic roots with a long history of free education for residents and currently also for EU citizens has backed up the creation of the Nordic startup ecosystems with access to fresh international talent
- Also, as the Nordic domestic markets are relatively small, many entrepreneurs have adopted the attitude to think globally rather than locally increasing the possibilities to create unicorns from a scratch

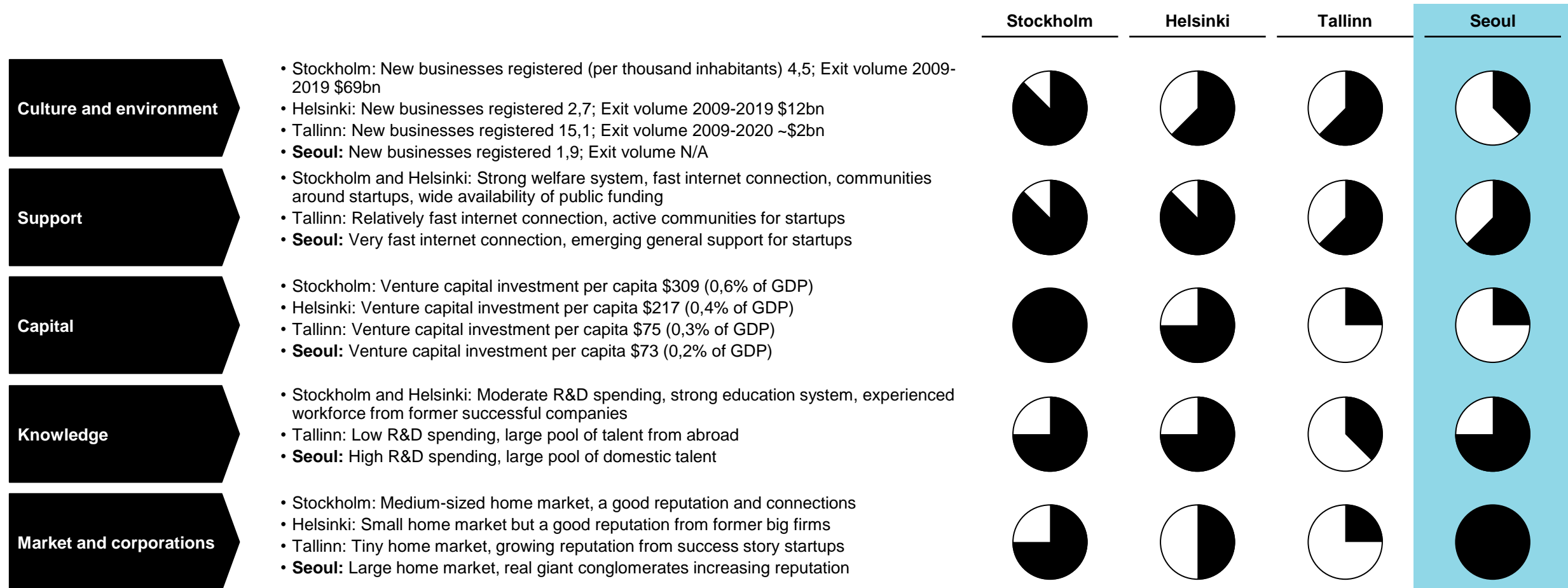
Industrial hubs mapped out in Nordics and Baltics



Source: PitchBook, KO2; Global VC Investment Index, StartupBlink; Global Startup Ecosystem Index 2021, Copenhagen Economics, Startup Universal, The Atlantic.

Seoul stands out in several key dimensions, but cultural barriers and lack of venture capital experience limits its current potential still

Framework comparison between the main Nordic and Korean hotspots



Source: United Nations, The World Bank, Founder Collective, SpeedTest, Forbes, Asia Times, Born2Global, VOOG.

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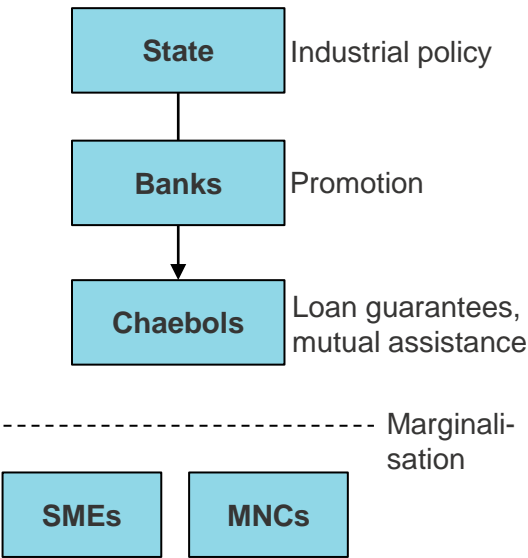
The Korean private equity players have focused on industrial and consumer goods with stable business – however, interest into technology investment growing and M&A activity is picking up

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A bit of history: Korea pursued substitution, while Malaysia, Taiwan and Vietnam pursued complementary strategy – the choice had effects on SMEs and affects also startups today

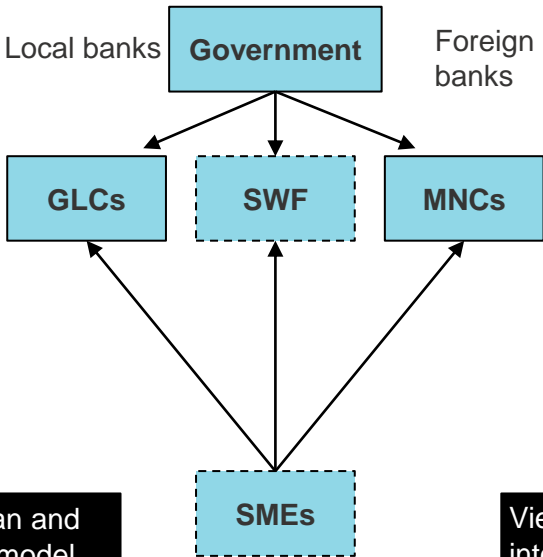
Comparison on national growth models

Korea
(substitution strategy)



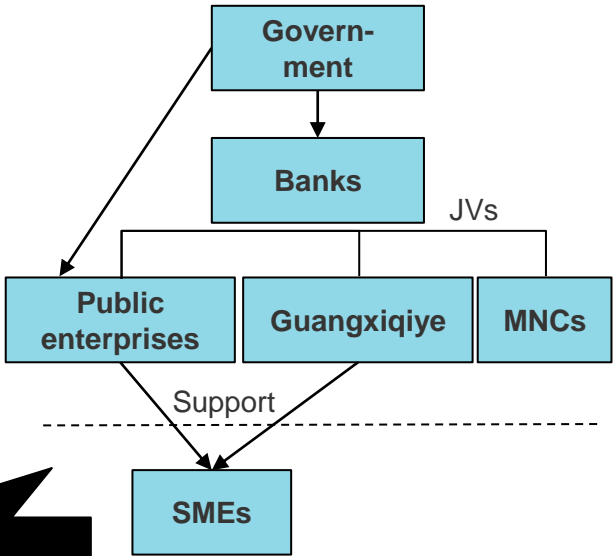
Unlike Japan, Taiwan and Singapore, Korean model required large outside financing (debt and other funding).

Singapore and Malaysia
(compl. strat. – int’l model)



Vietnam pursues a semi-international complementary strategy similar to Taiwan, yet with emergence of local conglomerates and weaker links to SMEs.

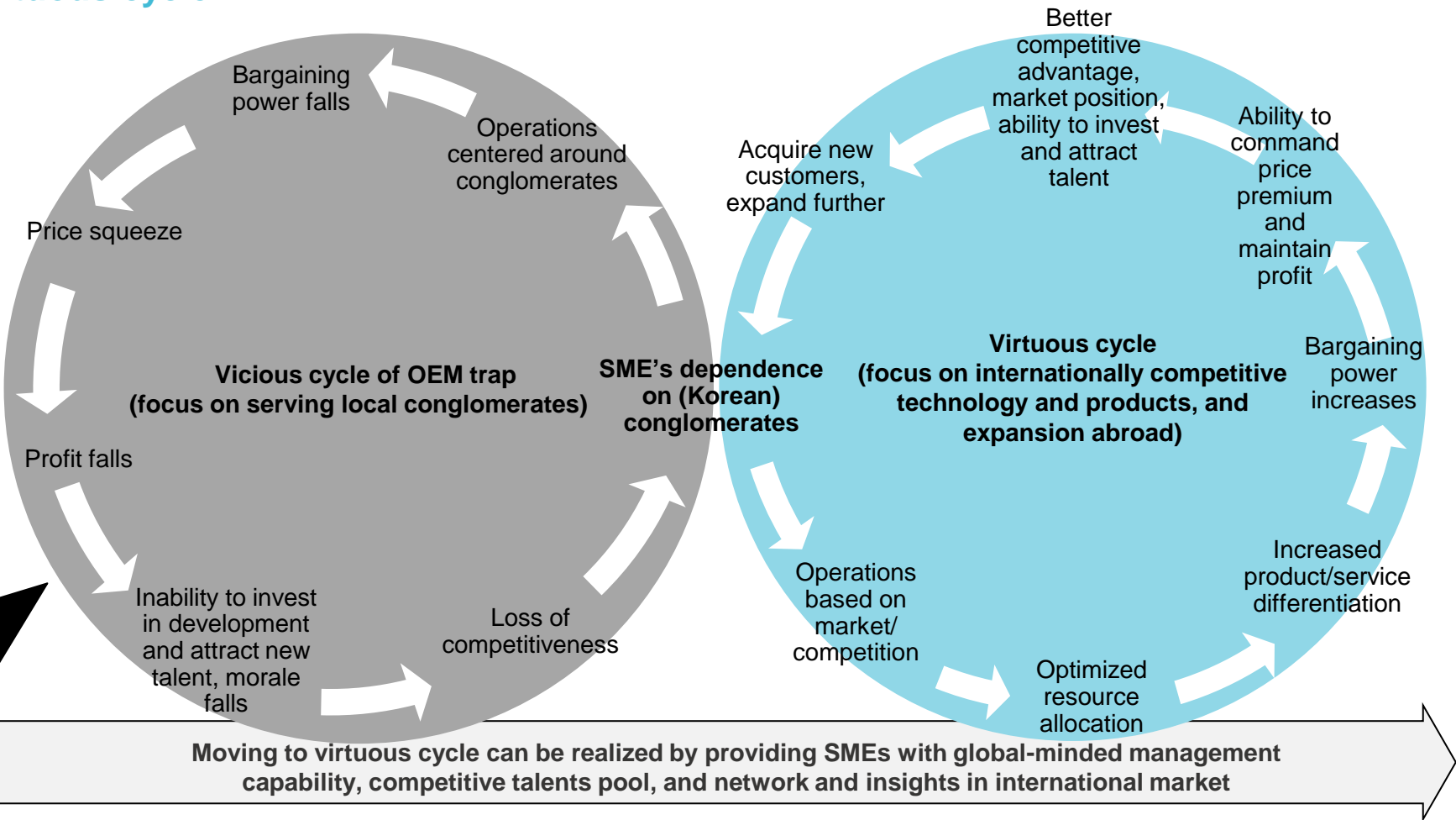
Taiwan and Vietnam
(compl. strat. – semi-int’l model)



Note: MNC = multinational company, SME = small and medium sized enterprise, GLC = government linked company, SWF = sovereign wealth fund, SOE = 100% state owned enterprise, Guangxiqiye = local business groups; China applies a modified substitution strategy, leveraging JVs to expediate tech transfer process.
Source: Shin, Chang, *Restructuring Korea Inc.*, pp. 11-22; Ha Thanh, Nguyen & Klaus Meyer (2004); Van Chung, Vu (2015); Reddal analysis.

Korean SMEs are often trapped in a vicious cycle, accepting their role as a local supplier – transition to virtuous cycle requires R&D and internationalization

SME vicious vs. virtuous cycle

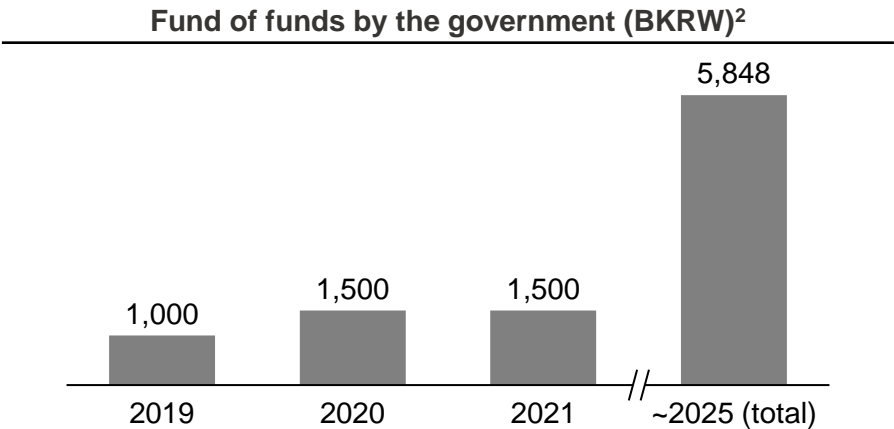


The government fuels the startup investment enough, but the government-led support shows some limitations – the survival rate of startups is relatively low

Government support and its limitation

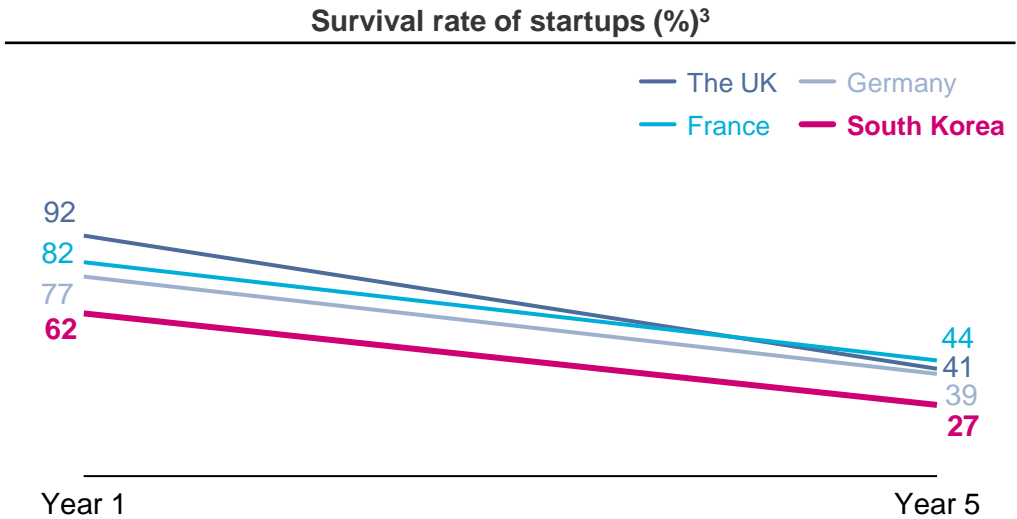
The government fuels the startup investment enough (...but wastefully)

- The government invests in VC's who invest a lot, not in VC's who make smart investments – the government's goal is to pour money into the market rather than selecting who deserves to get funding¹
- After satisfying the guidance/regulation (mainly, paper works) by the government, it is straightforward to establish startups¹



The government-led support shows some limitations^{3,4}

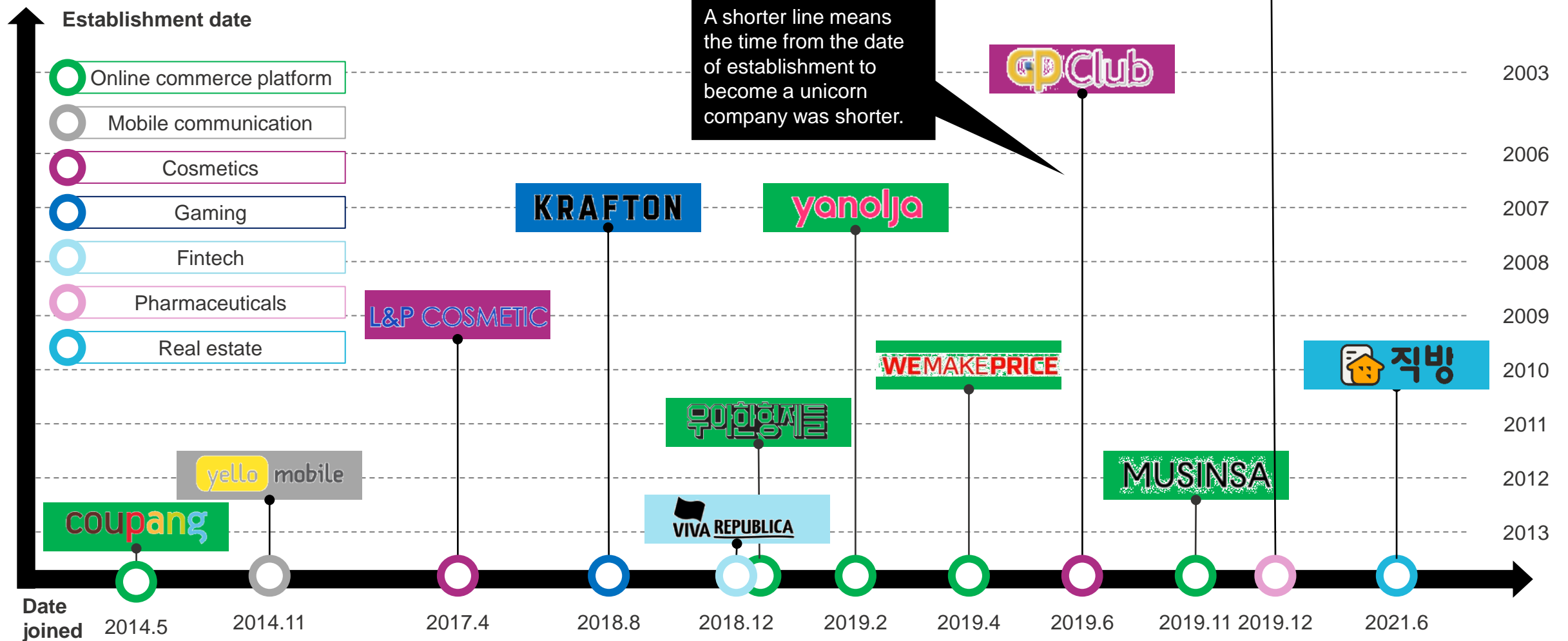
- There are extensive regulations for each industry; the government-led investment has limitations and it focuses on several areas
- Korean startups have more difficulties to survive after 5 years than European startups (failure to build sustainable business model)



¹An interview with an expert in the Korean VC industry; ²[\[Live 중소기업\] 1조5000억원...정부, 모태펀드에 태워 벤처·스타트업 키운다](#), 매일 경제, 2 Mar 2021; ³["창업해도 5년 이상 살아남기 힘들어"... 국내 스타트업 '한숨.'](#) TechM, 19 Aug 2020; ⁴[한국 스타트업 질적 성장 시대로...모빌리티·AI·플랫폼 규제 족쇄 풀어야](#), 매일경제, 21 July 2021.

There is a lot of talk about Korean unicorns, but they are in limited industries, and often local B2C market driven rather than global tech

Overview of Korean unicorns



Source: 2020 스타트업코리아! 온라인 정책 제안 발표회 – the data above from Ministry of SMEs and Startups, 5 Nov 2020; [NFF2021] "노는 물이 달라졌다"...세계로 뻗는 韓 스타트업, News1뉴스, 10 May 2021; ZigBang Hits Unicorn Status and Announces More Proptech Innovation, Online Marketplaces, 14 June 2021.

Local VCs tend to invest during a short period only and cannot invest enough in later stages

Venture capital investment in Korea



Korean startup investment been expanding

- 60% of local funding by VCs was public support until 2017; However, since then, VCs in the private sector have been on the rise since VCs with overflowing funds also need more companies to invest¹
- Korean big companies such as Hyundai, SK Telecom, KT, LG U+, CJ eager to find startups to grow their new business²
- Some Korean startups have also received substantial investment by foreign investors³
- Riid (AI-based English education service): 200BKRW⁴ from Softbank



Local VCs cannot invest enough and tend to invest during a short period^{5,6}

- A lot of Korean VCs participated in the initial investment in Korean unicorn companies; still, when the scale exceeds hundreds of billions of won, typically foreign VCs take over
- The primary reason is that the big LPs (limited partners, that is, fund investors) that invest in domestic VCs are usually the government or institutional funds that the government heavily influences, so they tend to minimize losses
- Coupang, the unicorn company, was funded mostly from venture capitals in the US and Japan
- Korean venture capitalists are facing criticism for their lack of bold and long-term investments (but this is tied to their LPs and the overall mindset in Korea where failure is not accepted – success rate must be 100%; this does not fit the normal venture capital model)

¹VC 투자실탄 폭증에...정부 지원금도 귀찮아진 스타트업, *Invest Chosun*, 18 May 2021; ²스타트업 '투자 전쟁'...대기업도 줄었다, *Hankyung*, 2 Aug 2021; ³美·中·유럽 등 해외 벤처캐피탈, 한국 스타트업 투자 열기, *A-ju Economy*, 9 Sep 2020; ⁴뤼이드, 소프트뱅크 비전펀드2에서 2000억 원 규모 투자유치, *Platum*, 25 May 2021; ⁵쿠팡 비상장...과실 나눌 한국 VC는 없다, *edaily*, 17 Feb 2021; ⁶외국계 VC가 투자 독식한 한국 유니콘, *Hankyung*, 4 Oct 2019.

It is hard to secure young and smart entrepreneurs due to the weak social safety net and rigid cultural characteristics; Korea does not have a competitive system to attract foreign talent

Cultural aspect of the Korean startup ecosystem

Weak social safety net and rigid cultural characteristics^{1,2}

People currently have a solid preference for joining big tech companies, which provides high recognition, growth potential, high salary, and welfare

Wage gap by company size¹

The wage of a workplace with 5 to 9 employees assumed to be 100, from which wage level for workplace with >500 employees is calculated.

199

158

154

130

Korea

France

The US

Japan

CEO ownership emphasized, KOSDAQ prefers management stability; also related to anti-fraud assurance.

• In Korean startups, the CEO gets more than 80% of the shares because of IPO; ambitious and intelligent people have no incentives to join startups in terms of experience and salary level²

• The founders often face severe conflicts due to unfamiliarity to make detailed contracts² (legal system does not support established Western style venture capital contractual frameworks)

It is hard to secure young and smart entrepreneurs

Korean startups face difficulties to recruit smart young people globally and locally^{3,4}

Few have entrepreneurial experience

Difficulties in the startup management (number of companies)³

Multiple responses possible

106
(40%)

96
(36%)

25
(9%)

7
(3%)

28
(11%)

Difficult to get investment

Hard to recruit smart people

Strict regulations

Lack of understanding

Rapid market changes

• It is getting harder for foreigners to get work permits (E-7 visa) in Korea⁵

• The Korean language is a barrier for smart people who want to work in Korea²

¹경총 "대기업 실적 파티 경계령"...임금인상 줄이고 고용 늘려라, 매일경제, 10 May 2021; ²An interview with an expert in the Korean VC industry; ³제 2의 벤처붐에도 벤처기업가 최대 애로는 '성장자금 및 인재 확보', 전자신문, 14 June 2021; ⁴20년간 양성된 백만 IT인재는 어디로 갔나, ZD Net Korea, 14 May 2021; ⁵[제2차 SW 인재 대란] ④ SW 인재 대책에 속 빠진 병역특례·취업비자... 뚜렷한 '부처 칸막이', 아주경제, 28 June 2021.

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The Korean startup ecosystem seems to be strongly clustered around consumer and media, but there seems to be larger diversity brewing

Heatmap* of Korean startups by industry and technical value chain position

No obser- vations	Handful of companies	Some companies	Emerging, several co's	Hot spot, many co's
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Industry classification	Energy • Eqpt, services • Oil, gas, fuels • Related services and solutions	Materials • Chemicals • Const. mat. • Packaging • Metals, mining • Paper, forest prod. • Rel. serv. and sol'ns	Industrials • Aeros., def. • Build. prod. • Constr., engr. • Elec. eqpt. • Machinery • Professional services • Transport.	Consumer discretion. • Education • Cars, comp. • Household and leisure • Textile • Hotels, entertain. • Retail	Consumer staples • Mobility • Food, beverage • Personal prod., cosmetics	Health care • Eqpt., supplies • Biotech. • Pharma • Health care, medical services • Fitness ser.	Financials • Consumer banking • Corporate banking • Capital markets • Insurance	Information technology • SW, services • HW, eqpt. • Semicon., semicon. eqpt.	Comm. services • Telecom • Media, entertain. • Gaming • Soc. media • Advertising	Utilities • Elec. • Gas • Water • Renew. • Services	Real estate • Consumer • Business • Public
Technical value chain position											
Front end dedicated services			Aircok Catchsecu Codit Modusign	Coupage Yanolja Todait Riid Kurly Daanang Market	Musinsa L&P Cosmetic Deerlens	Classpick Dr. Diary Smart Tooth	Toss Bigwork Sodit	FourGrit Upstage	Krafton Newspic Imgibbble	Zummaslide	Kasa
Platform, user aggregation and portals			Connectfit Seeso Suriking	Qanda Dogmate MISO DeepBrainAI	Menu.it	Kim Caddie Modoo Doc	Toss	Disquiet	Pickle Plus Crowdpic Duckzill		Ziptoss Able House Hogangnono
Middleware					CellMEAT	Dyna Medic	(Toss)	Creview Rendezvue	Music Spray Cinnamon CP Mewpot		
Backend			Aircok Jobis PayCheck	Fleetup Sellerhub Sixshop	Bunjang Styleshare Mealing	Curamys Enfit	Payple Infinisoft	Userhabit Creatorlink SEMIFIVE	Ninetap Backend		

Hot sectors where we expect to see more activity (given early stage of our research, we also expect to find more companies here as we dig deeper).

*Non-exhaustive list of South Korean unicorns and portfolio companies of major South Korean accelerators.

Source: [Primer](#), [Mashup Angels](#), [Bon Angels](#), [Fast Track Asia](#) (2021); [Global Industry Classification Standard](#).

SEMIFIVE provides a custom design platform for semiconductors, reducing design period by 75% and costs by 50% for the client

Startup profile – SEMIFIVE

Company overview

- SEMIFIVE provides a design platform for custom semiconductors (SoC) and assists clients in their production and quality testing
- Founded in 2019 and have acquired a local semiconductor design house Sesol Semiconductors
- Around 100 employees¹

Business areas

- Semiconductor design and customization
- Semiconductor development

Ownership and investments



- SiFive owns undisclosed percentage of shares of SEMIFIVE
- SEMIFIVE has secured 44BKRW in investment, including 34BRKW in Series A

¹As of Feb 2020.

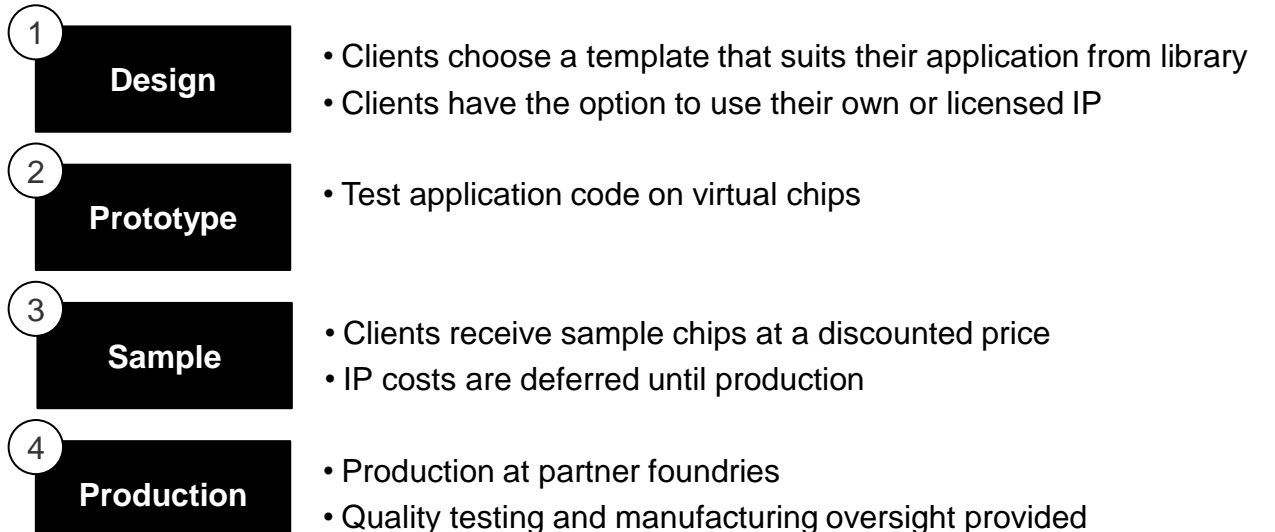
²As of Feb 2021.

Source: SEMIFIVE, [The Bell](#) (2020), [Forbes](#) (2021).

Technology and business characteristics

- Templatization of semiconductor base design using RISC-V, an open standard, open-source instruction set architecture for semiconductor optimization
- Customization of semiconductors design by integrating RISC-V based CPU's with other technology needs of the client
- Over 25,000 CPU IP license contracts²

Offering example: SEMIFIVE Template



ViewMachine applies AI vision technology to provide solutions for monitoring and inspection, as well as analysis and optimization of smart factories

Startup profile – ViewMachine

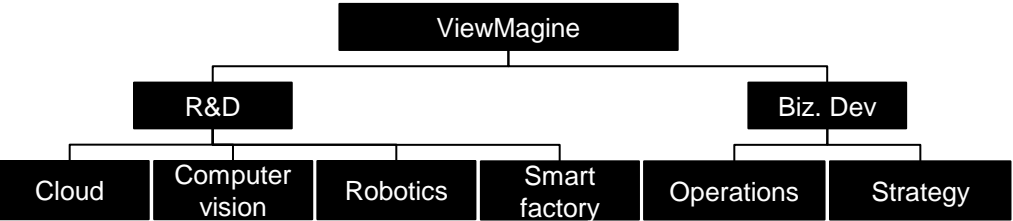
Company overview

- ViewMachine offers AI drone solutions for safety inspection, fault detection and facility surveillance
- Founded in 2020, total investment of 420kUSD
- Over 30 employees

Business areas

- Omni AI™ (smart factory)
- Drone AI™ (aerial survey inspection and monitoring)
- TwinView™ (digital twin, defence)

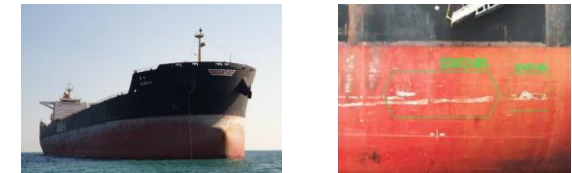
Team organization



Technology and business characteristics

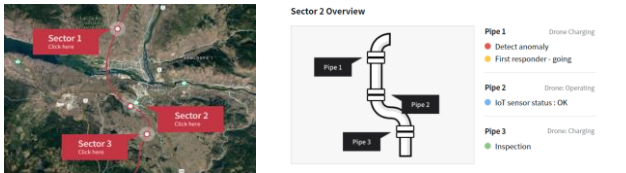
- Deep learning-based monitoring: image transformation and DL-based AI vision for classification, segmentation, object tracking and inspection
- Autonomous drones: simultaneous localization and mapping, sensor fusion for automated drone navigation in indoor and outdoor environments
- Various cloud platforms: image processing, analytics, data warehousing provided through cloud
- 5 patents secured in vision imaging and drone technologies; 10 pending¹

Offering example: Integrity inspection



- Inspection for physical integrity in the hull, cargo, and welding

Offering example: Facility monitoring



- Monitoring and tracking of inspections, equipment status, drone status, current and past events

¹As of October 2021.
Source: [Viewmachine](#), Viewmachine IR material (2021), [The Korea Economic Daily](#) (2020).

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The Korean private equity players have focused on industrial and consumer goods with stable business – however, interest into technology investment growing and M&A activity is picking up

For the successful identification and acquisition of high potential Korean technology companies persistence and a rigorous process is required

During the 2000s, the Korean private markets’ legal framework has developed a lot, and left its mark on the private equity industry structure, which is a bit unique

Regulatory framework in Korea

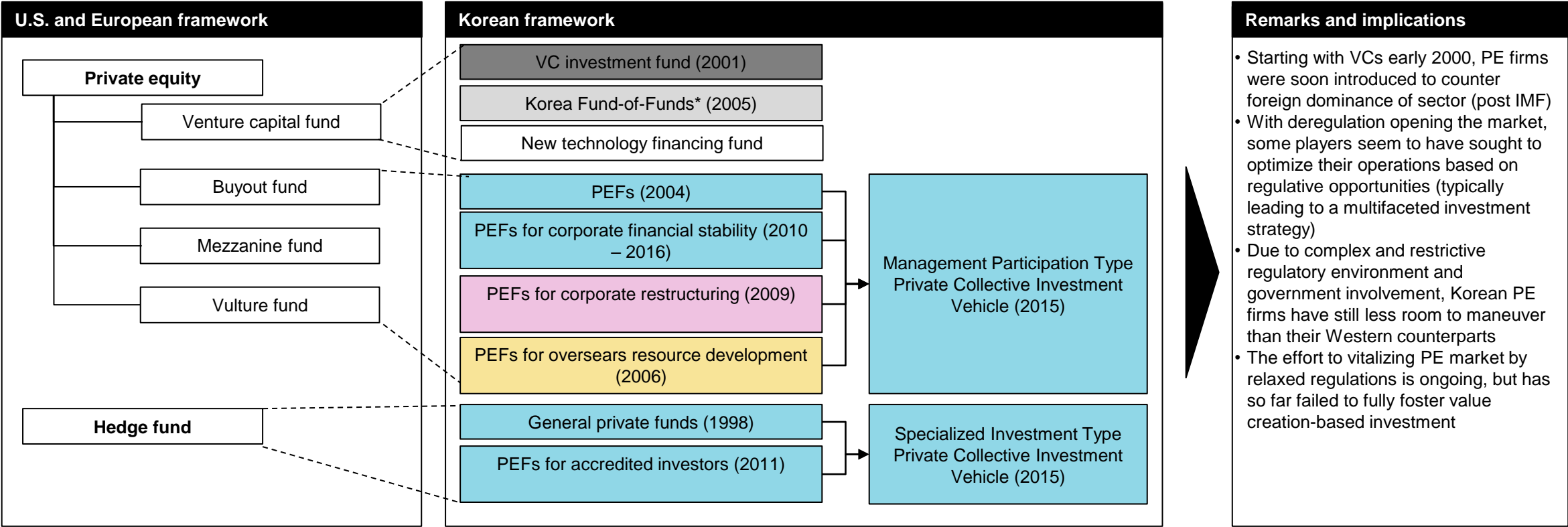
Financial Investment Services and Capital Market Act

Overseas Resource Development Business Act

Special Measures for Promotion of Venture Businesses Act

SME Establishment Act

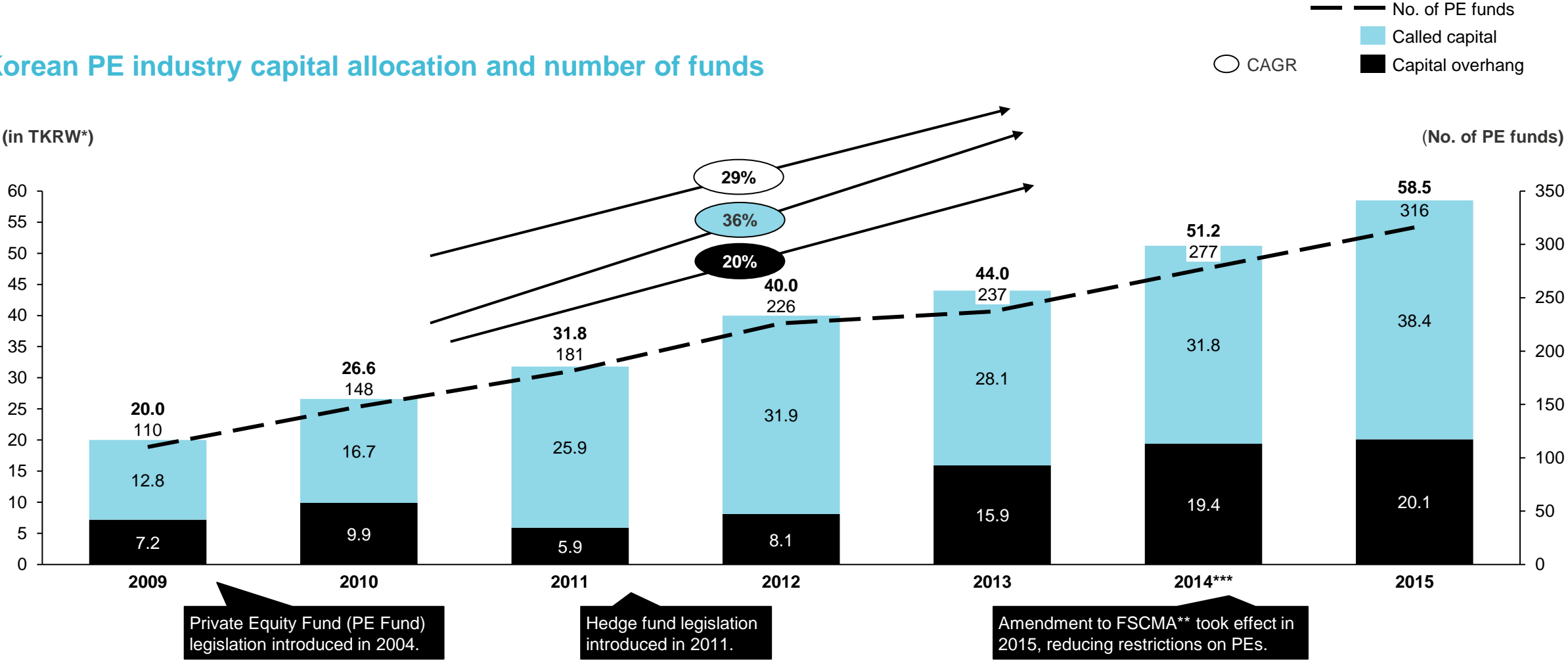
Industry Development Act



*In Korea, PE fund-of-funds are only allowed under special cases to promote venture businesses.
Source: Han, Sangjin (2015); Financial Services Commission; Lee and Han (2013).

The Korean PE industry has grown rapidly, with some build up of capital overhang

Korean PE industry capital allocation and number of funds



*1TKW is approximately 0.838BUSD using currency rate on 5/24/2016; **Financial Investment Services and Capital Markets Act (FSCMA).

***Figures adjusted based on modeling and Korean Capital Market Institute report.

Source: Financial Supervisory Service, '15년 PEF 동향 및 시사점, 2016; Practical Law, Multi-jurisdictional Guide 2015/16.

COVID-19 slowed down activity, but accumulated dry power and active M&A is expected to boost private equity industry

Investment after COVID-19

Current situation

Cumulative dry powder of major domestic private equity in 2020¹

Dry power is accumulating on the largest scale ever

- Dry powder of domestic PEF exceeded 20 trillion KRW for the first time since the introduction of private equity system (excluding global PEF)
- The three largest PEF funds in Korea, including MBK Partners, Han&Co, and IMM, account for 12.8 trillion KRW, accounting for 68% of the total dry powder

Private equity	Fund	Fundraise size (trillion KRW)
MBK partners	MBK blind fund 5 th	8
Han & Company	Han & Company 3 rd	3.8
IMM PE	Rosegold 4 th	2
STIC investment	SSG 4 th	1.2
VIG partners	Blind 4 th	0.95
JKL partners	Blind 5 th	0.8
Glenwood PE	Blind 8 th	0.8
Skylakes	Blind 11 th	0.7
...



Market prospect

Revitalize the M&A market²

There will be more M&A target companies in the market

- It is expected that available M&A target companies would increase in number due to voluntary/involuntary restructuring of companies that have been pushed to hit the wall due to COVID-19

Mega-scale buyout deals will appear on the market

- PE firms are expected to participate in the transactions by forming consortia

Company	Industry	Value (KRW)
Hanon Systems	Automotive/thermal management	Approx. 5 trillion
Taihan Wire	Wire manufacturing	1 trillion
Dlive	Wired/wireless broadcasting	1 trillion
KDB insurance	Life insurance	1 trillion

¹[마켓인] 국내 PEF 대기자금 20兆 시대 ... M&A 시장 '정조준', *이데일리*, 3 November 2020; ²대기업 투자대기자금 28조... 한온시스템, 대한전선 '정조준', *매일경제*, 7 December 2020.

Large and mid-sized buy-out focused PE firms dominate the market

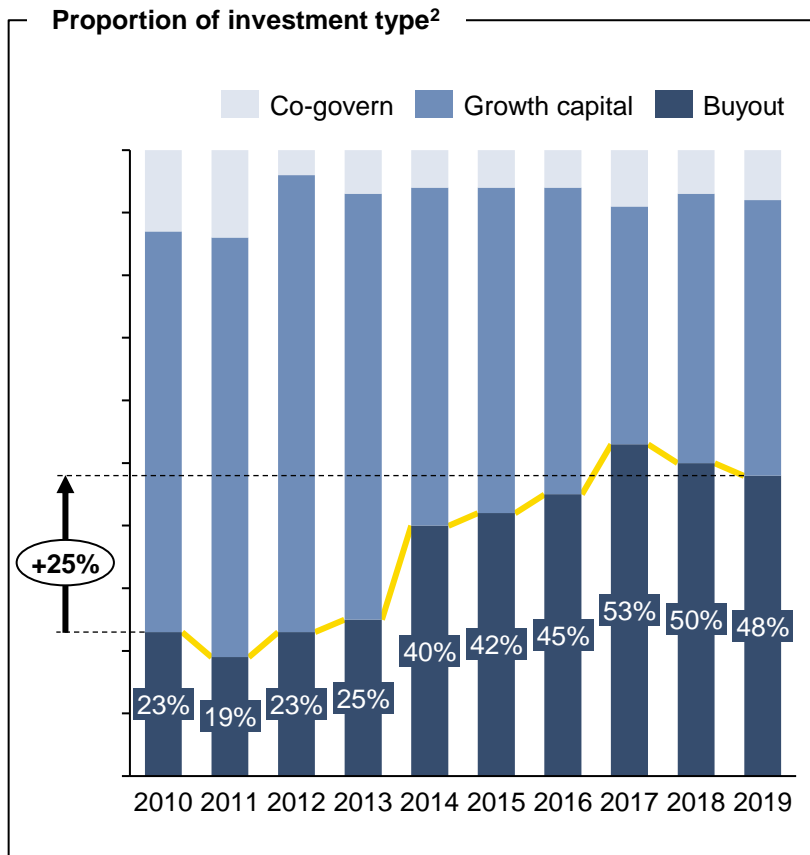
Capital commitment of top-tier PE firms active in South Korea

Annual average capital commitment

Over 500BKRW	Large	<div>MBK PARTNERS</div> <div>Hahn & CompanyIMM</div>	<div>AFFINITYEQUITYPARTNERS</div>	<div>KKR</div> <div>THE CARLYLE GROUP</div> <div>BainCapital</div>
	Mid	<div>STIC INVESTMENTS</div> <div>SKYLAKE</div> <div>JKL Partners</div> <div>GLENWOODPRIVATE EQUITY</div> <div>VIG PARTNERS</div> <div>...</div>	<div>ANCHOR</div> <div>Anchor Equity Partners (Asia) Ltd.</div> <div>MACQUARIE</div> <div>AFFIRMA CAPITAL</div> <div>UNISON CAPITAL</div>	<div>Blackstone</div> <div>TPG</div>
	Small	<div>Premier Partners</div> <div>PineTreepartners</div> <div>H&Q Asia Pacific</div> <div>CrescendoCAPITAL PARTNERS</div> <div>...</div>		
		Local	Regional	Global

South Korean private equity firms have been criticized for providing limited value add to their portfolio companies

Investment methods



As-was

Insignificant effect of value-up of investee

- There is insignificant effect of increasing the value of the acquired company in terms of total assets, revenue, capital expenditure
- This is because PE firms are setting the direction of securing investment stability rather than generating profit during the market growth period

Regulation has been relaxed

- The Financial Services Commission has been easing a series of regulations since 2015, making it easier to register private equity firms and to fundraise
- The buyout sector is set to receive a boost from a growing pool of SMEs available for acquisition

PEF takes the role of a liquidity provider

- The investment of Korean PEFs established itself as a constant liquidity provider during the economic crisis and restructuring of conglomerates

PE's position in the M&A market has grown¹

- PE's status in the M&A market, a major investment and recovery method, has increased – of the 12 M&A deals concluded in 2019, 7 were transactions of PE

To-be

Efforts to improve value-up

- In recent years, many cases of buy-and-build strategies have appeared in the Korean PE market, specially initiated by the leading PE
- Buy-and-build strategies have been used in a variety of industries from oligopolistic markets where industrial demand is stagnating with tough competition to markets where SMEs compete fiercely

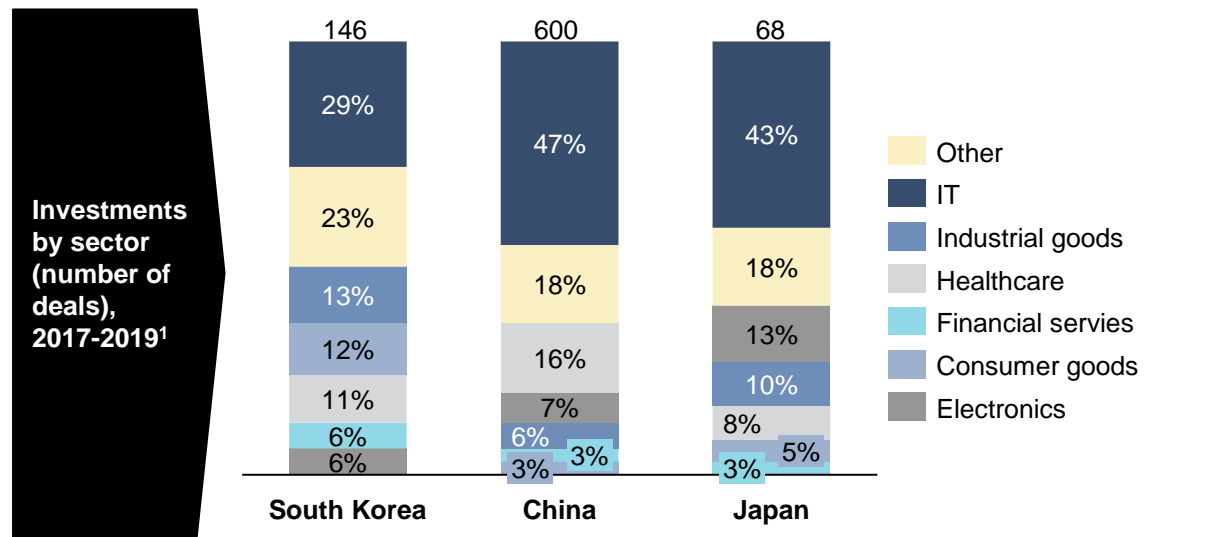
¹[시그널] 12건 중 7건.. PEF 독무대 된 M&A 시장, 서울경제, 10 September 2019; ²국내 PEF의 평가와 향후 과제, 자본시장연구원, pp.5-14, 4 November 2020.

South Korean PE firms have tended to focus on industrial and consumer goods but since 2017 there is an increased focus on IT

PE investment portfolio – industries

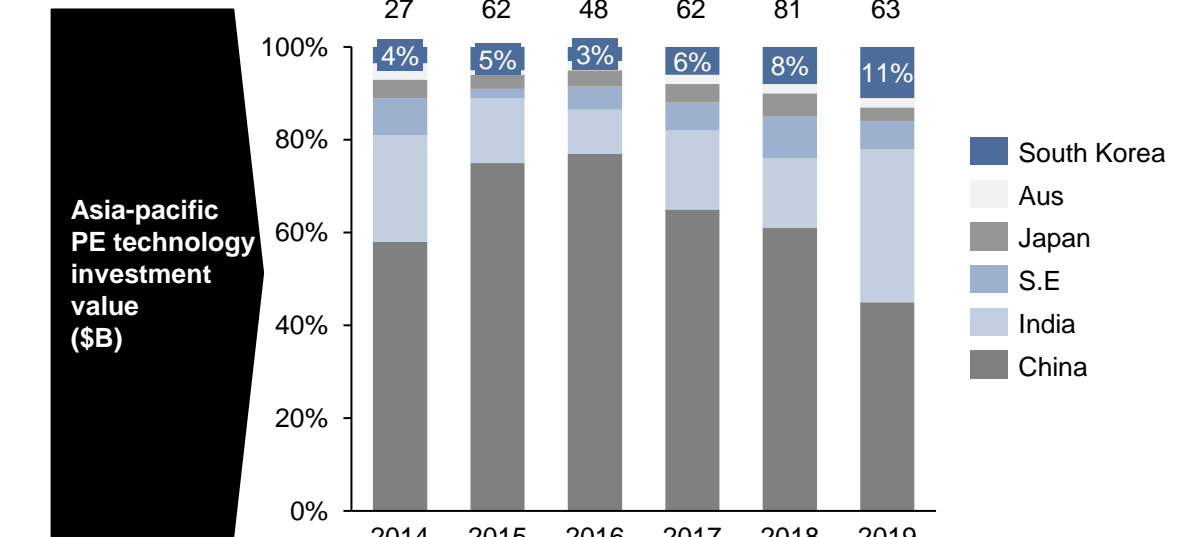
South Korea is less focused on IT investments than neighbors

- Public institutions that are major LPs for private equity such as public pension fund prefer conservative investment
- After the introduction of the system, private equity prefers stable investment with stable profit generation to build a reputation that is the key to fund creation in the future



Recently increasing investment toward the technology sector²

- Korean PE firms are increasing their investment in technology
- Also, the Korean New Deal Fund proposal announced by the government in 2020 could accelerate investment in IT/Technology industry



¹The Promise for Private Equity in Asia-Pacific, BCG insight, 13 August 2020; ²Asia-Pacific Private Equity Report 2020, Bain & Company, 11 March 2020.

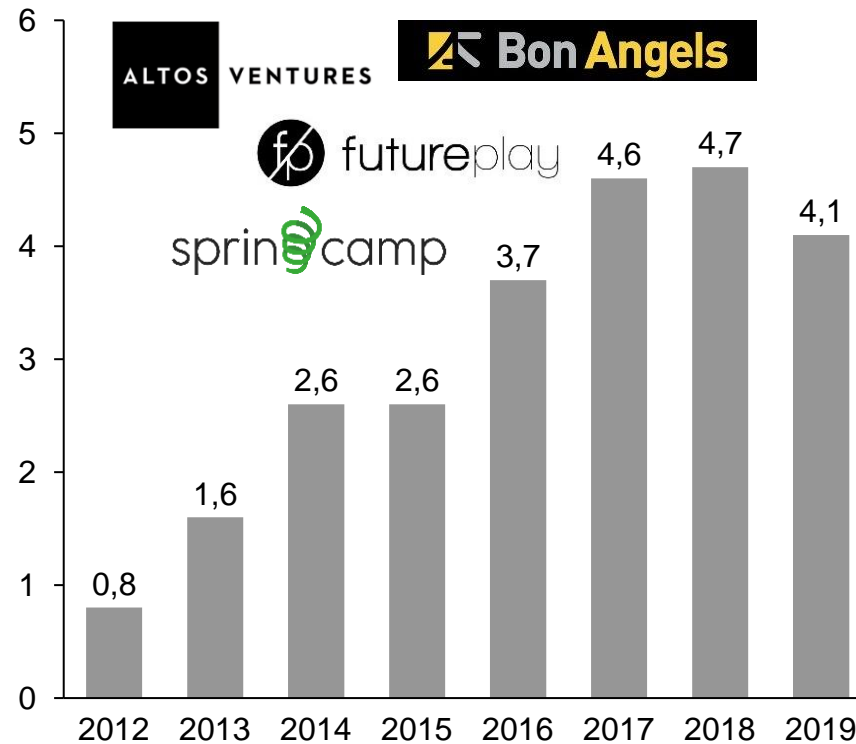
Meanwhile, venture capital fund raising has increased significantly over the last decade in South Korea

Venture capital evolution in South Korea

Venture capital principles

- Established based on the Entrepreneurship Support Act and the Special Venture Act
- Invest mainly in start-ups and venture companies – tech company
- Invest mainly by purchasing newly issued shares
- In response to the rapid increase in valuation of tech-companies, venture capital is growing (160% growth in 2018 compared to 2012 in terms of average individual fund size)

Fund raising in venture capital market (unit: trillion KRW)



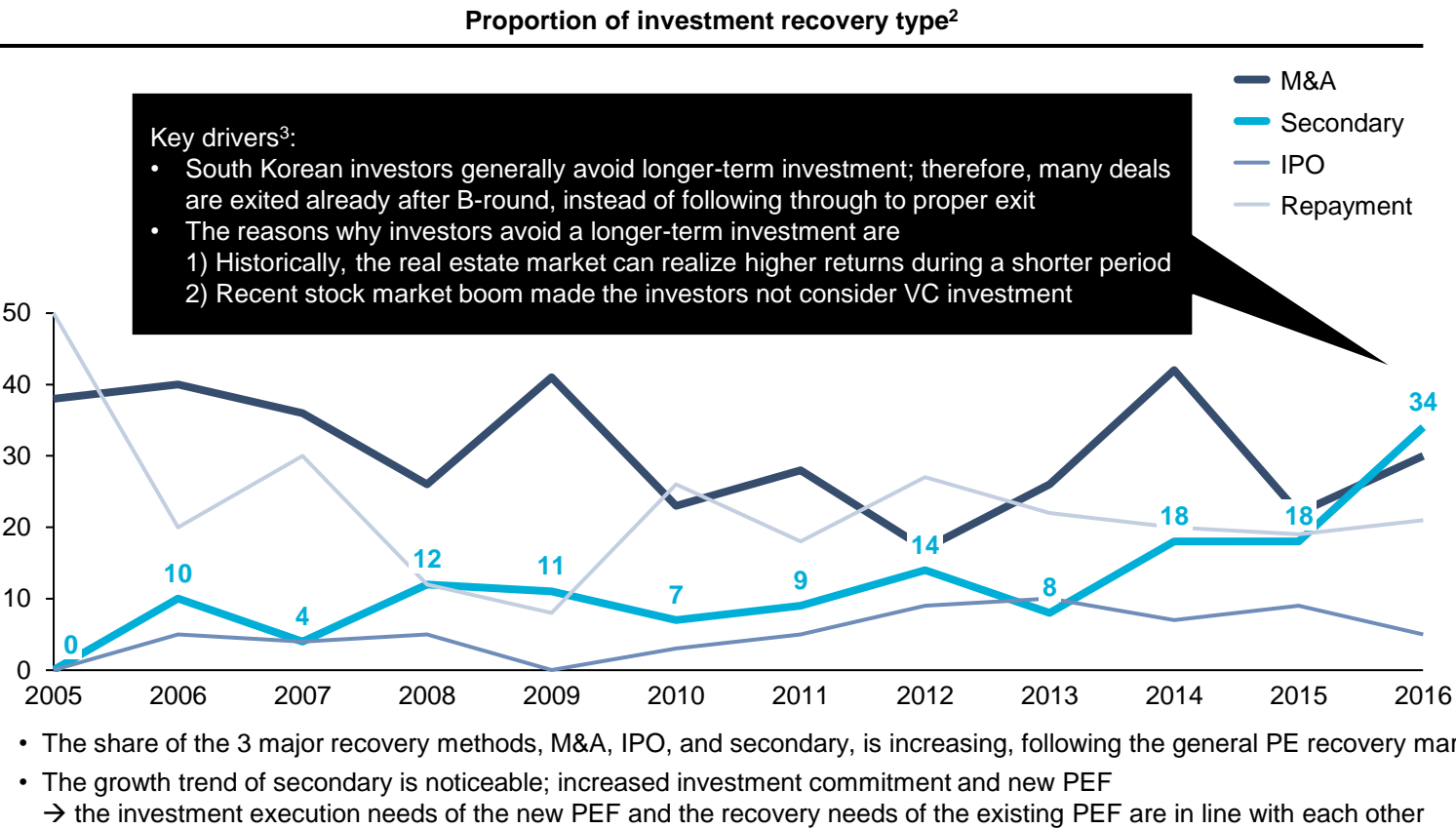
Comments

- Many public and private corporations support VC fields by forming the funds
- The number of funds focusing on early stage has been increasing, but do to lack of experienced team members not all teams are able to raise funds
- Still, the winner takes all – some very successful VCs attract a high-volume of funds – at the stage of seed, from 50M – 100MKRW to 1BKRW recently

Source: 국내 사모투자(벤처펀트/PEF) 시장 현황과 과제, KDB 산업은행, p.4, 20 May 2019; expert interviews.

M&A and secondary investment dominate as exit paths

Investment recovery approaches in South Korean private equity



Pain-point of the secondary market²

Insufficient value-up capability/no experiences of PE firms

- PE firms have limited experience or capabilities of value-up, although this varies from firm to firm
- Capability or experience issues create a market consensus that PE portfolio firms have difficulties increasing their value

LP redundancy

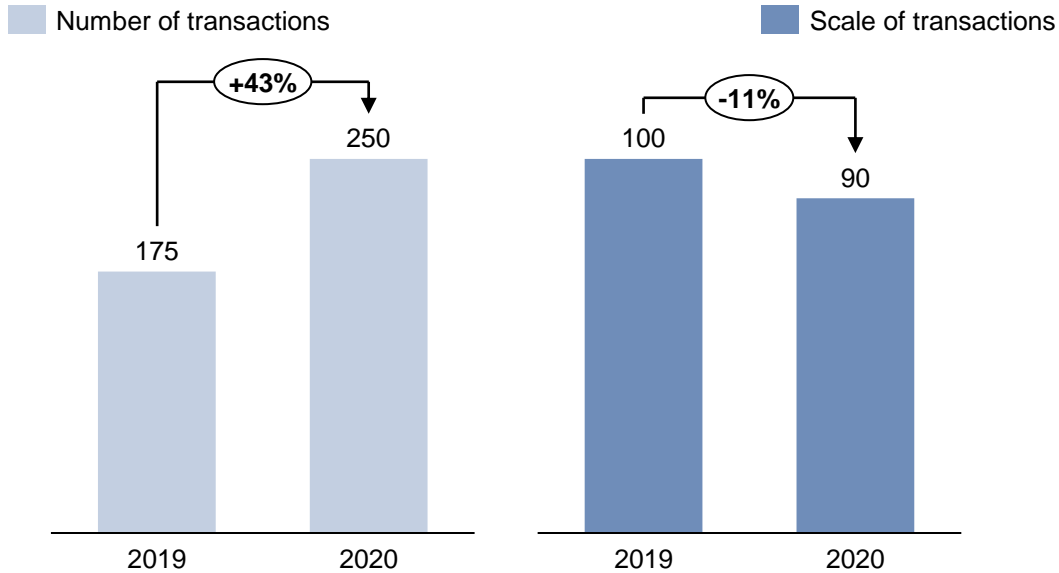
- Due to the narrow LP pool, it is highly likely that there will be overlapping LPs between PEFs to sell and PEFs to acquire
- For LPs, investing into the same object at a higher value is inefficient

¹국내 PEF의 평가와 향후 과제, 자본시장연구원, pp.5-14, 4 November 2020; ²'손 탄 거래' 기피? ... 세컨더리 투자 전향적 검토하는 사모펀드들, 인베스트조선, 20 June 2018; ³expert interviews.

The total number of M&A has decreased for a while due to the COVID-19, but small-scale transactions drive market recovery – still, the number of deals is limited

M&A activity in South Korean market

The number and scale of M&A transactions (PE participating)



- The number of M&A transactions in which PE participated increased by 43% in 2020, but the scale of transactions decreased by 11%
- Many PE firms seem to have focused on small and medium-sized transactions, including bolt-on operations

Difficulty to complete new large-scale investments

- New investment was difficult since there is a difference in perspective between buyers and sellers regarding valuation
- PE firms are focusing on improving performance of existing portfolio due to downturn inflicted by COVID-19

Bolt-on strategy

- PE firms adopt bolt-on strategy to increase/boost the value and return rate of existing investments
- Case 1: Through portfolio company, Auto Plus, VIG jumped into the acquisition of AJ and secured position as a preferred negotiator
- Case 2: Praxis Capital acquired Glohands and Plant-it Partners in 2020 to enhance the corporate value of Business On, an electronic tax invoice company

Source: [\[시그널\] 빅딜 가뭄에... '볼트온' 집중하는 PEF](#), 서울경제, 4 November 2020; expert interviews.

Agenda

The global startup ecosystem landscape offers a benchmark for Korea – different hotspots have different profiles, and successful hotspots build on many key elements; Seoul is still catching up

The evolution of Korean startup ecosystem has been stepwise with the government and chaebols steering various development efforts – more and more interesting technology companies are starting to emerge though

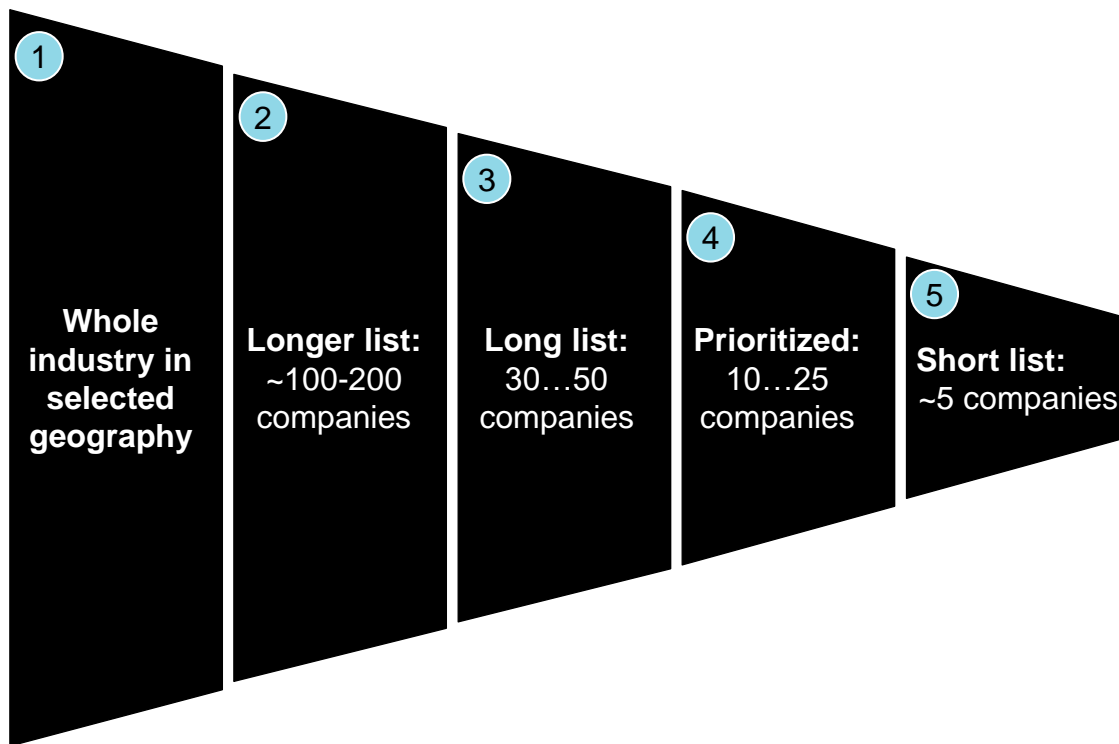
The Korean private equity players have focused on industrial and consumer goods with stable business – however, interest into technology investment growing and M&A activity is picking up

For the successful identification and acquisition of high potential Korean technology companies persistence and a rigorous process is required

The funnel approach provides fact-based analysis for multiple angles to identify most likely target with efficient assessment process

Funnel methodology to screening

Screening process phases

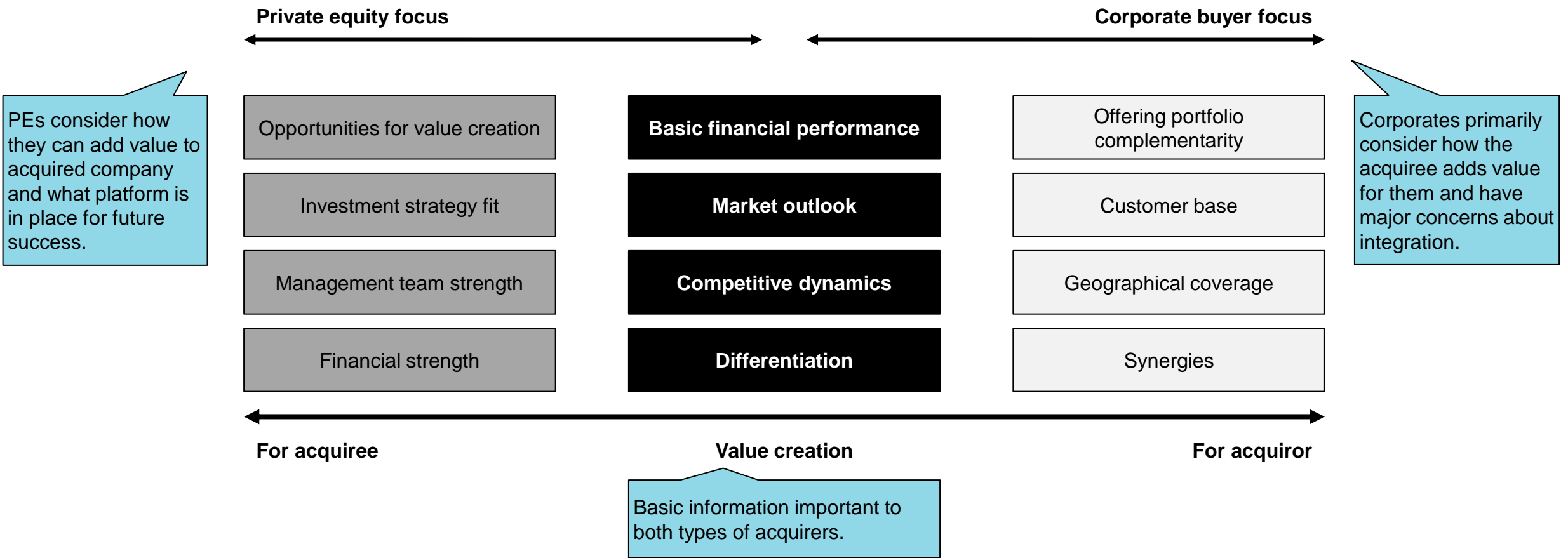


Comments

- 1 Initial list of companies in the selected industry/market based on industry classification in Orbis, similar database, or desktop screen for players
- 2 Longer list composed of companies in the selected sector and/or geography that meets basic criteria threshold, for example revenue, profitability or number of employees, IPR, synergies
- 3 Long list includes only best-performing companies on a specific set of financial data, for example growth, ROCE, EBITDA or cashflow
- 4 Prioritized list of companies selected among the cases based on sectors and financial performance, preliminary fit to strategy and likelihood of potential deals – can also be evaluated through offering portfolio complementarity, geographic coverage, customer base or other distinctive assets for companies
- 5 Short-listed companies to be identified after a deep-dives in relevant prioritized companies, focusing on market outlook, competitive situation, market drivers, differentiation, and value creation rationale

While overlap exists in base screening criteria, more advanced ones are different as PEs aim to add value to acquiree while corporate buyers aim to create value for itself

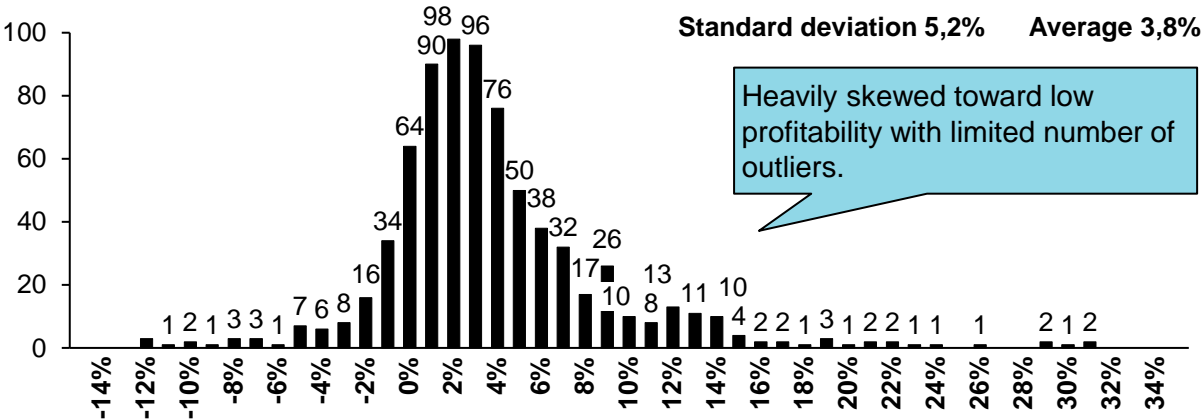
Acquisition approach differences between private equity and companies



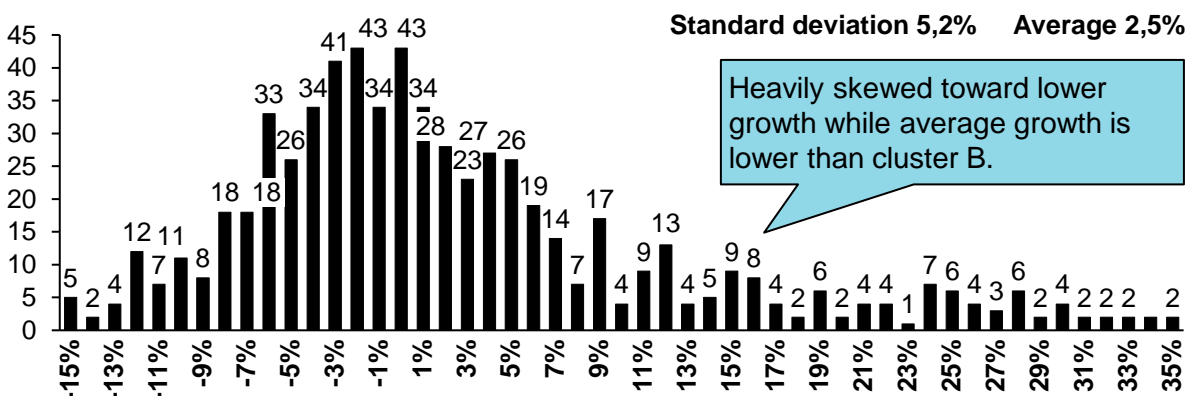
Statistical analysis of company performances across industries gives an overview of which industry to prioritize and context to understand individual targets' attractiveness

Industry cluster comparison

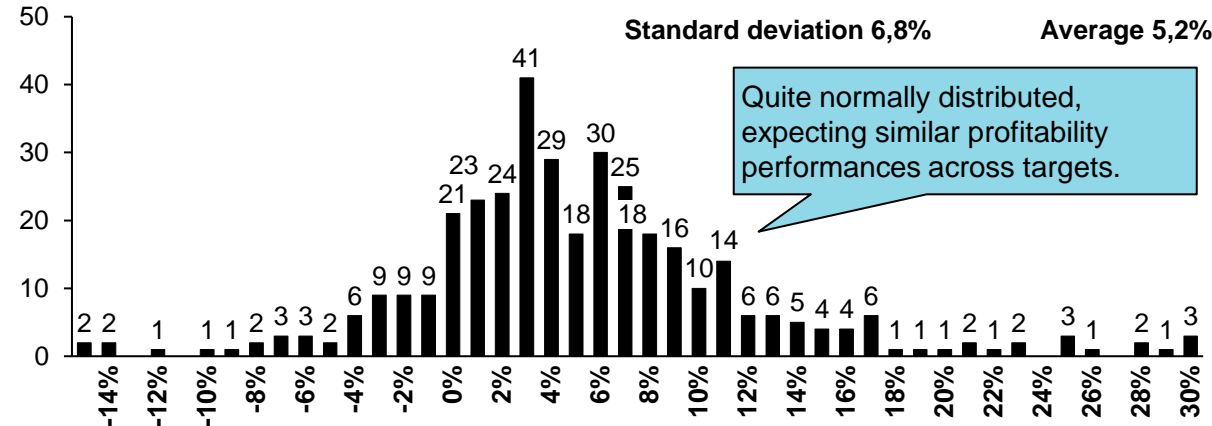
EBIT% distribution in Industry A



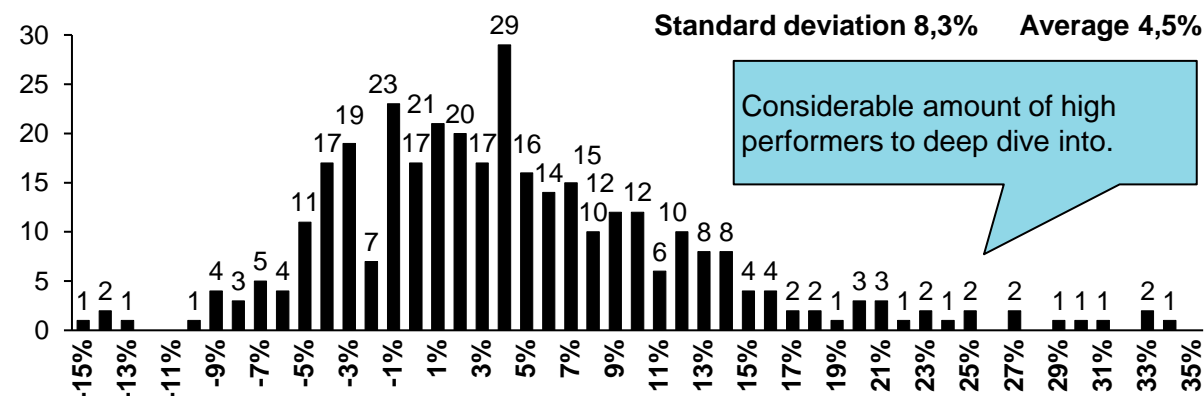
5-year CAGR distribution in Industry A



EBIT% distribution in Industry B



5-year CAGR distribution in Industry B



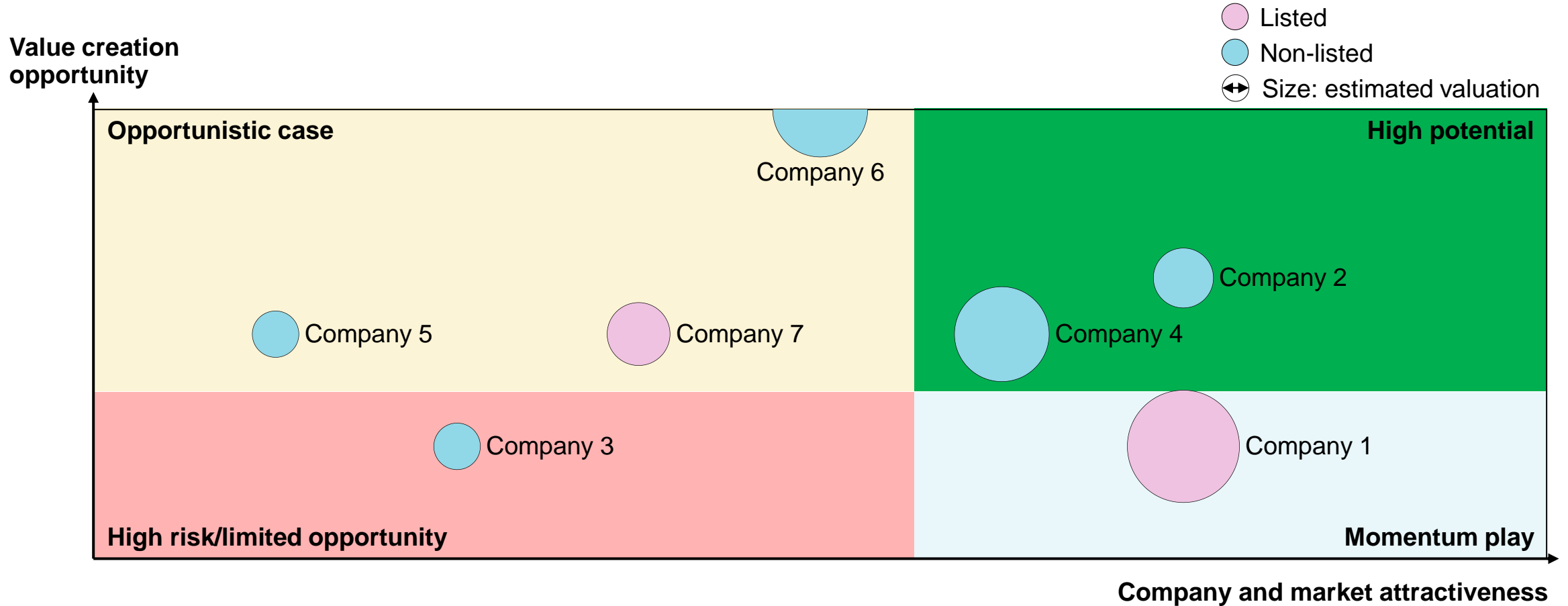
The early phases of the screening can be completed quickly and are scalable with the number of companies – assessment process needed for efficiency in later phases

Detailed methodology for the screening effort – typical criteria used for private equity

	Industry overview	Longer list	Long list	Short list	Prioritized list
Description	Big picture of potential companies in selected industries and meeting base financial criteria		Best performing relevant companies	Prioritized companies to assess and evaluate	Identified cases for further focus and concrete approach
Criteria	<ul style="list-style-type: none"> • Headquarter location of companies • Industries in scope • Turnover of companies 		<ul style="list-style-type: none"> • Ownership • Revenue/CAGR • EBIT/EBITDA • ROCE • Cashflow 	<ul style="list-style-type: none"> • Trends on main KPIs • Latest acquisitions • Likelihood for sale • Strategic alignment 	<ul style="list-style-type: none"> • Market outlook • Competitive dynamics • Company strength • Value creation opportunities
Effort needed	<ul style="list-style-type: none"> • 1 hour for project team to agree on base criteria for screening • 2-3 hours for one person to pull data from the database and analyze cluster 		<ul style="list-style-type: none"> • ½ day for project team to weed out irrelevant companies • 1 day for ranking 	<ul style="list-style-type: none"> • 2 hours from project team to review and prioritize 	<ul style="list-style-type: none"> • 1-5 man days per prioritized company • Interviews and iterations needed
Output	<ul style="list-style-type: none"> • Long list of potential targets • Statistical analysis of sample (distribution, average, standard deviation on selected KPIs) 		<ul style="list-style-type: none"> • Ranked relevant companies on 4 KPIs and overall 	<ul style="list-style-type: none"> • Prioritized 25 companies • Comparability of clusters 	<ul style="list-style-type: none"> • Comparable company and industry overview with value creation opportunities

Companies assessed are then compared on selected set of criteria to ensure prioritization of cases and resources to pursue most attractive cases

Overview of acquisition opportunities



Standard documentation provides a simple manner for comparability of evaluated cases and repeatability of analysis with multiple target companies

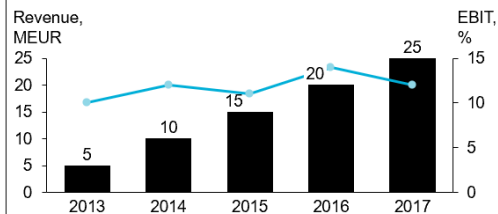
Standard documentation

Standard 1-pager for each case provides a snapshot of the case at hand and improves comparability across them

Target company case summary

Company profile

- <Year of foundation>, <listed or not>, <main owner>
- <Main business and specific niches>
- <Current differentiation element>
- <IPRs and patents>
- <Management team strength>
- <Preliminary valuation range, bank involved if relevant>
- <Reason for selling if relevant>



Market attractiveness

- <Key market attractiveness point 1>
- <Key market attractiveness point 2>
- <Key market attractiveness point 3>

Company strength

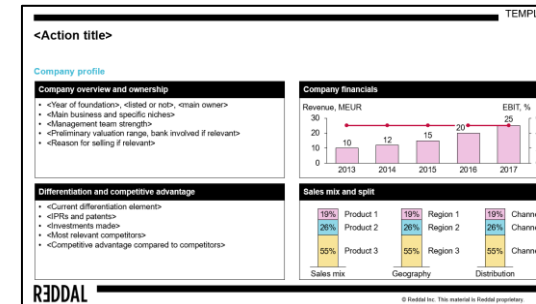
- <Key company strength point 1>
- <Key company strength point 2>
- <Key company strength point 3>

Value creation opportunity

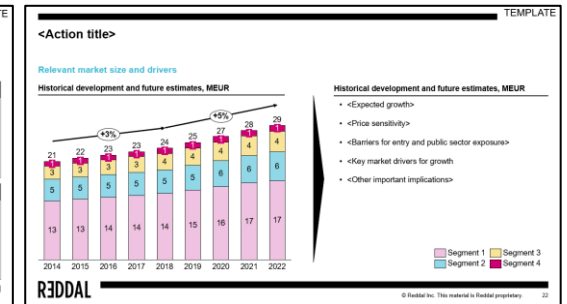
- <Key value creation opportunity point 1>
- <Key value creation opportunity point 2>
- <Key value creation opportunity point 3>

For corporates, should also consider explicitly stating "ability to add value" and "synergies".

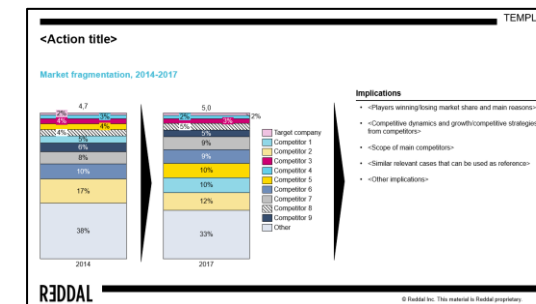
Company overview



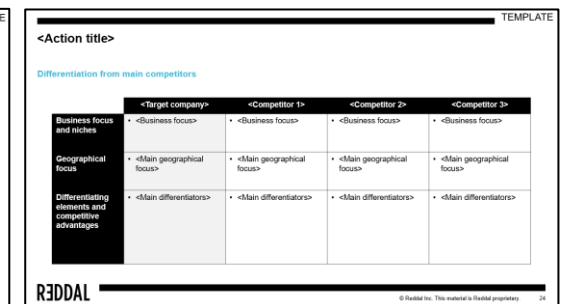
Market outlook



Competitive dynamics

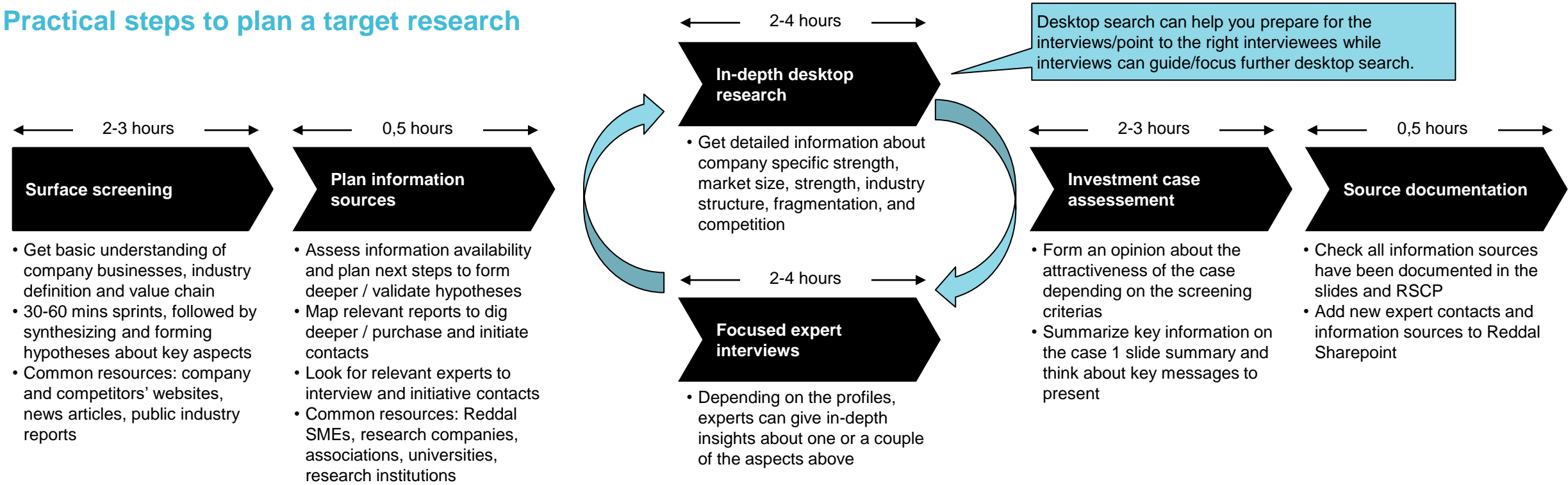


Differentiation



With an expected 1,5-2 days per case, alternating between short research sprints, interviews and synthesis is key to boost efficiency

Practical steps to plan a target research

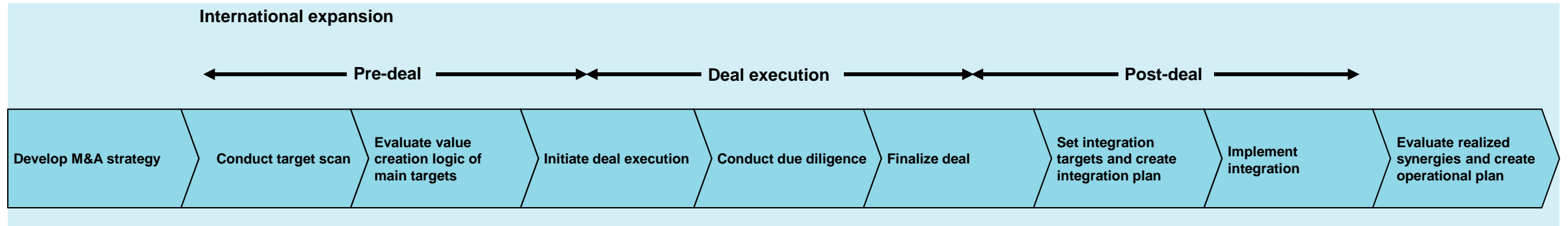


Target slide readiness by stage

<ul style="list-style-type: none">• Action titles (key hypotheses) formed about<ul style="list-style-type: none">• Company profile• Market size and drivers,• Competition• Differentiation	<ul style="list-style-type: none">• Quick-and-dirty mapping of relevant screenshots, links, datatable that support the hypotheses	<ul style="list-style-type: none">• Populate/revise slide templates with detailed information and in-depth insights found	<ul style="list-style-type: none">• Summary slide and harvey-ball assesement of key investment criteria	<ul style="list-style-type: none">• Typo, proper source documentation checked
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When conducting cross-border M&A you need to be aware of differences in legislation, culture and the way of doing business

M&A process in international context



Pre-deal considerations

- Prior to initiating the M&A process you need to be aware of possible differences in legislation, accounting standards, culture, way of doing business and political stability

Existing and new management

- The role of the management is also crucial to understand in an early stage
- In some countries it is vital that the management is not changed due to the importance of client networks and it might also be that the management has important relationships with authorities

PMI

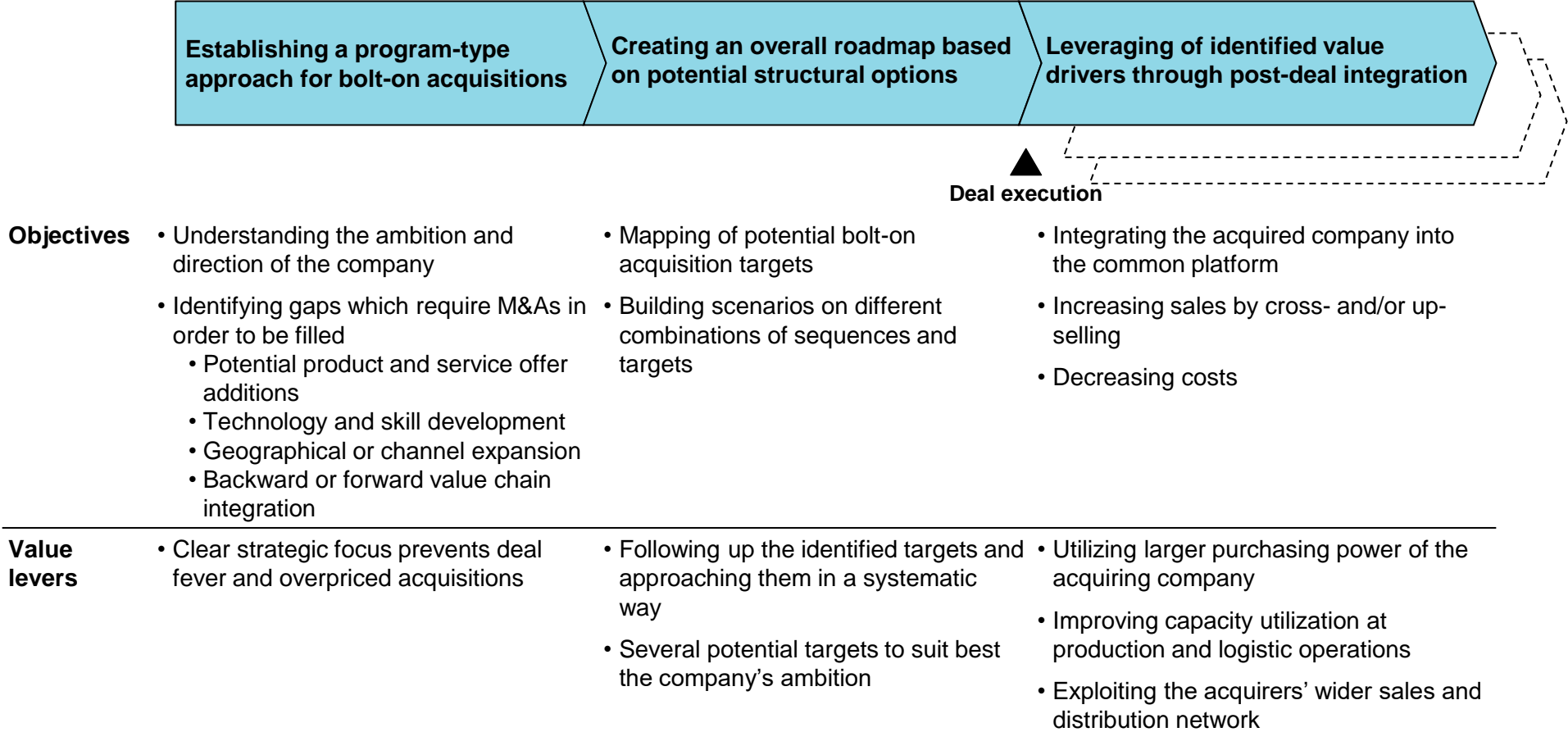
- The PMI-process can be highly affected by cultural differences
- Conducting a too ambitious and fast-paced PMI in a country where changes generally are made over longer periods can have adverse affects on the business

Other aspects

- Other important aspects to consider are the macro situation of the country, including political risk, stability of markets, exchange rate risks and other risks affecting the entire country

Program approach can be used to manage value creation when conducting several small- and mid-sized acquisitions

Program approach to manage series of acquisitions



When conducting M&A in South-Korea, extra focus should be put in the post-merger integration process which tends to take some 2-3 years generally

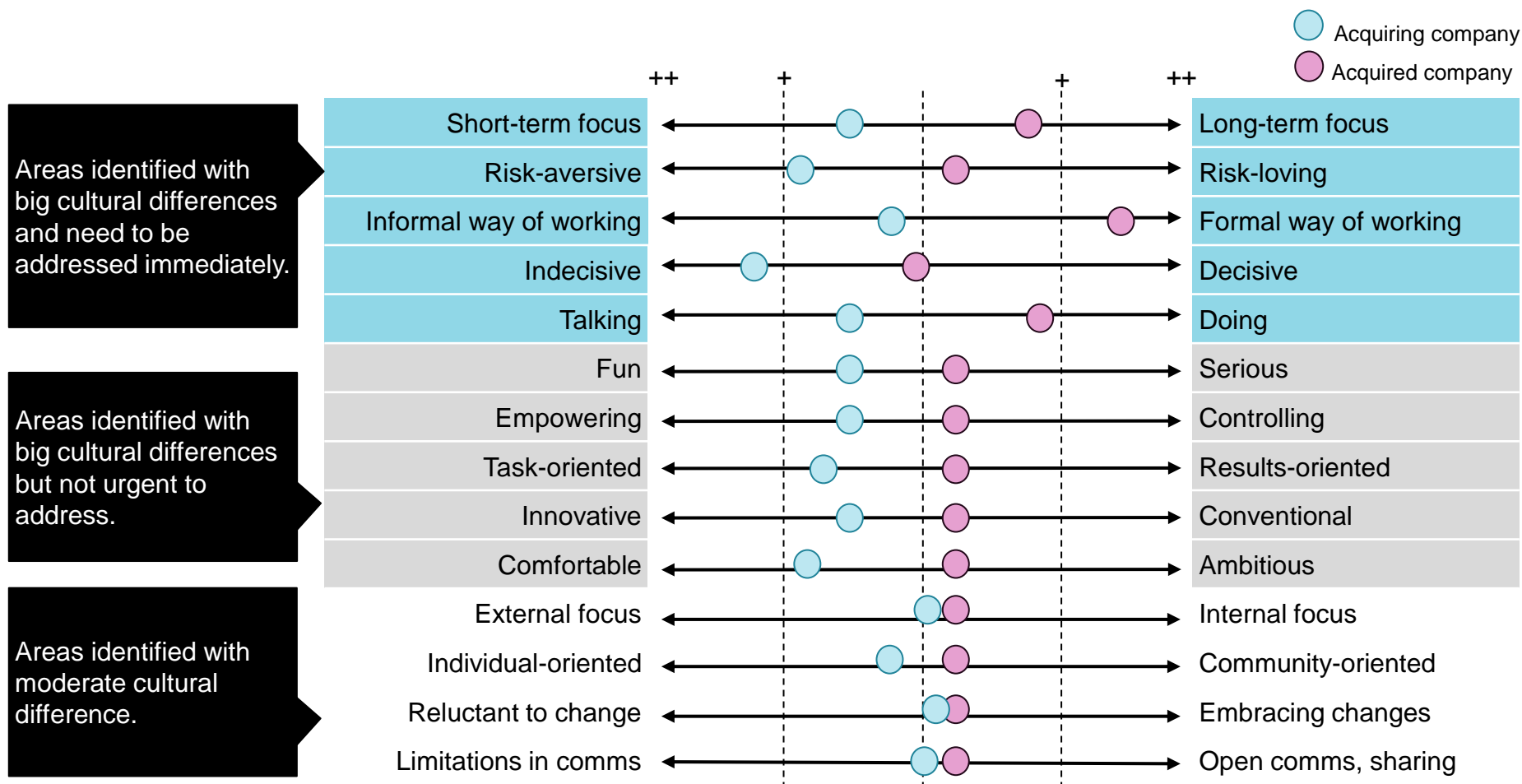
Summary of risk factors in South Korea

High risk
Medium risk
Low risk

Country	Pre-deal considerations	Existing and new management	PMI	Other
South Korea	<ul style="list-style-type: none"> • Review financials • Check IPR • Check management team • Ownership structure • Legal due diligence critical, since often contractual framework may be weak 	<ul style="list-style-type: none"> • Typically crucial to retain existing CEO, general manager or founder (typically holds all key information alone) • Understand internal power balance and relationships, and potential silos/walls in organization • Understand influence of Confucian principles 	<ul style="list-style-type: none"> • Typically doing a rapid PMI is not feasible, will take 2-3 years • Immediate concern is to retain existing customer and supplier/partner relationships • Legal and regulatory matters require local expertise, but are manageable – culture and language issues are typically bigger challenges • Understand implications of Korean labor law, rules of employment and potential labor union issues 	<ul style="list-style-type: none"> • Due to business being highly networked, and people protecting their position (knowledge/ network), process can be challenging • Government support and other benefits usually available to Korean nationals only, new acquirer may not benefit • Strict rules on how to take out profits from Korean subsidiary

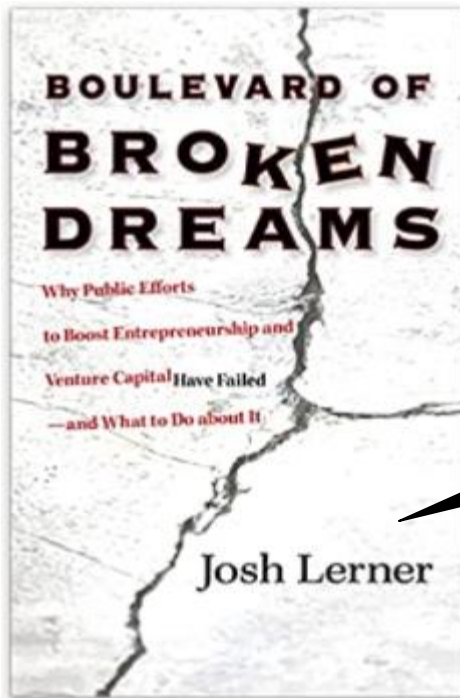
Having an open discussion about cultural differences, and how to address them, can be helpful to initiate change

Culture diagnosis tool



Q&A

For further questions, you can also contact per.stenius@reddal.com



In the webinar, there was a number of questions on the role of the public sector and the government. As mentioned, typically “less is more” – so government agencies should be careful about not taking a too big of a role. Please read this book by Harvard University Professor Josh Lerner, which presents learnings from a large number of countries. It talks about all the things governments have tried to do, and how they typically have led to failure.

You can find more insights related to these topics at www.reddal.com

Examples of further readings

M&A and post-merger integration

- Valuing a business in 30 minutes for quick insights <http://www.reddal.com/insights/valuing-a-business-in-30-minutes/>
- Using systematic bolt-on acquisitions to drive growth <http://www.reddal.com/insights/using-bolt-on-acquisitions-and-a-systematic-program-based-approach-for-driving-growth/>

More on Korea

- Lessons from the Nordics – perspectives on the Korean venture capital and startup ecosystem (also featured on Forbes Korea) <http://www.reddal.com/insights/what-the-korean-vc-ecosystem-could-benchmark-from-the-nordics/>
- Capturing the private equity value creation opportunity among Korean mid-cap SMEs <http://www.reddal.com/insights/capturing-the-private-equity-value-creation-opportunity-among-mid-cap-smes/>
- Business in Europe for Korean companies: mid-pandemic opportunities <http://www.reddal.com/insights/business-in-europe-for-korean-companies-securing-business-opportunity-amid-a-pandemic/>
- What is next for Korea after initial success in containing COVID-19 crisis <http://www.reddal.com/insights/what-is-next-for-korea-after-initial-success-in-containing-covid-19-crisis/>
- Discovering business opportunities in South Korea <http://www.reddal.com/insights/discovering-business-opportunities-in-south-korea/>

China

- Capturing the neglected consumption growth potential in China <http://www.reddal.com/insights/capturing-the-neglected-consumption-growth-potential-in-china/>

East and south-east Asia

- SMEs and national economic development <http://www.reddal.com/insights/smes-and-national-economic-development/>
- Exploring new growth paths for technology SMEs <http://www.reddal.com/insights/exploring-new-growth-paths-for-technology-smes/>
- Reddal Talks: Outlook on Vietnam <http://www.reddal.com/insights/reddal-talks-vietnam-building-a-strong-domestic-industrial-backbone-to-sustain-growth/>
- Driving Vietnam's economic growth – the role of private equity <http://www.reddal.com/insights/driving-vietnams-economic-growth-the-role-of-private-equity/>
- The untapped business opportunity in Southeast Asia – productivity improvement <http://www.reddal.com/insights/business-opportunities-in-supporting-the-needed-productivity-leapfrog-in-southeast-asia/>



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