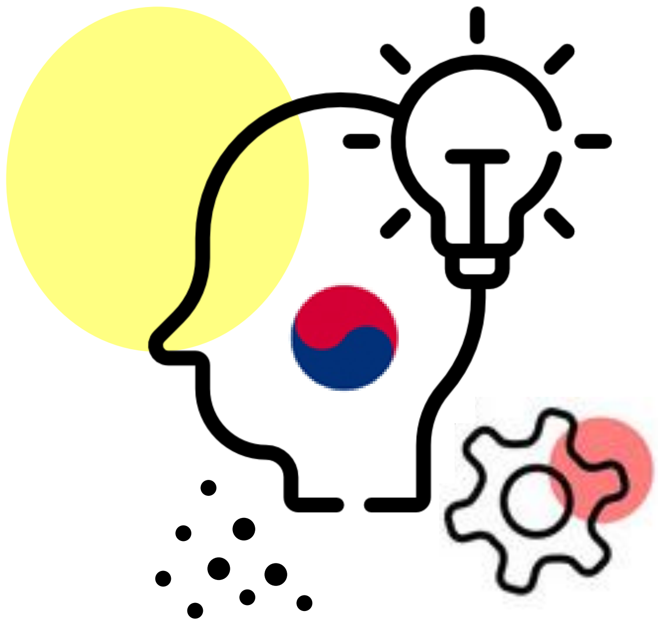


Role of the financial sector in the innovative growth

Financial support for SMEs and Start-ups

Jheenong KIM

Director General, FSC

Feb 19, 2020

Financial Services Commission

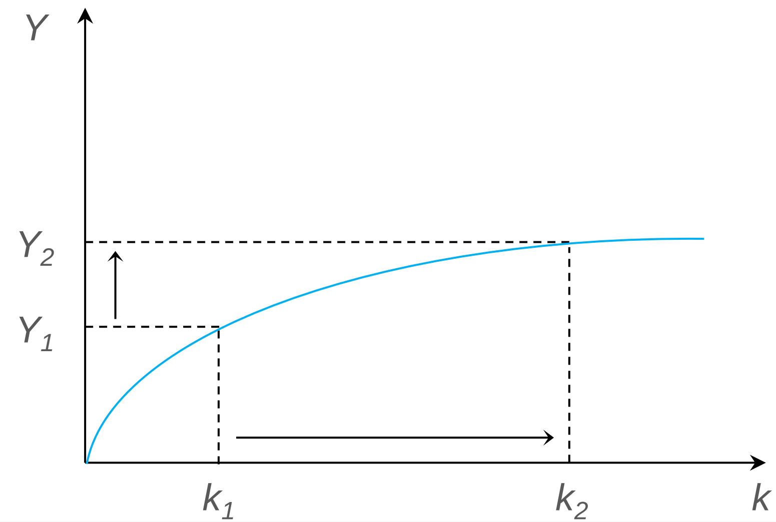
Motivation: Why innovation?

From input-driven to productivity-driven economy

Classic example: Solow's growth model

$$g_Y = g_A + \underline{\alpha_K g_K} + \alpha_L g_L$$

Case 1. Increase in capital



- *Developing economies* can get more outputs by *pouring more inputs* – e.g., labor and capital
- However, inputs are *limited*. More seriously, this growth strategy is not sustainable, because its marginal growth is expected to be *diminishing*

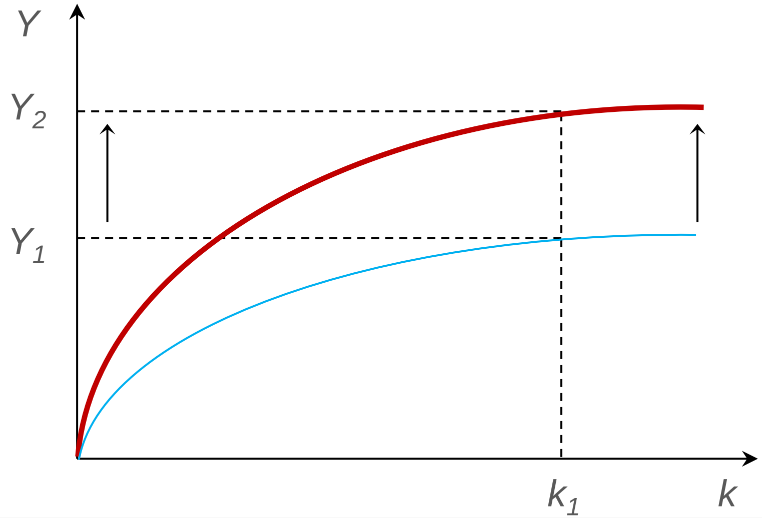
Motivation: Why innovation?

From input-driven to productivity-driven economy

Classic example: Solow's growth model

$$g_Y = \underline{g_A} + \alpha_K g_K + \alpha_L g_L$$

Case 2. Technological progress

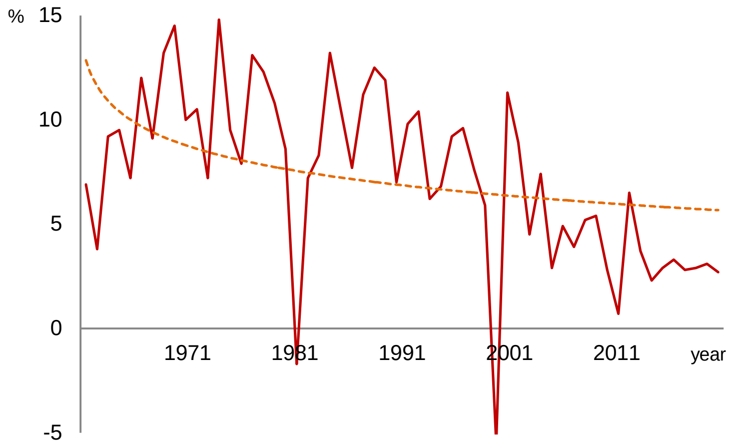


- It is possible to boost outputs from the same level of inputs with *technological progress*
- This strategy is important not only for *developed economies* – which have already reached the growth deadlock – but also for *developing economies* for *more efficient use of inputs*

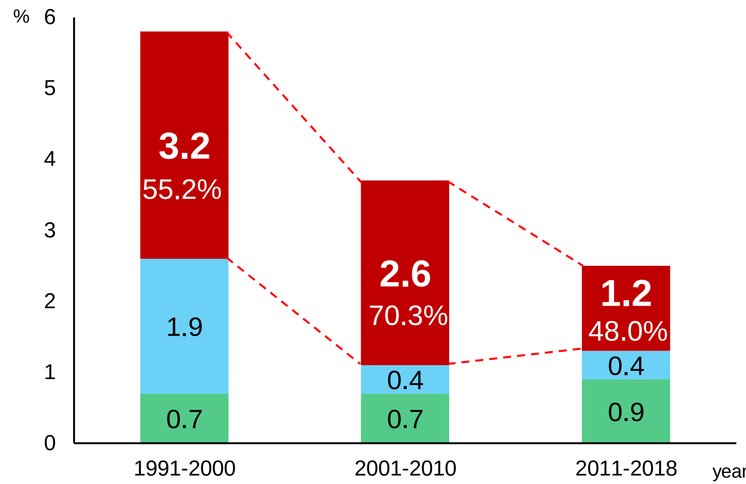
Economic growth on the wane

Strategic shift is needed – from an input-driven to a productivity-driven strategy

GDP growth rate of Korea (annual %)



Contribution of TFP to GDP growth

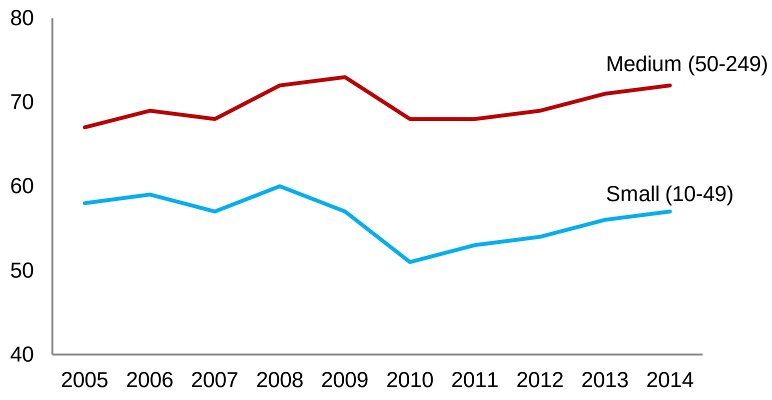


- Korea has enjoyed rapid economic growth, called the Miracle on the Han River. Such growth was backed by the *input-intensive growth strategy*
- But, the input-intensive strategy has been reaching a deadlock, and *sluggish productivity* has dragged the economy: Contribution of TFP to GDP has dropped to *below 50% level*

Policy imperative: enhancing productivity of SMEs

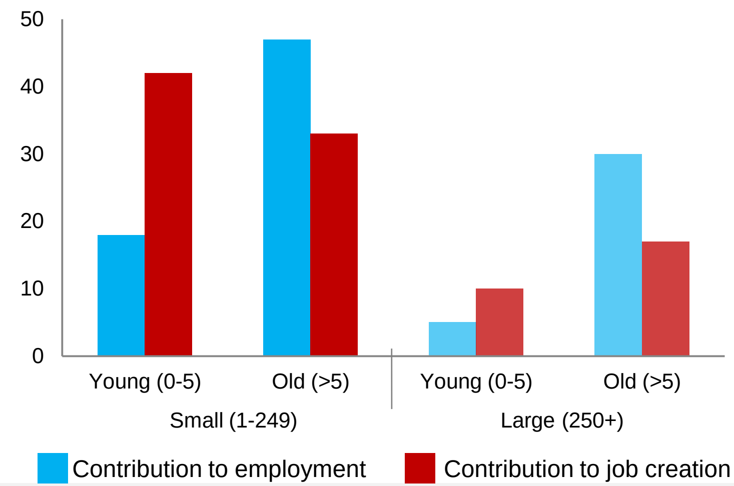
Both effective and inclusive growth can be achieved by boosting SMEs' productivity

Productivity gap btw large firms and SMEs



Note: Productivity of large firms are set at 100

SMEs as reservoirs of employment

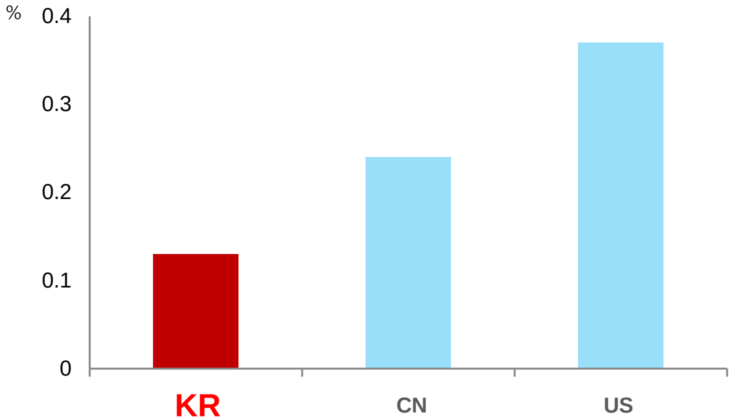


- To improve *productivity* of the Korean economy, policies should focus on the *SME sector*, which has been suffering from chronic low productivity
- Given its *strong job-creation capacity*, stronger SME sector would enable more inclusive and stable growth

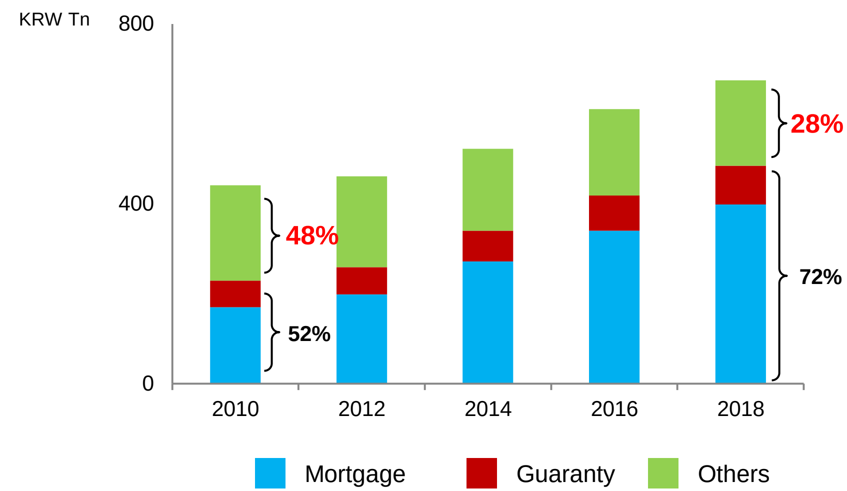
Quo vadis, finance?

But, the financial markets hesitate to join this new policy direction

Investment in start-ups per GDP is low



SME loans by collaterals

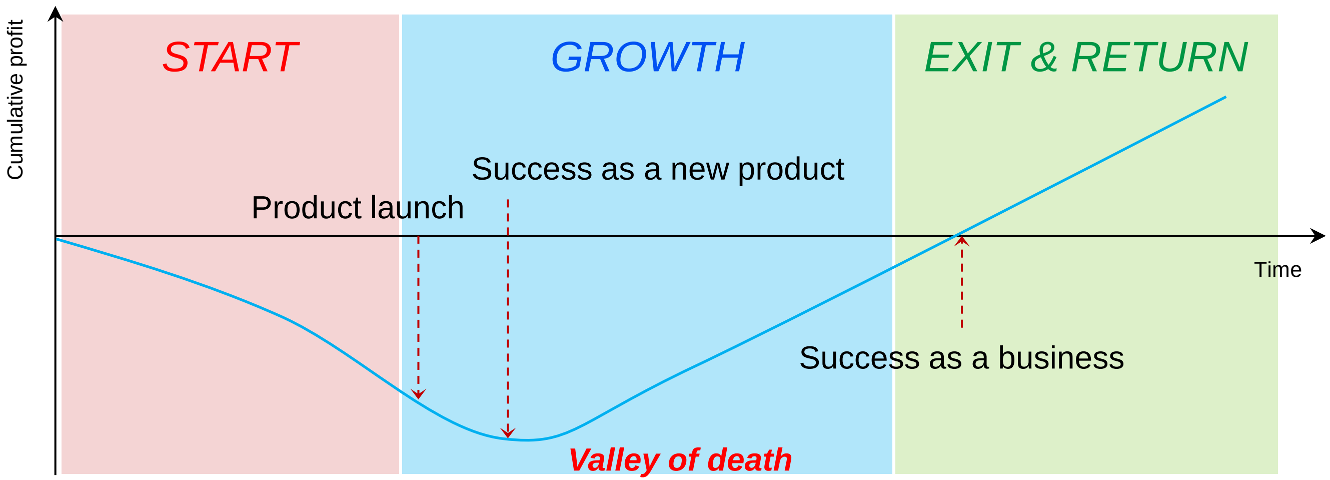


- Investment in the *SME sector* is *small*: Particularly, investment in start-ups is lower than start-up powerhouses like the United States and China
- Korean investors tend to strongly prefer *strong collateral*, especially *real-estate* – e.g., 54% of SME loans (or $0.3tn or KRW360tn) in 2018 were collateralized with real-estate

In-depth diagnosis by start-up lifecycle

Policy needs should be identified for effective supports

Lifecycle of start-ups



- Start-ups may suffer from different kinds of difficulties according to their lifecycle: It needs to (i) *figure out difficulties* in detail and (ii) *create friendly system* throughout the lifecycle

What do start-ups need?: *Stage 1.* Start

Start-ups have nothing except ideas

Policy needs by start-up lifecycle

START

- Lacks everything except idea, esp. *office* and *money*

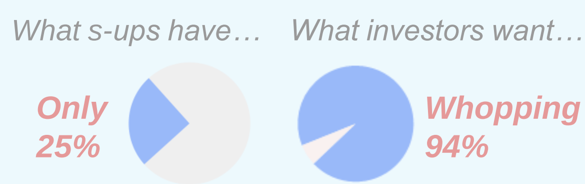
✓ Fierce competition to take up *publicly supported offices* with 5%> acceptance rate

✓ Budgetary supports are concentrated in growth stage – *only 5% at start stage*

GROWTH

- *Money, money, money*

✓ Investors want what start-ups don't have – *real estates*



✓ Result is *high foreign capital dependency* – circa 87%

EXIT & RETURN

- Investors are *hard to harvest* their investment

✓ Complicated *listing requirement*: takes about 13.1 yrs from birth to listing

✓ *M&A* record is particularly weak

What do start-ups need?: *Stage 2.* Growth

They want what they don't have

Policy needs by start-up lifecycle

START

- Lacks everything except idea, esp. *office* and *money*

✓ Fierce competition to take up *publicly supported offices* with 5%> acceptance rate

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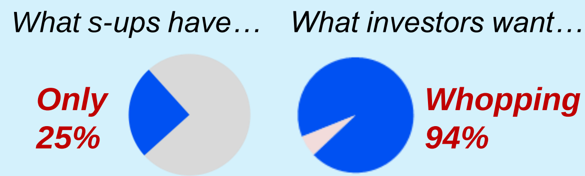

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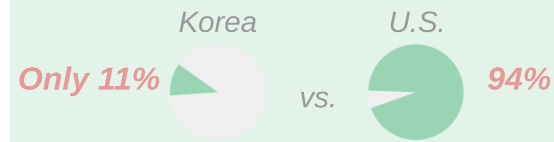


What do start-ups need?: *Stage 3.* Exit & Return

Complicated listing process and dull M&A market drags down investors' interest

Policy needs by start-up lifecycle

START

- Lacks everything except idea, esp. *office* and *money*

✓ Fierce competition to take up *publicly supported offices* with 5%> acceptance rate

✓ Budgetary supports are concentrated in growth stage – *only 5% at start stage*

GROWTH

- *Money, money, money*

✓ Investors want what start-ups don't have – *real estates*

What s-ups have… *What investors want…*

Only 25%

Whopping 94%

✓ Result is *high foreign capital dependency* – circa 87%

EXIT & RETURN

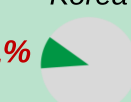
- Investors are *hard to harvest* their investment

✓ Complicated *listing requirement*: takes about 13.1 yrs from birth to listing

✓ *M&A* record is particularly weak

Korea *U.S.*

Only 11%



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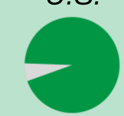

94%

Tailored supports: *Stage 1.* Start

More space, more money, and less regulation

Policy framework by lifecycle

START

GROWTH

EXIT & RETURN

- Lack of *space*
  - ✓ Opening start-up incubation hub
    - – Providing office space *about 0.1mn m^2* space with Seoul Metropolitan Govt
- Lack of *funds*
  - ✓ Expanding policy support
    - – Providing guarantees worth KRW 15.4tn
    - – Incubating alternative funding channels, e.g., *crowdfunding*
- Outdated *regulation*
  - ✓ Launching pan-governmental *regulation sandbox* (FSC, MSIT, MOTIE, and MSS)

Tailored supports: *Stage 2.* Growth

Attract investors to want what start-ups have

Policy framework by lifecycle

START

GROWTH

EXIT & RETURN

- Obsession with *real estates*
  - ✓ Drawing investors' interest in what s-ups have by establishing an infrastructure for:
    - *Assessment of movables* and *trades of movable collaterals*
    - *Incentivizing financial institutions* to provide more movable-backed finance
- Lack of *funds*
  - ✓ Creating various *fund schemes*:
    - Special fund for *scale-up (KDB Global Challenger, KRW 15tn)*
    - *Matching fund* btw SOBs and large firms

Tailored supports: *Stage 3.* Exit & return

Facilitate exit of investors to attract more investment

Policy framework by lifecycle

START

GROWTH

EXIT & RETURN

- Weak *M&A performances*

  - ✓ Creating *fund schemes with incentives* to channel more capital into KOSDAQ:
    - – *KOSDAQ Scale-up Fund (KDB, 300bn), KOSDAQ Venture Fund*
  - ✓ Promoting *pre-IPO deals in the OTC market*

- Complicated *listing process*

  - ✓ *Legislating new regulations* to promote listing of innovative businesses

No of newly listed firms with innovative businesses has grown

Thank You