

Current Landscape and Future Direction of Venture Capital in Korea

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Yong Rin Park
Head of Policies & Regulations Department
Korea Capital Market Institute



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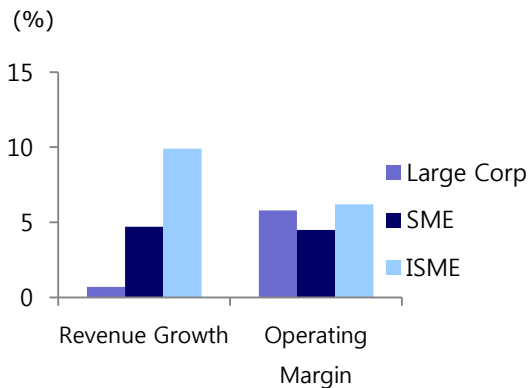
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I. Past and Present of Venture Capital in Korea

What Are Innovative SMEs?

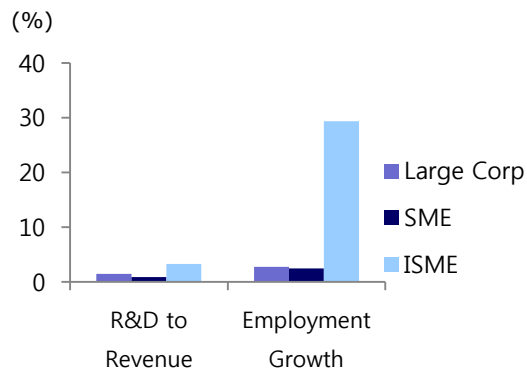
- ❖ **Innovative SMEs are SMEs that seek to commercially exploit new markets, technologies, and market knowledge to create value**
- ❖ **There are three types of innovative SMEs certified by SMBA in Korea with a total of over 39,000 firms in 2009**
 - Innovative SMEs account for only 1.3% of SMEs, but have potential to yield high benefits in job creation and innovation
 - However, most of ISME financing comes from banks and policy loans

Growth and Profitability of ISMEs



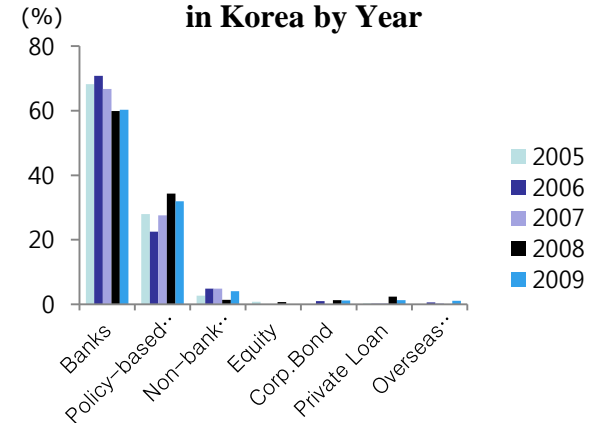
Source: SMBA (2010)

Innovation and Employment of ISMEs



Source: SMBA (2010)

Sources of Financing for ISMEs in Korea by Year



Source: KFSMB(2010)

What It Takes To Promote an Innovative SME Ecosystem

❖ Strengthening each **STAGE** in the chain of ISME growth stages

- Each stage needs three basic components
 - Entrepreneurs, capital, intermediaries (or investors)
 - Emergence of any component requires the existence of the other two
- Each stage consists of four basic investment steps
 - Fundraising, investment, value-addition, exit
- Market efficiency in each component in each stage is important

❖ Strengthening each **LINK** in the chain of ISME growth stages

- Strong supply of vibrant ISMEs to invest in each stage
- Provision of diverse and vibrant exit markets in each stage
- Investment in any stage is contingent on some potential to advance to the next stage
 - Linkage between informal capital, venture capital, formal regulated capital market

❖ **Venture capital plays an important role to bridge informal capital to formal regulated capital market**

The Evolution of Venture Capital in Korea

Background Condition (1974~1986)

Pre-emergence Phase (1987~1996)

Emergence Phase (1997~2000)

Crisis, Consolidation & Growth Phase (2001~Present)

- 1974: Korea Technology Advancing Corporation (KTAC) founded by Korea Institute Science and Technology (KIST)
- Three more New Technology Finance Companies established under Financial Support for New Technology Businesses Act (1986, Ministry of Finance and Economy)
 - 1981: Korea Technology Development Co. (KTDC)
 - 1982: Korea Development Investment Co. (KDIC)
 - 1984: Korea Technology Finance Co. (KTFC)
- Support for Small and Medium Enterprise Establishment Act enacted (1986, Ministry of Trade and Industry)

- Small and Medium Business Administration (SMBA) was established in 1996
- Act on Special Measures for the Promotion of Venture Businesses enacted in 1997
- Foundation of KOSDAQ in 1997
- 12 venture capital companies (VCs) were founded in 1986 and the number of VCs increased to 72 in 1998)

- VCs proliferated and the number of VCs peaked at 156 in 2000
- 325 VC funds were launched in 2000
- VCs invested \$2 billion in 2000

- After experiencing slowdown by the global economy downturn and plummeting technology-centered markets (NASDAQ, KOSDAQ, etc.) from 2001 to 2004, the venture capital industry starts to take off again (104 VCs in 2006)
- Dramatic changes in government policies to “revive the venture industry”
 - Government General Measures to revitalize the venture industry
- In 2005, Fund-of-funds (SMBA), whose role is to allocate funds among VCs, was built based on Act on Special Measures for the Promotion of Venture Businesses
- In 2009, VC fundraising reaches the prior peak level achieved in 2000

Success Factors

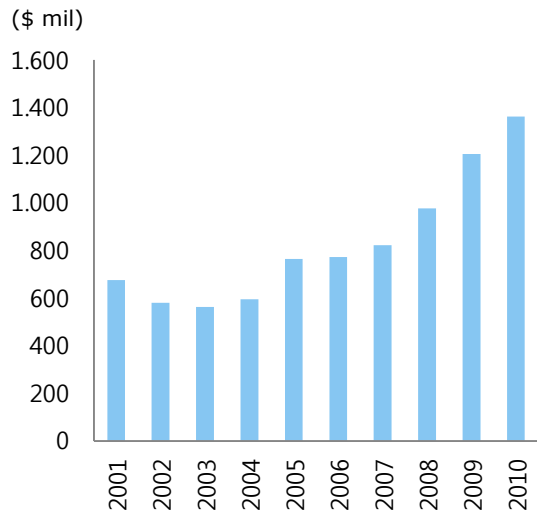
- Government Policies for nurturing venture companies
- Equity investment is larger than loan contract
 - Growth of stock market (KOSDAQ)

Venture Capital in Korea (1)

❖ Despite remaining areas to improve on, venture capital in Korea has generally made significant achievements

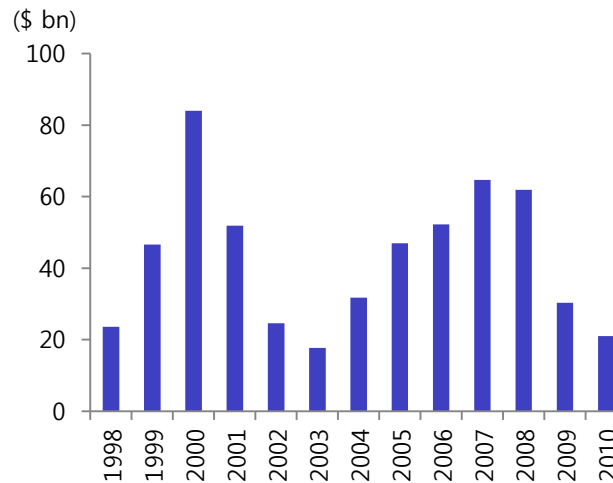
- Contrasted with a significant contraction in global VC after global financial crisis
- Source of VC funding remain driven mostly by government and policy-based funds

VC Fundraising by Year in Korea



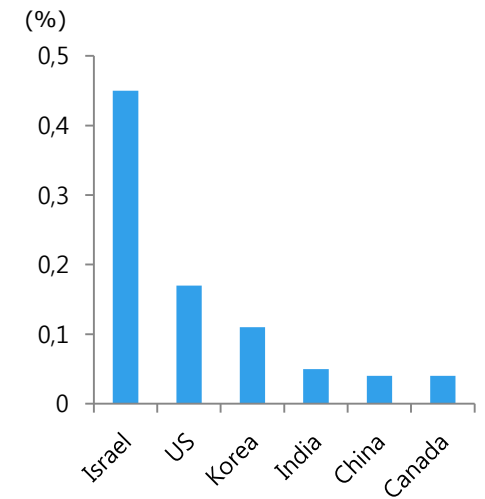
Source: KVCA (2011)

Global VC Fundraising by Year



Source: Preqin (2011)

VC Investment/GDP by Country

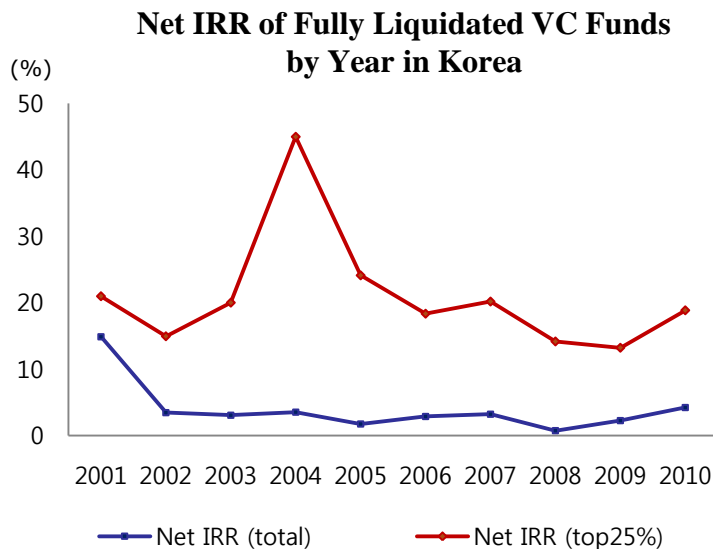


Source: OECD (2009)

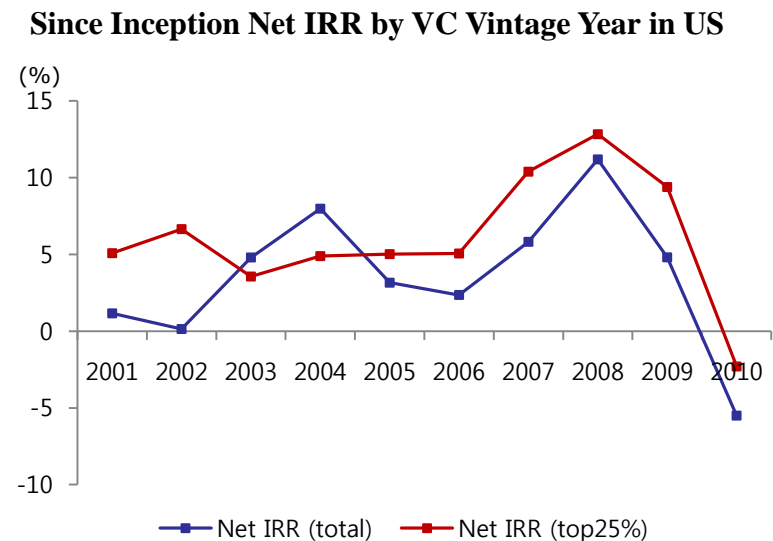
Venture Capital in Korea (2)

❖ However, profitability of VC investing has been subdued since the dot-com debacle in 2000 as in most of overseas VC markets

- Average net IRR to LPs of fully liquidated funds since 2001 is 2.8%, while that of top 25% funds is 21.0%
- Korea VCs, especially top 25% VCs, have demonstrated investment performance in during 2000's



Source: KVCA (2011)

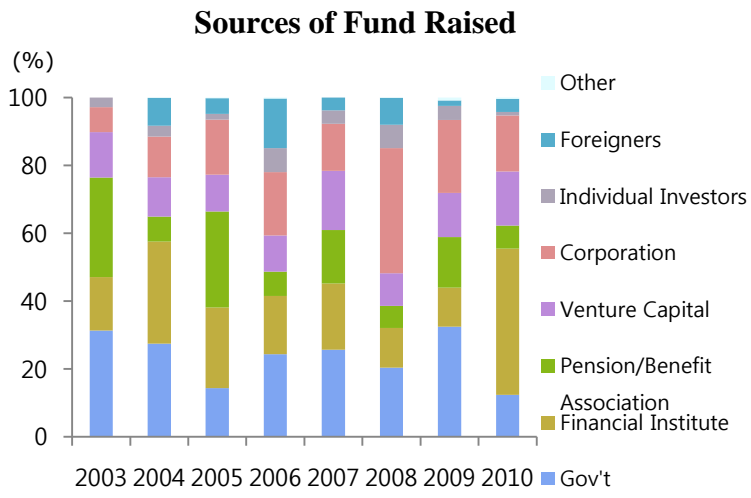


Source: NVCA (2011)

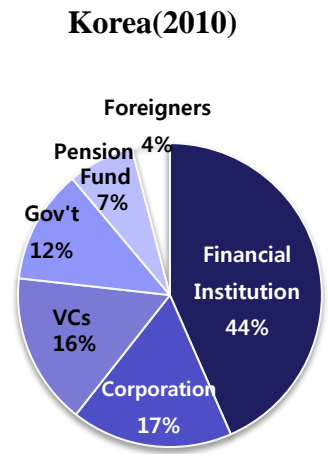
Funding Sources of Venture Capital in Korea

- ❖ **The ways of government sponsorship have changed, but the Korean VC market still depends heavily on government sponsored capital**
 - Korean government is a major limited partner for venture capital funds in Korea
 - Small & Medium Business Administration, The Ministry of Knowledge and Economy, The Ministry of Environment, The Ministry of Culture and Tourism, etc.

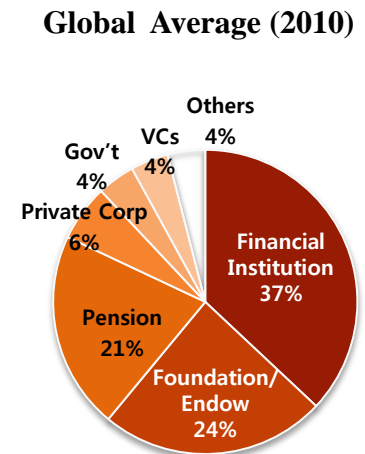
- ❖ **In recent years, private corporations have become the largest LP**
 - While ‘foreign investor’ is a fast growing LP, ‘pension fund’, unlike other countries, accounts for a relatively small proportion



Source: KVCA (2011)

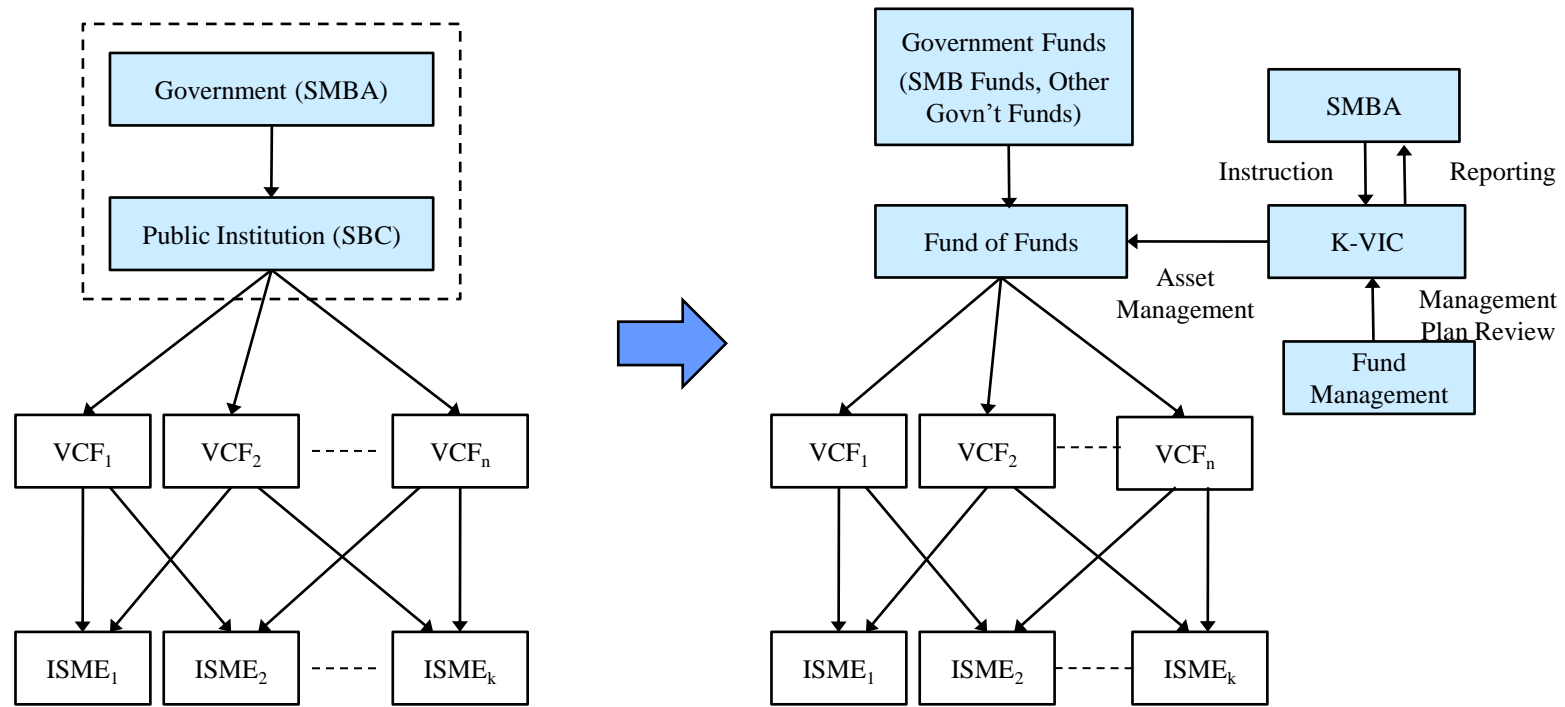


Source: KVCA (2011), Preqin (2010)



Capital Allocation through a Fund of Funds

- ❖ To efficiently manage government-backed VC investment program, the Korean government (SMBA) initiated Korea Fund of Funds program
 - The program was started in 2005 and is operated by K-VIC



Exit Route of VC: IPO

❖ **KOSDAQ, a growth stock market established in 1997, provides a major exit channel for VCs in Korea**

- With 1,029 listed companies and a market capitalization of \$84 billion, KOSDAQ has grown to be one of the leading growth stock markets in the world
- Originally listing requirements were minimum like other growth stock markets around the time of internet bubble
- However, after certain scandals and embezzlements in the listed companies, listing and maintenance standards have become restrictive for strengthened investor protection

Major Growth Stock Markets in the World

	Number of listed companies		Market Capitalization	
	2007	2010	2007	2010
KOSDAQ	1,022	1,029	107	84
NASDAQ	3,069	2,778	4,014	3,889
AIM	1,694	1,195	194	123
TSX Ventures Exchange	2,338	2,376	59	73

Unit: US\$ bn

Exit Route of VC: M&A, Secondary, SPAC

❖ Inactive M&A market as a viable VC exit channel

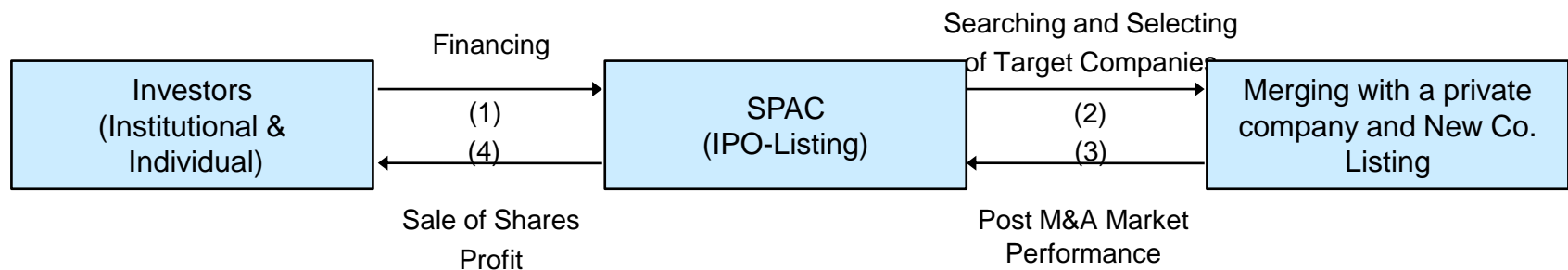
- Negative attitude toward M&A as an exit option
- Valuation problems of ISMEs and data credibility
- Lack of investment banks specializing in ISMEs

❖ Nascent secondary market

- However, due to valuation problems of ISMEs, and restrictions on the VC purchase of issued shares, secondary market for investee companies is developing only slowly

❖ SPAC as an exit scheme combining IPO and M&A

- SPAC, introduced in 2009, is a public listed company with an intention of M&A and raises capital via IPO and expected to complement IPO market

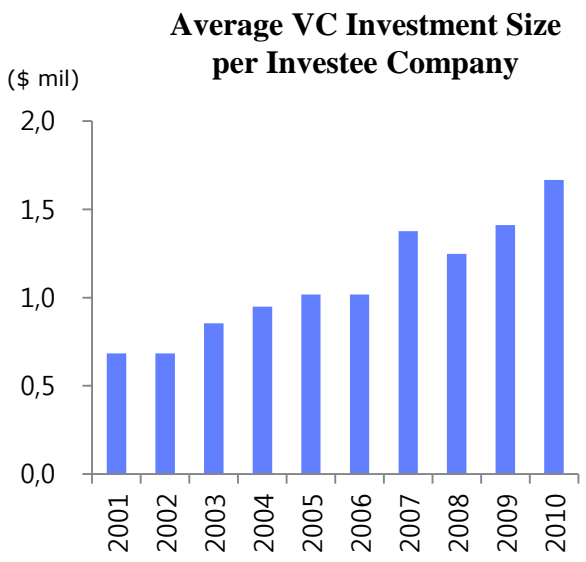


II. Key Issues Concerning Venture Capital in Korea

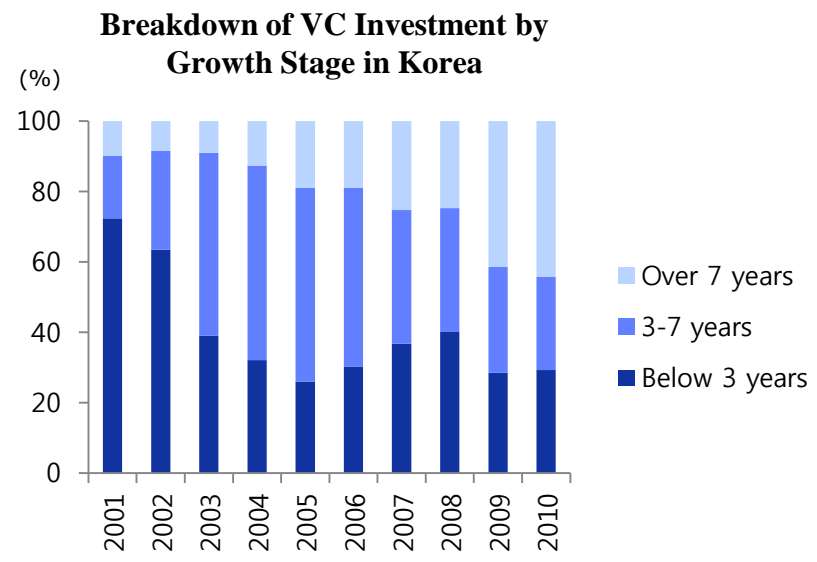
Issues in Venture Capital – Investment Market (1)

❖ **Average size per investment has been steadily increasing, aggravating the equity gap problem**

- Average investment size per investee company has increased from \$0.7mil (2001) to about \$1.7 mil (2010)
- Leads to conservatism in VC investing preferring pre-IPO rather than early stage
- A critical issue considering primitive business angel market in Korea



Source: KVCA (2011)



Source: KVCA (2011)

Issues in Venture Capital – Investment Market (2)

- ❖ **Inactive participation of institutional investors in VC funds**
 - Despite recent improvement, low participation of institutional investors and high dependency on specific institutional investors
 - The share of institutional investors in VC funds in 2009 and 2010 are 26.7% and 49.5%, respectively
 - Zero investments by university endowments in VC funds, compared to US (20.3%)

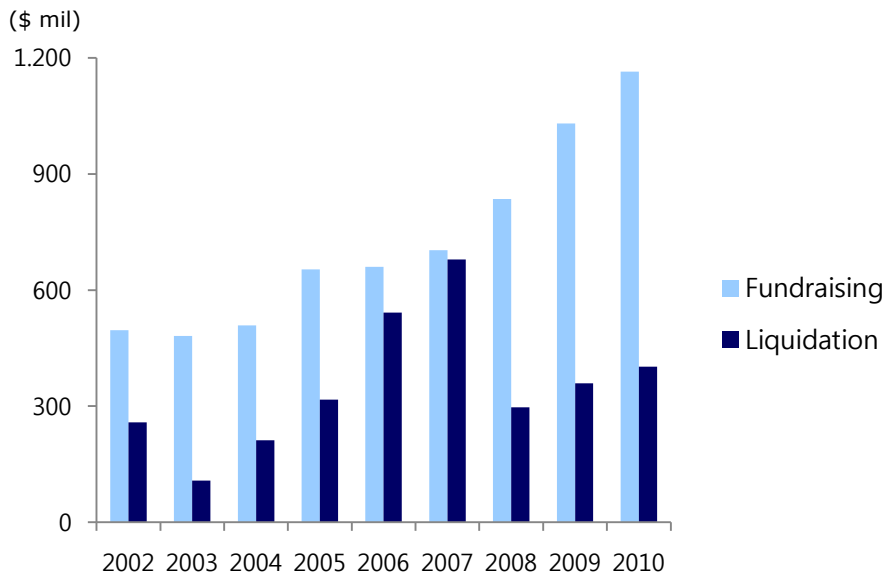
- ❖ **Lack of global investment capability**
 - Lack of efforts on the part of VCs to access overseas markets or build investment capability for foreign capital attraction and transfer of advanced techniques

- ❖ **K-VIC’s insufficient role for creating new markets**
 - KVIC focused on fair selection of GPs and development of monitoring system
 - Lack of KVIC’s role to attract diverse sources of capital home and abroad, and to create a new market for a more active implementation of market-oriented policy

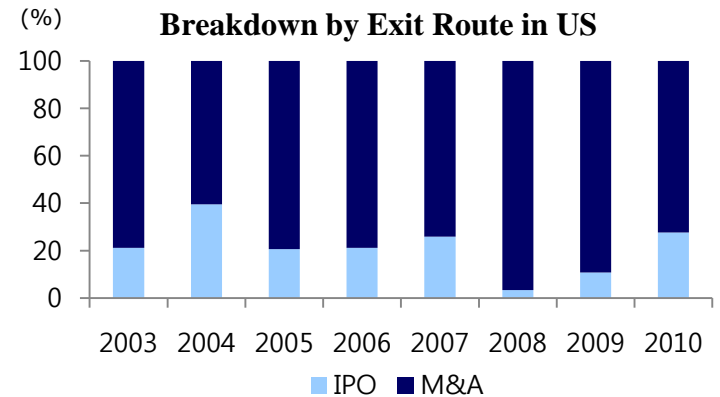
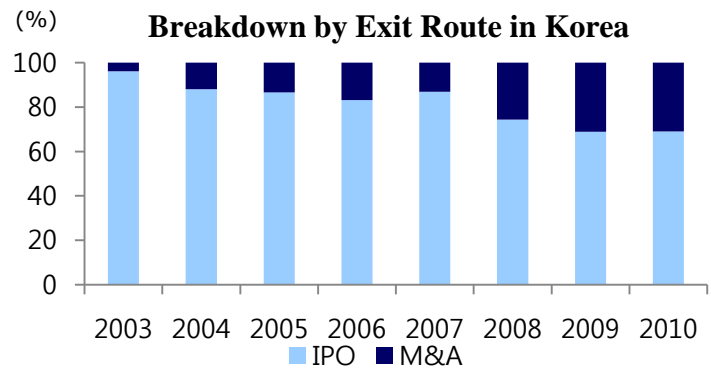
Issues in Venture Capital – Exit Market (1)

- ❖ **VC activities have significantly increased over the recent past, but exits have not caught up with the trend, portending exit problems down the road**
 - Heavy reliance on IPO as a main exit route

Fundraising and Liquidation by Year



Source: KVCA (2011)

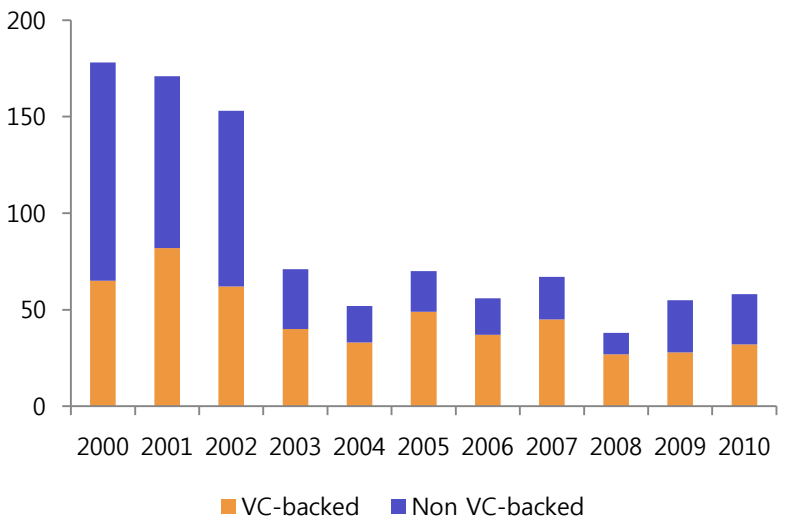


Source: KVCA (2011), NVCA (2011)

Issues in Venture Capital – Exit Market (2)

- ❖ **Since the early 2000's KOSDAQ has lost its vitality, and VC time to IPO and IPO size have been on an upward trend**
 - Due to relatively short life of VC funds in Korea (5~7 yrs), VC funds focus on later stage investees with over 7 years of operation history

Number of IPOs in KOSDAQ



Source: KVCA (2011)

Time to VC-backed IPO and IPO Size



Source: KVCA (2011)

Why Business Angels?

- ❖ **Venture capital finances only a limited number of ISMEs each year**
 - About 1.3% of the total number of ISMEs receive VC funding each year
 - VC investment is highly concentrated in a few high growth industries
 - IT, manufacturing, and entertainment take up about 80% of total VC investment
- ❖ **Structure of VC industry has been shifting toward making substantial investment per deal, making the equity gap larger**
 - This is due to increased VC fund size and fixed costs in the VC investment process
 - Average VC fund size increased from \$0.7 mil (2001) to \$1.7 mil (2010)
 - Fixed costs in identifying, screening, investing, and monitoring investee companies
- ❖ **Business angels are mostly wealthy, sophisticated, individual investors with prior entrepreneurial or management experience, who can fill the void left by venture capital**
 - Different from general passive angel investors

Characteristics of Business Angels

- ❖ **As a major group of investors in the private capital market, business angels have different characteristics and investment behaviors from those of VC**
 - Own money, experience, investment in others' businesses
 - Business angel network (BAN) and syndicated investments
 - Potentially important synergies between business angels and venture capital

Comparison of Business Angels with Venture Capital

Difference	Business Angel	Venture Capital
Characteristics	Prior experience as an entrepreneur or management	Mostly financial managers
Invested funds	Own money	Investors' money
Investees	High potential start-ups and early stage	Mostly expansion and late stage
Geographical proximity	Important	Less important
Form of contract	Simpler than VC	Complex and demanding
Post-investment monitoring	Active, hands-on	Strategic
Involvement in management	Important	Less important
Exit route	Important	Very important

Source: EBAN (2009)

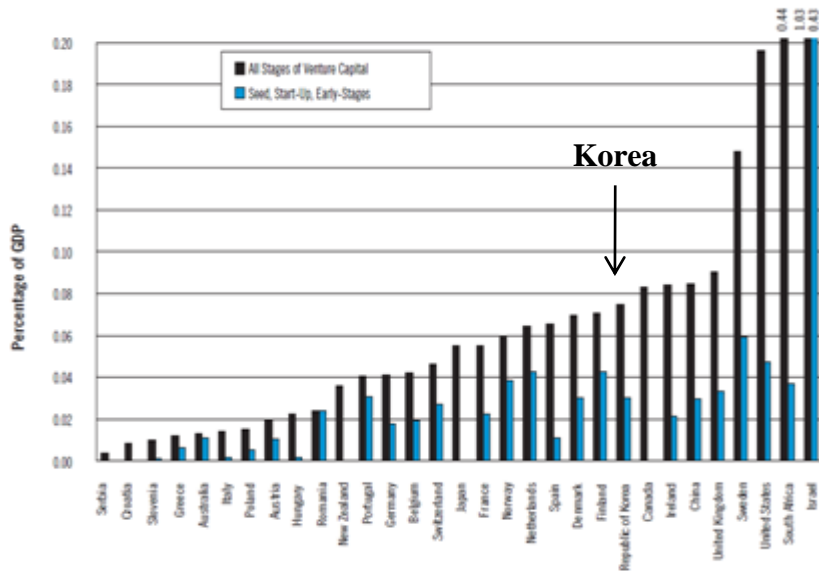
Business Angels in Korea (1)



❖ Compared with venture capital market, business angel investments in Korea lag well behind other countries with similar VC/GDP ratio

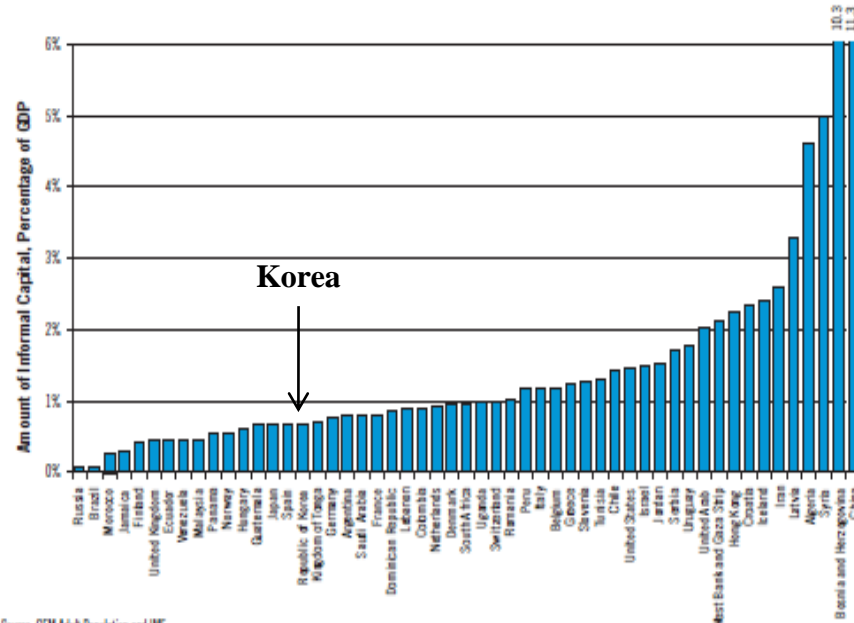
- Business angels are an important subset of informal capital that comprises family, friends, and business angels, but excludes VC

VC Investments as a Percentage of GDP by Growth Stage



Source: NVCA and EVCA, and national venture capital associations
 Note: No data available on seed, start-up, early-stages for Canada, Croatia, Japan, New Zealand and Serbia.

Informal Capital Investment as a Percentage of GDP

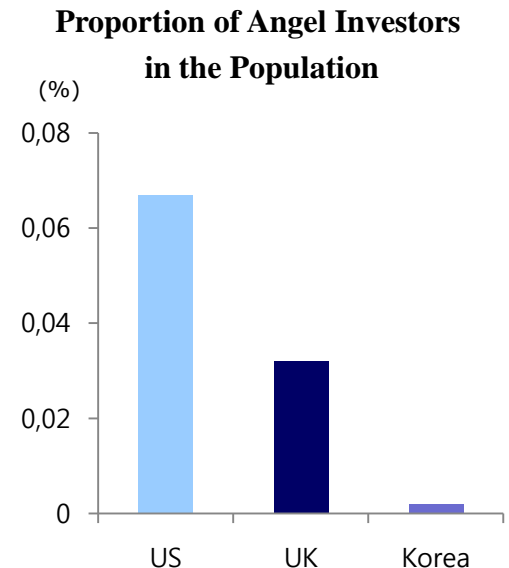
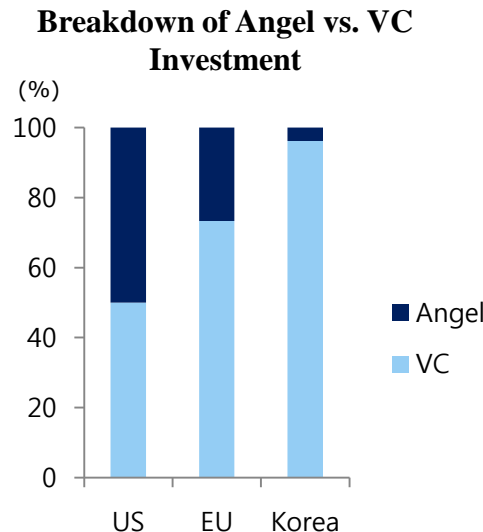
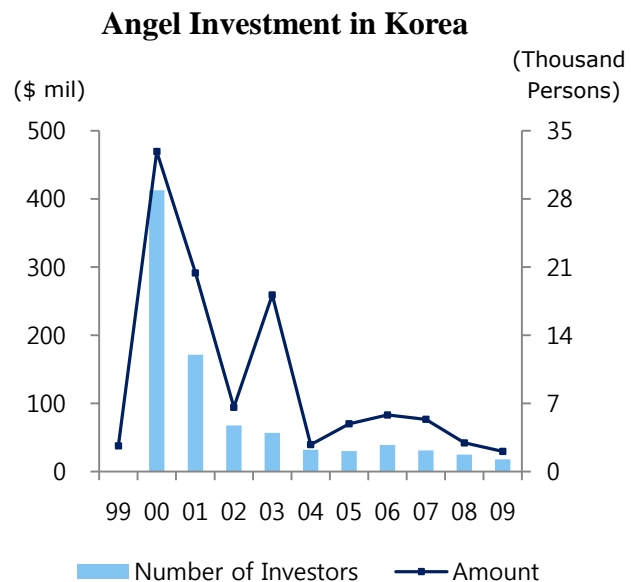


Source: GEM Adult Population and IMF

Business Angels in Korea (2)

❖ Angel capital market in Korea has almost disappeared since the dot-com debacle, exacerbating the equity gap problem

- Can be critical to the growth of ISMEs, considering its role as an important bridge to venture capital
- A serious threat to the ISME ecosystem in Korea



Policies to Support Business Angels in Major Countries



❖ **Focusing on the important role that business angels play in financing ISMEs, major governments have been implementing policies to promote the investment activities of business angels**

- The main policy instruments adopted are tax deduction, provision of matching funds, and promoting the establishment of business angel networks (BANs)

Angel Investment Tax Benefit

Country	Income Tax Deduction Rate
US	10%-100% (state level tax with mostly tax credit)
UK	VCT: 30% (5 yr hold. period) EIS: 20% (3 yr hold. period)
Japan	Almost 100% of investment
Singapore	50% (2 yr hold. period)
Korea	10% (5 yr hold. period)

Matching Funds

Country	Matching Fund	Size
UK	ECF	\$185m
	SCF	\$79m
Singapore	SPRING SEEDS	\$89m
	BAS	\$24m
Korea	N/A	\$10m

Business Angel Network

Country	Number of BANs	Avg. BA per BAN
US	300	44
UK	35	100
France	66	
Germany	38	
Spain	40	
Sweden	22	
Italy	11	
Korea	4	< 10

Principle of Exit Markets Vitalization

- ❖ **Strengthening of each and every individual exit market**
 - Unlike investment, timing of exit and exit route to take are beyond control
 - Selection of an exit route based on the market situation and likely performance of the investment

- ❖ **Prioritization of policy options for exit market with focus on financing possibility**
 - Exit markets should not only provide exit routes, but also facilitate capital injection after exit

- ❖ **Provision of framework conditions as pre-requirement for an effective exit route for exits through stock markets**
 - Investor protection and sufficient liquidity are pre-requisite conditions for a well-functioning stock market
 - Experience of other growth stock exchanges and KOSDAQ (and FreeBoard)
 - Among the available exit options, exits through IPO are likely to remain the most effective and viable option in the foreseeable future

Growth Stock Exchanges in the World and KOSDAQ

- ❖ **Despite its visibility in the world growth markets, KOSDAQ has not been effective in providing exits for VCs and financing ISMEs**
 - KOSDAQ has been overly weighted toward the secondary market function

Growth Stock Exchanges in the World

Sponsor Exchange	Name of New Market	Market Cap (\$mil)	No. of Companies	Traded Value	IPO (\$mil)	SEO (\$mil)	(IPO+SEO)/Market Cap
London SE	AIM	123,498	1,195	13,424	1,882	8,825	8.67%
Korea Exchange	KOSDAQ	84,441	1,029	412,190	1,194	922	2.51%
Shenzhen SE	ChiNext	111,768	153	232,530	14,251	0	12.75%
Tokyo SE Group	Mothers	16,167	181	42,083	92	22	0.71%
Hong Kong Exchanges	Growth Enterprise Market	17,324	169	16,211	1,700	3.5	9.83%
Deutsche Borse	Entry Standard	17,419	129	1,272	0	N/A	N/A
NYSE Euronext	Alternext	6,735	155	1,368	124	97	3.28%
Singapore Exchange	SGX Catalist	5,087	133	3,754	88	154	4.76%
NASDAQ OMX Nordic Exchange	First North	3,401	124	1,747	13	N/A	0.38%
Istanbul SE	Second National Market	4,123	31	11,474	159	0	3.86%
Thailand SE	Market for Alternative Investment (MAI)	1,774	66	2,847	22	57	4.45%

Source: World Federation of Exchanges (2011)

Ideal Characteristics of a Growth Stock Market

- ❖ **Successful operation of a growth stock market is based on three pillars, harmonizing of which remains a tricky business**
 - Eased listing requirements, strengthened investor protection, and increased liquidity

Dimension	Ideal Characteristics
Listing requirement	<ul style="list-style-type: none"> – Focus on company’s technology and growth, rather than past financial performance – To secure investor confidence and liquidity, fast-growing, but quality innovative SMEs need to listed
Disclosure	<ul style="list-style-type: none"> – High asymmetric information requires strict disclosure requirement for investor protection – Need to maximize the effectiveness of disclosure due to high disclosure cost for ISMEs
Trading	<ul style="list-style-type: none"> – Generally, employ competitive auction method which has effective price discovery in general – For low liquidity stocks, supplement with liquidity providers (LPs) or market makers
Investor mix	<ul style="list-style-type: none"> – Acute information asymmetry and high volatility of ISMEs likely to cause investor protection problems, which will ultimately lead to the failure of the market and high cost of capital – Induce qualified investors to dominate
Sponsor (or advisor)	<ul style="list-style-type: none"> – Introduced to mitigate problems from asymmetric information and agency costs between investors and ISMEs – Delegated by growth stock market the authority of screening listing candidates together with supervision, advice on disclosure and corporate governance – Engaging a sponsor is a pre-requirement for listing and maintenance requirements
Graduation (or Migration)	<ul style="list-style-type: none"> – ISMEs listed on growth stock market have incentive to advance to main exchange – Need to have listing requirements consistent with those of main stock exchange

III. Policy Directions

Policy Directions for Virtuous VC Investment Cycle

❖ VC Investment

- Continued VC funds formation and promotion of early stage investments
- Strengthened global investment capability, network and professionalism

❖ Exit Market

- Revitalization of KOSDAQ through improved investor protection
- Promotion of M&As and secondaries through K-VIC sponsored funds and subsidies
- Alternative stock markets

❖ Angel Capital

- Promotion of angel investments by successful ex-entrepreneurs and managers (“Registered Angels”)
- Enhanced support through tax incentives, angel clubs and matching funds

❖ VC infrastructure

- Expanding K-VIC for enhanced market research and support for first-time funds
- Assisting VCs in building global network through matching foreign LPs and creating joint VC funds with foreign investors

Enhancing VC Environment

❖ **Strengthening of early stage investment**

- Creation of VC-led incubating funds of \$20 mil in 2011
- Expansion of early stage funds and provision of incentives for GPs
 - Preferred capital commitment of Korea FoFs to GPs planning early stage funds for start-ups or ordinary funds investing in more start-ups
 - Lower the hurdle rate from 5% to 0%

❖ **Gradually increase the size of K-VIC funds**

- Currently AUM of \$1.3 bil

❖ **LP Diversification**

- Increase commitments by institutional investors and pensions by reducing VC commitment limits for banks and insurance companies
- Inviting institutional investors such as Korea Post and universities to VC funds

❖ **Strengthening of VC professionalism**

- Building VC investment expertise in growth industries such as renewable energy
- Strengthening VC evaluations on transparency and ethics

Promotion of Entrepreneurship (Demand Side)

❖ Encouraging entrepreneurship

- Establish the KEF (Korea Entrepreneurship Foundation) with public private partnership
- Promote young tech-driven entrepreneurs by designating a “Start-Ups Leading University”

❖ Further assistance to would-be businesspersons

- Financial assistance and commercialization of ideas and technology
 - Youth start-up school, would-be tech start-up promotion

❖ Assisting people in recovering from failure

- Improving system on re-startup finance of \$20 mil
- Eliminating additional interest rate
- Expanding beneficiaries
 - Expanded to include failed entrepreneurs with low credit (in addition to those with delinquent credit)
 - Benefits are available for 5 years after failure rather than 3 years

Virtuous Cycle of ISME Financing

- ❖ **Virtuous financing cycle requires efficient functioning of all the components in the ecosystem**

Virtuous Cycle of Innovation-driven Growth

