



The Role of Universities fostering Global Entrepreneurs

- **A case study of National University of Singapore(NUS)**
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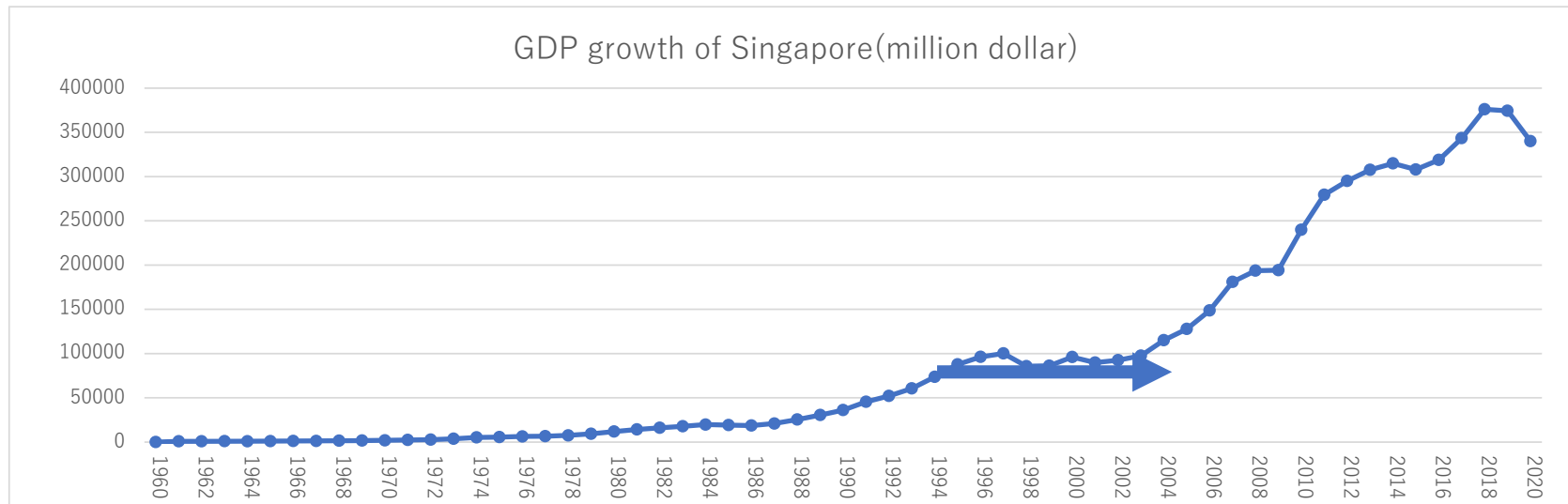
National University of Singapore(NUS)



- Singapore's flagship university
- Founded in 1905
- 11 departments
- Accepting foreign students from over 100 countries
- Academic excellence
 - As for world university ranking in 2022, NUS ranked in 21 (3rd in Asia)

Economic crises in Singapore

- 1997: Asia currency crisis occurred
- 2000: IT bubble burst
- 2001: 9.11 Terrorist attack
- Around 2000: GDP growth was stagnated



Background

- In 2001, Shih Choon Fong took office as the president of NUS
 - Shih started reforming of NUS.
 - Shih tried to transform NUS into the research oriented and entrepreneurial university.
- Professor Wong Poh Kam conducted the survey of NUS students and asked about their attitude toward entrepreneurship.
 - It suggested that ①sex, ②occupation of family members, and ③education, had strong effect on the students' attitude to entrepreneurship.
 - Based on the research result, he started entrepreneurial education.
 - The class, "Technology Entrepreneurship" was started offering in 1999 for all NUS students.
- In 2001, **NUS Enterprises** was founded.
 - NUS enterprises provided coworking spaces for entrepreneurs and ran startups incubator.

NUS Overseas College (NOC)

- NUS enterprise started **NUS Overseas College (NOC)** in partnering with Singtel Innove8 and MDA.
 - NUS signed inter-university exchange agreement with the universities, which located in the place where entrepreneurial activities were active.
 - Under the program, NUS students were sent to the places, experiencing internship program provided by the startups as well as taking university classes from three months to a year.
 - Student participants of NOC go abroad for work-and-study trips that last between three months to a year.
- NUS started sending students to Stanford University in 2002.
 - NOC now has 11 partner universities and features 12 programs held in 15 cities today.
 - The number of the universities that sign the agreements have increased year by year.
 - Beijing, Israel, Lausanne, Munich, New York, Shanghai, Stockholm, Toronto, Nagoya, Ho-Chi-Minh city, SE-Asia

NOC alumni back to Singapore

- The students who attended NOC were back to Singapore after NOC experience.
 - About 100-150 students finished the program each year.
 - 30% of them started their own businesses.
 - Average NUS students who started businesses is about 2%.
 - As the number of students who joined NOC program, the culture of NOC started changing.
 - 300 companies have been created by them.

Most of NOC them hoped to stay around the campus.
- However, there were not enough places where they could stay on campus in the 2000s.

Renovation of Ayer Rajah Industry Park

- In Ayer Rajah Industry Park, there used to be old factories manufacturing electronics and precise parts.
- In 2010, the industrial park supposed to be demolished and their redevelopment plan was under way.
- Jurong Town Corporation (JTC), the owner of the factories, decided to renovate the building and launched it as incubators, convinced by NUS enterprises, MDA, and Singtel Innov8.

Block71 started in 2011

- **In 2011, a building in the Ayer Rajah Industry Park was renovated into the Startup hub. (Block71 took off)**
 - The building was called “Block71”
 - Entrepreneurs including NOC alumni start entering in the Block71.
- In 2012, various stakeholders moved into the Block71.
 - Investors, incubators, accelerators, …etc.
 - Block71 housed 250 startups and 30 incubator in 2017.



Block71



Block73

Expansion of Block 71

- The number of prospective tenants had increased, other factories in the Ayer Rajah Industry Park changed into incubators.
 - In 2015, Block 73,79
 - In 2016, Block 75,77,81
 - The area was renamed “**JTC Launch Pad @one-north**”.
- In 2018, 56,000 square meter wide was occupied. 800 startups, 50 support organizations reside.
- There are still waiting list

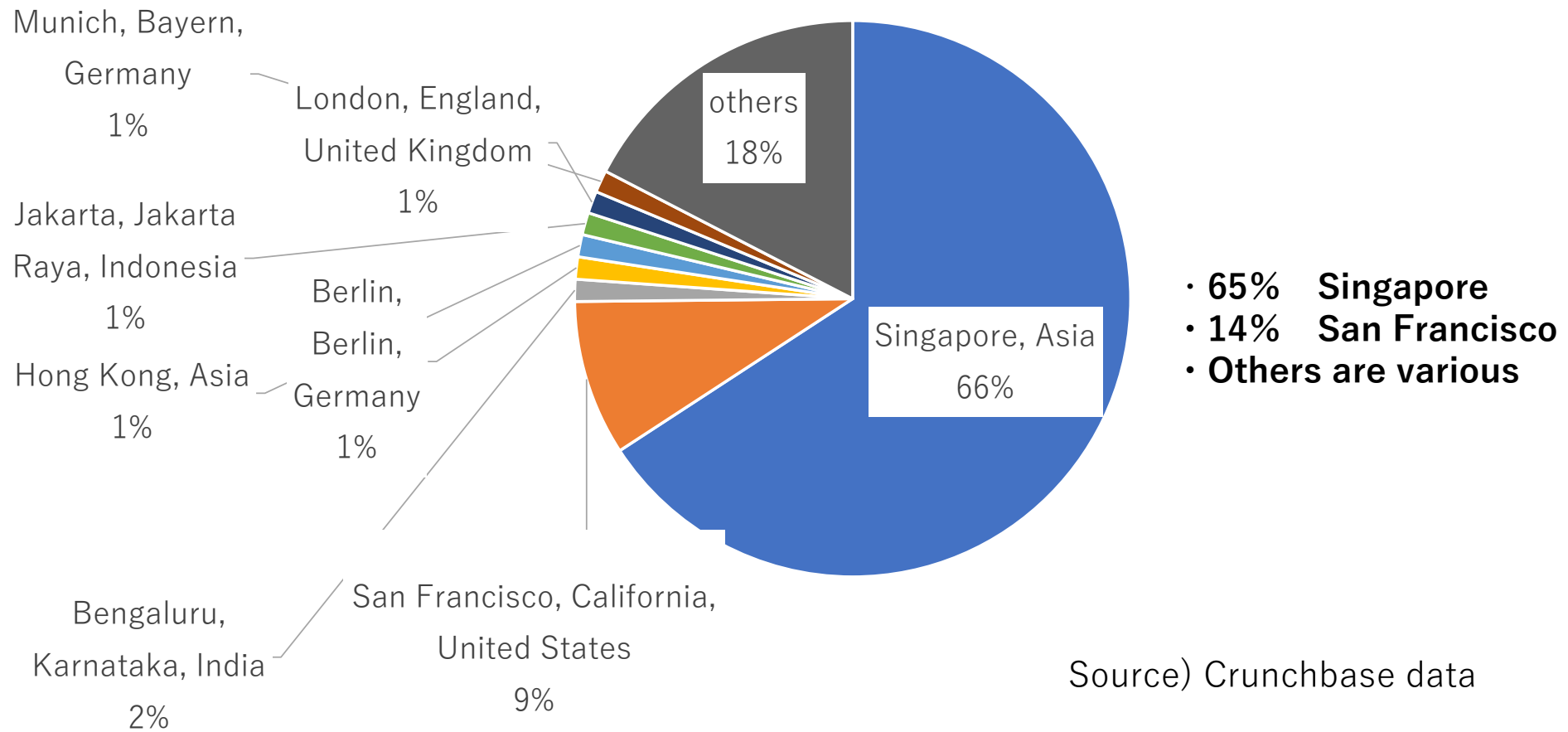
Chemical reaction

- Economist reported Block 71 as follows;
 - **“The world mostly tightly packed entrepreneur ecosystem”.**
- NOC alumni are major residents
 - 3400 students finished the program in 2020.
- Some NOC alumni have held key positions in startup enablers.
 - It was useful for founders to start and develop their businesses
- Formation of networks: **NOC mafia.**
 - NOC alumni formed networks, called NOC mafia.
 - Experiences gained from NOC program played a critical role to form them.
 - **The NOC mafia combine people of similar backgrounds and motivations together.**
 - **NOC mafia was the backbone of Singapore’s ecosystem.**

Academic background of entrepreneurs in Block71

University	Number
NUS (Singapore)	254
Nanyang technology University (Singapore)	138
INSEAD(France)	75
Stanford University (US)	62
Harvard University (US)	22
University of Cambridge (UK)	21
MIT(US)	17
University of Sydney (Australia)	11

Countries in which NUS alumni start businesses



Globalization of Block 71

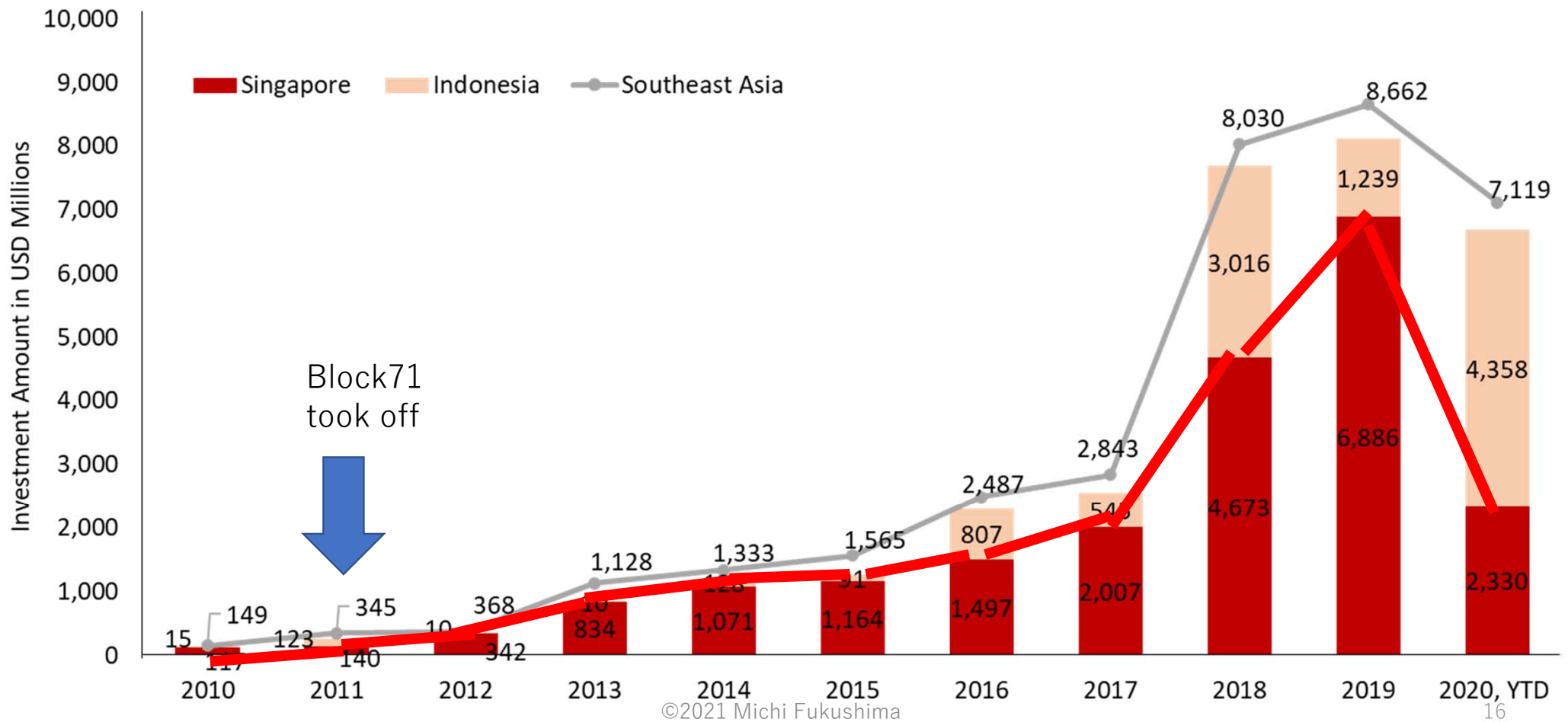
- As Block71 has globalized, five new branches were set up outside of Singapore.
 - 2015, Block71 opened in San Francisco branch.
 - Following Block 71 in San Francisco, Block71 Suzhou(China), Jakarta, Bandung, Yogyakarta(Indonesia) were opened.
- Entrepreneurs who are interested in starting their businesses in Singapore can visit the Block17 branch.
 - Block71 recruits global entrepreneurs through the branches.



Impact on Singapore startup communities

- External effects of Block 71 were seen in Singapore.
- **The number of coworking spaces and incubators have increased.**
 - In 2018, the number was over 100 in Singapore.
 - Including serviced offices and fitted office space solutions, there are about 180 flexible office spaces.
 - The numbers indicates that there were many entrepreneurs in Singapore.
- The number of entrepreneurs attracted to Singapore have increased.

Investment to Singapore



*Source: Pitchbook

What are needed in order to flourish ecosystem?

- Human resource development should precede building Science Park.
 - Science Parks without entrepreneurs can't be productive.
- It is important to convene entrepreneurs and organizations to facilitate learning between entrepreneurs across industries and sectors.
- Diversity is essential.
 - Diverse participations in the ecosystem make ecosystem rich2
- Being patient is a need.
 - Keep working and continuing the program matter.

Thank you for your attention!