

# Interview: Lai-Shou Su, Deputy Executive Secretary, National Development Fund, Executive Yuan, Taiwan

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*The Deputy Executive Secretary of Taiwan's National Development Fund discusses the recent shift in focus from semiconductors to biotech investments; why this has been a huge success thus far and why international collaboration will further benefit the market in Taiwan.*

**Over the years, the National Development Fund (NDF) has increasingly shifted its focus to biotech investments. What was the motivation for this shift and what are the major advantages of so doing?**

I should first mention that the National Development Fund (NDF) follows the industrial policies set by the Council for Economic Planning & Development (CEPD) and Ministry of Economic Affairs (MOEA). The MOEA decide which industries should be promoted and developed to the benefit of Taiwan. The NDF, in turn, provides financial support that, ultimately, aims to encourage people within the private sector to themselves invest in a given industry.

With that said, I believe that that the MOEA chose biotech for Taiwan for the following reasons. For the past thirty years, this country has been very successful in semiconductors. But increasingly, the profit margins in this field are shrinking. Meanwhile, in the year 2000, the human genome was coded—and like many other countries, Taiwan became very excited about the future of biotech. The sector was chosen as an important driver in the diversification of our economy away from semiconductors.

The NDF made its first biotech investment in 1996. Since then, we have invested in approximately 13 enterprises in this field—although I should mention a caveat: in Taiwan, what we refer to as ‘biotech,’ does not directly imply biopharmaceuticals. The term refers to what is typically called ‘life sciences’ in the rest of the world, including the study and development of small molecule drugs, medical devices, and etc.

**It has taken over a decade for the NDF to see the first significant returns on these investments. Were you daunted by the risk involved in that kind of incubation period?**

The mission of this fund is precisely to take on the high-risk investments that the private sector may be weary of. The reason the government created this fund is to help build new industries from the ground up, when there is not yet much guarantee of success. In this way, the private sector can build confidence. We must be the ones to set the fire—then others will join us by throwing in more kindling!

For a long time, people continuously criticized the state’s decision to put money into biotech. However, two or three years ago, stock market investors began to place a very high valuation on biotech companies. Suddenly, stock prices exploded! It seemed that every day that I woke up, the NDF had made another billion TWD (approx. 34 million USD). Our total profit from biotech investment approaches 300 million USD.

So while our choices may have been risky, they have also been prudent. In addition to the biotech figure I shared with you, I would like to mention that this fund has been quite broadly successful. In total, over the last 40 years, we have made over 400 billion TWD from our investments, delivering half of the profit as a cash dividend back to the state. The interesting part is that we started out with only 30 billion TWD to invest; we offer our stakeholders better returns than a lot of Silicon Valley capital funds!

**What are the key elements that have led to such astonishing success?**

Firstly, we have been fortunate. Over the last few decades, the Taiwanese economy has been very strong, and we’ve ridden that wave. It was often the situation that the more money we invested, the more money we made.

Another important point is that, as a government agency, if we invest money into a company, our name will add value to the business. When potential partners and investors evaluate that company, seeing government endorsement will instill them with a great deal of confidence. We are admittedly speaking of an intangible value—but I believe it is quite powerful in increasing a

particular company's probability of success.

Finally, we hold our stock for a very, very long time. If a company is developing the right way, the longer we can hold onto it, the more profit we are able to make. Moreover, divesting would send a negative signal both to the company's management team and to other stakeholders. Actually, because we have thus far remained invested in the majority of our biotech portfolio, the biotech profit I mentioned is still just a number on our financial report!

### **Can biotech succeed semiconductors as the economic engine of this country?**

So far, so good!

Some people are worried that we are witnessing the growth of a bubble. But the government has made a lot of careful effort in this area: it has invested a lot of capital, modified regulations to attract more talent, and emphasized collaboration with our neighbors.

The story of this industry is so far quite similar to the semiconductor story: when the state-invested Taiwan Semiconductor Manufacturing Company (TSMC) found success, the public became excited about the possibilities of semiconductors. TSMC inspired a lot of capital investment. That fire has been lit, now, in biotech as well. Furthermore, as the area becomes healthier and healthier, many more will join to enjoy the spoils. I'm not sure that excitement will last forever, but for now, we are in a great moment.

### **What are some of the major advantages of the market in Taiwan?**

Taiwan is a small island, with a small market and a dearth of resources. But one of the largest markets in the world is just next door to us—so we have a lot of potential.

To the international community, I would like to mention that we not only invest in individual biotech enterprises and individual projects, but also biotech venture capital funds, both in Taiwan and overseas. Most of the technologies in this industry still originate in the West, so we try to play an active role in Western markets—and when we invest abroad, we ensure that the organizations that receive financing from us put some of that money back into Taiwan: either through technology transfer, joint venture, licensing, or some other mechanism.

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