

Some Facts on the Recent Performance of Taiwan and Reflection

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In the following, I try to connect my cross-strait first-handed living experience to the macroeconomic situation to have a big picture of the social phenomenon and its related economic situation.

1 Paragraph I: Labor

“Why would you decide to study at Tsinghua University, rather than staying in Taiwan?” Almost everyone I have met, no matter in mainland China or Taiwan, asked me this question. I always smile and explain to them that I have determined to stay in mainland for better career opportunities and won’t return to home in the foreseeable future. In fact, I am not the only or even the minority of Taiwanese teenagers that decided to explore the opportunities abroad. According to a poll carried out by one of the largest local Taiwanese human resource agency in 2015, 80 % of labor respondents said that they are willing to work or have already worked abroad¹; a famous international report even warned that Taiwan would experience the largest talent deficit among 46 developing and developed economies in 2021².

1.1 ”22k Curse”

In the same poll mentioned above, more than 60 % out of the 80 % of respondents admitted that the “low domestic wage” is the biggest driver for them to leave the domestic labor market, while more than 90 % of respondents with international working experience seized a better-paid job abroad. The mainstream media in Taiwan has reported the prevalent low

¹1111 Job Bank: “上班族前進海外工作意願調查”, https://www.1111.com.tw/news/survey/ns_con.asp?ano=85404

²Oxford Economics: “Global Talent 2021”, 2012, pp10

starting salary for fresh graduates as the “22k curse”, a word that can trace its root to 2008. After the global financial crisis in 2008, the ministry of education in Taiwan has launched an assistant program that guaranteed the applicant with NTD 22,000 monthly wage. The program has been abolished after 2013, but the employers took this as a benchmark of the starting salary for fresh graduates. Afterward, people usually refer the “22k” as the pronoun of the low income. Several friends of mine and even my sister are complaining about the low income they can get, but how is the real status quo³?

According to the nominal data released from the Taiwanese government, from 2017 to 2018, the labor aged between 20-24 (normally fresh graduates) earn an NTD 23,569 average monthly rate, which is still around the 22k. On the other hand, the overall average income of labors is only NTD 35,986, which is still less than 40k⁴. A recent news also confirmed the situation by claiming that the wage in Taiwan has dropped back to the level of 16 years ago and that you can earn an RMB 9,900 (NTD 46,000) average monthly wage in Beijing, exceeding that in Taipei (NTD 43,500)⁵.

1.2 Non-synchronized GDP-Wage Puzzle

A report by Institute of Economics, Academia Sinica⁶ has researched on the confusing fact of the mismatch between the real GDP and the real wage in Taiwan. Figure [??] shows that after 2002, the real wage in Taiwan has been stag and the gap between the real GDP and the real wage has kept expanding. The most intuitive explanation may be that the fact is caused by the increasing inequality, meaning that the employee did not earn a wage proportional to the growth of company revenue. However, the empirical data did not support the hypothesis with a relatively stable wage to GDP ratio after 2002 showed in Figure [??]. The report then proposed two possible explanations:

1. The income may be under-evaluated by only looking at the monetary wage

In Taiwan, employers pay labor insurance, national health insurance and other miscellaneous benefit packages for employees, and the reduced wage to income ratio has reflected in the empirical data showed in Figure [??].

2. The misinterpretation of the economic index and the statistical methodology

The real GDP is used to measure the “productivity”, in which we use the GDP deflator (price of production) as the denominator eliminate the effect of inflation,

³趙維孝: “22K 低薪化”, Business Weekly, <https://www.businessweekly.com.tw/article.aspx?id=30422&type=Indep&p=0>

⁴Directorate General of Budget, Accounting and Statistics, Executive Yuan, R.O.C., <http://www.dgbas.gov.tw/>

⁵戴瑞芬: “薪資倒退 16 年台北平均工資輸給北京”, 2017/12/03, Economic Daily News, <https://udn.com/news/story/7269/2852920>

⁶林依伶, 楊子霆: “經濟成長、薪資停滯? 初探台灣實質薪資與勞動生產力成長之成因”, 2018/3/22, Institute of Economics, Academia Sinica

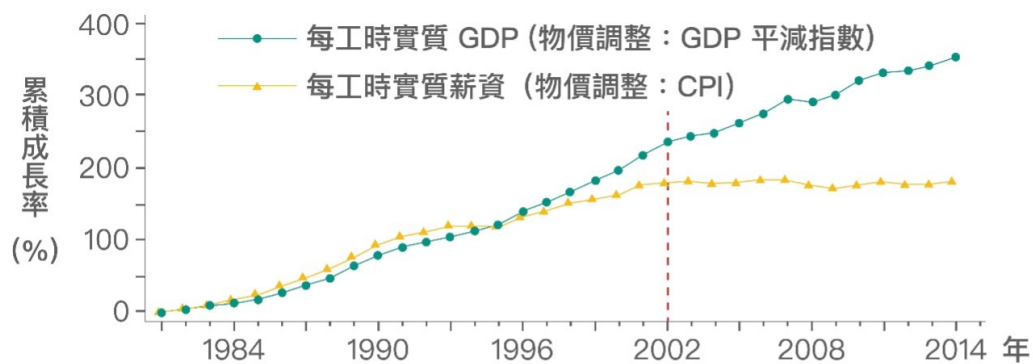


Figure 1: Real GDP per working hour growth vs real wage per working hour growth
Source: Directorate General of Budget, Accounting and Statistics, Executive Yuan, R.O.C.

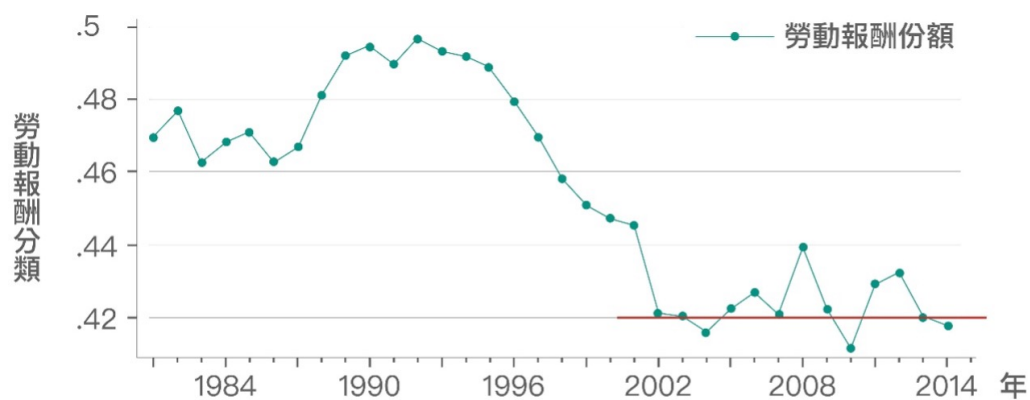


Figure 2: Labor shares to GDP trend
Source: Directorate General of Budget, Accounting and Statistics, Executive Yuan, R.O.C.

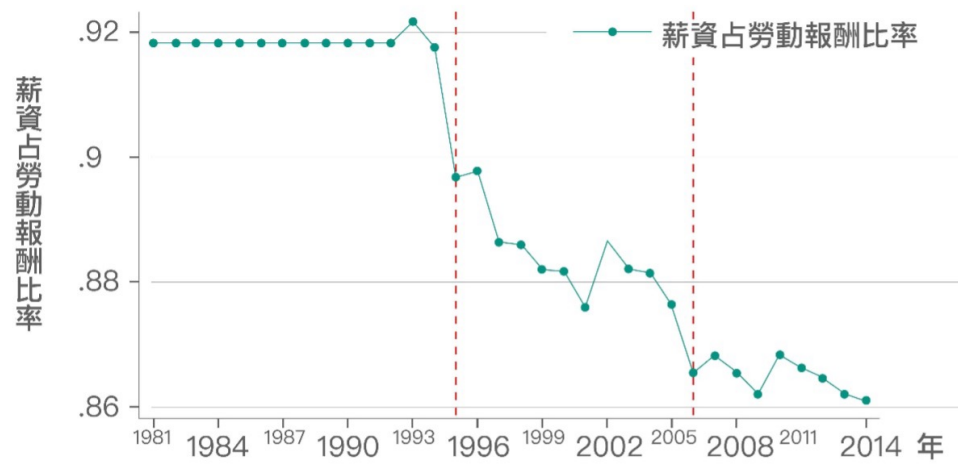


Figure 3: Wage to income ratio trend

Source: Directorate General of Budget, Accounting and Statistics, Executive Yuan, R.O.C.

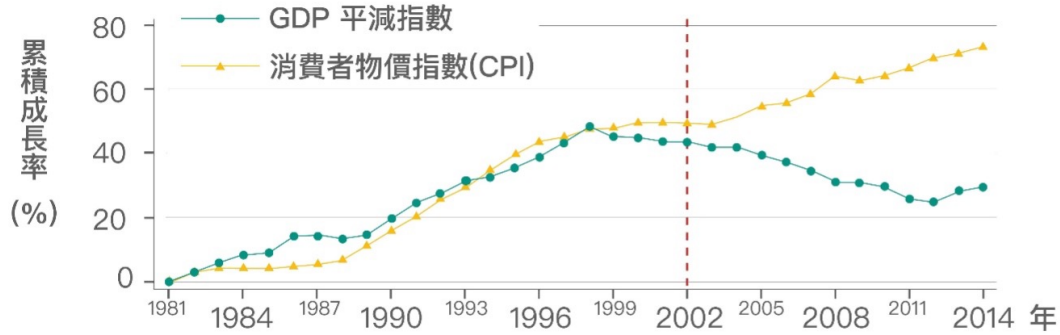


Figure 4: GDP deflator and CPI trend

Source: Directorate General of Budget, Accounting and Statistics, Executive Yuan, R.O.C.

while the real wage is used to measure the “purchasing power” , in which we use the Consumer Product Index as the denominator.

From Figure [??], we can see that the GDP deflator keeps declining while the CPI keeps increasing in the past decade. This phenomenon can be further interpreted as the result of declining export prices due to the steady decline in the Information and communication technologies products and the increasing import prices due to the increase in the oil price. Based on this, the report concluded that, in the past 15 years, the seemingly steady GDP growth actually results from the price deterioration of the main production, and we can find a stag “real” GDP by deflating the nominal GDP using the CPI, as showed in Figure [??].

The report pointed out that Taiwan’ s economic growth actually slowed down in the past decade. Taking the conclusion as true, then the question now becomes “why Taiwan’ s economy slows down such early?” A lot of has devoted to address the issue from different aspects, and I would like to contribute part of the issue to the unfriendly investment environments. The low wage can become an advantage attractive to capital owners, but what is going on indeed?

2 Paragraph II: Capital

Usually, the popularity of a college major can reflect the value and the development stage of a society. In Taiwan, junior high school students are separated into three groups focusing on biology, natural science, and social science. Among all majors, the medicine is the one

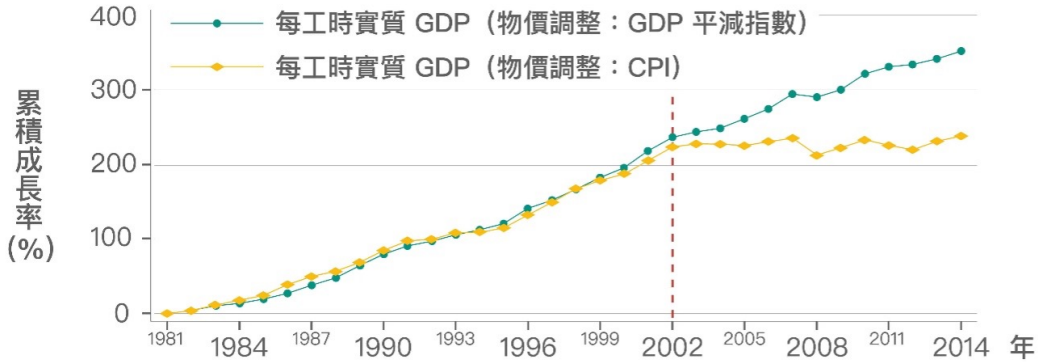


Figure 5: Real GDP growth rate deflated with GDP deflator and CPI

Source: Directorate General of Budget, Accounting and Statistics, Executive Yuan, R.O.C.

requiring the highest college entrance score, since doctors earn a stable above-average wage and enjoy a high social-economic status in Taiwan. There is no official statistical data, but it is said that the starting salary plus the year-end bonus of a fresh doctor can reach up to NTD 1 to 1.25 million per year⁷ (monthly wage almost quadruple to quintuple to the 22k). In Taiwan's General Scholastic Ability Test 2014, I scored one of the highest rankings that can earn me a ticket to study in the best medical school in Taiwan. However, due to my personal interest and career planning, I decided to study economics and finance here at Tsinghua. I did not realize that I have enrolled in the most popular major until I discuss the relative issue with my classmates. Additionally, my classmates in SEM talked about the unbelievably high pay that one can earn in investment banks, consultancy, private equities and other financial institutions, which I have never heard in Taiwan for such kind of discussion.

2.1 FDI Desert

The prosperity (and the wage) of the financial industry can be highly related to the amount of Foreign Direct Investment that increases the domestic capital to increase the economic productivity, especially for small economies such as Taiwan. Despite the long-term low labor costs, Taiwan has failed in the FDI attraction competition. According to the "World Investment Report 2012", Taiwan ranks 2nd from the bottom among 211 countries and

⁷網搜小組, "好賺? 台灣醫生薪水曝光 入行穩破百... 拚 10 年「年薪 500 萬」, 2017/6/28, ETtoday, <https://www.ettoday.net/news/20170628/955174.htm#ixzz5BsCC3Npt>

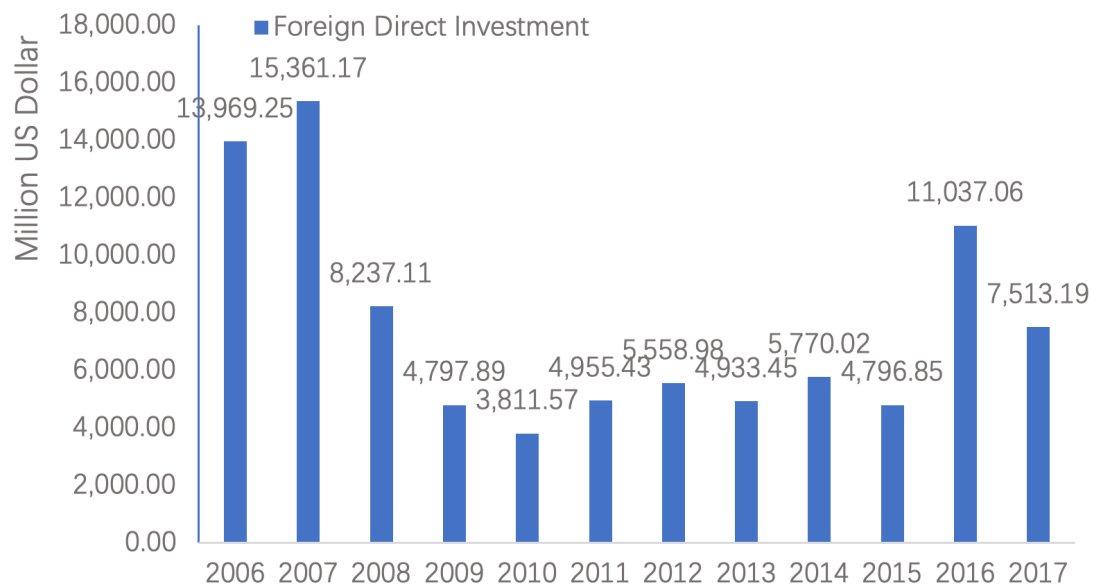


Figure 6: FDI trend

Source: Investment Commission, Ministry of Economic Affairs

regions in the world with an -1.96 billion US dollar⁸ FDI for that year, shocking Taiwan's society. Data in Figure[??] released by the Taiwanese government has also shown that the FDI amount lingers around a relatively low level comparing to that before the financial crisis⁹.

Ironically, the investment of private equities is even worse, when Taiwan needs them most in its industrial transition period to help firms to transform. In 2015, the curtain manufacturer Nien Made's re-listing in Taiwan Stock Exchange has become the biggest news in Taiwan's investment industry, since this is the only successful PE investment case in Taiwan after 1998¹⁰. According to Thomson Reuters, investment by international private equities peaked at 2006 at 5 billion dollars but dropped to less than 1 billion after 2008 and even became zero in 2015. Now, referring back to the open story of this paragraph. After the research, I considered these figures a qualified explanation for the Taiwanese sluggish attitude toward the investment institutions, while my classmates in SEM are eager to step

⁸United Nations Conference on Trade and Development, "World Investment Report 2012", pp170-pp172

⁹Investment Commission, Ministry of Economic Affairs, https://www.moeaic.gov.tw/business_category.view?seq=0&lang=ch

¹⁰杜易寰, "外國私募基金什麼都不來台灣?", Common Wealth 594th

in this industry. A natural question then pops up, which is that why foreign investors step back, despite the abundant low-cost labors? One of the reason may be that the economy size of Taiwan is so small that may not be interesting to the global investors. However, the economies with comparable or smaller size such as other Asian tigers, including Hong Kong, South Korea, and Singapore have kept catching investors' eyeballs. In the following, I would rather focus on the institution reasons that bothers Taiwan within the period.

2.2 Regulation Jungle and Public Protest

According to IMD World Competitiveness Center, top three key attractive factors of Taiwan are the skilled force, high education level, and cost competitiveness (which corresponds to figures in paragraph I), while the bottom three factors are competency of government, effective legal environment, and competitive tax regime¹¹.

As a student who lives in Taiwan for 18 years, I am quite surprised by these facts. We are educated to be proud of the democracy we have achieved and the political rights we have earned. However, it seems like that the progress in the social right did not transfer into, or even harms the sustainable and successful industrial shift. Many social movements disguise the populism in the name of the democracy, go beyond the representative democracy or the existing political order, and directly respond to people's demand, thus increasing the instability and unpredictability of government policies. The industry investment usually lasts for a long horizon, requiring a stable political environment that supports the whole investment cycle. Furthermore, the credibility of an investment environment can collapse overnight by a discretionary power that goes beyond the law, forming a vicious cycle that chased investors away. I would like to elaborate the topic from the two perspectives below.

1. Mainland Chinese Investment Examination

I came to Tsinghua in 2014, and in the same year, Taiwan also experienced the biggest student activism in recent years to protest against the violation of legislative procedures. The movement later evolves into the protest against the trade treaties with mainland China, resulting in the suspension of the Economic Cooperation Framework Agreement (ECFA).

Due to the historical reason, Taiwan has separated regulations of investment from foreign countries and mainland China. However, the discretionary power of the Investment Commission (the authority responsible for investment approval) may sometimes go out of the control. In addition to the regulated industry, investment from mainland China to the unregulated industry can still be disapproved under the pressure of public opinion, and that directly lowers the incentive of foreign private equities

¹¹IMD World Competitiveness Center, "Countries profiles 2017", <https://www.imd.org/wcc/world-competitiveness-center-rankings/countries-profiles/>

investors since that they lost the chance to profit by reselling the share to mainland Chinese investors.¹² Taiwan government even becomes the first one who fined the Alibaba group in the world when the rest competes for its investment, with the reason that they tried to disguise themselves as foreign investors to avoid the regulations.¹³ After that, the government even tries to amend the act to change from the non-substantive to substantive examination, based on the actual controller of investor companies.¹⁴ The tightened examination of mainland Chinese investment also harms the foreign investors in the way that they have to spend lots of effort to prove their source of capital in a manner that does not follow the international commercial practice, and that chased away tycoons such as Carlyle Group and Blackstone Group.¹⁵

2. Environmental Impact Assessment (EIA)

In last semester, I had the chance to visit the LCY Chemical, a medium-sized listed chemical company head-quarters in Kaohsiung. In a private speech, the CEO of the company, Mr. Bowei Lee, has pointed out that the time-consuming EIA in Taiwan has kept a lot of valuable investments away. In Taiwan, the environmental movement has started since the 1980s due to several significant public pollutions, and within the period, a lot of firms, including Du Pont¹⁶ and Beyer¹⁷, were faced with protection and resulted in the withdrawal.

In 1994, the Environmental Impact Assessment Act has been passed to evaluate the potential investments¹⁸. However, after 22 years, the act becomes one of the biggest nightmares to investors, and almost killed one of the most important industries for Taiwan in the next decade, the offshore wind power industry.

After the long-term sluggish investment atmosphere in the past decade, investors of green energy flooded into Taiwan recently to utilize the strong wind blowing through the Taiwan Strait. The seemingly cleanest and most valuable investment in recent years still faces obstacles from EIA, and almost make the pioneer company go bankrupt.¹⁹ EIA has been blamed for several reasons, and I perceive the “veto

¹² 杜易寰, “外國私募基金什麼不來台灣?”, Common Wealth 594th

¹³ 勵心如, “台灣淘寶隱瞞陸資經部開鏟”, Want Daily, 2015/05/15, <http://www.chinatimes.com/newspapers/20150515000972-260303>

¹⁴ 閻馥馨, “經部嚴管陸資推「淘寶條款」”, Economic Daily News, 2016/07/14 <https://www.thenewslens.com/article/43416>

¹⁵ Taiwan Mergers & Acquisition and Private Equity Council, <http://www.mapect.com/>

¹⁶ 廖永來: “反杜邦三十年這條路”, Liberty Times Net, 2016/09/25, <http://talk.ltn.com.tw/article/paper/1035633>

¹⁷ 周俊宇: “反拜耳事件”, Encyclopedia of Taiwan, 2009/12/03, <http://nrch.culture.tw/twpedia.aspx?id=5252>

¹⁸ Laws & Regulations Database of The Republic of China, <http://law.moj.gov.tw/LawClass/LawContent.aspx?pcode=00090001>

¹⁹ “台灣海峽的「金寶藏」”, Global Views Monthly, 2018/02

power”²⁰, the final decision power to the approval of the whole investment, owned by the environmental protection authorities as the most important and notorious issue. Originally, environmental impact should be considered as one of the evaluation factors that have a trade-off between the economic development.

However, once the veto power has been introduced to the environmental impact evaluation committee, the environment actually goes beyond and is prioritized before everything. The process can even create a large room for rent-seeking and corruption since it imposes a quota system in disguised form.

2.3 “Multiple Marginalization”

It seems like that the high costs incurred by the Taiwanese society can be explained using the classical theory of industrial organization of three structures of corruption by Andrei Shleifer and Robert Vishny²¹. The permissions in the whole investment processes can be viewed as “complementary government goods” that investors will not have interest in consuming them separately. In Taiwan, “sellers” of these complementary government goods, including the Investment Commission, EIA, other relevant authorities, and even the citizens (who may protest against you), act independently to maximize their own benefit. If there is corruption, this structure of the industrial organization is predicted to charge the highest “total price” (including bribes) of the bundles facing the investors, incurring the largest efficiency loss out of three corruption structures. Since these sellers act as independent monopolists and ask for bribes of monopoly prices on the complementary goods they own, investors have to face the stacked-up margin burdens for buying a whole bundle, and the terminology “double/multiple marginalization” is coined to describe the situation.

On the other hand, people in Taiwan like to compare the legal environment to that in mainland China. But, if we look at investment conditions of mainland China, although the Effective legal environment ranks as low as that in Taiwan, the Policy stability and predictability ranks among the most attractive factors.²² Again applying the theory, if there is corruption, the structure in mainland China can be perceived as the “monopolistic structure”, due to its relative concentrated power. In this scenario, the sellers of different permissions can be perceived as a whole, and will only charge a bribe of monopoly price. Although the price is still higher than that in the perfect competition, the outcomes are more efficient than that in the case of Taiwan with lower price and more quantity.

²⁰Laws & Regulations Database of The Republic of China, <http://law.moj.gov.tw/LawClass/LawContent.aspx?pcode=00090001>

²¹Andrei Shleifer and Robert Vishny: “Corruption”, The Quarterly Journal of Economics, August 1993

²²IMD World Competitiveness Center, “Countries profiles 2017”, <https://www.imd.org/wcc/world-competitiveness-center-rankings/countries-profiles/>

3 Postscript

Recently, several new terms have become popular to describe the Taiwanese teenagers and the atmosphere of the society. “Generation Misanthropy (厭世代)” has been coined to refer to the generation born in the 1990s (including me), who face low wages and a blurred future. Working desperately ceased to be the priority, and the inability to change the social and industrial structure makes the generation turn to embrace “a little happiness (小確幸)” .

On the other hand, since the wage remains low and the capital inflow remains slack, more and more teenagers who are unwilling to be trapped by the structure has determined to vote by feet, and mainland China becomes a popular destination in these years. At the end of the February of this year, Taiwan Affairs Office of the State Council PRC has announced a new round of beneficiary policies to attract Taiwanese²³, stimulating a new wave of westward talent flow; The outcomes of 2018 Taiwan college entrance exams has just released, and it comes to the 9th year that mainland Chinese universities admit Taiwanese students using the scores of the exam.²⁴ This year, not only the hurdle of scores are lowered from the supply side, the number of top students with high rankings also skyrocketed. The admission line to the top 4 universities has increased steadily, and the score even reaches or exceeds that required by the top medicine school (traditional first choice for top Taiwanese students)²⁵ in Taiwan.

As one of the luckiest students admitted by the best University in mainland China, lots of opportunities are open to me, but I also hope that Taiwan and the people can find the way to jump out of the low income and capital shortage trap. Fortunately, the situation may be changed in the near future by several good news, including that lawmakers in Taiwan has started to revise laws regarding investment²⁶ and EIA²⁷ mentioned above, and that international information technology giants including Google, Microsoft, and IBM has expanded the investment in Taiwan for Artificial Intelligence (AI) this year.²⁸ Hope this time, the dream of transformation can come true and Taiwan can yet again shine on the international stage.

²³中共中央台湾工作办公室、国务院台湾事务办公室：“关于印发《关于促进两岸经济文化交流合作的若干措施》的通知”，http://www.gwytb.gov.cn/wyly/201802/t20180228_11928139.htm

²⁴内地（祖国大陆）高校面向港澳台招生信息网, <http://www.gatzs.com.cn/>

²⁵Informally collected data from teachers and alumni

²⁶“經濟部公告：預告「外國人投資條例」修正草案”，Ministry of Economic Affairs, 2017/10/19, <https://join.gov.tw/policies/detail/fc914327-1942-49fc-8cd6-b7a504e77483>

²⁷“環保署建構「明確、有效率」之環評制度，以 6 個月 1 年間完成環評審查目標”，Environmental Protection Administration, Executive Yuan, R.O.C. (Taiwan), 2017/08/03, https://enews.epa.gov.tw/ENEWS/m_fact_Newsdetail.asp?InputTime=1060803192151&MsgText2=

²⁸Ralph Jennings, “Why Google, IBM & Microsoft Are All Expanding In Taiwan This Year”, Forbes, <https://www.forbes.com/sites/ralphjennings/2018/04/04/why-google-ibm-and-microsoft-all-decided-to-expand-in-taiwan-this-year/#2123314c5c72>