

# Massified Master's Education in Taiwan: A Credential Game?

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# Briefing

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Master's education in Taiwan has been significantly transformed since the 1990s in an effort to cope with the **knowledge-based economy** and the growing demand for **greater innovation**.

In such a context, this study examined how the **expansion** process of **master's education in Taiwan** has impacted the **labour market** and **employment opportunities** over the past two decades through the lenses of **credentialism** and **signalling theory**.

# Introduction

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For the past decade, master's education has been transforming globally in various ways, including attracting an **increasing number of students**, providing more **diversified programs**, and offering **different modes of delivery** (Jung and Lee, 2019).

A massified master's education is an **essential component** to sustain Taiwan's previous vision at the national level and has led this island state to become one of the most **highly educated societies**, with **48% postgraduate degree holders** among its citizens **25 to 64 years of age**.

Blagg (2018) deemed the master's degree as **"the new bachelor's degree"** for young workers, suggesting that a master's degree will become a basic threshold for the labour market.

# Master's education and the labour market

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Governments are keen to **upgrade their industries** and enterprises into **creative and high-tech** orientations.

Talented and professional workers are the **cornerstone**, and master's education can be an effective **channel** to provide **these high-end workforces** in a **knowledge-based** economy (Neubauer and Buasuwan, 2016)

In South Korea, Jung and Lee (2019) indicated that university graduates with higher job prospects and urgent employment needs have lower motivation to pursue master's education.

In China, Liu and Morgan (2016) found that the prospect of greater employment is an important factor perceived by graduate students when choosing master's and doctoral education programs.

# Benefits having a master degree

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Zwanikken et al. (2014) conducted: master's education in public health can enhance graduates' **career development, competencies, work performance, and leadership.**

Støren and Wiers-Jenssen (2016) studied the association between the increase of master's students in higher education and over-education in Norway from 1995 to 2013 and found no linear correlation between the two.

Masayuki (2013) found that the wages of postgraduate degree holders in Japan were on average **30% higher than those of undergraduate degree holders**, according to the data from 2007.

Lindley and Machin (2013) : They also pointed out that postgraduate qualifications can help individuals **distinguish themselves** in the labour market. Acquiring a postgraduate degree can help graduates be more **competitive in the labour market.**

# Further benefits

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Yang, Lin, and Lin (2011) collected time-series panel data between 1990 and 2004, studying the **rates of return of a master's education in Taiwan**. They found that the wage increase for master's degree holders was **not linear** over time.

# Theoretical framework: Credentialism

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Credentials have been widely regarded as a **positional good** (Shavit and Park, 2016). As Bill (2016, 65) argued, “the value of one’s level of attainment is less a simple function of the amount of schooling one has attained, and more a function of how much schooling one has **relative to others** in the educational queue”.

Shavit and Park (2016, 1) asserted that: as education expands, lower and mid-level credentials become widespread and no longer represent the exceptional diligence and ability that employers seek.... Thus, **the value of a credential is positional** in that it depends on its **relative position in the distribution of education**.

According to Van de Werfhorst (2009, 269), “education functions as a positional good, and if education loses value, **people need more of it** in order to reach the same social class as their parents”.

# Signalling theory

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The greater pursuit of higher degrees is highly related to **signalling**.

Credentials enable the employer to reliably **distinguish low-ability workers from high-ability workers** (Spence, 1973). Previous literature has also pointed out that a master's degree seems to be a reliable **“filter”** for selecting a more able workforce.

According to signalling theory, those with higher degrees should have more abilities in terms of knowledge, skills, and attitudes. Therefore, a master's education as a higher credential should **conceptually be a stronger signal for employers** than undergraduate studies.

Credentialism normally results in **credential inflation**, a process of inflation of the minimum standard of a certain profession and the simultaneous **devaluation** of academic degrees (Bollag, 2007). If this is true, credentialism might be a **social barrier** creating **educational inequality** and **stratification**.

# Research questions

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How can the expanded master's sector influence the labour market?

Will credential inflation occur within the market or among degrees?

Does master's education bring greater employment benefits for individuals, etc.?

Based on these questions, this research aims to explore how the expansion process of master's education in Taiwan has impacted the labour market and employment opportunities.

# Research methods and data

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We explore what transformations have been taking place at the systematic level and how since the mid-1990s.

A longitudinal research design was adopted.

The researchers mainly adopted a time-series analysis ranging **from 1995 to 2018** to demonstrate how significantly the transformation has gradually emerged.

Data sources:

Department of Statistics, Ministry of Education (教育部統計處);

Manpower Utilization Survey (人力運用調查) released by the Directorate-General of Budget, Accounting and Statistics, Executive Yuan (行政院主計總處)

Ministry of Labor (勞動部)

# An elite tradition and rapid expansion process

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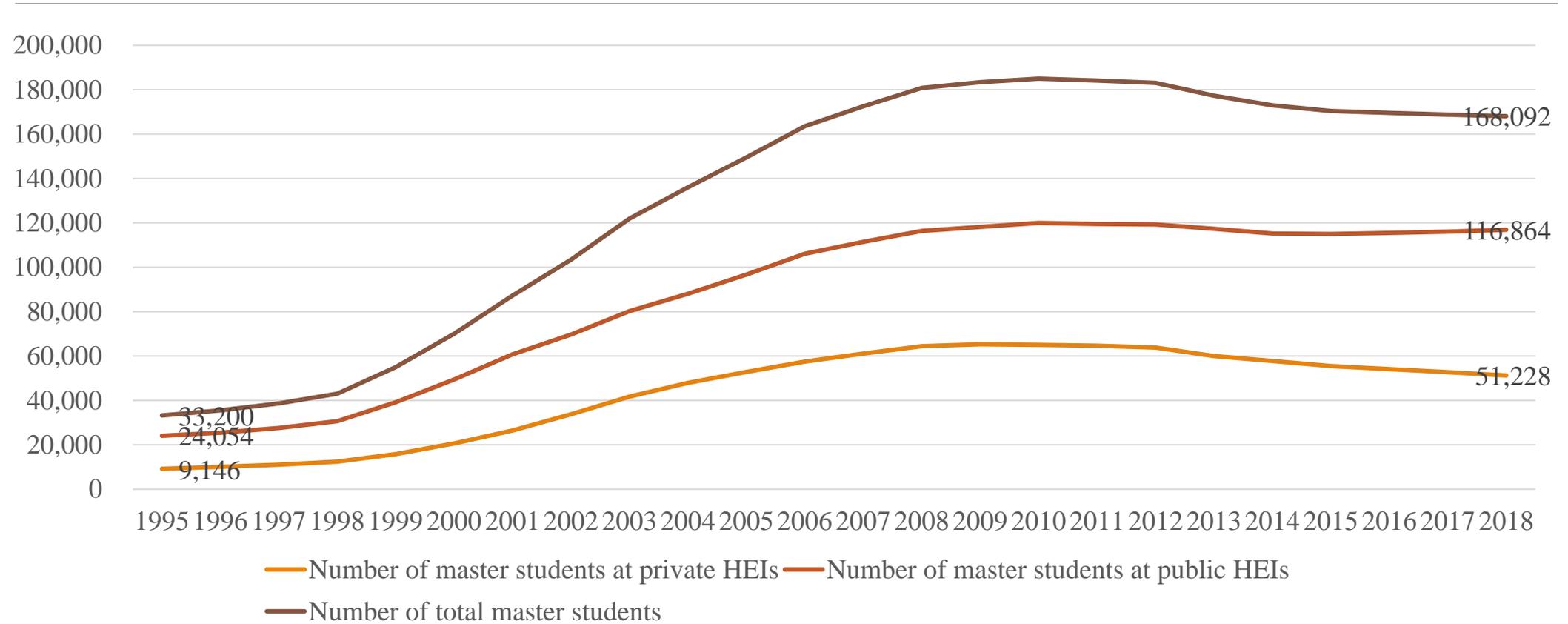
Master's degree programs in Taiwan before the mid-1990s were **elite and academic oriented**, with very limited opportunities for undergraduate students.

The main goal of a master's degree education in Taiwan was to develop students' research and academic abilities, serving as a relay station for doctoral degrees for academic purposes.

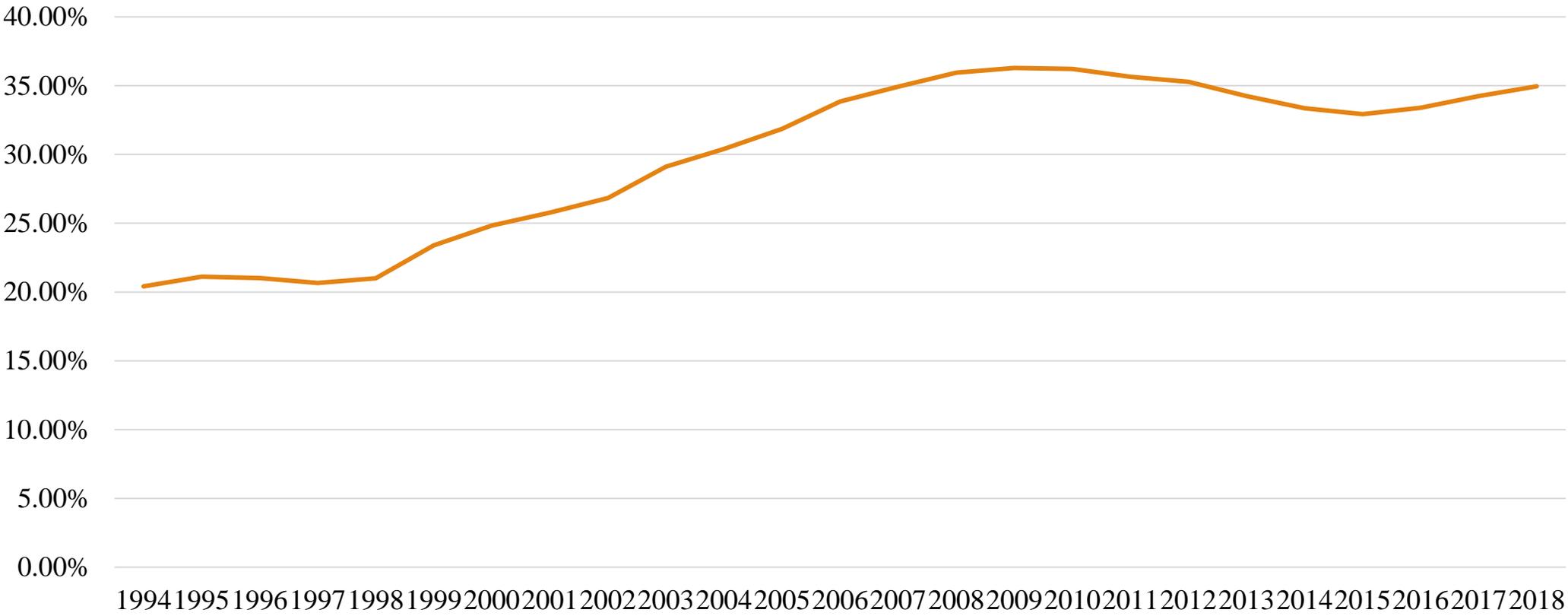
Significant increase in the total number of master's degree students occurred at the start of the educational reforms in 1995 (only 33,200 students), peaking in 2010 with 185,000 students.

The **majority of master's students—around 65%** throughout our surveyed period—were enrolled at **public** universities.

# Number of master's degree students in Taiwan



# Enrolment rate of master student



# New type of master's education: Professional but privatized

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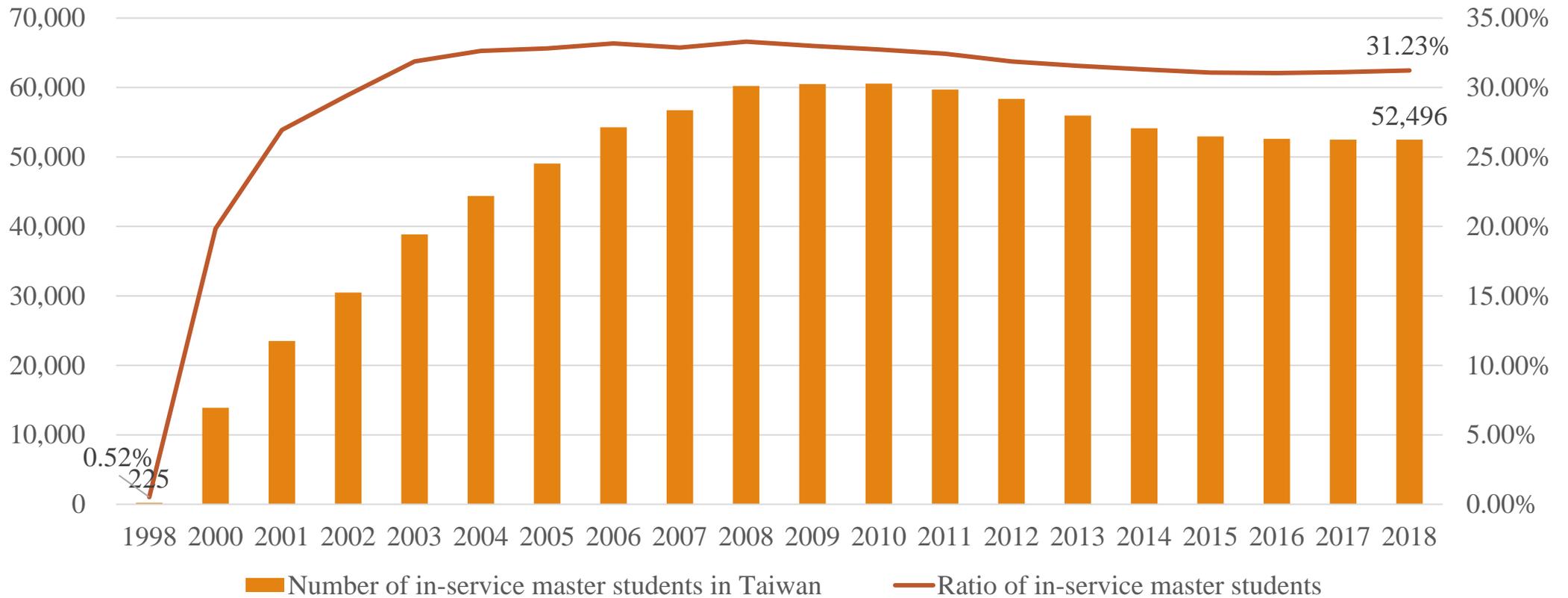
The **in-service master's degree program** (碩士在職專班) is a new addition to the traditional master's education.

It is designed as an **extra channel** for those seeking an **advanced degree** who already have job experience.

The courses are held on **weekends or at night**, unlike the regular degree schedule (i.e., daytime classes).

Enrolees in this program **pay much higher tuition fees** than those in the traditional master's degree program.

# Number and ratio of in-service master students in Taiwan



# Wages and employment

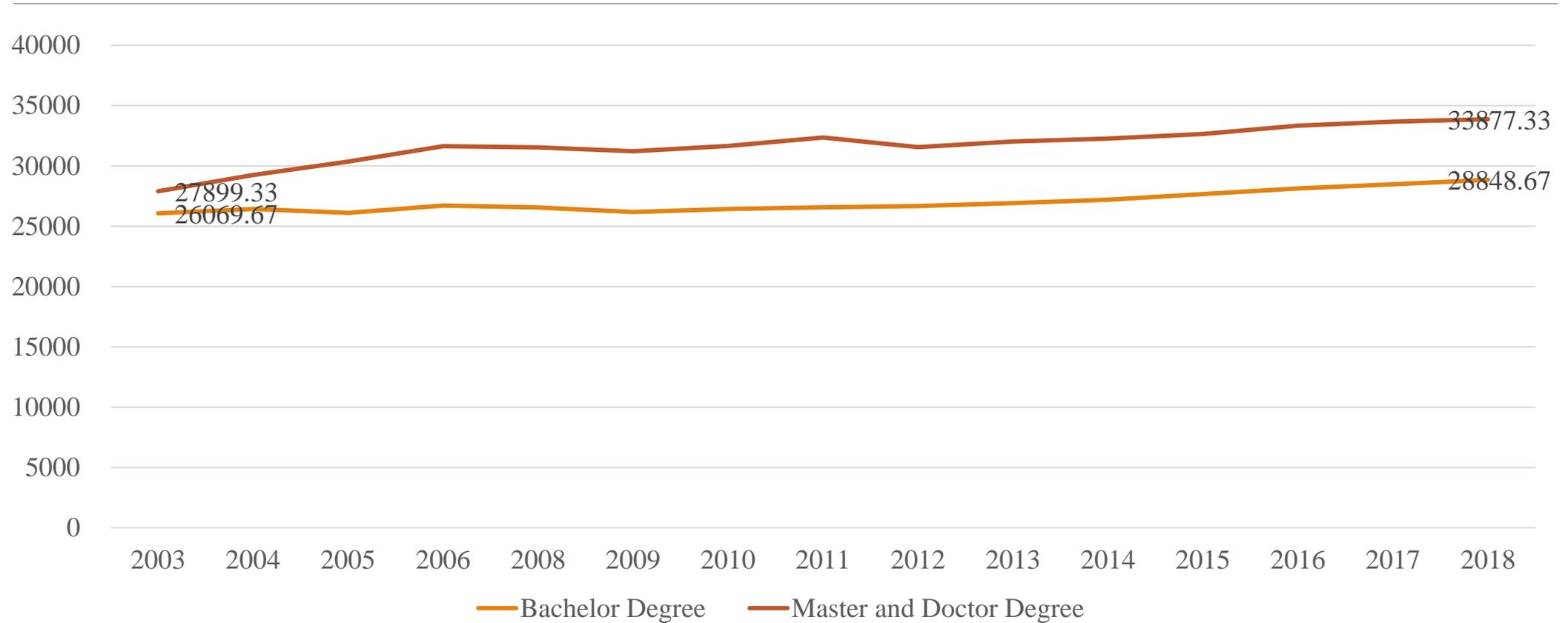
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Initial wage;

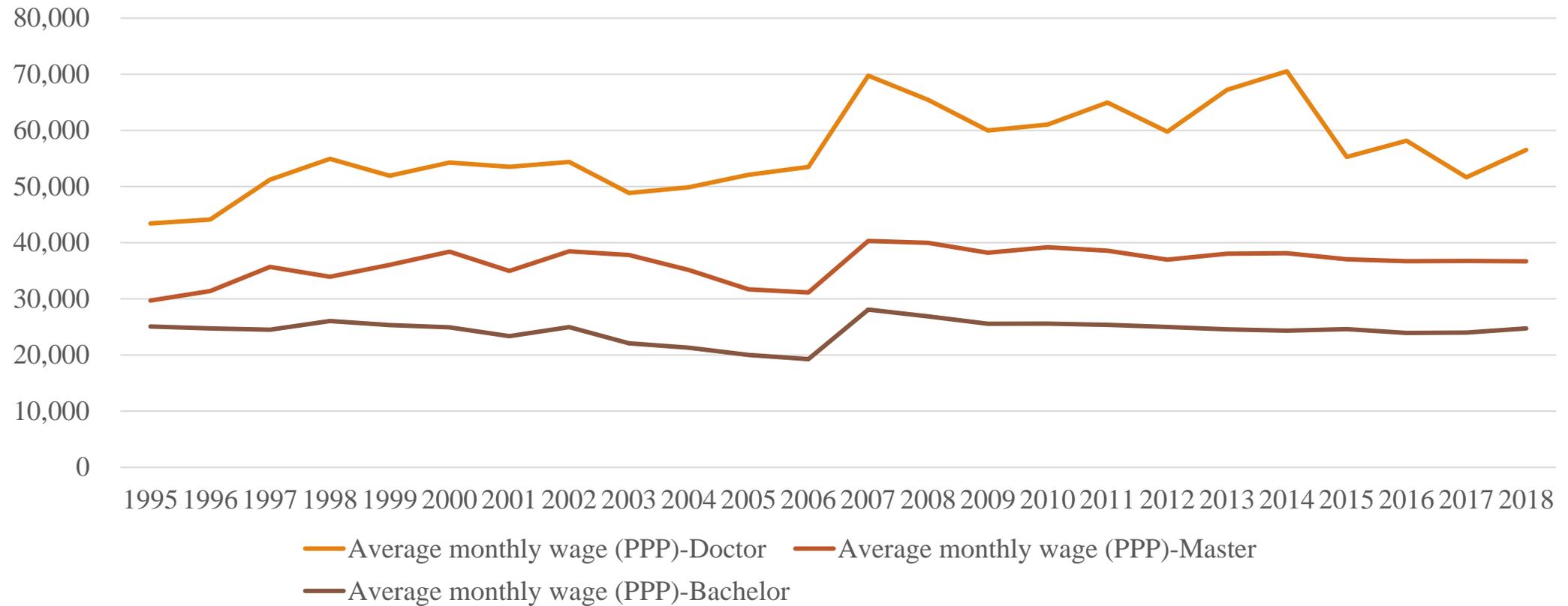
Average wage (by degree);

and unemployment rate in a comparative manner (by degree)

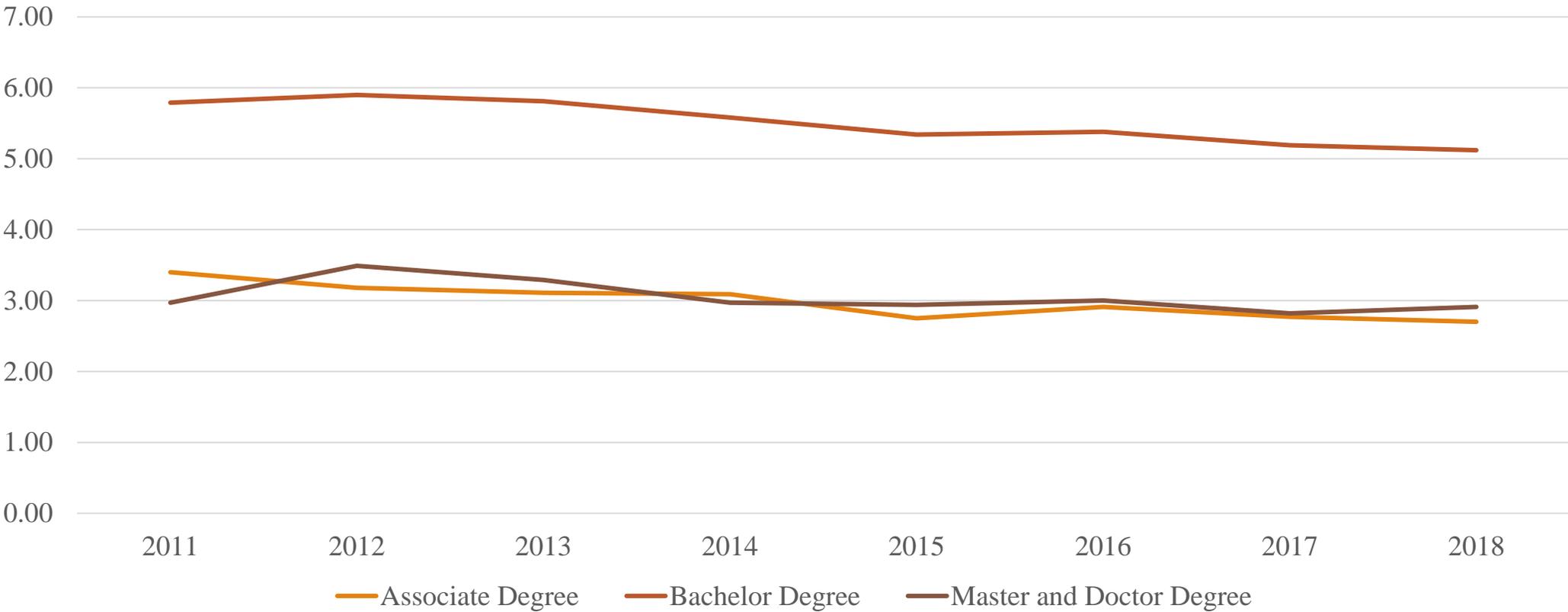
# First job monthly salary (in NTD) by degree



# Average monthly wage by degree (in NTD)



# Unemployment rate by degree



# Greater credentialism and signalling in the labour market: A compulsory game?

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Compared to a bachelor's degree, master's education seems to be favoured by employers, with a low unemployment rate, higher initial wages, and average wages during this period.

2010 was the turning point for master's education in Taiwan, when the decreasing average salary and reduced number of enrolled students occurred simultaneously, suggesting that the public began to understand that higher credentials cannot guarantee a high salary.

This proves the validity of master's education being a positional good in the labour market. **The effects of credential inflation are not as significant as hypothesized**

Nevertheless, in order to maintain a stronger signal to employers, students have been **forced to engage in the credential game** because bachelor's degree holders are much more **vulnerable in terms of the employment rate and wages.**

# Massified master's education and positional good: The unintended effect of decreasing social mobility

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Government subsidizes middle-class families pursuing master's education (65% at public universities) in a massified system whereas working-class students do not have equal opportunities.

massified master's education in Taiwan has created **dual barriers** for social mobility, thereby subsidizing the wealthy family for higher positional good and **compressing the average wage of bachelor's** degree holders.

Hoeling et al. (2014) indicated that postgraduate qualifications are **expensive** and are more affordable and attainable for students with **better socioeconomic backgrounds**.

Greater credentialism or credential inflation might not be harmful to master's education *per se*, but it becomes very acutely felt among bachelor's degree holders and leads to a new type of educational inequality in light of the positional good.

# Conclusion

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Growing misalignment between the provision of a master's degree and the demands of industries. It seems that the total capacity to accommodate master's degree holders has overstretched within the Taiwanese labour market. This means that greater credentialism would become more prevailing in Taiwan in the longer run.

Government should play a more active role in supporting disadvantaged students in this unequal competition for greater credentialism.

Additionally, any nation seeking to expand its master's education sector should carefully balance the relative provision of bachelor and master's education at the societal level.

How to sustain an appropriate size of master's education at the national jurisdiction is critical to policy-makers both for the sake of the labour market and social equality.

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Thank you for your attention

Looking forward to your comments and suggestions

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