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SPOTLIGHT

Discovery Research

Time for school: A look at private schools in China

Private degree-granting school operators are now a key part of China's vast educational system

We answer three big questions: what they are, what are the policies that matter, and why we see plenty of growth ahead...

...and detail the opportunities facing private higher educational institutions as well as K-12 schools

This is a redacted version of the report published on 22-Sep-20. Please contact your HSBC representative or email AskResearch@hsbc.com for information.

Disclosures & Disclaimer: This report must be read with the disclosures and the analyst certifications in the Disclosure appendix, and with the Disclaimer, which forms part of it.

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Facts and figures

10.7m students

The number of students who took Gaokao in 2020

275m students

The number of students enrolled in China (2019, for degree-granting education)

China's 2035 modernisation master plan aims to bolster its competitiveness in educational quality and manpower

RMB3.5trn

The government's general fiscal budget for education in China, in 2019

>190,000

The total number of private schools in mainland China, 2019

36%

Penetration ratio of private schools in mainland China (in school numbers, 2019)

<2%

Market share of China Education Group (in terms of student enrolment within private higher education, 2018)

Class 101 on China's schools

- ◆ Already the biggest single item in China's financial budget, we believe education will continue to be supported by government policies
- ◆ Private school operators have seen their market share increase, albeit with a focus on preschool and higher education
- ◆ With a simple business model and strong cash flow, private school operators can be a highly profitable business

Education: A key area of Chinese society

China's government spent cRMB3.5trn (USD510bn) on education in 2019

The importance of education in traditional Chinese culture can't be overstated. One well-known legend is that around 300 B.C. the mother of Mencius, a Confucian philosopher, moved three times to find a good place to educate her son. Fast forward to today and the Chinese government spends more on education than any other item. It's a similar picture for households who devote around 13% of their expenditure towards education for their children¹.

This report is focused on the role of private school operators. But given it falls in a mainly state-driven ecosystem, we first take a look at the big picture. Led by the Ministry of Education (MOE), the education service has made major strides recently, including:

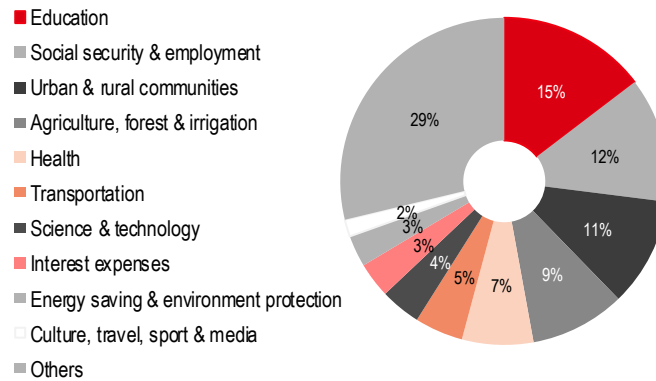
Rising student enrolment shows China's commitment to school education...

- ◆ For compulsory education (Grades 1-9 or ages 6-14), the enrolment rate – the number of students divided by the number of school-age children – has been 100% since 2008.
- ◆ The enrolment rate of high school students (Grades 10-12 or ages 15-17) climbed from c40% in the early 2000s to nearly 90% in 2019.
- ◆ The enrolment rate of higher education rose to 50% in 2019 – reaching the government's target a year early.
- ◆ The government's education expenditure, as measured by the percentage of GDP, climbed to 4% in 2012 and has remained there ever since (Exhibit 2)

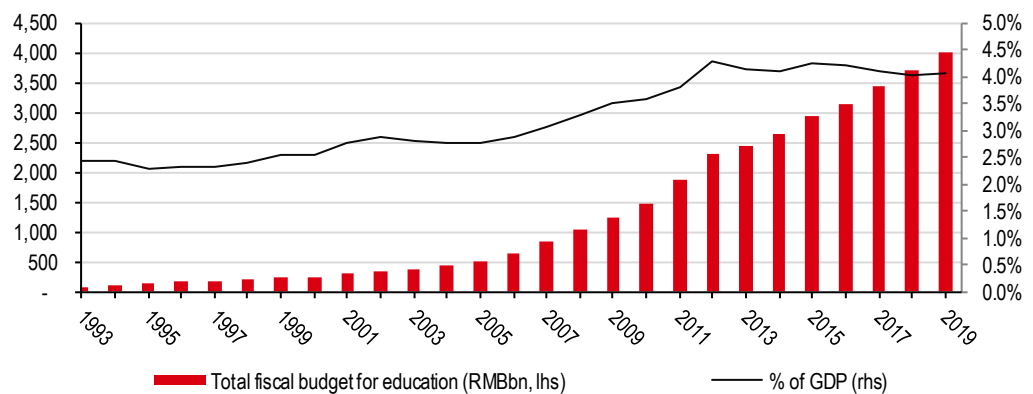
...a journey set to continue, with private school operators set to benefit

Looking ahead, we see plenty more progress in store. In 2019, the State Council released the "China Education Modernization 2035" program where policymakers outlined strategic initiatives – including a push for high-quality preschool education, a solid and balanced compulsory education sector, and competitive higher education to ensure China has a well-educated work force.

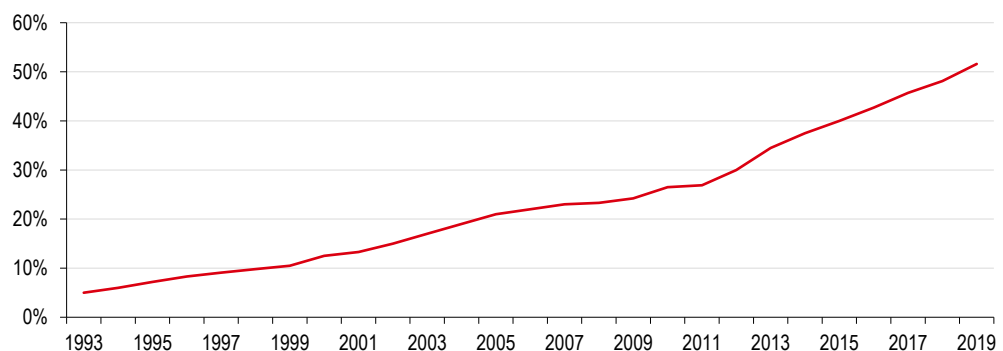
¹ According to a survey by the China Institute for Educational Finance Research of Peking University, the Chinese household has spent over RMB8,000 on K-12 education in school year 2016/17.

Exhibit 1: Education stands out as the largest item in China's general fiscal budget in 2019


Source: Ministry of Finance, HSBC

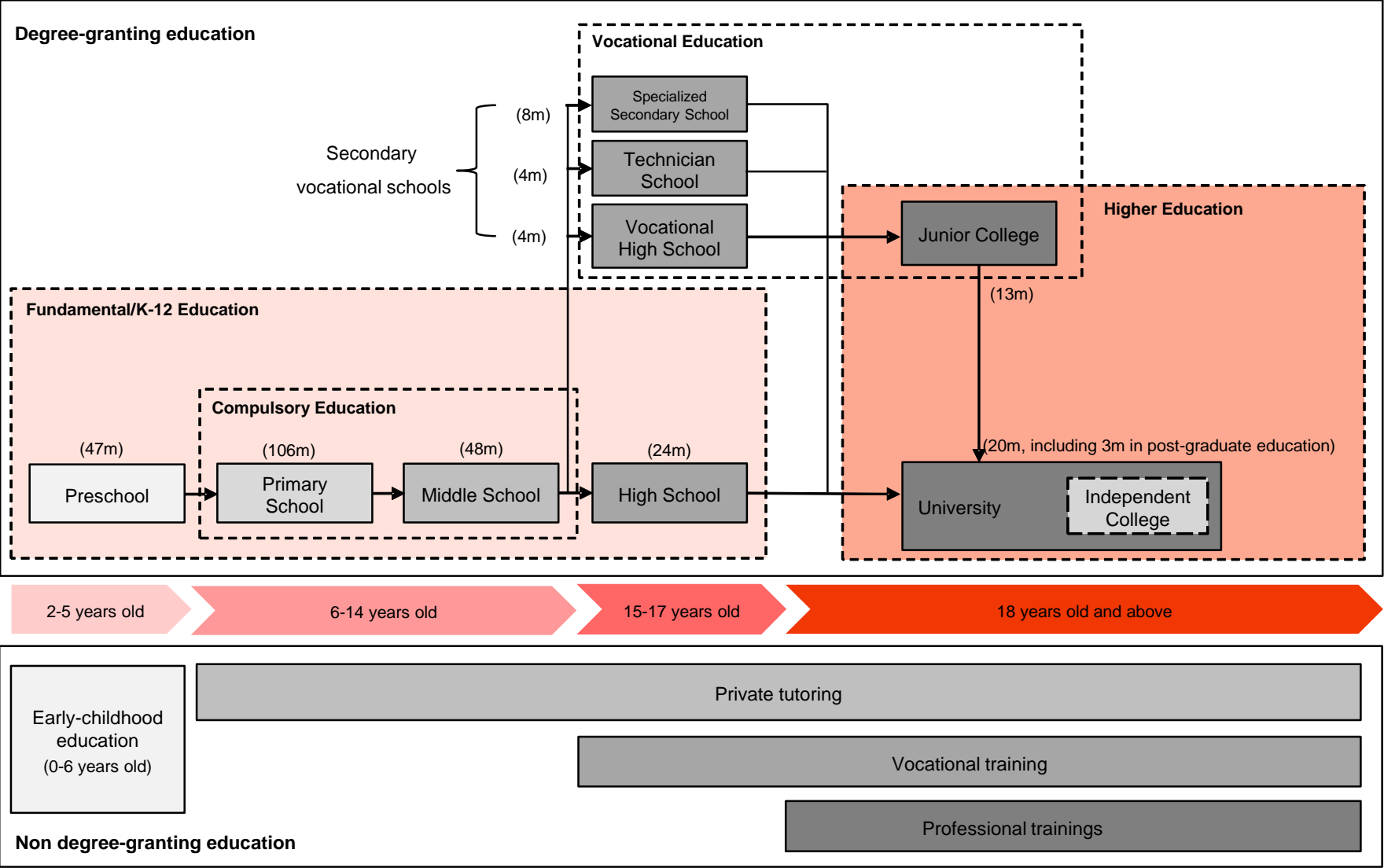
Exhibit 2: The government's total financial budget for education has been increasing


Source: National Bureau of Statistics, HSBC

Exhibit 3: The enrolment ratio* of higher education has continued to climb in China


Note: *Enrolment ratio was calculated by the number of students divided by the number of school-aged candidates.
 Source: MOE, HSBC

Exhibit 4: China's education industry landscape



Note: 2019 student enrolment number in the bracket; blue highlighted names are examples in the education stage.
Source: HSBC

A quick glance at China's educational landscape

Before we delve into private school operators, we first take a close look at China's comprehensive and sophisticated educational landscape. It can be classified into two types:

- ◆ **Education for academic qualifications.** This refers to degree-granting educational programs that are recognised by regulatory authorities, like the compulsory education sector and bachelor programs.
- ◆ **Education not for academic qualifications.** This refers to non-degree granting educational programs such as after-school tutoring and vocational training.

The educational system can be divided into five different stages:

- ◆ **Preschool**, which includes early-childhood tutoring and kindergartens for children aged 2-5.
- ◆ **Primary school**, which refers to school and after-school education for children aged 6-11.
- ◆ **Middle school**, which refers to school and after-school education for children aged 12-14.
- ◆ **High school and secondary-vocational education** for students aged 15-17.
- ◆ **Higher education**, including university degree programs and junior college programs, for students aged 18 or above. This also includes adult education, vocational training, and professional training.

There are other classifications too – like online education providers versus those teaching in physical classrooms, and public versus private (which can be further divided into “for-profit” versus “not-for-profit”). In the previous page, we provided a chart summarising the educational system.

In this report, our focus is on the private school operators, which provide educational services for academic qualifications, the fundamental infrastructure in China's education system.

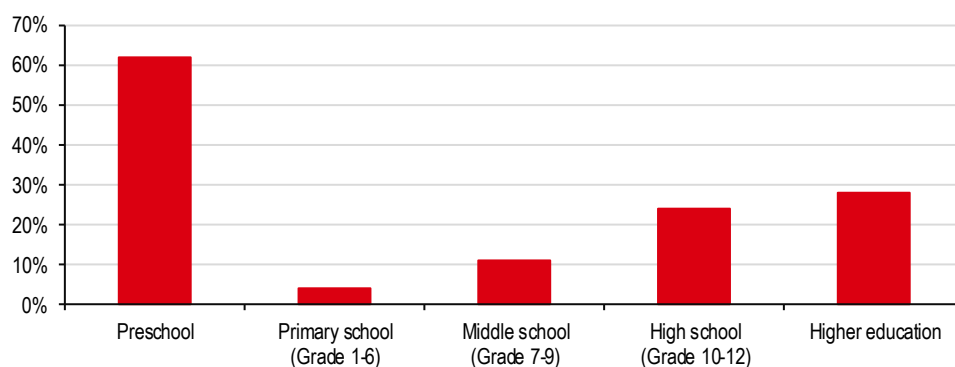
Private schools play a small role in compulsory education

Private education in China is more than 2,000 years' old

Private education has a long history in China and can be traced back more than two thousand years. In more recent times all schools became public in the 1950s. Then in the 1980s, amid a host of reforms, private investment in education was allowed once again.

Having gone through ups-and-downs over the past 40 years, private education today has transformed from simply being a supplement to China's education system to a much more important segment. A raft of laws and regulations have also enhanced the sector. That being said, the proportion of private schools remains largely limited, aside from the preschool and higher education stages.

Exhibit 5: Percentage share of private schools in China in 2018, by school number



Source: MOE, HSBC

Compulsory education is dominated by public education

On one hand, the preschool stage does look large, that's mostly because it traditionally hasn't been a focus for the government. The private sector's penetration rate has actually declined from nearly 70% in 2011 and it is likely to reduce further after tight regulations were introduced in late 2018. Nevertheless, preschool education is not a focus of this report.

On the other hand, the participation of private schools in the compulsory education stage (Grades 1-9) has been lower than 10%. We believe this is unlikely to rise given the government's focus on this educational stage and the requirement for all compulsory educational schools to be "not-for-profit" schools. Nevertheless, the proportion of private high schools has been rising and is now above 20%; the level of private participation in higher education is also close to 30%, although the number has been flat for the past ten years – in part due to the reduced number of public-affiliated independent colleges, on the back of a regulatory shake-up.

The limited participation of private education is also shown through other data sources: according to the *China Education Development Report 2018* published by Deloitte China in August 2018, non-public, degree-granting education only accounted for c22% of the total market, led by kindergartens (c15%) and distantly followed by higher education (c4%). Moreover, according to Frost and Sullivan's estimates, private higher education had a total market scale of RMB118bn in 2018, which was less than 10% of the total higher education market.

Comparison between private and public schools

Exhibit 6: Comparison between private and public schools

| Business or financial areas | Public schools | Private Schools |
|--|--|--|
| School type | NA | Kindergarten: For-profit school or not-for-profit school (optional) G1-9: Not-for-profit school G10-12: For-profit school or not-for-profit school (optional) Higher education: For-profit school or not-for-profit school (optional) |
| Legal classification | Public institution | For-profit: Enterprise Not-for-profit: Private non-enterprise unit |
| Land use right | By government allocation | For-profit school: Government land sales (through a bidding process) Not-for-profit school: By government allocation |
| Admission criteria | K-9: Allocated per student's residence G10-12: Mainly selected by exam (high school entrance exam, or <i>Zhongkao</i>) Higher education: National selection (national college entrance exam, or <i>Gaokao</i>) | Kindergarten: Discretionary G1-9: Allocated per student's residence G10-12: Mainly selected by exam (high school entrance exam, or <i>Zhongkao</i>) Higher education: National selection (national college entrance exam, or <i>Gaokao</i>) |
| Funding | Mainly from the government | Mainly from tuition and boarding fees |
| Price-setting | Regulated by the government | For-profit school: Discretionary Not-for-profit school: Regulated by the government |
| Taxation | | |
| -Value added tax (VAT) | Tax-free | Tax-free |
| -Corporate income tax | Tax-free | For-profit school: Taxable (with possible low tax rate) Not-for-profit school: Tax-free |
| Profit distribution | Generally not allowed | For-profit school: Permitted Not-for-profit school: Not allowed, with a few exceptions |
| M&A | Generally not allowed | Not permitted for not-for-profit schools Permitted between for-profit schools |
| Student-to-teacher ratio (2019)* | | |
| -Primary school | 16.7 | 18.6 |
| -Middle school | 12.5 | 16.3 |
| -High school (including vocational ones) | 14.3 | 18.6 |
| -Higher education (including vocational) | 18.6 | 20.9 |
| Curriculum design | K-12: Based on a syllabus designed by the Ministry of Education (MOE), with limited flexibility Higher education: Focus is more on academic education and/or research | K-12: Based on a syllabus designed by the MOE, with greater flexibility for additional courses Higher education: Focus is more on vocational education |

Note: *Based on our own calculations.
Source: MOE, HSBC summary and analysis

Exhibit 7: Tuition fee comparison of some Sichuan-based private and public schools (RMB, for school year 2020/21)

| School | Nature | Tuition fee |
|---|---------|-------------|
| High school | | |
| Chengdu Foreign Languages School (成都外国语学校) | Private | 36,000 |
| Chengdu Experimental Foreign Languages School (成都实验外国语学校) | Private | 36,000 |
| Chengdu Experimental Foreign Languages School, West Campus (成外西区) | Private | 36,000 |
| No. 4 middle school (成都四中) | Public | 920 |
| No. 7 middle school (成都七中) | Public | 920 |
| No. 9 middle school (成都九中) | Public | 920 |
| University program - English major | | |
| Chengdu Institute of Sichuan International Studies University (四川外国语大学成都学院) | Private | 17,000 |
| Sichuan University (四川大学) | Public | 4,440 |

Source: School websites, HSBC

Private vs. Public

Private schools tend to be more flexible in terms of operations and syllabus

While private schools are different from public schools, we believe they are complementary and add value to the existing educational system in China. Private schools enjoy greater flexibility in their business operations and syllabus setting; particularly the “for-profit” schools where they have more control over how much they can charge (see table on the previous page for details).

It is also worth noting that the proportion of private schools in primary and secondary schools has risen in recent years, albeit modestly driven by these two factors:

- ◆ The rising affluence of the middle class in China has led to increased demand for high-end and differentiated services like international education, which isn’t well supplied by public schools.
- ◆ Support from local governments, especially in lower-tier cities where financial budgets are generally tighter. It is not uncommon to find local governments using private investment in school education to meet some of their policy goals, such as reducing large classes (大班制) through direct government subsidies and/or service procurement. An example of the latter is when public schools don’t have enough resources to meet educational needs, students can study at private schools but pay just a low tuition fee equivalent to that of public schools, with governments subsidising the difference.

Rising enrolments and a focus on higher vocational education has benefited private higher education providers

In higher education, rising student enrolments has bolstered private school operators. However, we believe it is generally difficult for private school operators to compete with public schools, especially the public universities, which are generally well-funded and have a significantly better reputation. That being said, rising demand for higher vocational education has benefited the private school operators, which are usually more market-oriented and savvy in rolling out tailored courses to meet demand for “blue-collar” and technical workers.

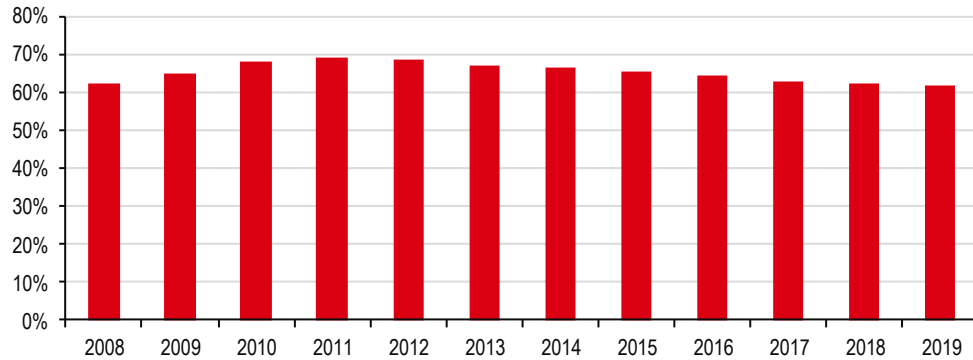
It is also worth bearing in mind that public schools still hold a strong leading position in the academic area though, and this is unlikely to be challenged by private school operators anytime soon. Some interesting statistics stand out from our studies:

However, private school operators are unlikely to compete with public schools on academic results

- ◆ In China’s four so-called “tier-1” cities, plus Chengdu, we found the majority of the top ten high schools in the cities (by measuring their admission scores, see Exhibit 10 on the following page for details) are public schools. In fact, apart from Chengdu, all the top-10 schools in the “tier-1” cities are public schools.
- ◆ Public universities are well funded: Tsinghua University had the largest budget among all universities in 2019 (nearly RMB30bn); the No. 30 player, Northeastern University, still had a budget of nearly RMB5bn. Conversely, Shandong Yingcai University (under Yuhua Education), which ranked No. 3 among private universities in the CUAA ranking in 2020, had revenue of just RMB450m in school year 2018/19.
- ◆ Public schools have lower student-to-teacher ratios – which is usually an indication of educational quality – compared to private schools in general.

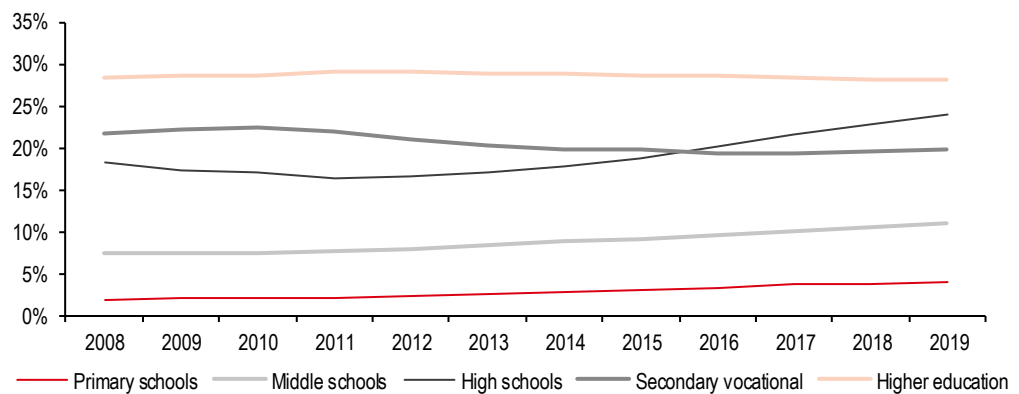
In a nutshell, we believe that private education will continue to provide differentiated educational services over the near term in order to distinguish themselves from public schools.

Exhibit 8: Private schools have a high, but declining market share in preschools (by number of schools)



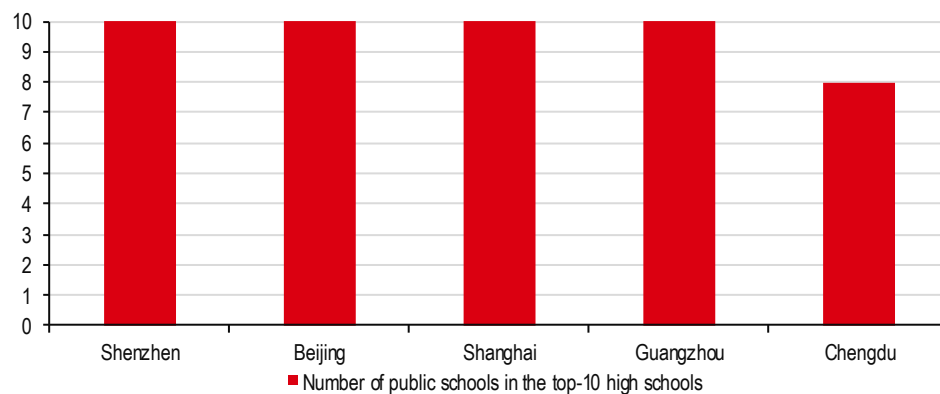
Source: MOE, HSBC

Exhibit 9: Private participation in high schools has increased more significantly than in the other educational stages (by number of schools)



Source: MOE, HSBC

Exhibit 10: Public schools lead private schools in China in terms of academic results*



Note: *Top-10 high schools by admission scores in Shenzhen, Beijing, Chengdu, and Shanghai in 2019, and that for Guangzhou in 2018.
 Source: HSBC

A look at the private business model

A simple business model with three major income sources

In this section we look at the different income streams for private school operators. Generally speaking, they have a simple business model with revenue from three major aspects:

- ◆ **Tuition fee:** This is the most important income stream for private school operators and is simply a function of student numbers and pricing. Student numbers are mainly determined by the number of school-age candidates and competition, but is also subject to allocations from local education bureaus (especially in the K-9 stages). Based on our understanding, the average pricing is generally set by the government with scope for some price adjustment. This can vary significantly across different regions and educational stages. We believe that pricing will become more market-oriented and also be increasingly driven by competition once the Private Education Promotion Law is implemented. This is especially the case for the “for-profit” schools.
- ◆ **Boarding fee:** This is another major income stream for many school operators. Some combine this with the tuition fee in their financial reporting. We believe the dynamics are similar to tuition fees discussed above.
- ◆ **Other services:** This mainly includes ancillary services like catering services, school camps, and uniforms, which are not typically controlled by government authorities; normally they have a positive correlation with student numbers. We note this may be a significant part of income for some school operators, with some deriving more than 30% of their revenue from other services such as the school canteen in FY19.

In addition to the three above-mentioned revenue streams, there are other income lines – these mainly include government subsidies which, in some cases, can be quite meaningful; finance income and investment income are other common items, although the latter can fluctuate significantly.

There are some benefits from scale, mainly in administrative and selling expenses

On the cost side, staff wages are the largest contributing factor. Given the regulatory requirement regarding the student-to-teacher ratio as well as its correlation with the quality of education, we believe staff costs are a function of student numbers. Other major costs include depreciation charges, finance costs and administrative expenses; selling expenses is another noticeable item, although its share is relatively small and tends to decline as the number of students rises.

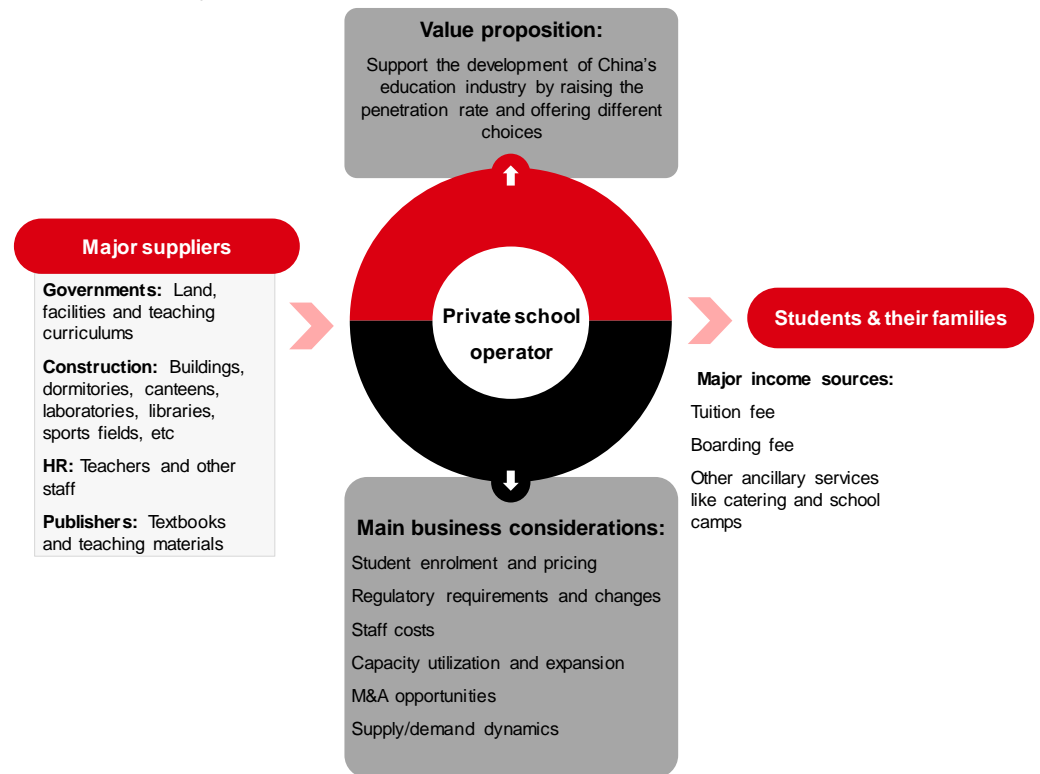
Decisions may not always be entirely business driven...

It is worth bearing in mind that school operations are highly regulated, and policy changes can quickly affect the business performance (see the latter section, [Policy, policy, policy](#) for detailed discussions). Moreover, education is a public good and hence decision making may not be entirely business driven. For example, more teachers may help to improve the education quality and to take better care of the students, but this will also lead to higher costs and lower profits – hence the need for balance.

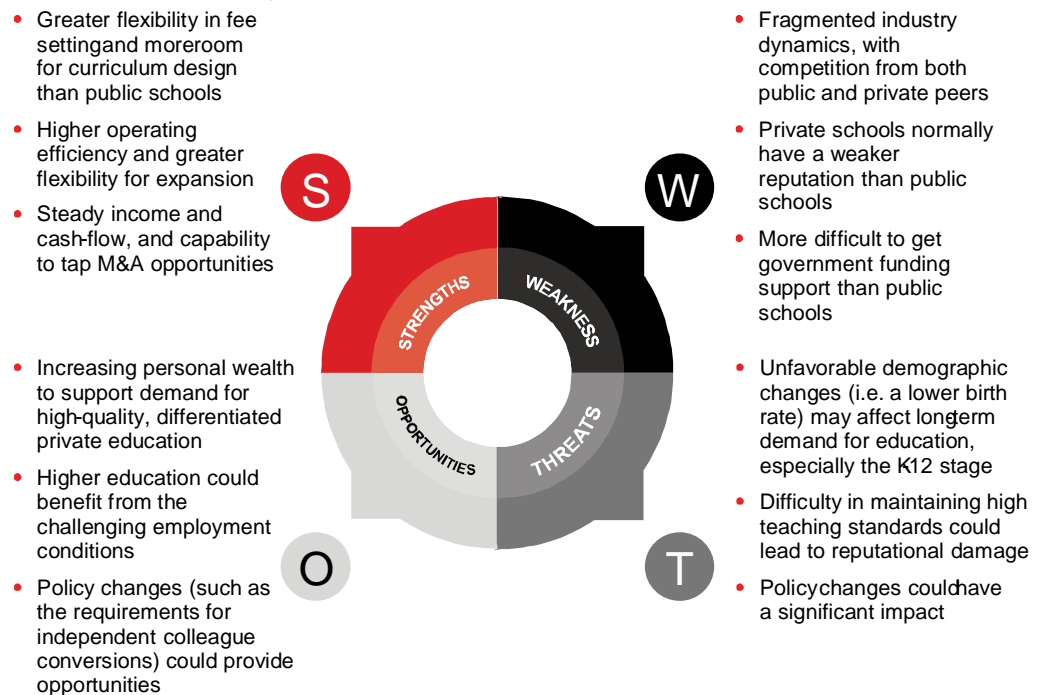
...but strong private schools can still be highly profitable

That being said, strong private operators can still be highly profitable, with some higher education operators having a net profit margin of more than 60% and some leading K-12 operators reporting a net profit margin of more than 40% in FY19.

It is also noteworthy that school operations can be different between different educational stages, especially between K-12 and higher education – each of them also faces different risks and opportunities, and we will discuss them separately in the following sections.

Exhibit 11: Ecosystem


Source: HSBC

Exhibit 12: SWOT analysis


Source: HSBC

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K-12: Pluses and minuses

- ◆ Demographic trends aren't favourable for K-12 school operators as the birth rate falls, but there are large differences across regions
- ◆ Given policy uncertainties around M&A, listed K-12 school operators generally pursue organic expansion to drive growth
- ◆ We see potential opportunities from the conversion of public-affiliated private schools into pure private schools

Falling student numbers...but there is a silver lining

Unfavourable demographic trends are leading to reduced demand for K-12 schools...

At first glance, it can appear a bleak future for private school operators. K-12 schools are facing falling demand driven by a declining birth rates in China: the new-born population is down from 24m in 1989 to 15m in 2019. This, coupled with increasing penetration of K-12 education, leads to falling incremental demand for K-12 schools. As a result, it is no surprise to see the number of K-12 schools falling across different educational stages, except for the preschool stage, which was under-invested by the public in the past. Our analysis – based on historical new born data – indicates that demand, when measured in new admission numbers, will fall even further.

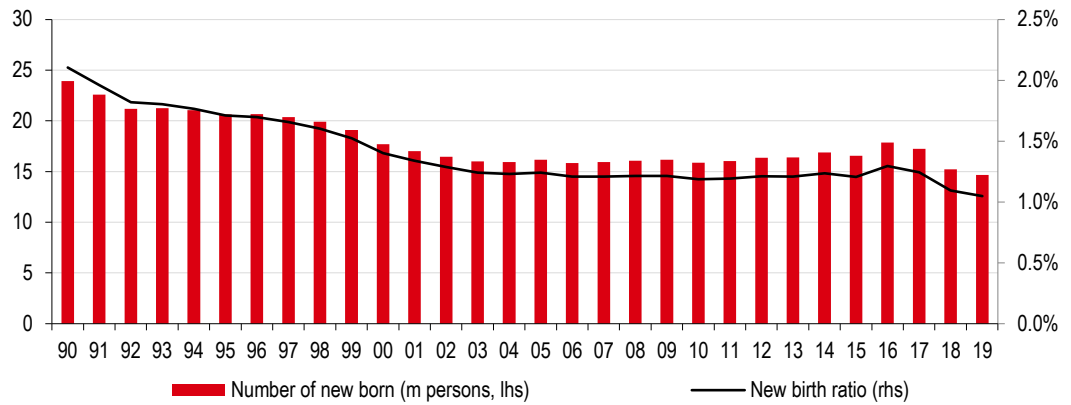
...but there are also positives to counter this trend

Nevertheless, outside the compulsory education stage, the number of private schools have surpassed public schools in the preschool stage (although it has shrunk in recent years). Private schools have also registered an increased percentage share in the high school stage too.

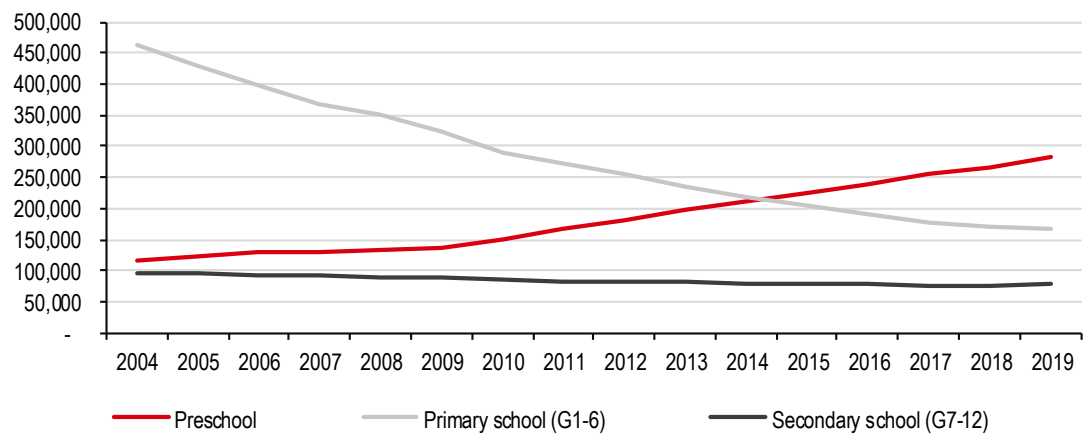
Positive drivers include:

- ◆ Growing demand for diversified educational services – such as private international schools – which can divert students away from public schools to private schools.
- ◆ The need for private schools differs significantly across China. For instance, in some regions where local governments are financially weak, they may choose to use private schools to meet educational objectives like eliminating large classes (大班制).
- ◆ Also, the demographic trends vary significantly. For cities faced with large inflows of workers, they may not have enough schools to meet demand so may welcome private school operators. In November 2019, the education bureau of the Longhua District of Shenzhen (深圳市龙华区) indicated a shortage of around 8,000 seats at the primary school (G1) stage and a shortage of around 3,000 seats at the secondary school stage (G7).

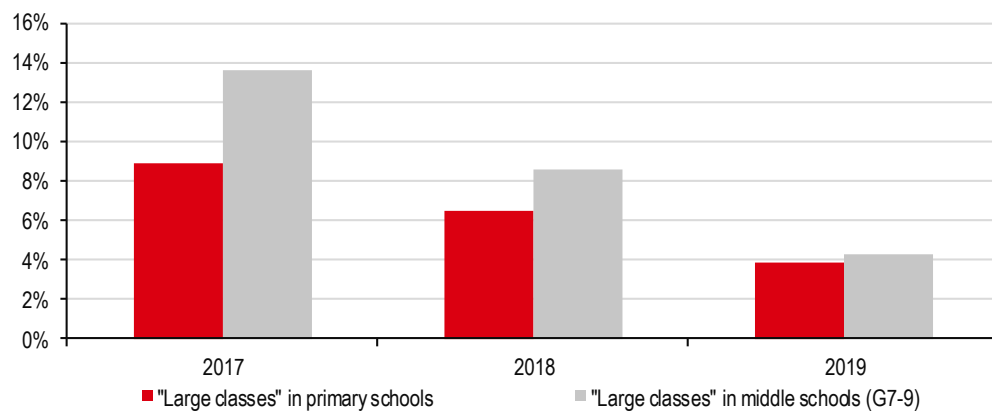
All these factors mentioned above, in our view, help to explain the increased participation of private schools in the K-12 stages over the past few years. Nevertheless, looking ahead, we believe the trends are different across the different educational stages, which are discussed later.

Exhibit 13: A falling birth rate and a high penetration ratio has led to lower demand for K-12 schools


Source: NBSC, HSBC

Exhibit 14: The lower demand explains the falling number of primary and secondary schools


Source: NBSC, HSBC

Exhibit 15: China has pledged to cut “large classes”, providing opportunities for private schools in some areas

 Note: Percentage of “large classes” represented by the classes with more than 56 students.
 Source: MOE, HSBC

Different schools, different outlooks...

The prospects for private schools varies across different educational stages:

- ◆ **Preschool:** We believe that private school participation will drop substantially given the strict regulations and policy objectives to bolster the percentage of public and private inclusive preschools (i.e. 普惠园, preschools charging relatively low tuition fees as part of social welfare) to 80% by 2020e. This is not a key focus in this report.
- ◆ **Compulsory education (G1-9):** We see a generally bleak outlook facing private schools at this stage as there seems to be a clear policy inclination to limit private capital participation – as reflected by rules to prohibit “for-profit schools” in this area. This has also stopped M&A activity and created technical difficulties for school operators to effectively allocate their capital in this area.
- ◆ **High school stage (G10-12):** We believe private school operators are unlikely to significantly expand in this area after growing modestly in recent years. While they are allowed to choose to be “for-profit” schools in the future, in practice many middle schools and high schools are difficult to separate. We believe many students (and their parents) still have a view that public high schools are ahead in terms of academic results from the national examination, or Gaokao (高考), making private schools a second choice for many.

...but opportunities still exist

Given the policy hurdles, many listed K-12 school operators have mainly focused on organic growth – spearheaded by establishing new schools – to expand. While their growth rates could lag behind higher educational peers, it is worth bearing in mind that:

- ◆ K-12 operators tend to have a longer period of steady income than higher education schools, as their academic periods are generally longer (especially for G1-12 integrated schools, see Annex).
- ◆ K-12 operators tend to have a more standardised and highly-regulated recruitment process, especially after implementing simultaneous recruitment for public and private schools – which prescribes that student recruitment for compulsory education should be managed centrally and progress simultaneously for public and private schools – could lead to lower promotion expenses than their higher educational peers.

We also see potential opportunities from policy changes given:

- ◆ According to the Implementation Regulations of Private Education Promotion Law, public schools are not allowed to sponsor “for-profit” private schools and should also not profit from brand-licensing to the “not-for-profit” private schools.
- ◆ In January 2020, the Chengdu education bureau announced rules that requested that public schools exit from private schools that they have sponsored or are affiliated with.

Combined, we believe this raises a future possibility that public-affiliated private schools (国有民办学校) could be required to convert into pure private schools. While this approach and the timing of such exits are yet to be determined, there is a chance that this may follow a similar track as the conversion of independent colleges, in which private school operators are requested to pay a “break-up fee” to public schools to terminate the cooperation agreement. Should this happen, some private school operators may choose to sell their stakes – just like what we have seen in the accelerated conversion requirements for independent colleges. We discuss this in more detail in the following sections. In this regard, we suggest investors pay close attention to this area as a gauge of whether M&A activity could pick up for K-12 school operators.

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Higher education: A golden track

- ◆ Favourable policies, the need for a trained workforce and a weak economy are driving near-term growth in higher educational services
- ◆ The accelerated conversion of public-affiliated independent colleges into pure private operators also provides M&A opportunities
- ◆ The challenging employment outlook and potential vocational education reforms may be swing factors, leading to consolidation

Strong and growing demand, supported by multiple drivers

Despite facing unfavourable demographics similar to K-12 school operators, higher education schools have blossomed. The number of enrolled students has risen from 4m in 1998 to 33m in 2019 and the number of institutions are up from around 2,700 to nearly 4,600 over the same period. This is underlined by the increased enrolment rate, which we see supported by these three factors:

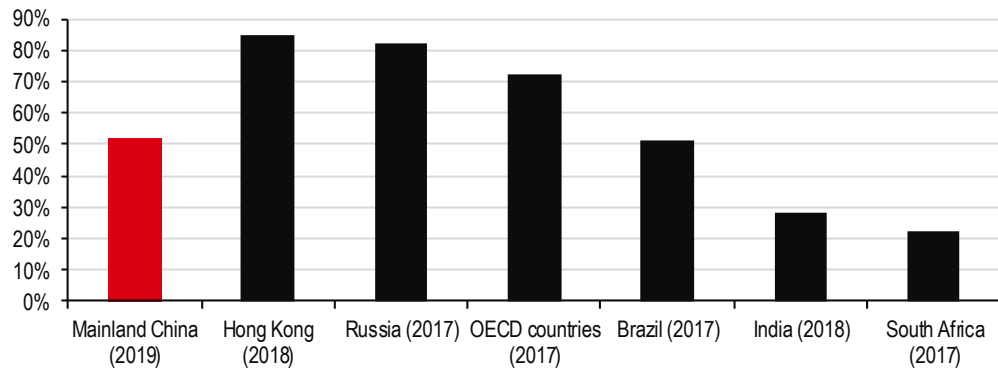
The 52% enrolment rate in higher education is lower than in some other countries

There may be a shortage of 19m skilled labours in 2020e

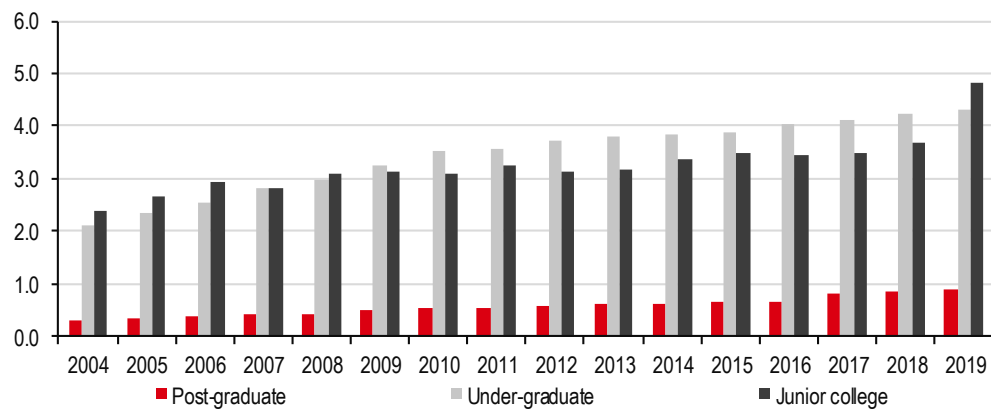
Admission quotas for higher vocational education to grow by 2m over the next two years

- ◆ **Policy commitment:** China pledged to raise the enrolment rate of higher education to 50% in 2020, and this was reached early in 2019 (at 52%). Nonetheless, we expect higher targets in view of the large gap with other developed countries, which have an average of 70% (OECD countries).
- ◆ **Manpower upgrade:** The manufacturing industry is important to China and will remain so as it upgrades its industrial capability. But there's a large shortage of skilled labour: according to a guideline jointly issued by three municipalities in late 2016, it is estimated that mainland China will face a shortage of nearly 19m skilled labours in ten key industries in 2020e, and the gap will expand to 30m in 2025e. Given this, there's been an emphasis on higher vocational education, as shown with the large jump in student admissions at junior colleges in 2019, from 3.7m students in 2018 to 4.8m in 2019.
- ◆ **Macro pressure:** The current economy uncertainty has also bolstered student admissions in vocational education, particularly the junior colleges and secondary vocational schools which – in our view – can act as a temporary home for students to help them avoid unemployment. In the Government Working Report that was released in May 2020, it stated that the quota for higher vocational education will be expanded by 2m in the coming two years while there were similar policies to expand the admission quota of secondary vocational schools.

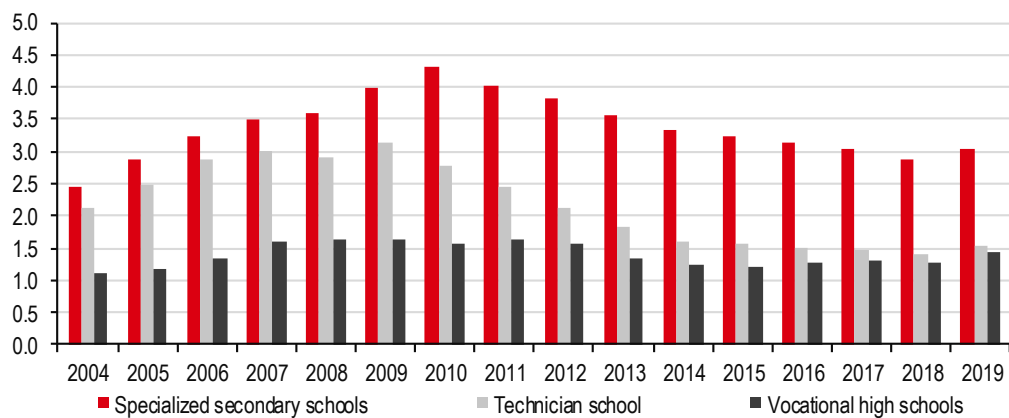
We believe that private school operators are particularly well positioned to benefit from these because: **(1)** they operate application-based schools (i.e., curriculums designed in a more practical manner to help train blue-collar or technical workers), **(2)** they are usually more market-oriented and put a strong emphasis on ensuring employment for their graduates, and **(3)** private school operators have stronger incentives to expand their schools (either through acquisitions or organic growth) to meet this growing demand.

Exhibit 16: China's higher educational enrolment ratio still has substantial room for improvement


Source: CEIC, World Bank, HSBC (Enrolment ratio of higher education, with data's time in the bracket)

Exhibit 17: The numbers of student enrolled has increased sharply in higher education (m)


Source: MOE, HSBC

Exhibit 18: Admissions of secondary vocational schools recovered a little in 2019 (m)


Source: MOE, HSBC (in million students)

Independent college conversions bring M&A opportunities

Independent colleges generally refer to a kind of undergraduate institution that is mainly funded by social entities or individuals (i.e. private operators) who pay a fee to partner with public universities in exchange for the use of their brands. It was a product of its time as during the last part of the 20th century the government had insufficient education funding to meet the rising demands for higher education and hence turned to the private sector. Since the establishment of the first independent college – Zhejiang University City College – in 1999, the number of independent colleges has risen quickly, surpassing 360 colleges nationwide over the next few years. We believe the boom is mainly attributed to the more flexible operations of these independent colleges versus public universities though they may share part of the latter's resources such as teaching, brand equity, and even campuses. All this has helped independent colleges grow quickly.

After a boom in independent colleges, problems grew like poor education quality and the misuse of public brands

Nevertheless, the looser regulations on independent colleges in the early years led to some problems like poor education quality and the misuse of public brands. Therefore, since 2003, the government had issued a number of policies to strengthen regulations, including:

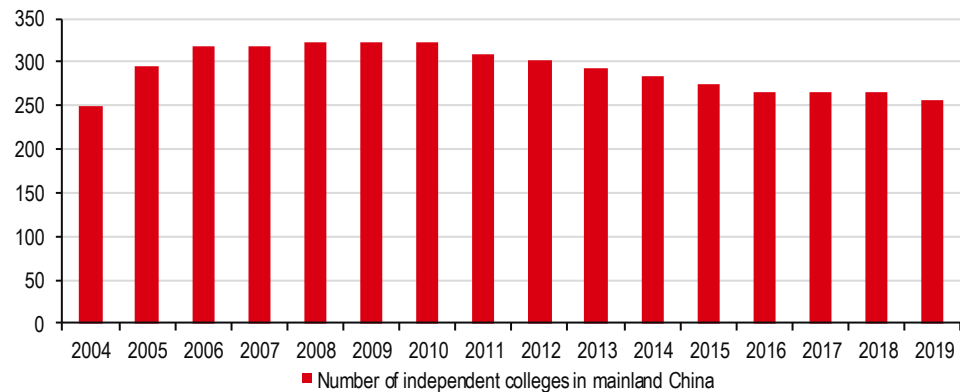
- ◆ In 2003, the Several Opinions on Regulating and Strengthening the Management of Independent Colleges with New Mechanisms and Models (关于规范并加强普通高校以新的机制和模式试办独立学院管理的若干意见) was issued and required independent colleges to have stand-alone campuses and a relatively independent management.
- ◆ In 2008, the Regulations on the Establishment and Management of Independent College (独立学院设置与管理办法) were issued to elucidate details on the establishment, management, supervision, and cessation of independent colleges.

The new push to convert independent colleges into private universities creates M&A opportunities

Over 100 independent colleges had their official registrations revoked by the MOE in 2003. Yet since then growth has resumed – albeit at a more modest manner – with the number rising back to 323 as of 2010. However, problems such as inadequate internal management continued to exist while the use of public universities' brands have created more concerns such as reputational issues. Therefore, the government has encouraged independent colleges to convert into private universities, to combine with the public ones, or to end operations; this was first mentioned in 2006, in The Opinions on the Operation of Colleges and Universities during the "11th Five Year Plan" Period (关于"十一五"期间普通高等学校设置工作的意见) and was reinforced in The Regulations on the Establishment and Management of Independent College. Based on a news report by Xinhua News 18 June 2020, up to September 2019 a total number of 69 independent colleges were being converted, driving the number of independent colleges to fall to 257 as of 2019. This also offered substantial M&A opportunities for private school operators: four M&A deals were announced over the past three years in this area relating to the school operators we cover.

We note the demand for the pace of conversion has accelerated recently with the issuance of the Implementation Plan on Accelerating the Conversion of Independent Colleges (关于加快推进独立学院转设工作的实施方案) in May 2020 that requires the sponsors of independent colleges to finalise their conversion plans by the end of this year. On the back of this, certain requirements such as the campus area are relaxed while some favourable policies on tax, funding, or talent introduction were offered to successfully convert colleges. We believe this could bolster M&A opportunities over the near term, particularly for those listed school operators that have greater financial resources.

The conversion of independent colleges will help to improve the school operators' financial performance: normally, private school operators pay 10-20% of tuition fees to public universities mainly for the use of their brand. Upon conversion, they have to pay a termination fee to the public universities but, in return, the profit margin can be enhanced going forward. Take Yuhua as an example. As an example, a private operator's "break up" of its university with the public university in FY15 and a successful conversion, its gross profit margin at its university segment improved to 63% (from 49% a year earlier).

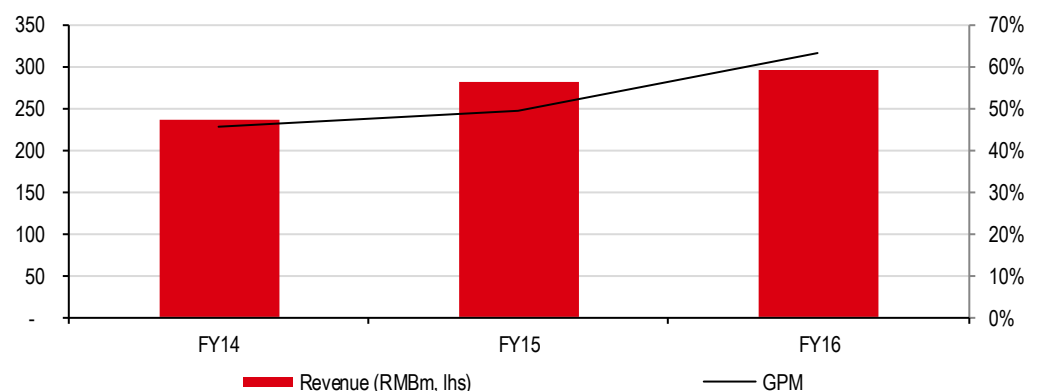
Exhibit 19: Independent colleges have gone through ups and downs in the past


Source: MOE, HSBC

Exhibit 20: Sample M&A related to independent colleges from 2018

| Date of initial announcement | Acquirer | Target school | Consideration (RMBm) | Implied PE (x) | Implied price per student (RMB) |
|------------------------------|-----------------|---|----------------------|----------------|---------------------------------|
| Jun-18 | China Education | 100% of Guangzhou University Songtian College (广州大学松田学院), 100% of Guangzhou Songtian Polytechnic College (广州松田职业学院) | 538 | 7.3 | 44,825 |
| Jan-19 | China Education | 100% of University of Jinan Quancheng College (济南大学泉城学院) | 455 | N/A | 53,289 |
| Mar-19 | Hope Education | 100% of The College of Science and Technology of Guizhou University (贵州大学科技学院) | 148 | 9.6 | 16,444 |
| Jun-19 | China Education | 100% of Chongqing Nanfang Translators College of SISU (四川外国语大学重庆南方翻译学院) | 1,010 | N/A | 77,692 |

Source: Company data, HSBC

Exhibit 21: Yuhua's university segment: GPM improved following the conversion


Source: Company data, HSBC

The most difficult job-seeking season: More to come

There are nearly 9m higher education graduates in 2020, and many are job seekers

Despite the rosy near-term outlook facing private higher education, we believe the current employment season – which is sometimes described as the most difficult one in history – could pose a near-term challenge to school operators and have a profound impact on their prospects. According to a news report from *Xinhua News Agency* on 12 May 2020, the MOE suggests that there are around 8.7m higher education graduates in 2020 – a record high – and this will lead to a particularly challenging job market amidst COVID-19 and the macro headwinds.

The employment index has plummeted amid COVID-19

This was vindicated by the latest employment survey released by the China Institute Employment Research (under the Renmin University of China), which shows that the China Employment Index (or the CIER index) fell sharply in 1Q20, and remained weak in the following quarter. In addition, a news report from *Caixin* on 25 May 2020 says some schools have seen their employment rates of graduates reach only 60-70% of levels in prior years, and that graduates from the junior colleges were being particularly hard hit – in part because COVID-19 has postponed their internships.

This could affect the application to the junior colleges, which are badly hit

It is also worth bearing in mind that the difficult job market could last for some time, especially given the expansion of junior college admissions in recent years (up by more than 1m alone in 2019) will lead to growth in graduate numbers and intensify the “supply shock”; this may curb the enthusiasm for potential applicants. In other words, despite the pledge by policymakers to expand the higher vocational educational program by 2m in the coming two years (which, based on our estimates, represents more than a c40% expansion to the 2019 admission numbers), the admission of junior colleges could be far less than expected over the near term.

Private schools may adapt to changes easier...

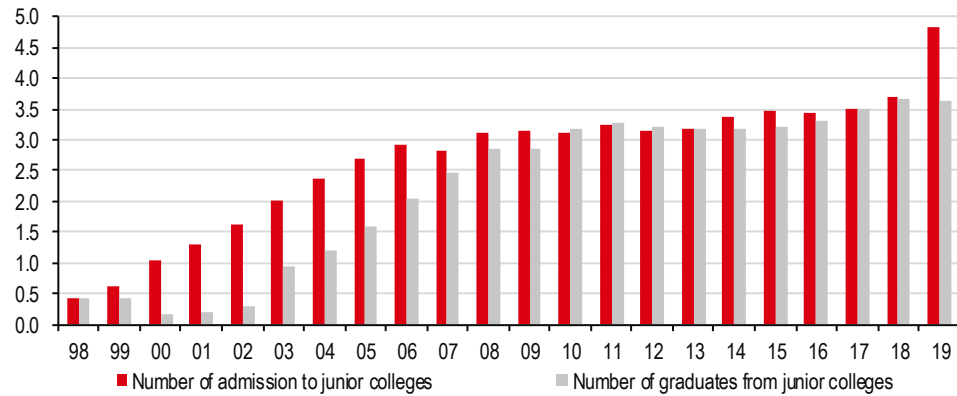
Longer-term, in view of China’s economic growth and demand for skilled labour – especially in “new economy” industries – we don’t think the picture is that bleak; we also believe that private school operators are better positioned to mitigate the pressures from the “supply shock”. For instance, they could tap the significant expansion of the “top up program” from junior colleges to universities (专升本) (see Annex) and partner with overseas universities (sometimes ones that are under the same group) to offer international programs for their students. Meanwhile, compared to public universities, we believe private schools are also more adaptive to market trends and are faster at rolling out the new degrees and programs, such as on automation, mobile-game design and robotics. In the meantime, their pursuit of enterprise-school collaboration programs (校企合作) are also instrumental to enhancing the employment outlook of their students. According to another survey that was published by the China Institute of Economic Research in April 2020, the relevant internship experience was considered by graduates as the most important reason for getting job offers.

...but bear in mind that policy benefits will diminish over time

That being said, we believe with the enrolment rate (in higher education) now surpassing the 50% water-mark and with a difficult job market, student recruitment could become more challenging. This raises the bar for private school operators, particularly on their capabilities for developing new programs, offering different and diversified development paths for graduates (especially in junior colleges) as well as their ability to connect graduates with enterprises (such as through internship programs and collaborative programs). Over time, we believe only private school operators that excel in these skills will stand out and become industry consolidators.

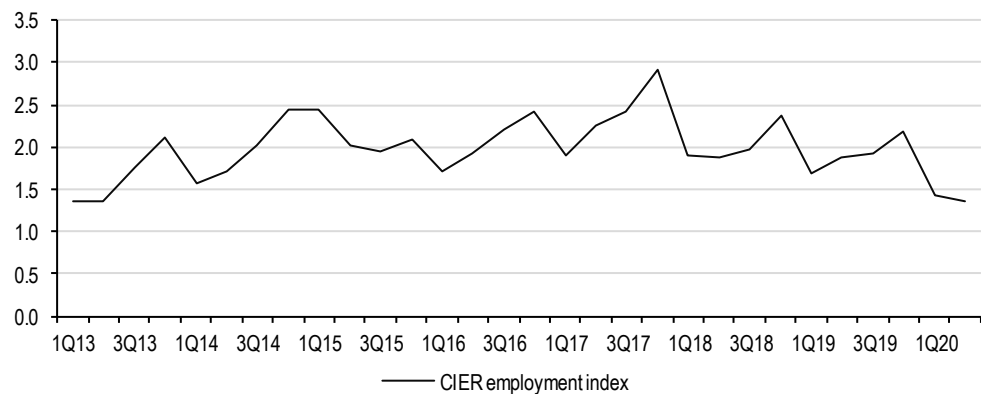
It is, however, worth bearing in mind that not all M&A is value-accretive. In some cases, factors like complicated sponsor interests can deter deals from closing quickly; integration capabilities also matter as they create synergies.

Exhibit 22: Sharply rising admissions to junior colleges may intensify future employment pressure



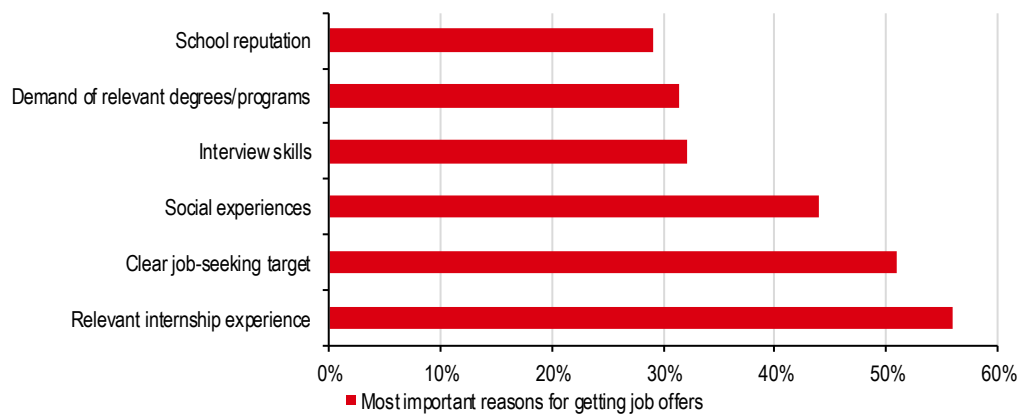
Note: The number of student admission in the columns, in million students.
Source: MOE, HSBC

Exhibit 23: A difficult job market casts a shadow over the employment prospects of graduates



Note: The index is calculated by using the number of job offers divided by the number of job applicants, based on the data from Zhaopin.com.
Source: China Institute of Employment Research, HSBC

Exhibit 24: We believe schools that are good at connecting students with employers will stand out, as many students believe the internship experience is the most important factor in getting jobs



Source: A report about student employment capability 2020 by the China Institute of Employment Research (2020 年大学生就业力报告), HSBC

Vocational education reform may be another swing factor

The upcoming vocational education reforms may pose some uncertainties to higher education school operators, especially for those operating junior colleges. The key objectives of the reforms, as outlined in the Proposal on Implementing the Reform of Nationwide Vocational Education (国家职业教育改革实施方案, 或称职教 20 条) focuses on establishing a greater balance between vocational high schools and ordinary high schools with a view to cultivating more skilful students for higher vocational education. Moreover, the Draft revision on the Vocational Education Law of mainland China (Draft for comments), released in December 2019, may help to establish a more comprehensive system on vocational education and better support private vocational schools.

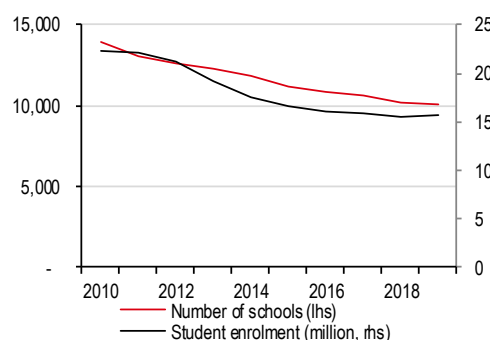
Secondary vocation schools:
 Includes specialised
 secondary schools,
 vocational high schools, and
 technician colleges

In our view, the reforms were also designed to reverse the declining trend of secondary vocational education over the past decade: between 2010 and 2019, the number of secondary vocational schools has declined from nearly 14,000 to 10,000 and student enrolments have declined from 22m to 16m, led by the decline in vocational high schools. While this may indicate more students were enrolled in ordinary, academic-based high schools, it has also weakened the recruitment base for junior colleges. Hence, despite the government's policies to expand the quotas in higher vocational education (mainly junior colleges), it is our understanding that the recruitment of junior colleges remains a key issue for school operators, as reflected in a low registration rate (报到率, or the ratio of actual admissions to the number of seats offered) of 50-70%.

We believe one way to revamp secondary vocational education, in addition to building more schools in this area, is to offer better and wider access for graduates. In this regard, the proposed national examination of secondary vocational education (职教高考) in 2019, under which the graduates use the exam results to apply for junior colleges (and potentially private universities), could be an important development though the details have yet to be released.

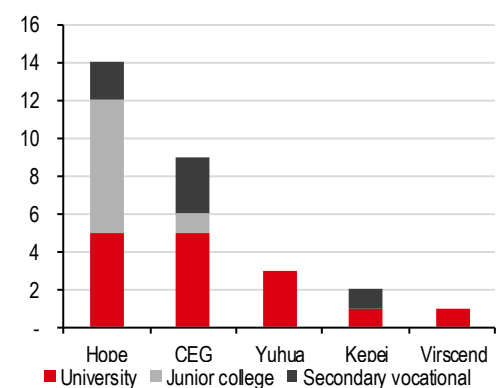
We believe this may also have a profound impact on private higher education schools: while this potentially helps to expand the recruitment base for junior colleges and application-based university degrees, it may also intensify competition as the students can now use their exam results to apply for more schools and have more options. In this regard, for schools with sizable junior college programs, this may weaken their competitiveness and introduce more competition. For secondary vocational colleges, this may imply a better outlook in the future given the stronger potential demand. This, however, may take years to happen, given it will take time to change the traditional belief and culture among Chinese students and their families who normally regard vocational education as the lower choice compared to academic-based schools.

Exhibit 25: Number of secondary vocational schools and student enrolment



Source: MOE, HSBC

Exhibit 26: Number of higher education and vocational education schools by type



Source: Company data, HSBC (in mainland China)

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Policy, policy, policy

- ◆ Private schools are highly regulated in China
- ◆ Our case study on a leading preschool operator is an example of how policy changes can significantly impact operations and the outlook
- ◆ Uncertainties still linger with the Implementation Regulations of Private Education Promotion Law which could greatly affect future prospects

A highly regulated industry

Private school operations are highly regulated in China. Before we discuss the current climate we first look back at the different stages of development:

- ◆ **Revamp:** Private education investment resumed after 1982, when the National People's Congress (NPC) for the first time formally recognised and encouraged private capital to invest in the education industry. In 1984, Huanghe Science and Technology University was established as one of the first private universities authorised by the Ministry of Education. During this decade (i.e., 1982-91), as private capital re-entered the industry, private investment gradually increased with a focus on preschools and higher education, although it remained limited. At the end of 1991, there were only 544 private secondary schools.
- ◆ **Rapid development:** This period covers the second decade of development (1992-2002) when private investment accelerated. The State Council released in 1993 the Outline of Education Reform and Development, which actively encouraged private education and set a 4% target for the fiscal funding to GDP ratio. In 1997 and 1999, more regulations were rolled out to support and regulate private education investment. In 1999, the first independent college, Zhejiang University City College, was established after being authorised by the Ministry of Education. The number of private middle schools jumped to 1,915 in 2001.
- ◆ **Respite:** Following this era of rapid growth, more legislation was passed to regulate private education. In 2002, the Private Education Promotion Law (民促法) was first promulgated (which established equal legal status for private schools and public schools) and, two years later, the associated Implementation Regulations (实施条例) were passed. In 2006, rules were passed to strengthen regulations and controls over private schools. During this period, the industry underwent consolidation to safeguard educational quality: for example, after 2003, over 100 independent colleges were closed due to inadequate control mechanisms in place. Generally speaking, while we note that the number of private schools has continued to grow during this period, they are facing stricter regulations, such as tighter rules over kindergartens as well as the pending Implementation Regulations of the Private Education Promotion Law (second amended version).

Policy changes could have a large impact...

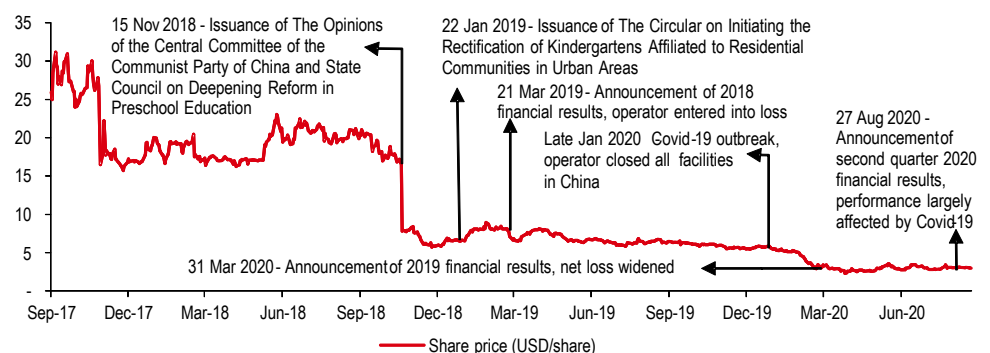
To better understand the impact of policy changes, we looked at a leading early education service provider in mainland China, which adopts a “direct plus franchise” business model whereby it directly operates schools and also permits franchises. Over 2015-18, the company expanded aggressively by growing the number of its franchised kindergartens from 111 to 254. However, from 2018 the business was impacted by tighter regulations, including the Reform Opinions² which set an 80% market share target for the public and private inclusive preschools by 2020 and prohibited listed companies from acquiring “for-profit” kindergartens through equity funding. In 2019, another Circular³ was released, reaffirming the required conversion of some kindergartens in residential areas to become “not-for-profit”.

While the company stated that it believes the regulations are not retroactive and does not affect its listing status, we note these regulations still led to an unfavourable impact on the company, including:

- ◆ Firstly, the rules have raised barriers around the company expanding its business through M&A or franchises; as a result, it only added three new franchisees in 2019. This has reduced its fee income from the franchisees and led to a lower gross profit margin.
- ◆ Pricing has come under pressure from more competition amid an increased number of public and inclusive kindergartens, which are supported by government funding and normally charge a lower fee than pure private kindergartens.
- ◆ The company’s general and administrative expenses have increased from USD7m in 2018 to USD25m in 2019, partly due to stricter government regulations and supervision measures.

The preschool operator slipped into a loss in 2018, recorded another in 2019, and its loss widened in 2020. Meanwhile, its share price halved on the day of the release of the Reform Opinions on 15 November 2018 and has dropped by more than 60% since then (vs. Hang Seng index down 7% over the same period).

Exhibit 27: Case study share price has been buffeted by policy changes



Note: Share price up to 17 September 2020.
 Source: Bloomberg, HSBC

This case study illustrates an example of how changing regulations can affect the operations and prospects of private school operators, and hence their share prices. It is, however, important to bear in mind that such a risk is not limited to preschool players. There was also a sharp share price slump in Hong Kong listed school operators after 10 August 2018, when the Implementation Regulations of Private Education Promotion Law (the second amendment) were released.

² The Opinions of the Central Committee of the Communist Party of China and State Council on Deepening Reform in Preschool Education (关于学前教育深化改革规范发展的若干意见)

³ The Circular on Initiating the Rectification of Kindergartens Affiliated to Residential Communities in Urban Areas (关于开展城镇小区配套幼儿园治理工作的通知)

...and policy concerns linger

It's important to note though that not all policies are unfavourable. In particular, many recent measures in the higher education area have helped expand admission quotas and supported the development of higher vocational education.

Implementation Regulations: A key overhang for the sector

Nevertheless, we believe the largest policy uncertainty facing private school operators comes from the Implementation Regulations of Private Education Promotion Law (民促法实施条例). Back in 2016, the law was revised with a focus on classifying schools into “for-profit” schools and “not-for-profit” schools – both with large differences in areas like price-setting, taxes, land use rights, and profit distribution – and to better regulate them by type. Meanwhile, according to the law, schools in the compulsory education stage (i.e., G1-9) can only be “not-for-profit” schools. For details, please refer to Exhibit 28 for a comparison.

The terms of “for-profit” and “not-for-profit” are somewhat misleading

One of the initial misunderstandings, in our view, comes from the terms about “for-profit” and “not-for-profit”. However, in the latter description of “not-for-profit”, the schools are still allowed to make money but there are significant restrictions placed on the distribution of profits – in principle they are not allowed to distribute profits to equity providers (or sponsors), including through connected transactions.

In addition, with the Implementation Regulations of Private Education Promotion Law (second amendments) being released in August 2018, there are some uncertainties including:

- ◆ Clause 12 stated that education groups are not allowed to acquire or control “not-for-profit schools” through contractual arrangements or franchises. If strictly implemented, this could deprive private K-12 school operators from many M&A opportunities and may also challenge their existing control over school operators in the compulsory education stage.
- ◆ Clause 45 required private schools to conduct related-party transactions in an “open, equal, and justified” (公开, 公平, 公允) basis and cannot harm the interest of the nation, school, students, and teachers. This increases the difficulty for schools from distributing their profits to the listed companies, which we believe is usually done through service fee agreements (which are regarded as connected transactions within the listed groups).
- ◆ Furthermore, in the classification process, the schools need to go through a “financial liquidation” under which its income tax rate and land use costs may be reset. The potential new tax rate is not yet known, although some school operators say it may be 15% (up from 0% now). Moreover, there is a possibility that the “for-profit” schools may need to pay for higher land use cost on their existing land (if those were allocated at free or low costs).

Under the new law, private school operators will see higher tax rates and land use costs

In a nutshell, while there are uncertainties over the Implementation Regulations of Private Education Promotion Law, it is clear that under the new law private school operators will see higher tax rates and land use costs (see our pro-forma analysis in the following page) while their M&A opportunities could be reduced – especially for school operators in the compulsory education stage.

It is also worth highlighting that two years have passed since these new rules were released and now, given the challenging macro conditions, their finalization may be further delayed. That said, the recent share price decline by the school operators on 2 September 2020 – on the back of the news to regulate the fees of “not-for-profit” schools and the reiteration of restricting connected transactions – suggest investors remain sensitive to changes.

Lastly, it is also important to mention that the Implementation Regulations of Private Education Promotion Law not only brings tighter regulations but could also have a favourable impact on the industry. By imposing proper controls, they help to safeguard the healthy and long-term development of private school operators. Meanwhile, room to grow has not abated: Clause 7 – which regulates the public schools in cooperating with private capital – could lead some publicly-sponsored private schools to leave the industry, providing opportunities for the private K-12 operators.

Exhibit 28: Comparison of not-for-profit schools and for-profit schools

| Private school type | Not-for-profit school | For-profit school |
|---|--|---|
| Legal classification | Private non-enterprise unit | Enterprise |
| Registration department | Ministry of Civil Affairs | Ministry of Industry and Commerce |
| Land use right | Allocation | Transfer (land sales) |
| Pricing (i.e. tuition fee/boarding fee) | Regulated by the government | Self-determined |
| Taxation | Exempted from VAT and corporate tax | Exempted from VAT but subject to corporate tax (with an unclear tax rate) |
| Profit distributions (to sponsors) | Prohibited | Permitted |
| Government grants and/or funding support (i.e. subsidies, services purchases) | Fully eligible | Partly eligible |
| Classification of school type | | |
| -Higher education | Permitted | Permitted |
| -High school | Permitted | Permitted |
| -Compulsory education | Permitted | Prohibited |
| -Preschool | Permitted | Permitted |
| Residual value allocation after termination | Continue to be used for other "not-for-profit" education activities after allocating subsidies to sponsors | Refer to Company Law regulations |
| Establishment and/or joint establishment by public school | Permitted, but not allowed profits via brand sharing | Prohibited |
| M&A | Prohibited | Permitted |
| Allocation of development funds | No less than 25% of the increase in net asset value | No less than 25% of net profit |

Source: HSBC analysis

To better evaluate the potential impact of conversion of "not-for-profit schools" into "for-profit schools", we performed a hypothetical, pro-forma analysis below – by using the historical data of a listed education player as an example. Our key assumptions include two parts:

- ◆ We assume a 15% corporate tax rate after conversion, without taking into account any further potential tax savings or preferential tax treatments.
- ◆ We assume the school operator needs to pay a "top-up" fee on its occupied land that was previously allocated by the government at zero or low cost, and assume a "top-up" cost of RMB600 per square meter (based on past educational land transfer in the same region); we further assume the increased "top-up" costs are being amortized over 50 years.

Overall, we estimate the FY19 profit of this operator, in a pro-forma basis, would have declined by around RMB75m, or around c17%, after the conversion into "for-profit" schools. The core net profit margin is estimated to fall from 63% to 52% – still a fairly high level; note that we didn't assume the conversion to have a material impact on its financial position, in view of its low gearing ratio and a strong operating cash flow (of over RMB500m in FY19).

Conversion into the "for-profit" school: Our analysis shows a c17% profit impact

Exhibit 29: A pro-forma analysis on "for-profit school" conversion, for FY19 (RMBm) – change from NPM to core NPM

| Items | Before conversion | After conversion |
|--|-------------------|------------------|
| Increased tax cost | - | 67 |
| Additional amortisation of land-use rights | - | 8 |
| Net profit | 456 | 381 |
| Net profit margin | 63% | 52% |

Source: HSBC estimates

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Annex

- ◆ Here we summarise and explain some key terms which are specific to China's school operations

| Chinese term | English term | Explanation |
|--------------|---|---|
| 高考 | National college/university entrance examination (i.e., Gaokao) | An annual exam held uniformly across mainland China for high school students to enrol in colleges/universities |
| 高考状元 | "Gaokao" top scorers | The student who comes first in the national college entrance examination within a certain area |
| 保送 | Recommended students | The students who are recommended by high schools and can be admitted to the universities without taking the national college entrance exam |
| 义务教育 | Compulsory education | A nine-year period of education that's free, mandatory and school-based for every student in mainland China (primary to middle school) |
| 素质教育 | Quality-oriented education (i.e., 'Suzhi' education) | Aiming for all-round development rather than being score-focused |
| 多校划片 | Random admission by multi-schools | A policy first introduced in 2015 which prescribes that students should be randomly admitted into schools near their residence for compulsory education |
| 公民同招 | Simultaneous recruitment of public and private schools | A policy effective from 2020 which prescribes that student recruitment for compulsory education should be managed centrally and progress simultaneously for public and private schools |
| 大班额 | Large classes | Class sizes of over 56 students in educationally-underdeveloped areas and which are targeted to be eliminated in compulsory education by 2020 |
| 12 年一贯制 | Vertically-integrated school networks for G1-12 | A school network covering grade 1 in primary school to grade 12 in high school, in which primary school students normally continue to study at a middle school with very high internal progression rates |
| 五大学科竞赛 | Five discipline competitions | A specific competition of five disciplines, including mathematics, physics, chemistry, biology, informatics for high school students who want an advantage in university admission |
| 一本/二本/三本 | The first / second / third batch of institutions | The first/second/third batch of institutions in student admissions by the Gaokao results |
| 985 工程 | Project 985 | A project to build 39 key universities in China with strong research capabilities. It was named after the date it was announced, in May 1998 |
| 211 工程 | Project 211 | A project to build around 100 key universities in the 21st century |
| 扩招 | University enrolment expansion | A policy effective from 1999 to cultivate a qualified labour force by expanding higher education enrolment; revoked in 2012 |
| 专升本 | "Top-up" program from junior colleges to university | A program for junior college students to continue their studies in universities with undergraduate degrees for graduation certificates |
| 单招 | Separate enrolment for junior colleges | An enrolment method in which junior colleges design test papers, organise examinations and make admission decisions by themselves |
| 公立、民办 | Public / private school | Public schools are schools operated and financed by the government Private schools are schools not operated and financed by the government |
| 国有民办 | State-controlled private schools | Schools owned by the government but operated by social institutions or individuals |
| 分类管理 | Classified management | A regime requiring private for-profit schools and not-for-profit schools to register with different departments for better private education management |
| 合理回报/不要求合理回报 | Schools requiring justified profit vs. schools not requiring justified profit | The old school classification standards adopted in the Private Education Promotion Law of the PRC (2002 version). Sponsors of school requiring justified profit can extract a certain portion of its operating surplus at the end of an accounting year |
| 举办者 | Sponsors | The person or institution who sponsors and establishes private schools/colleges. It's a similar concept to the originator or founder |
| “双师型”教师 | Double-qualified teacher | A concept introduced in 2019 to promote vocational education by cultivating teachers with both theoretical and practical teaching capabilities |
| 职教高考 | National examination for vocational education | An exam system introduced by the State Council in 2019, but not yet implemented, to improve opportunities for vocational secondary students to enter colleges/universities |
| 四类人员 | Four specific types of personnel | Demobilised military personnel, laid-off workers, rural migrant workers and farmers are encouraged to study in higher vocational colleges with supportive policies from the government |

Source: HSBC

Disclosure appendix

Analyst Certification

The following analyst(s), economist(s), or strategist(s) who is(are) primarily responsible for this report, including any analyst(s) whose name(s) appear(s) as author of an individual section or sections of the report and any analyst(s) named as the covering analyst(s) of a subsidiary company in a sum-of-the-parts valuation certifies(y) that the opinion(s) on the subject security(ies) or issuer(s), any views or forecasts expressed in the section(s) of which such individual(s) is(are) named as author(s), and any other views or forecasts expressed herein, including any views expressed on the back page of the research report, accurately reflect their personal view(s) and that no part of their compensation was, is or will be directly or indirectly related to the specific recommendation(s) or views contained in this research report: York Pun, CFA, Christina Chen and Terrence Liang

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The target price is based on the analyst's assessment of the stock's actual current value, although we expect it to take six to 12 months for the market price to reflect this. When the target price is more than 20% above the current share price, the stock will be classified as a Buy; when it is between 5% and 20% above the current share price, the stock may be classified as a Buy or a Hold; when it is between 5% below and 5% above the current share price, the stock will be classified as a Hold; when it is between 5% and 20% below the current share price, the stock may be classified as a Hold or a Reduce; and when it is more than 20% below the current share price, the stock will be classified as a Reduce.

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Upside/Downside is the percentage difference between the target price and the share price.

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*A stock was classified as volatile if its historical volatility had exceeded 40%, if the stock had been listed for less than 12 months (unless it was in an industry or sector where volatility is low) or if the analyst expected significant volatility. However, stocks which we did not consider volatile may in fact also have behaved in such a way. Historical volatility was defined as the past month's average of the daily 365-day moving average volatilities. In order to avoid misleadingly frequent changes in rating, however, volatility had to move 2.5 percentage points past the 40% benchmark in either direction for a stock's status to change.

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| | | |
|-------------|-----|--|
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| Hold | 36% | (32% of these provided with Investment Banking Services) |
| Sell | 9% | (25% of these provided with Investment Banking Services) |

For the purposes of the distribution above the following mapping structure is used during the transition from the previous to current rating models: under our previous model, Overweight = Buy, Neutral = Hold and Underweight = Sell; under our current model Buy = Buy, Hold = Hold and Reduce = Sell. For rating definitions under both models, please see "Stock ratings and basis for financial analysis" above.

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