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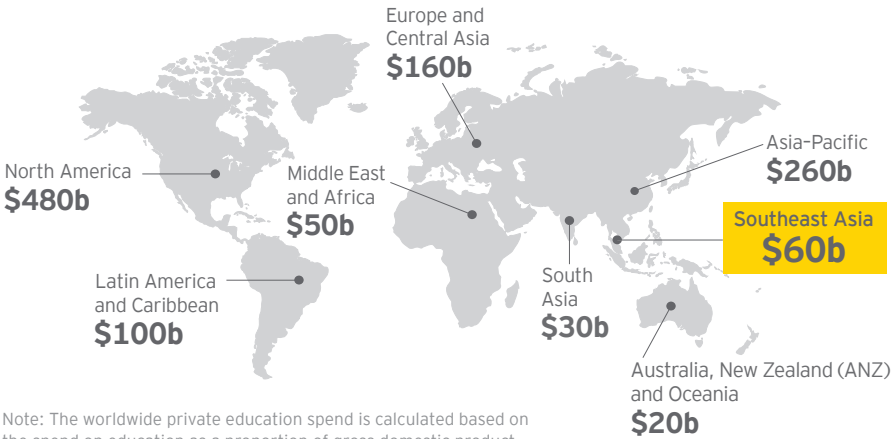
Education in Southeast Asia

Opportunities for investors and operators



Background: growth of private education

Estimated worldwide private education spend by region, 2015



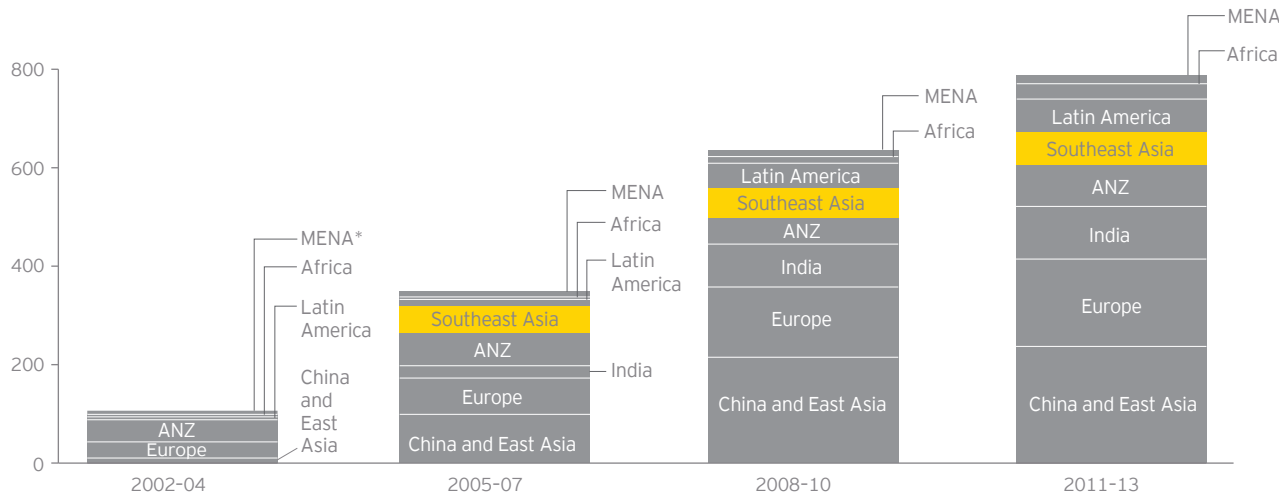
Note: The worldwide private education spend is calculated based on the spend on education as a proportion of gross domestic product.
Source: World Bank data; Oxford Economics data; Parthenon-EY analysis.

Private education is a trillion-dollar industry globally. Emerging markets have seen a surge in private provision of education during the last decade. Population growth during the last century, along with macroeconomic gains, has paved the way for this trend. Rising affluence has contributed to increased enrollment across levels of education.

However, as demand for education has risen, governments have struggled to match the supply. The burgeoning middle class in emerging markets has turned to private education to meet the demand for high-quality education. The private education spend in Southeast Asia has reached nearly \$60 billion.

Transaction activity has accelerated greatly in the past decade, highlighting the success of the sector. Much of this growth has been driven by activity in Asia; deal volume has jumped more than 80% with around 60 transactions taking place from 2011-13.

Completed M&A activity in emerging private education markets, 2002-13



*Middle East and North Africa
Source: Preqin; CapIQ.

What is driving the growth of private education in Southeast Asia?

Economic growth, demographic trends and cultural shifts have spurred the large demand for private education.

Key demand drivers



Shrinking household size



Rapid urbanization



Affordability



Low capacity vs. demand



Value of English proficiency

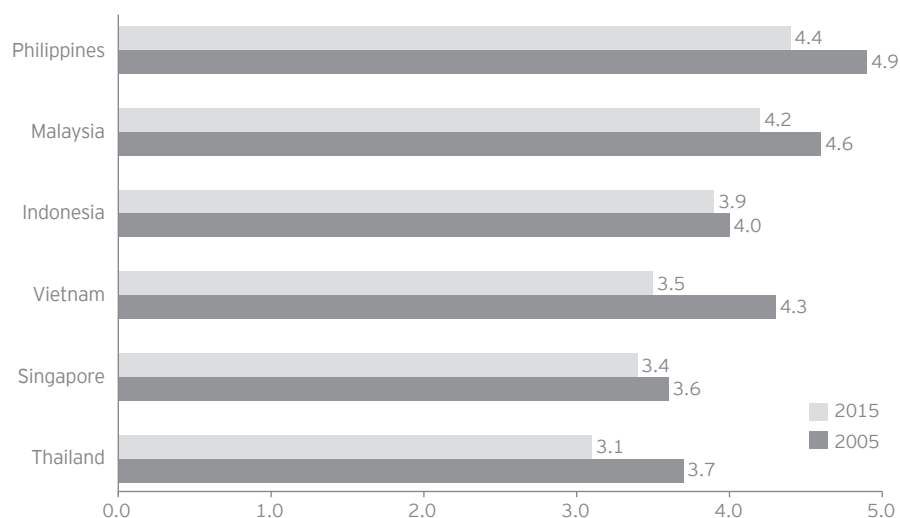


Desire for international education



Shrinking household size

Population growth of city versus national average, 2005-15



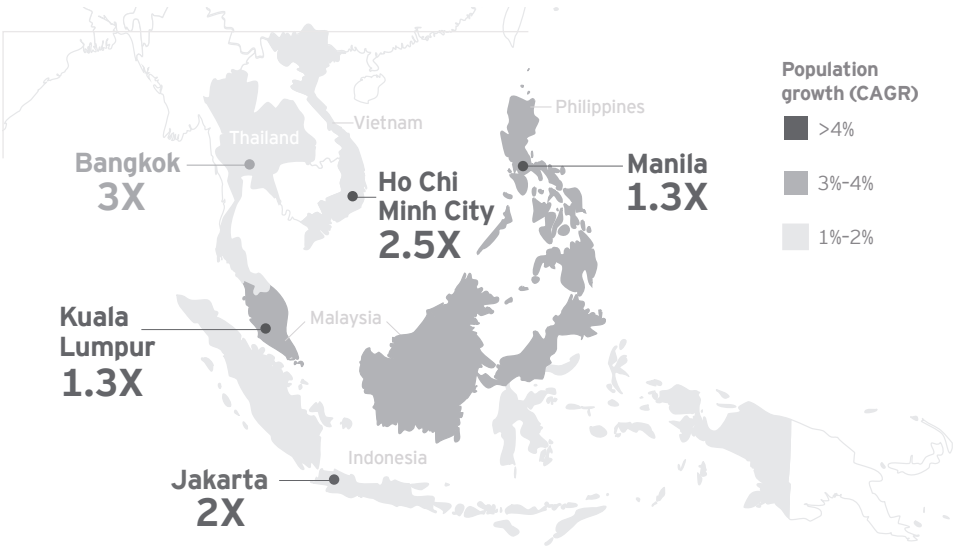
The average household size has decreased across Southeast Asia. Traditionally, large, extended families made childcare accessible to couples. As more families have dual incomes, a growing number of nuclear families must look for outside childcare providers. The decline in the average household size has led to a corresponding increased demand for early education across the region.

Source: Euromonitor; Parthenon-EY analysis.



Rapid urbanization

Population growth of city versus national average, 2005-15



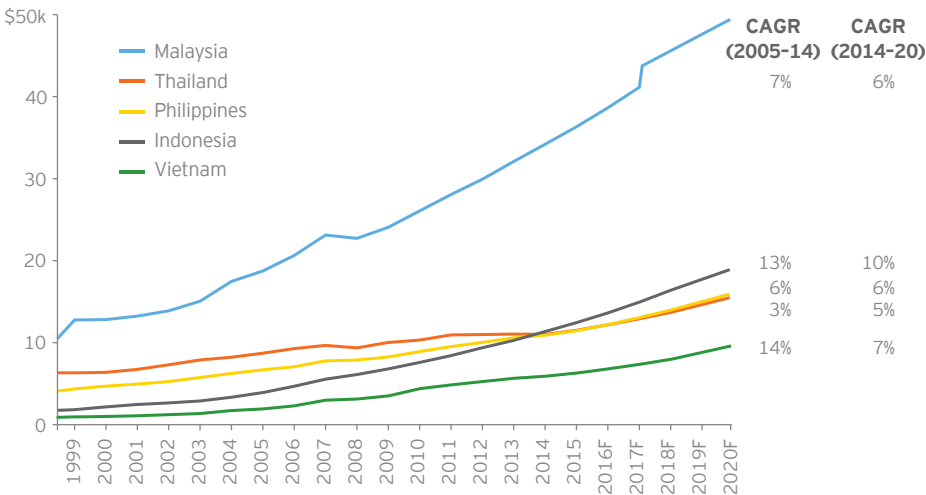
Source: Euromonitor; Parthenon-EY analysis.

Rapid urbanization has also encouraged the growth of private education as a result of concentrated demand and higher incomes. The populations in major metropolitan areas of Southeast Asian countries have increased at a significantly higher rate than national populations.



Affordability

Average gross income per household (US\$), 1999-2020F (Forecast F)



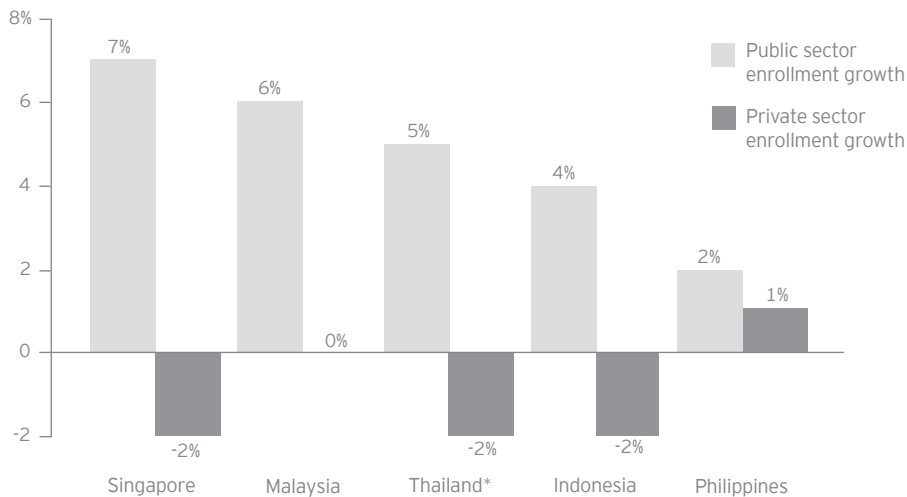
Note: Real income growth is based on 2013 US\$.
Source: Euromonitor; Parthenon-EY analysis.

Emerging markets in the region have demonstrated robust economic performance during the past 20 years, with the average gross income per household on a steady rise. Increases in income have greatly contributed to demand for high-quality education, with more households than ever before able, and willing, to spend a premium on education – from the early years to higher education.



Low capacity vs. demand

K-12 private vs. public enrollment, 2011-14*



*Data for the most recent years has been used when 2011-14 data was not available.
Source: Singapore Education Statistics Digest; Ministry of Education, Malaysia; Malaysian National Statistics; Ministry of Education, Thailand; Ministry of Education, Indonesia; Ministry of Education, Philippines.

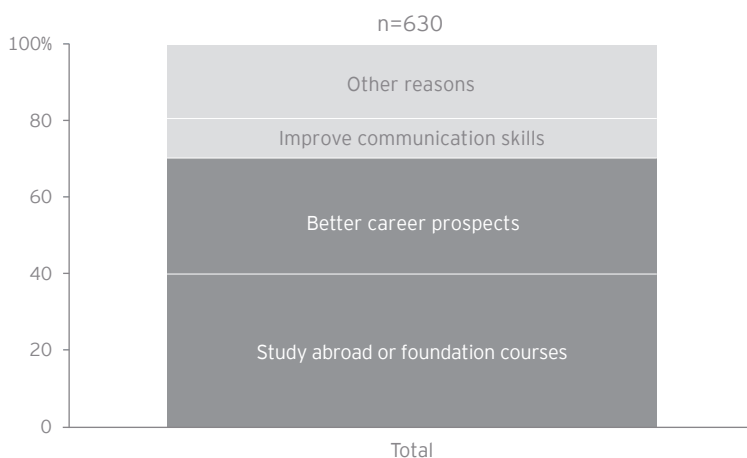
The growing demand for quality education in Southeast Asia cannot be met by the overburdened public systems. The private sector has stepped in to meet this demand, with private school enrollment outperforming public enrollment across most of the region.



Value of English proficiency

Survey of Vietnamese parents, 2015

Q: Why is learning English important for your child?



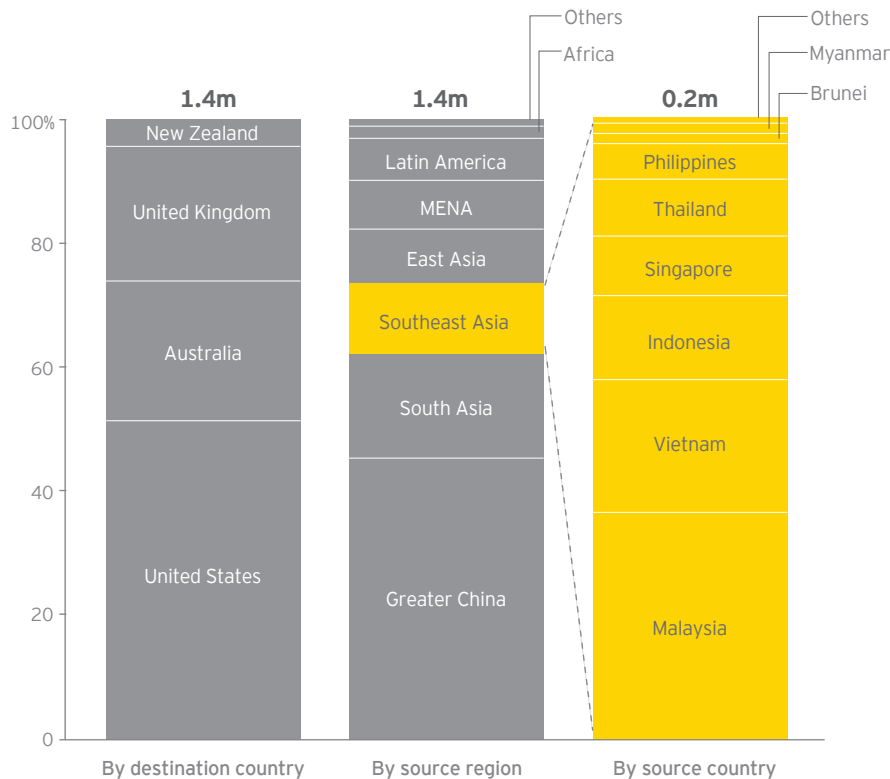
Note: Real income growth is based on 2013 US\$.
Source: Euromonitor; Parthneon-EY analysis.

English has moved from being an aspirational skill to an essential requirement in the job market in many Southeast Asian countries. Students and parents place a high value on learning English, particularly in markets such as Thailand and Vietnam, where the public curricula may not offer English-learning opportunities. Parthenon-EY's surveys of parents across the region confirmed that English is valued because it can lead to higher-paying jobs, increased chances of studying abroad and job success.



Desire for international education

International enrollment in Western markets, by source, region and country, 2013



The importance placed on English language skills has led to a corresponding desire to study abroad in English-speaking countries. Developed markets not only offer a chance to improve one's English skills, but also an opportunity to work in the host country, potentially earning a premium salary. After Greater China, Southeast Asia is the second largest market of students leaving for key Western countries, with the majority of students coming from Malaysia.

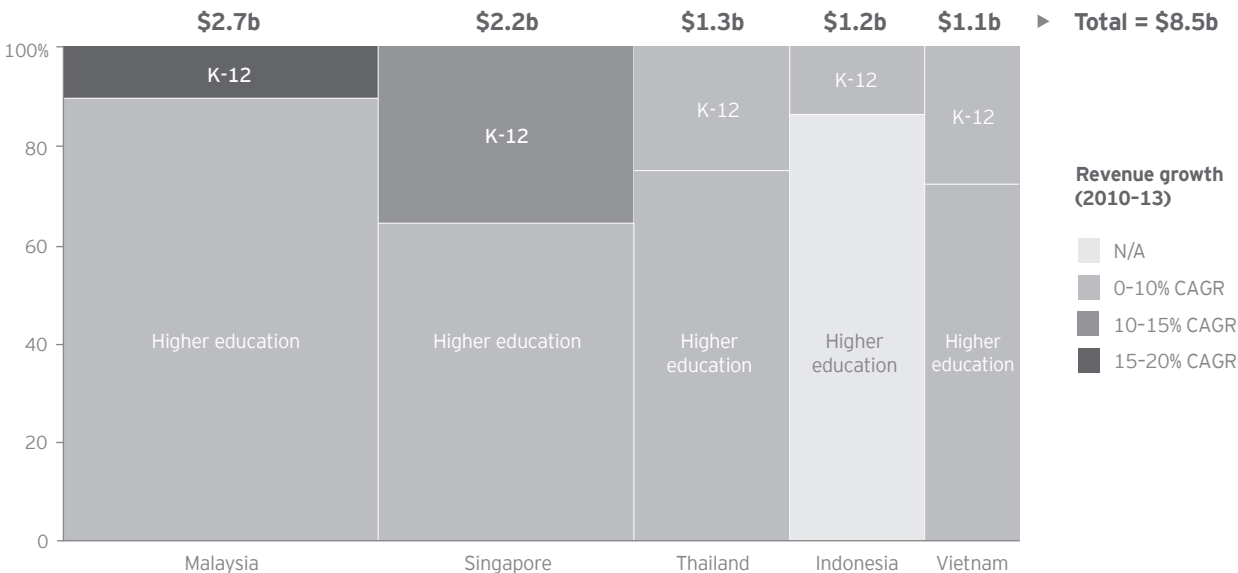
Source: World Bank statistics; Parthenon-EY analysis.

Understanding market size and growth in Southeast Asia

The key demand drivers have contributed to a robust and growing private education market in Southeast Asia, close to \$10 billion in key markets. Private K-12 and higher education are the largest segments in the market and the most developed. In part due to their scalability, K-12 and higher education also accelerate quickly as economies develop and students invest in higher education to take advantage of these new economic opportunities.

Singapore and Malaysia have the most developed private education markets. Malaysia has a long history of establishing private higher education institutions and generating significant investments from corporations and private equity. Both countries are also benefiting from the increased popularity of international schools. Singapore is now the largest international schools market in the world, with estimated revenues of more than \$700 million. It is not uncommon to find schools with an enrollment of more than 2,500 students, priced at more than \$25,000 per year. The Thai, Indonesian and Vietnamese markets, though smaller in size, are expected to expand as their economies grow, bringing more high-quality, private offerings.

Private K-12 and higher education market, select Southeastern Asian countries, 2013



Source: Official school websites; Parthenon-EY primary research and proprietary data.

Considerations for investing in education

Education segments differ in character, but favorable attributes make the sector especially encouraging for investment.

	1 Long-term revenue visibility	2 High barriers to entry	3 Demand greater than supply	4 Prices rising faster than inflation	5 Negative working capital
Higher education	✓	✓	✓	✓	✓
Private K-12	✓	✓	✓	✓	✓
Transnational education	✗	✓	✓	✓	✓
English-language learning	✗	✗	✗	✓	✓
Vocational education	✗	✗	✗	✗	✓

1 Long-term revenue visibility

Education can offer long-term revenue in segments where completion of courses takes several years, providing a multiyear revenue outlook for operators. This is particularly strong in K-12, where students enroll for 4 to 12 years, and higher education, where students enroll for 3 to 4 years. Operators can accordingly predict future returns and growth that is, in large part, guaranteed as long as they continue to provide a quality service throughout the duration of the student's enrollment.

2 High barriers to entry

Barriers to enter the education market prevent the sector from overcrowding, allowing quality providers to build strong brands. The main barriers include:

- ▶ **High capital requirements**
Land and infrastructure for institutions are capital expenditure intensive.
- ▶ **Regulation**
Government regulation of the sector protects the interests of various stakeholders, including operators, students, parents and investors.

Regulatory oversight ranges from fee caps and foreign investment limitations to quality management and standard setting. Varied regulations across markets require investors and operators to deeply examine and understand the potential limitations and opportunities in each market.

▶ Reputation

Reputation is a key selection criterion of parents and students across education segments. Reputation is strongly tied to the age of an institution, reducing the ability of new entrants to gain market share without establishing themselves as quality providers over several years.

3 Demand greater than supply

While demand for education consistently grows, supply is slow to catch up because of the high barriers to entry. Scalability of existing institutions is limited and seats cannot be added beyond a certain point without affecting the quality of delivery. Thus, successful new market entrants can tap into this unmet demand for quality education.

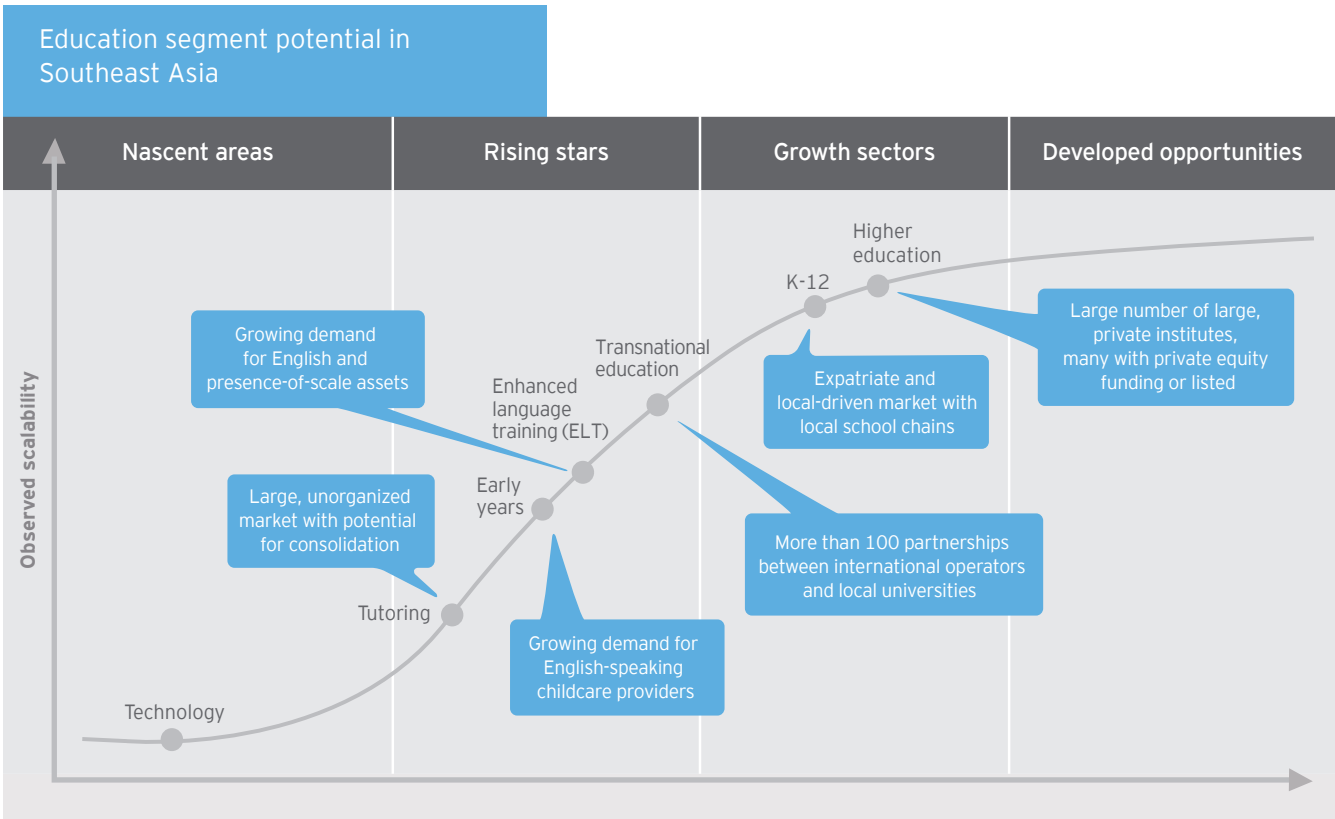
4 Prices rising faster than inflation

Education is one of the largest investments people make in their lifetime, particularly in emerging markets. Parents and students select institutions that they believe will provide the highest return over time. Well-reputed, quality institutes possess pricing power, allowing prices to grow higher than inflation during the same time. In contrast, data shows that costs tend not to grow more than inflation.

5 Negative working capital

Education is characterized by negative working capital. Most education programs require fees paid in advance, providing them with the liquidity to invest in programs and institutions with reduced risk.

Education segments vary in their development stages across Southeast Asia. Investors should consider potential scalability and opportunities when considering assets.



Impact of regulations

The regulation of private education is generally friendly in Southeast Asia. Governments have recognized the role of the private sector in meeting the demand for education and have strived to balance the interests of operators and investors while making certain of the high quality of delivery and infrastructure.

In particular, favorable regulations around for-profit education and foreign ownership are prevalent in the region. Foreign direct investment in education is encouraged in most markets, without significant limitation on the foreign repatriation of profits. Markets that allow 100% foreign ownership have seen the proliferation of international providers and foreign university branch campuses.

The regulation of school fees in Malaysia and the Philippines is characteristic of growth-stage education markets. Typically, these regulations ease as markets mature. Pricing management, in the short term, protects the interests of consumers and provides accessibility to quality education. As more providers enter the market and a natural supply and demand process develops, a self-regulating system emerges.

	Malaysia	Vietnam	Thailand	Indonesia	Singapore	Philippines
For-profit education allowed	✓	✓	✓	✗	✓	✓
Foreign direct investment	✓	✓	✓	✓	✓	✓
Profit repatriation allowed	✓	✓	✓	NA	✓	✓
Foreign ownership	100%	100%	50%	49%	100%	40%
Locals allowed to enroll at international schools	✓	✓ up to 20%	✓ up to 50%	✓	✗	✓
K-12 fee regulation	✓	✗	✗	✗	✗	✓
Foreign higher education partnership allowed	✓	✓	✓	✓	✓	✓

Source: Ministry of Higher Education, Malaysia; Vietnam: Ministry of Education and Training, Vietnam; Thailand: Ministry of Education, Thailand; Office of the Private Education Commission, Thailand; Indonesia: Indonesia Ministry of Education and Culture; Singapore: Ministry of Education, Singapore; Council for Private Education, Singapore; Philippines: Department of Education, Philippines.

Conclusion

The education opportunity in Southeast Asia, although often overshadowed by that of its neighbors, China and India, is growing increasingly attractive. The region is mostly middle income, with a GDP per capita equivalent to that of China and a \$10 billion private education market. Both private K-12 and higher education still offer many opportunities to investors, with both sectors offering room for consolidation. Other sectors such as English-language training, early education, tutoring and transnational education, are also quickly proving their potential as “rising stars” in the region.

The Southeast Asian education market, as with that of any emerging market, comes with a set of inherent challenges. Opportunities are few and difficult to identify, especially for investors looking to invest upward of \$100 million. Smaller deals have long investment windows and limit the ability to roll up assets quickly. Yet, a favorable operating environment will allow this situation to improve gradually. As the sector organizes itself, we expect to see education transactions across verticals increase.

How can Parthenon-EY help?

Parthenon-EY has an unparalleled understanding of the education dynamics in Southeast Asia and other emerging markets. Our extensive proprietary databases and analytical processes further leverage this knowledge.

- ▶ We have demonstrated a long-term commitment to the education sector and have high credibility among the investor community. This comes from a strong track record of helping investors translate education business planning into improved returns.
- ▶ We have developed an in-depth understanding of governments, investors, operators, parents and students based on extensive work with each of these stakeholder groups.
- ▶ We have extensive experience working with leading regulators, including ministries of education, quality rating institutions and other education regulatory bodies at national, state and district levels, allowing us to quickly navigate the unique regulatory terrain of each market.

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About Parthenon-EY

Parthenon joined Ernst & Young LLP on 29 August 2014. Parthenon-EY is a strategy consultancy, committed to bringing unconventional yet pragmatic thinking together with our clients' smarts to deliver actionable strategies for real impact in today's complex business landscape. Innovation has become a necessary ingredient for sustained success. Critical to unlocking opportunities is Parthenon-EY's ideal balance of strengths – specialized experience with broad executional capabilities – to help you optimize your portfolio of businesses, uncover industry insights to make investment decisions, find effective paths for strategic growth opportunities and make acquisitions more rewarding. Our proven methodologies along with a progressive spirit can deliver intelligent services for our clients, amplify the impact of our strategies and make us the global advisor of choice for business leaders.

About Parthenon-EY Education practice

The Parthenon-EY Education practice – the first of its kind across management consulting firms – has an explicit mission and vision to be the leading strategy advisor to the global education industry. To achieve this, we invest significantly in dedicated management and team resources so that our global experience extends across public sector and non-profit education providers foundations, for-profit companies and service providers, and investors. We have deep experience and a track record of consistent success in working closely with universities, colleges, states, districts, and leading educational reform and service organizations across the globe.

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