

Business Valuation Market Study 2017

Valuation trends in ASEAN



Jointly conducted by



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The 2017 Business Valuation Market Study is jointly conducted by the Institute of Valuers and Appraisers, Singapore (IVAS) and Ernst & Young Solutions LLP (EY).

Executive summary

Background

Welcome to the 2017 Business Valuation Market Study, a survey jointly conducted by the Institute of Valuers and Appraisers, Singapore (IVAS) and Ernst & Young Solutions LLP (EY).

Our inaugural survey in 2014 focused solely on the views of Singapore executives. This year, we have broadened the survey to include other ASEAN countries. With the formation of the ASEAN Economic Community in 2015, this survey is timely; it will provide insights on valuation practices across ASEAN including valuation parameters and approaches, key challenges faced by valuation professionals, and the outlook for valuations in ASEAN.

We trust that this survey will fill the information gap on fundamental valuation issues professionals in the region face and contribute to the development of valuation practices in ASEAN.

EY and IVAS would like to thank the following organizations for supporting this survey: The Association of Chartered Certified Accountants, CPA Australia, CFA Society of Singapore, Institute of Chartered Accountants in England and Wales, Institute of Singapore Chartered Accountants, Investment Management Association of Singapore, and Singapore Venture Capital & Private Equity Association.

About the survey

We have captured the views of 205 respondents across a wide range of industries. The survey questions were circulated through the networks of various professional organizations and bodies.

The survey questions broadly cover:

- ▶ **Purpose of valuations**
 - ▶ Respondents provided the valuation purpose, asset classes valued, and level of valuation complexity they encountered for each asset class over the last three years.

- ▶ **Valuation process and trends**
 - ▶ Respondents were surveyed on the valuation approaches they frequently adopt and the typical way they conclude their valuations.
 - ▶ Respondents were also asked about their adopted practices and challenges faced under the valuation approaches.

- ▶ **Looking forward: A peek into the future**
 - ▶ Respondents weighed in on the future of valuations, essential skills to remain relevant, and key drivers of valuation growth.

Executive summary

Summary of highlights

This survey highlights the similarities and differences of valuation practices across ASEAN.



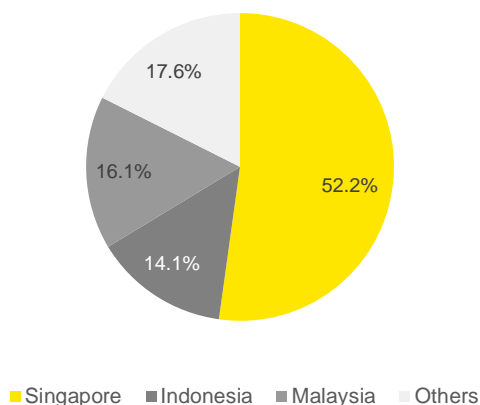
Survey highlights

- ▶ **Purpose of valuations across ASEAN is driven by each country's economic, legislative, and regulatory environment.** Valuations for litigation or dispute resolutions and tax compliance are less common than financial reporting and transactions. However, respondents from Indonesia have the most experience with valuations for tax compliance while those from Singapore have the most experience with valuations for litigation or dispute resolutions (pages 6 and 7). Respondents also identified mergers, acquisitions, and disposals or takeovers, in addition to financial reporting, as the top two drivers for valuations over the next three years (page 21).
- ▶ **The preferred way to conclude a valuation is to cross-check the value from the primary approach with another approach.** Less common approaches adopted by respondents include averaging valuation results from different approaches or using just one valuation approach (page 9).
- ▶ **The most significant challenge in a valuation is the estimation of cash flows.** There appears to be less fuss over the ubiquitous WACC (weighted cost average cost of capital), which is attributable to an increase in the availability of data, knowledge, and familiarity with how the WACC is built (page 10).
- ▶ **Earnings before interest, tax, depreciation and amortization (EBITDA) multiple, the winner. Revenue multiple, the dark horse.** The EBITDA multiple came out tops among the many possible multiples that can be used when adopting the Market Approach, a surprising move away from the formerly popular price/earnings (P/E) multiple. The revenue multiple snuck into second place, and we believe this can be explained by technology start-ups becoming commonplace across ASEAN (page 14).
- ▶ **Respondents have displayed a keen awareness of sector and industry specific market multiples,** which are preferred over traditional multiples that focus on earnings and book values when valuing businesses in specific industries (page 15).
- ▶ Survey respondents identified the collection and analysis of all relevant information as one of the top three challenges in the valuation process and technology as the next industry focus; **interestingly, data analytics is slowly gaining traction as an essential skill** (pages 16, 17 and 21) across ASEAN, although we note that Indonesian respondents selected data analytics as one of the essential skills.

Profile of respondents

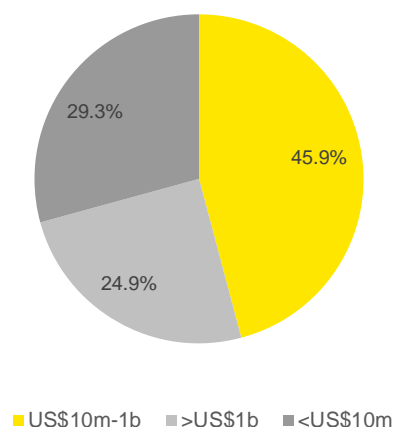
Geography base

D1: Which country are you based in?



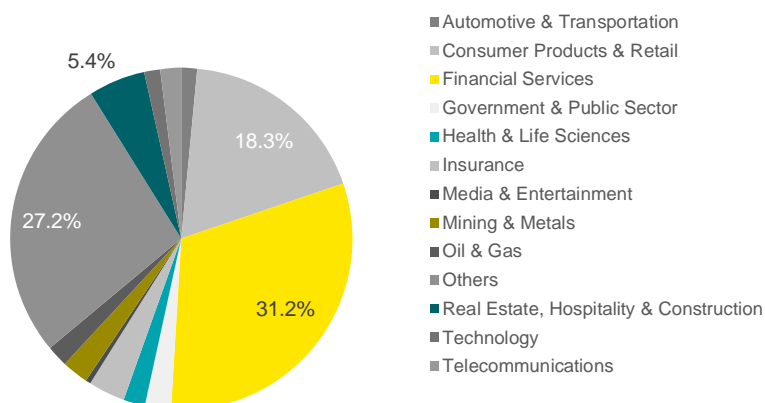
Organization revenue

D3: What is the size of your company in terms of annual revenue?



Industry focus

D4: Please select the industry you primarily work on:

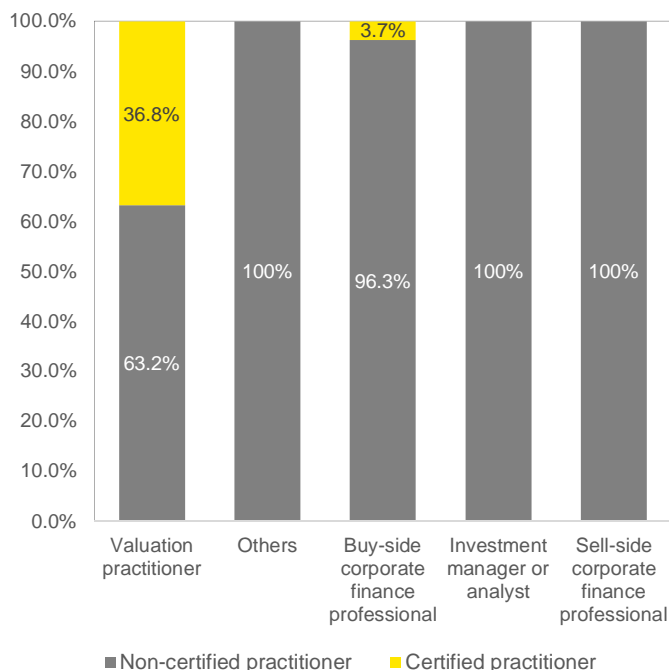


- Automotive & Transportation
- Consumer Products & Retail
- Financial Services
- Government & Public Sector
- Health & Life Sciences
- Insurance
- Media & Entertainment
- Mining & Metals
- Oil & Gas
- Others
- Real Estate, Hospitality & Construction
- Technology
- Telecommunications

- Others include:
- Professional services
 - Private equity
 - Power and energy
 - Plantation and agribusiness
 - Infrastructure

Primary role of survey respondents

D2: Which of the following best describes you?



A total of 205 respondents took part in the survey, of which 52.2% are from Singapore, 16.1% from Malaysia, 14.1% from Indonesia, and 16.3% from other ASEAN countries including Thailand, the Philippines, Vietnam and Brunei (Figure D1).

Practitioners in professional services accounted for 55.6% of survey respondents, followed by corporate finance professionals and investment professionals at 28.3% (Figure D2).

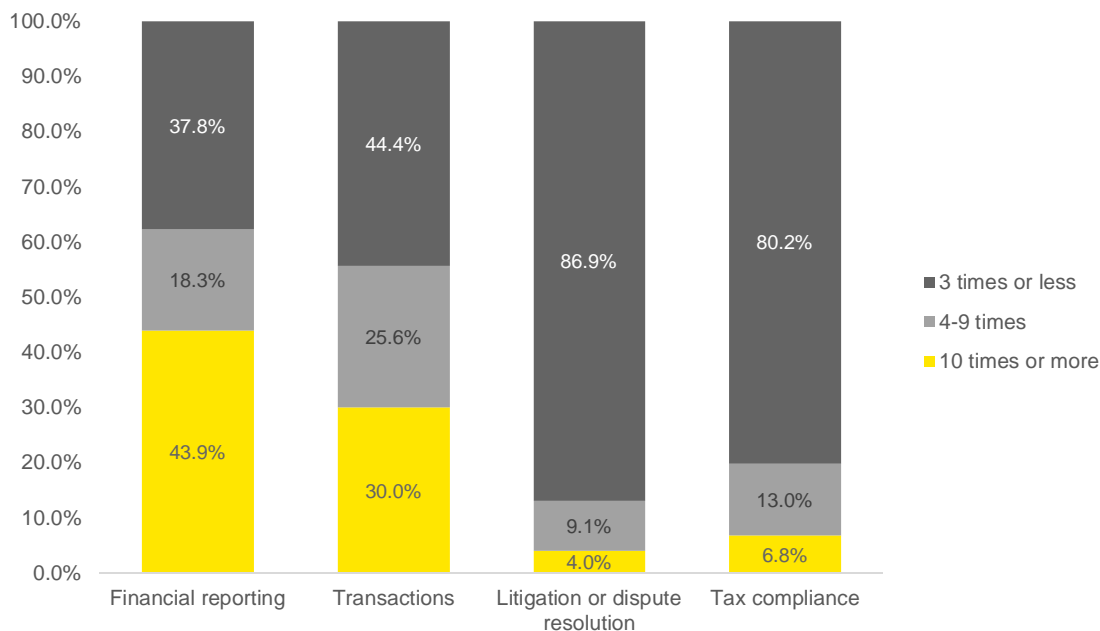
Most respondents (46.5%) came from organizations with annual revenues of US\$10m-1b, followed by <US\$10m (28.2%), and >US\$1b (25.2%) (Figure D3).

Survey respondents have worked across various industries, with Financial Services being the primary sector that respondents are from (Figure D4).

Purpose of valuations

Frequency of valuations

D5: Over the last three years, how often have you been involved in valuations for each of the purposes mentioned below?



What has been keeping our respondents busy?

D6: Geographical location of the respondents who performed transaction and financial reporting valuations more than 10 times over the last three years.

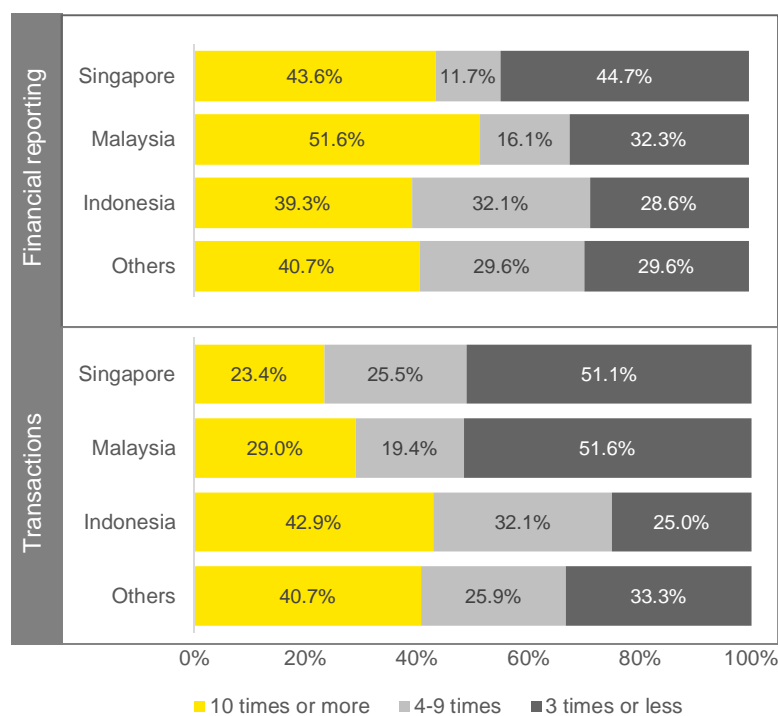
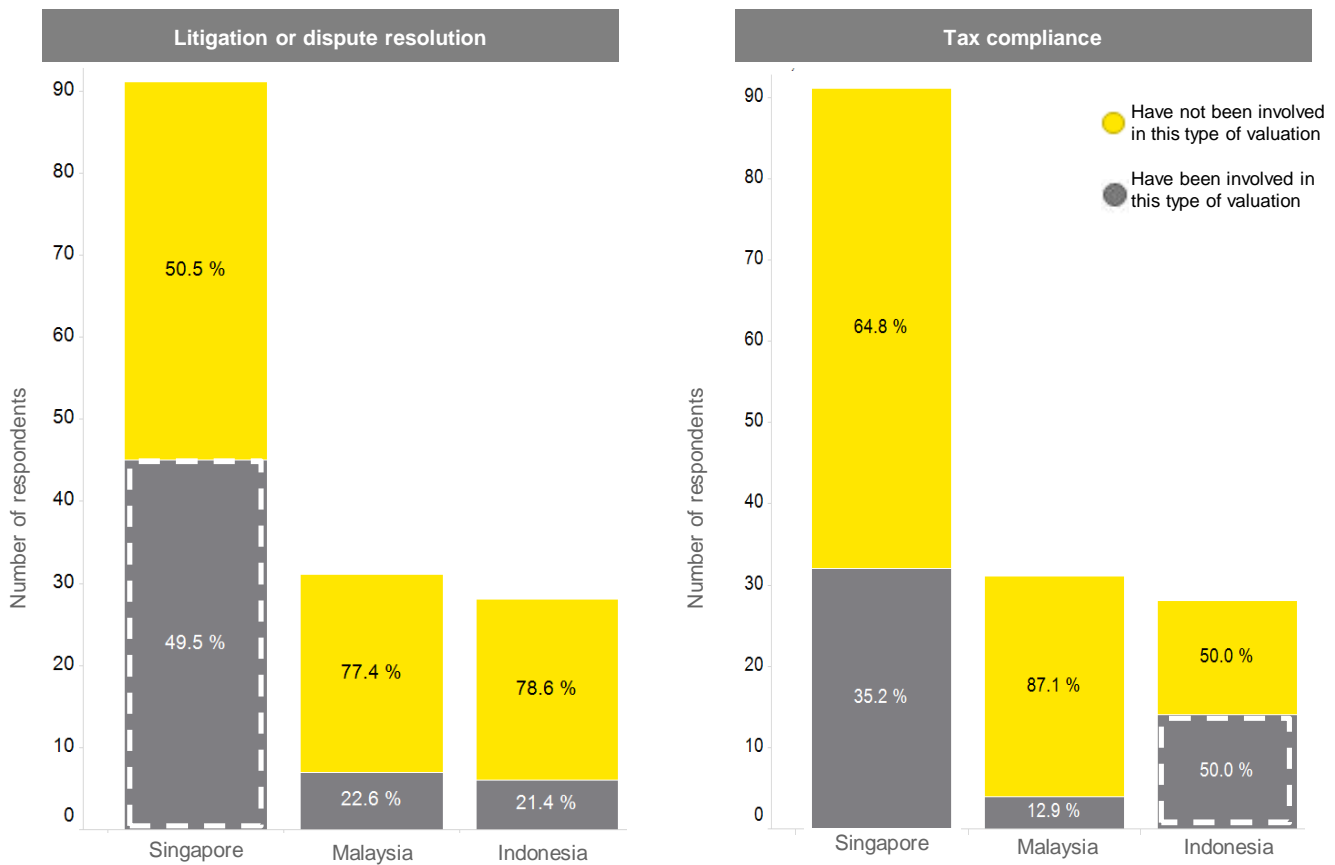


Figure D5 highlights financial reporting as the main purpose for valuations over the last three years. More than 39% of respondents from all geographical locations have performed financial reporting valuations 10 times or more (Figure D6).

Transactions is the second most common purpose for valuations (Figure D5). We found that 42.9% of respondents from Indonesia have been involved in transaction valuations 10 times or more over the last three years, compared to respondents from Singapore (23.4%) and Malaysia (29.0%) (Figure D6).

D7: Geographical location of respondents who have been involved in valuations for litigation or dispute resolution and tax compliance over the last three years.



Valuations for litigation or dispute resolutions and tax compliance are less common than financial reporting and transactions. However, 49.5% of respondents from Singapore have performed valuations for litigation or dispute valuations, while 50.0% of respondents from Indonesia have performed valuations for tax compliance (Figure D7).

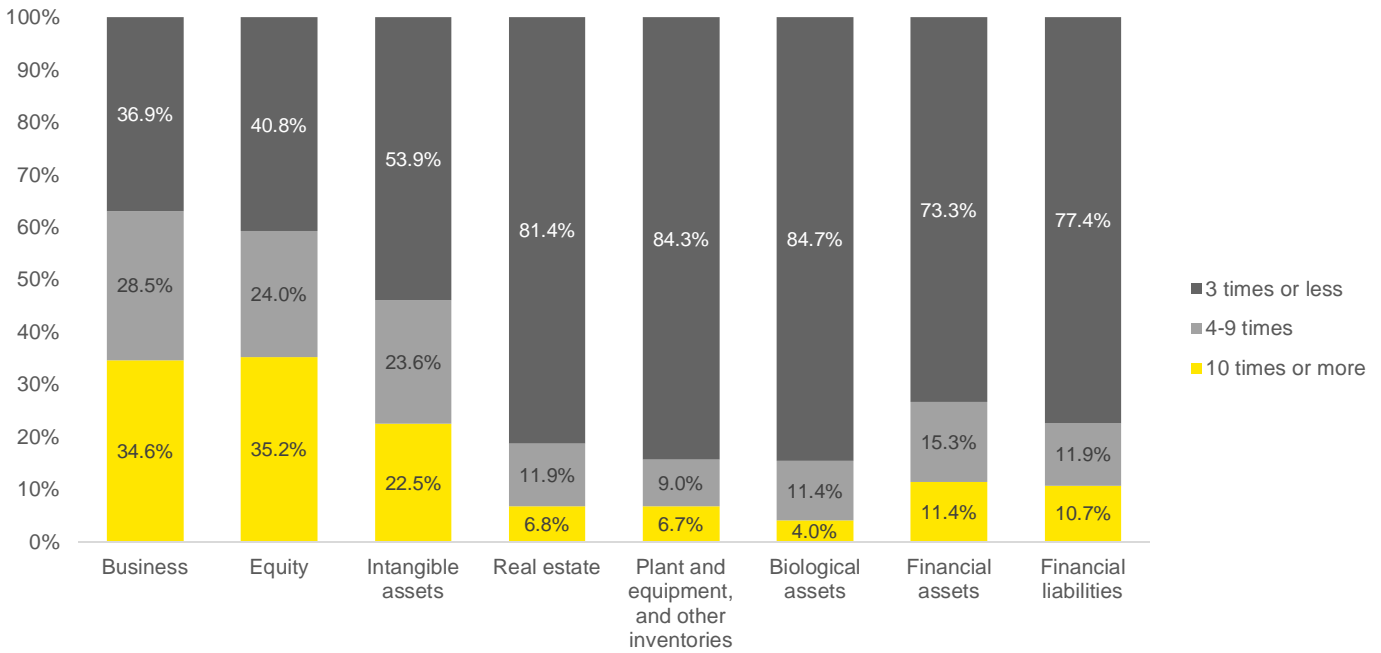


Survey highlight

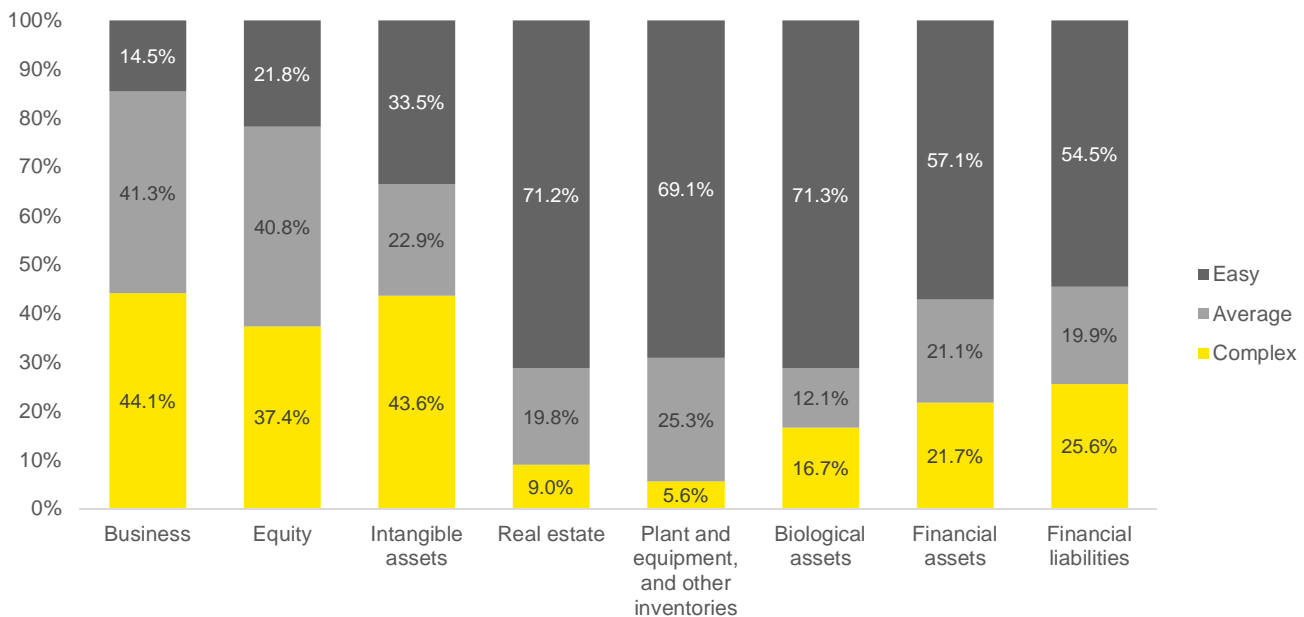
- ▶ Purpose of valuations across ASEAN is driven by each country's economic, legislative, and regulatory environment.
- ▶ Respondents from Indonesia have been involved in transaction valuations more frequently than respondents from Singapore and Malaysia.
- ▶ Valuations for litigation or dispute resolutions and tax compliance are less common than financial reporting and transactions.
- ▶ Respondents from Indonesia have the most experience with valuations for tax compliance while those from Singapore have the most experience with valuations for litigation or dispute resolutions.

Subject of valuation and its complexity

D8: Over the last three years, how often have you been involved in valuations for each of the asset classes mentioned below?



D9: What is the level of complexity involved in valuing these asset classes?



Familiarity may not equate to less complexity

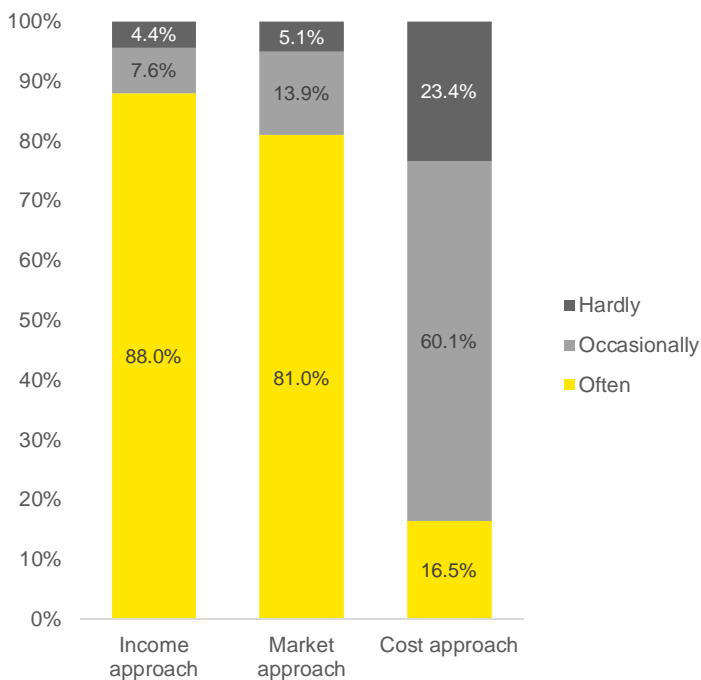
Business, equity, and intangible assets were the most common subjects of valuation (Figure D8). At the same time, close to 40% think valuations for the same three asset classes are complex.

Respondents' lack of familiarity with valuing real estate, plant and equipment and other inventories, and biological assets, may be due to their industry experience, which has been primarily focused on financial services and consumer products and retail (Figure D9). These asset classes are not commonly found in the aforementioned industries.

Valuation process and trends

Subject of valuation and its complexity

D10: How often do you use the following approaches in your business valuations?



Respondents prefer the Income and Market approaches

The income and market approaches continue to be the tools-of-choice for valuations among respondents (Figure D10).

Only 16.5% of respondents often use the cost approach, which could be due to financial statements not capturing the full earnings power of a business. Businesses' balance sheets have become more asset-light with the advent of disruptive technologies, with true value residing in intangible assets such as brands that are best quantified through other approaches.

Support your conclusion

Figure D11 shows that over 90% of respondents use more than one approach to conclude their valuations.

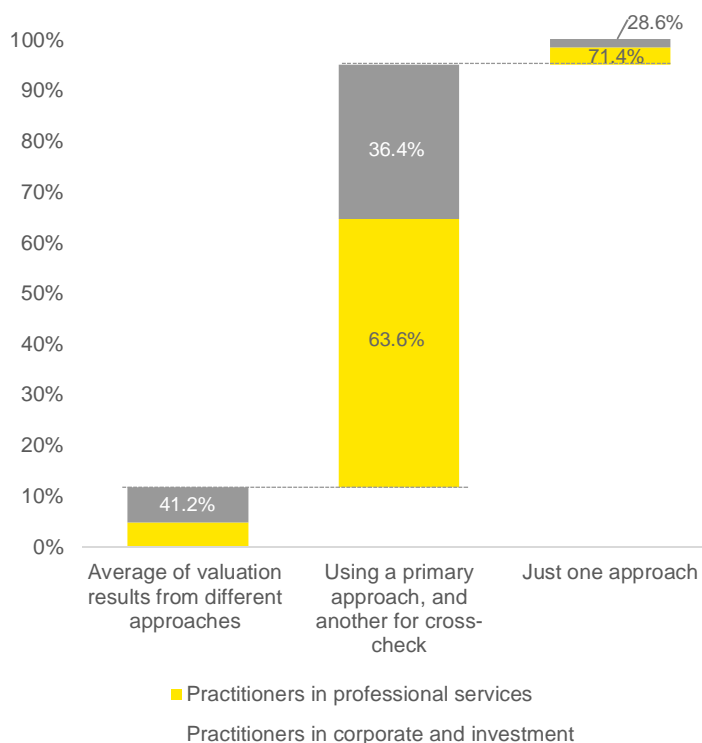
The most common approach among the respondents is to use a primary approach and another as a cross-check.



Survey highlight

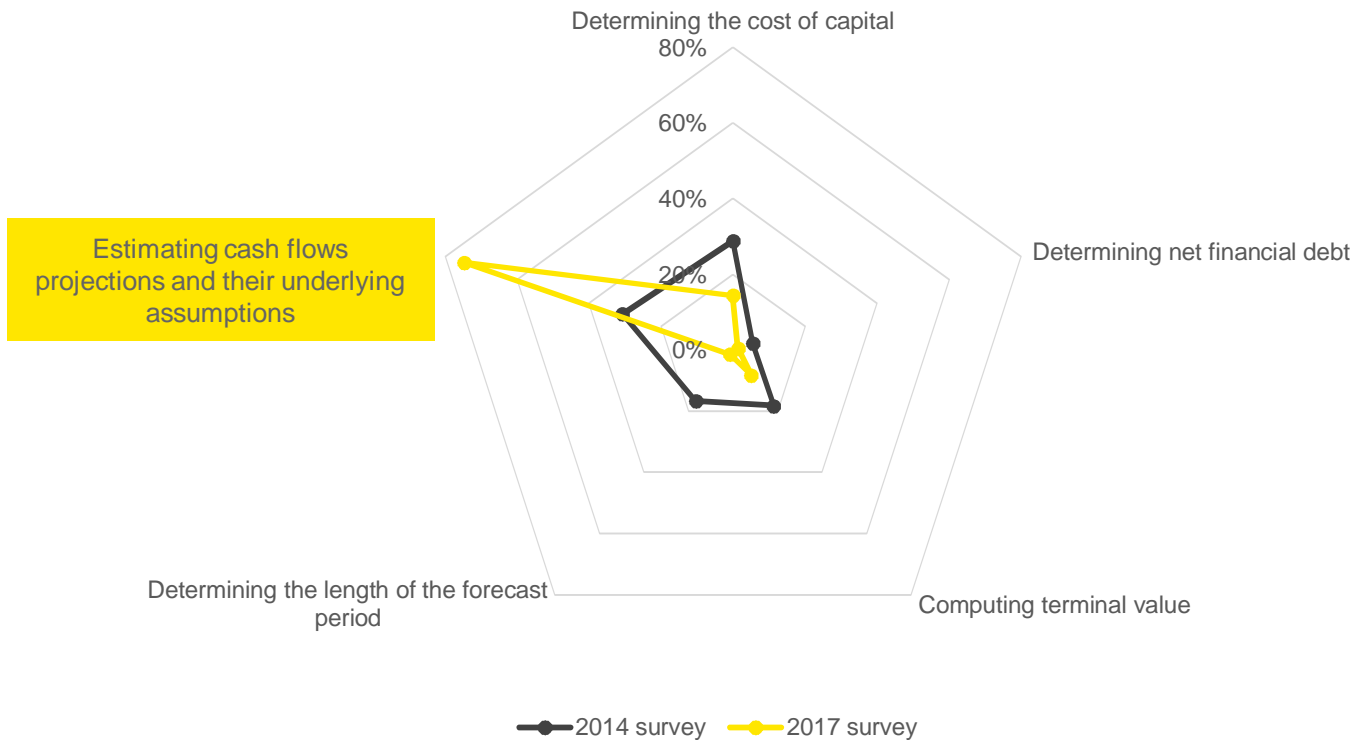
- ▶ Practitioners in professional services commonly conclude a valuation by cross-checking the results of the primary to another approach.

D11: What is the typical way you would conclude a valuation?



Income approach challenges

D12: Please select up to three tasks (2014: one task) that you find most challenging when applying the income approach.



Respondents struggle with long-term forecasts

In the 2014 survey, we asked respondents to select the three most challenging tasks when applying the income approach (Figure D12).

We decided to ask the same question with a slight twist; select the one task instead of three. Focusing on what truly matters, an overwhelming majority (74.7%) chose estimating cash flow projections and their underlying assumptions (Figure D12).

Estimating future cash flows is a difficult process that requires reliable financial information or at the very least, realistic projections. The effect of miscalculations in cash flows over the life of a project is much greater than that of a similar percentage change to discount rates.

Respondents have their work cut out for them; unprecedented events in the marketplace, such as brick-and-mortar businesses shifting their sales online, and an era of depressed oil prices have rendered historical data irrelevant for cash flow projections.

This also suggests that technical challenges relating to the cost of capital and length of forecast period are less critical to the valuation process.

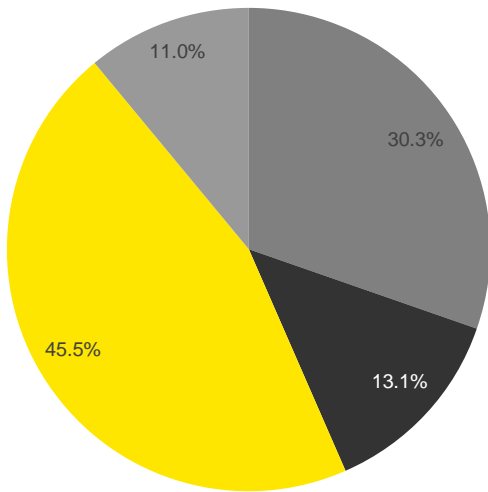


Survey highlight

- ▶ The top three challenges of applying the income approach come as no surprise, but when asked to choose, respondents see estimating cash flows as “The Challenge”.
- ▶ There appears to be less fuss over the ubiquitous weighted average cost of capital, which is attributable to an increase in the availability of data, knowledge, and familiarity with how the WACC is built.

Cash flows under the income approach

D13: What is your preferred approach to address significant uncertainty in future cash flows?



- Adjust the cost of capital
- Prepare a single most likely set of cash flows
- Prepare multiple scenarios of possible future cash flows
- Prepare probability-weighted expected cash flows

A balanced approach to address uncertainty

Most respondents (45.5%) prepare multiple scenarios of possible future cash flows to address uncertainties in cash flow projections, a sentiment echoed by practitioners in both professional services and corporate and investment (Figure D13).

Preparing multiple scenarios is seen as a balance between the probability-weighted average of cash flows, and cash flows under the most likely scenario.

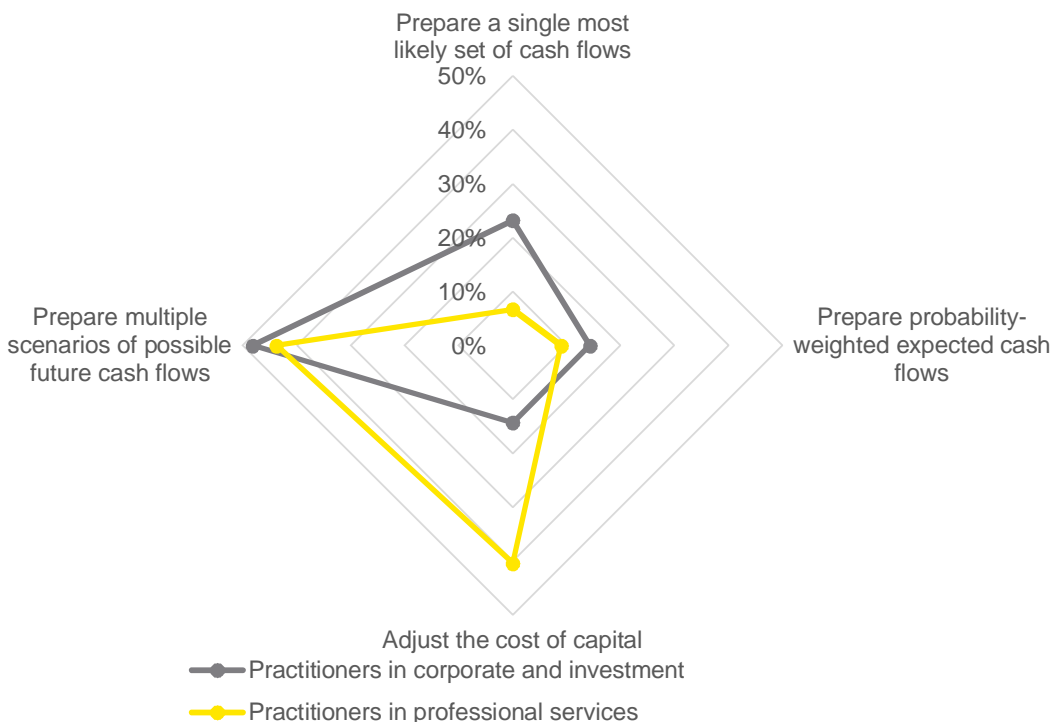
While more precise, probabilities are unobservable and highly subjective, making the final valuation quite sensitive to probability weightings. On the other end, a single scenario does not consider the possibility that reality may deviate from expectations.

That said, outlined scenarios should be realistic and try to cover the spectrum of possibilities.

The next best thing...

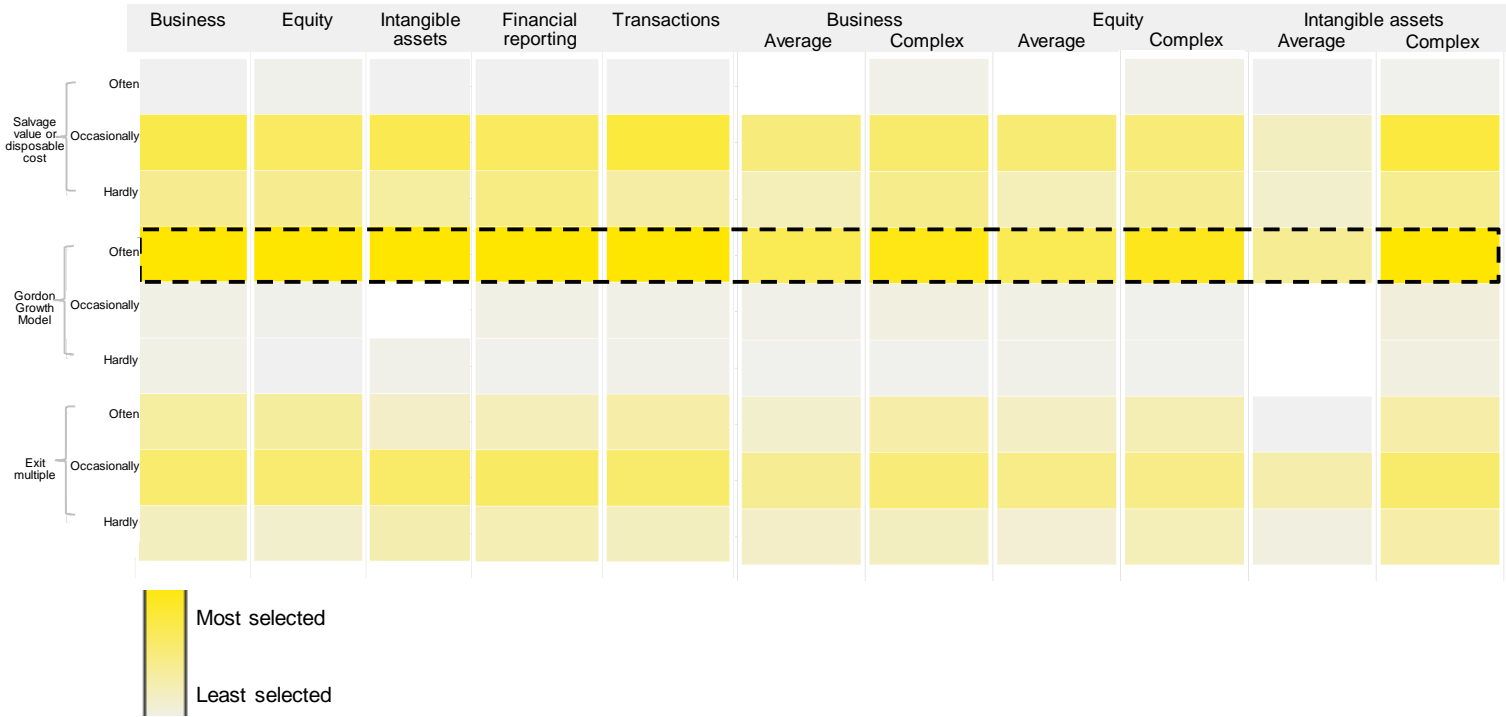
Respondents were divided on viable alternatives for addressing uncertainty. Figure D14 shows that practitioners in professional services' preference for adjusting the cost of capital, while practitioners in corporate and investment prefer preparing a single most likely set of cash flows.

D14: What is your preferred approach to address significant uncertainty in future cash flows (based on respondents' profile)?



Terminal value calculation

D15: How often do you use the following methods to calculate the terminal value in a business valuation?



Gordon is very popular

Often contributing to more than 50% of the discounted cash flow value, how respondents assess terminal value deserves some attention.

Respondents have indicated their preference for the Gordon Growth Model to close off valuations; it is used often across asset classes, valuation complexity, and purpose.

An extension of the Dividend Growth Model, the Gordon Growth Model is simple to comprehend and allows for company growth over time through reinvestment of retained profits.

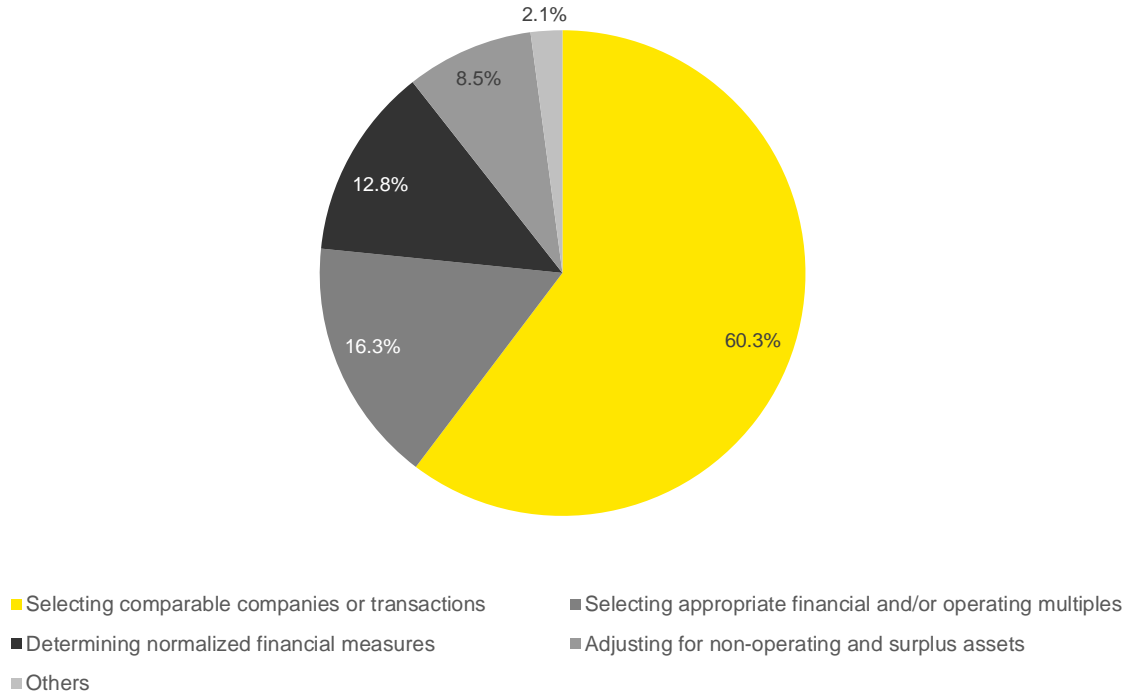
It is notable that exit multiples are relatively popular, but may not be widely used due to its inconsistency with the application of the income approach

Additionally, estimating the exit multiple at a future point in time is challenging and unobservable.

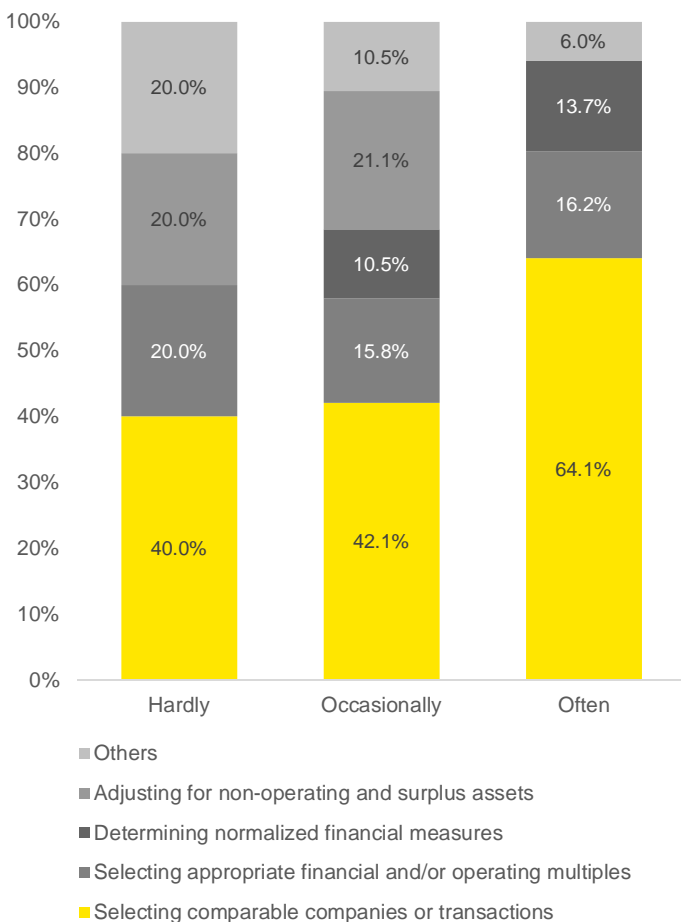
The salvage value or disposable cost appears to be the least common method adopted by survey respondents; a business's operations is assumed to cease at some point in the future, and all assets will be sold to the highest bidders. However, this approach may be unrealistic as businesses are typically assumed to operate as a going concern.

Market approach challenges

D16: Please select the one task you find most challenging when applying the market approach.



D17: How often do you use the market approach in your business valuations?



Top market approach challenge: Selecting comparable companies and transactions...

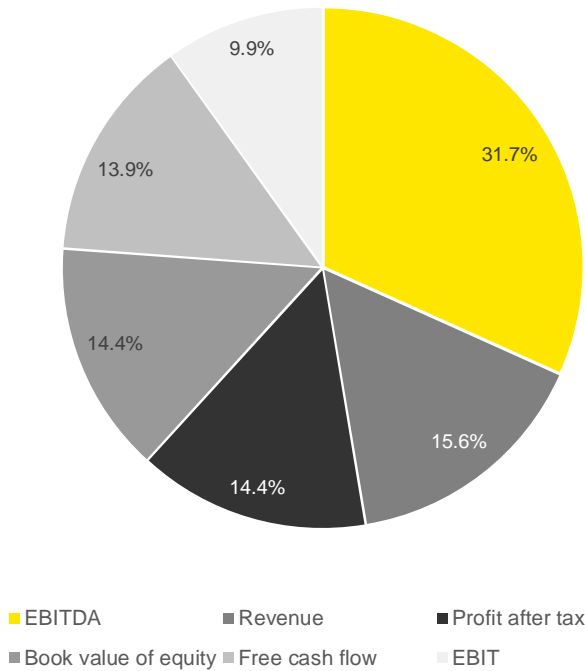
Selecting comparable companies or transactions was identified as the top challenge of applying the market approach (Figure D16).

We tried to find a correlation between the frequency of using the market approach and the difficulty of selecting comparable companies and transactions. The verdict? In spite of their experience with the market approach (Figure D17), respondents in general find the selection of comparable companies and transactions to be the most challenging.

Frequent users of the market approach (16.2%) find the selection of an appropriate multiple more challenging relative to other users, who view adjustments for non-operating and surplus assets as more challenging than selecting appropriate multiples (Figure D17).

Multiples adopted in business valuations

D18: Please select the top three measures you usually rely on when performing a business valuation using the market approach.



EBITDA, the winner. Revenue multiple, the dark horse...

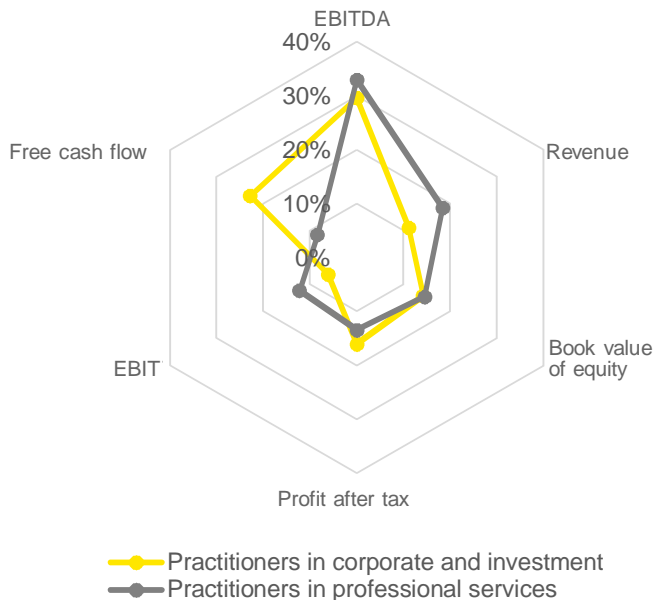
Earnings, rather than book value, is the preferred measure of business value among our respondents (Figure D18).

EBITDA is the most widely used earnings measure (31.7%). Revenue came in second place (15.6%) with book value of equity and profit after tax (both 14.4%) hot on its heels.

Revenue, a dark horse, took second place. We believe this can be explained by technology start-ups becoming commonplace across ASEAN; revenue then becomes a better base for value than profits.

Practitioners in professional services indicated a preference for book value of equity and revenue as alternative measures after EBITDA, whereas practitioners in corporate and investment prefer free cash flow and profit after tax (Figure D19).

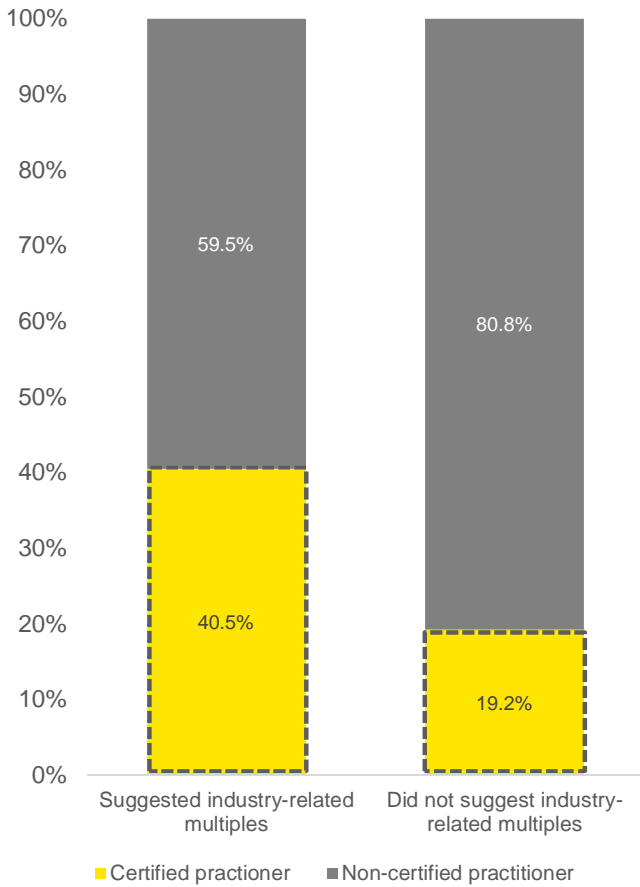
D19: The selected measures by practitioners in professional services and corporate and investment.



Survey highlight

- ▶ The EBITDA multiple came out tops among the many possible multiples that can be used when adopting the Market Approach, a surprising move away from the formerly popular P/E multiple.
- ▶ The revenue multiple snuck into second place, and we believe this can be explained by technology start-ups becoming commonplace across ASEAN.

D20: Other than the multiples listed, have you used any other multiples for a business valuation?



The rise of industry multiples

As illustrated in Figure D20, practitioners have shown an inclination for industry multiples (where applicable) over traditional ones.

Some industry-related multiples listed by respondents:

Industry	Multiple
Natural resources	<ul style="list-style-type: none"> Price-to-reserve Enterprise value (EV)/reserve, EV/barrel, EV/1P or EV/2P, EV/ton MT of mining reserve
Crude palm oil	<ul style="list-style-type: none"> EV/planted area
Plantation	<ul style="list-style-type: none"> EV/ha
Tower provider	<ul style="list-style-type: none"> EV/tower
Media, technology and e-commerce	<ul style="list-style-type: none"> EV/view, EV/subscriber, EV/visit, EV/like Gross merchandise value (GMV) multiples
Private equity	<ul style="list-style-type: none"> Price-to-asset under management (AUM)
Energy	<ul style="list-style-type: none"> Dollar per megawatt



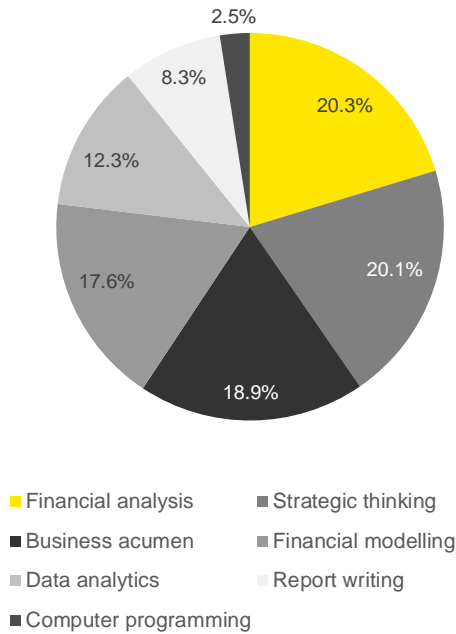
Survey highlight

- ▶ The respondents have displayed a keen awareness at sector and industry specific market multiples. These are preferred over traditional multiples that focus on earnings and book values when valuing businesses in specific industries.

Looking forward: A peek into the future

Essential skills for a dynamic business world

D21: The choice of essential skill based on respondents who are experienced in financial reporting and transaction valuations.

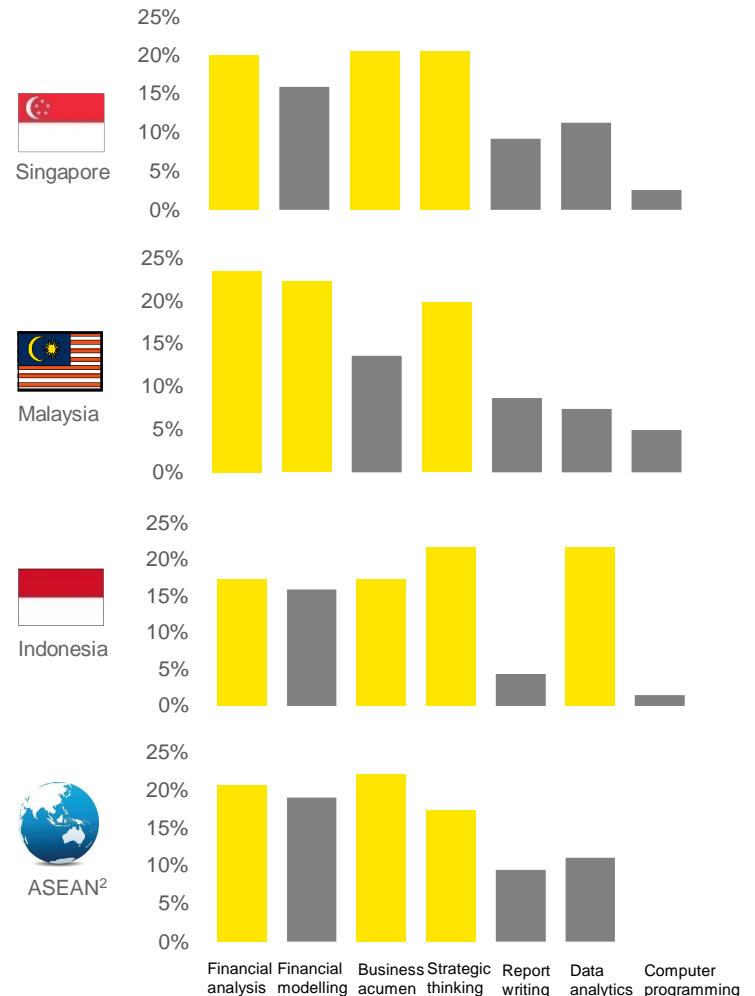


Business acumen, an essential for transaction valuations while financial analysis is key for financial reporting valuations

Financial analysis (20.3%), strategic thinking (20.1%) and business acumen (18.9%) are seen as the most essential skills among respondents. Endorsement of all other skills fall below 18% (Figure D21).

Across ASEAN, respondents' views on essential skills were rather homogeneous with the exception of Indonesia. Indonesian respondents chose strategic thinking and data analytics as the most essential skill (Figure 22).

D22: The experienced practitioners' choice of essential skill based geographical locations.



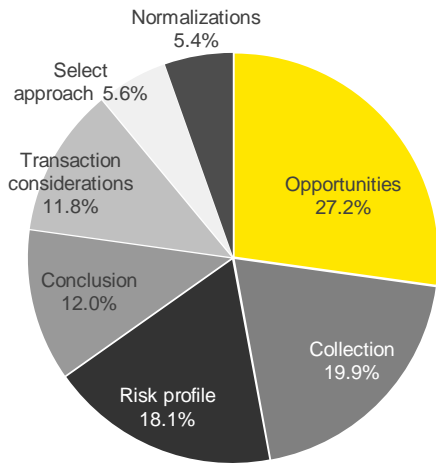
Note:

- 1 Respondents who are involved in financial reporting or transaction valuations for at least 10 times
- 2 ASEAN countries, including Thailand, the Philippines, Vietnam and Brunei

Data analytics: Attractive yet unloved

Professional firms, including consulting firms and big four accounting firms, have been utilizing data analytics to help organizations better understand their customers and areas of potential growth. Yet, results of the survey as illustrated in Figure D21 show that data analytics was ranked near bottom of the list of essential skills. This is disquieting in the face of disruption to many traditional professions and businesses in today's information age.

D23: Out of all the steps in the business valuation process, which three are the most challenging?



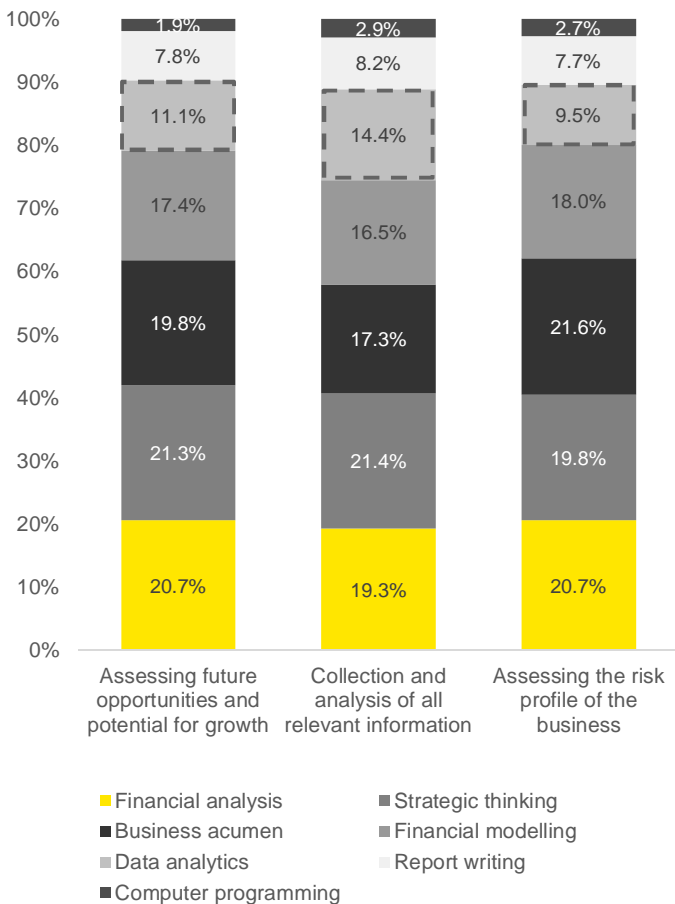
Interestingly, respondents who selected collection, risk profile, and opportunities as the three most challenging steps in the business valuation process, ranked business acumen, financial analysis and strategic thinking ahead of data analytics (Figure D24).

Data analytics requires large volumes of data and takes time to perform. However, we believe that the three challenges can be resolved with data analytics, which uses predictive and prescriptive modelling to help organizations anticipate business opportunities and improve decision making.

Steps in business valuation

- ▶ **Collection** and analysis of all relevant information
- ▶ Assessing the **risk profile** of the business
- ▶ Assessing future **opportunities** and potential for growth
- ▶ **Normalizations** of financial statements
- ▶ Selecting appropriate **valuation approaches** and methods
- ▶ **Transaction considerations**, including the number of buyers and sellers in the industry
- ▶ **Valuation conclusion**

D24: What do you believe will be the top three skills professionals must possess to remain relevant?

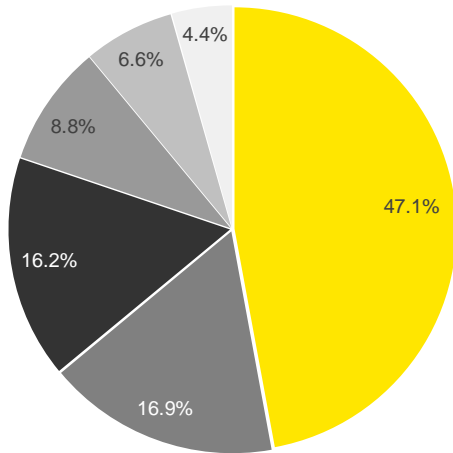


Survey highlight

- ▶ Collection and analysis of all relevant information is one of the top three challenges in valuation process.
- ▶ Interestingly, data analytics is still gaining traction as an essential skill across ASEAN, with the exception of Indonesia.
- ▶ Data analytics may resolve respondents' top three business valuation challenges. A deeper understanding of the power of data analytics to resolve valuation challenges must be harnessed.

Issues affecting businesses and their impact on valuations

D25: Which of the following issues do you think will have to be increasingly factored into the process of conducting a business valuation exercise?



- Disruptive technology
- Data analytics
- Environmental, social and governance
- Regulatory oversight
- Global geopolitical development
- Cyber security threats

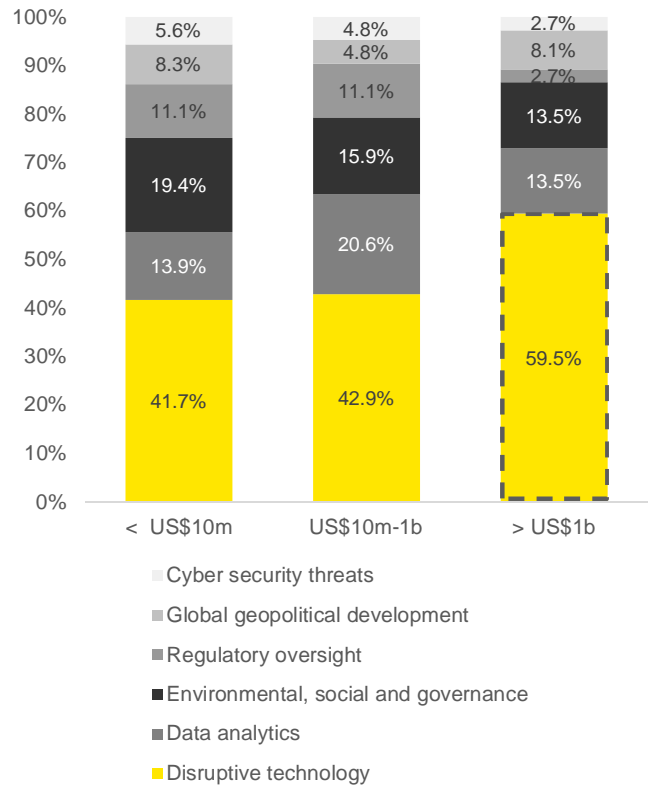
What's keeping our respondents awake?

Social media, mobile, wearables, and autonomous vehicles: just some technologies with huge implications on business value as they change customer and employee behavior, values and expectations.

More than ever, valuations will need to consider scenarios where traditional assumptions of business growth e.g., build it and they will come, may need to be abandoned as technology and society are evolving faster than businesses can naturally adapt.

Respondents, particularly those from large organizations (Figure D26) have recognized this development by selecting disruptive technology as the main issue to be considered in a business valuation.

D26: What is the size of your company in terms of annual revenue?



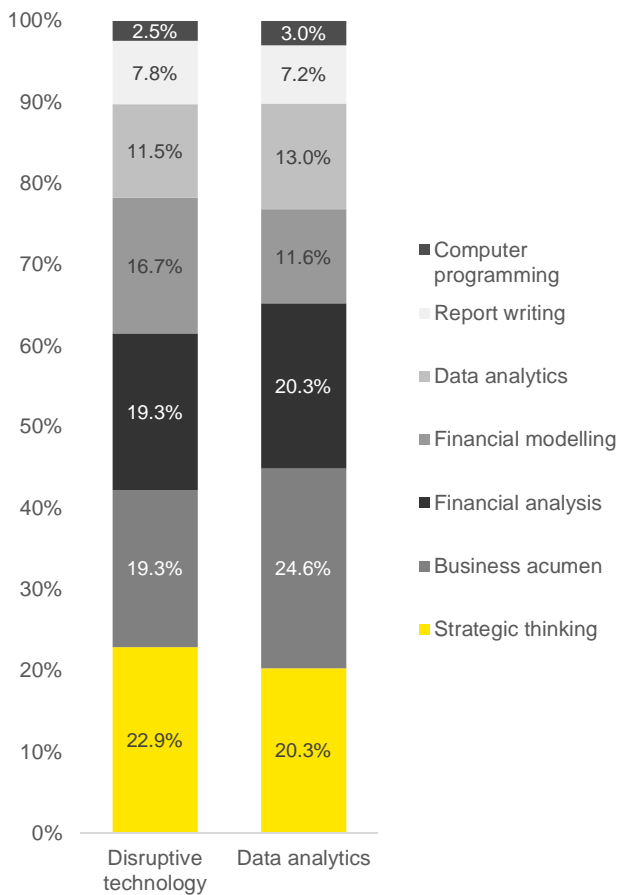
Data analytics is the second issue highlighted by respondents. Today, people and machines are creating large and disparate data mountains.

Harnessed in the right manner, data analytics could aid with the discovery and communication of meaningful patterns in the data to derive insights into customer needs and areas for performance improvement.

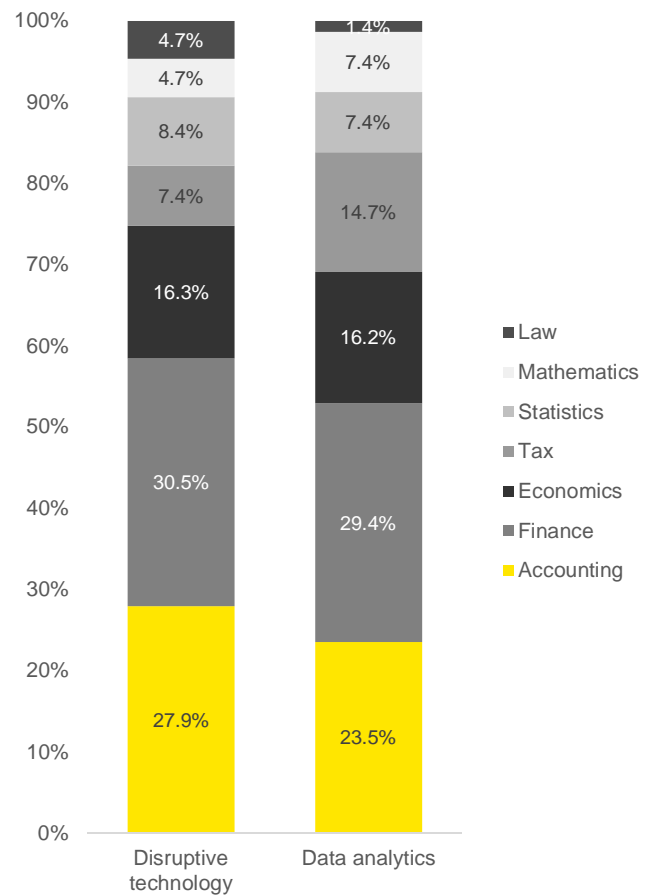
Next on the list is environmental, social and governance (ESG) factors, slowly becoming an important yardstick of sustainability as some stock exchanges have made it compulsory for listed companies to disclose their ESG practices. Done well, it identifies risks related to environmental, social and governance aspects of a company's performance and shows how companies manage such issues relative to their peers.

Skills and knowledge disciplines required for valuing companies of the future

D27: What do you believe will be the top three skills professionals must possess to remain relevant?



D28: Please select the top three knowledge disciplines you see as essential for business valuations.



Q: Which of the following issues do you think will have to be increasingly factored into the process of conducting a business valuation exercise?

Technical skills alone, is insufficient

Survey respondents who view data analytics and disruptive technology as key valuation issues selected business acumen and strategic thinking as necessary competencies to remain relevant in valuations (Figure D27).

While financial analysis also ranked highly, the survey results indicate that technical skills alone are neither sufficient nor most important in performing valuations.

Respondents who further explained why data analytics and disruptive technology are key valuation issues raised points such as the importance of analyzing both financial and non-financial data in valuing a company, the ability to forecast reliable cash flow scenarios through strong business acumen, and the need to understand new business models in a changing business environment.

Finance and accounting are key disciplines

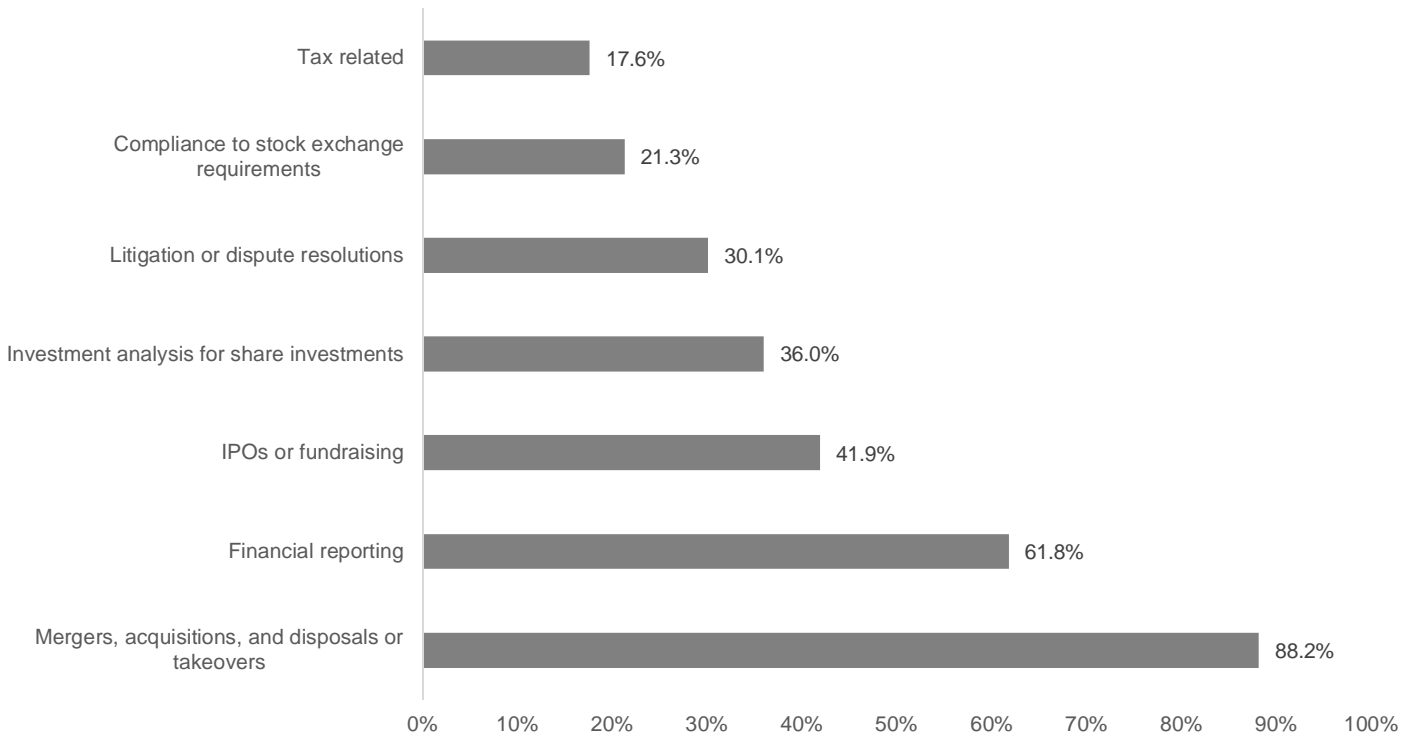
Respondents who chose data analytics and disruptive technologies as key valuation issues also view finance and accounting as the top two disciplines essential for valuations (Figure D28).

The interpretation of financial statements, understanding financing sources, calculating profitability and risk, and performing financial analysis to estimate future earnings, are enabled through these disciplines.

Despite mathematics and statistics being highly utilized in data analytics, they did not rank highly among survey respondents. This perhaps indicates that professionals do not yet fully grasp the data analytics process despite acknowledging its importance.

Transaction and financial reporting are the key drivers for valuations

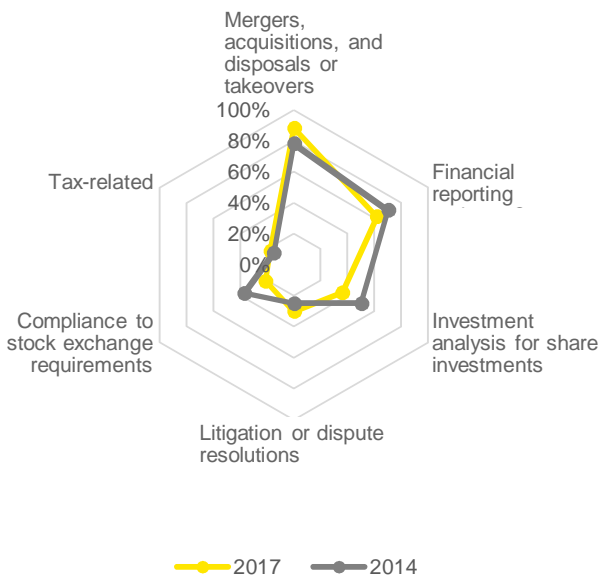
D29: In terms of growth in the business valuation space, where do you think the key drivers will come from over the next three years?



D30: In terms of growth in the business valuation space, where do you think the key drivers will come from over the next three years?

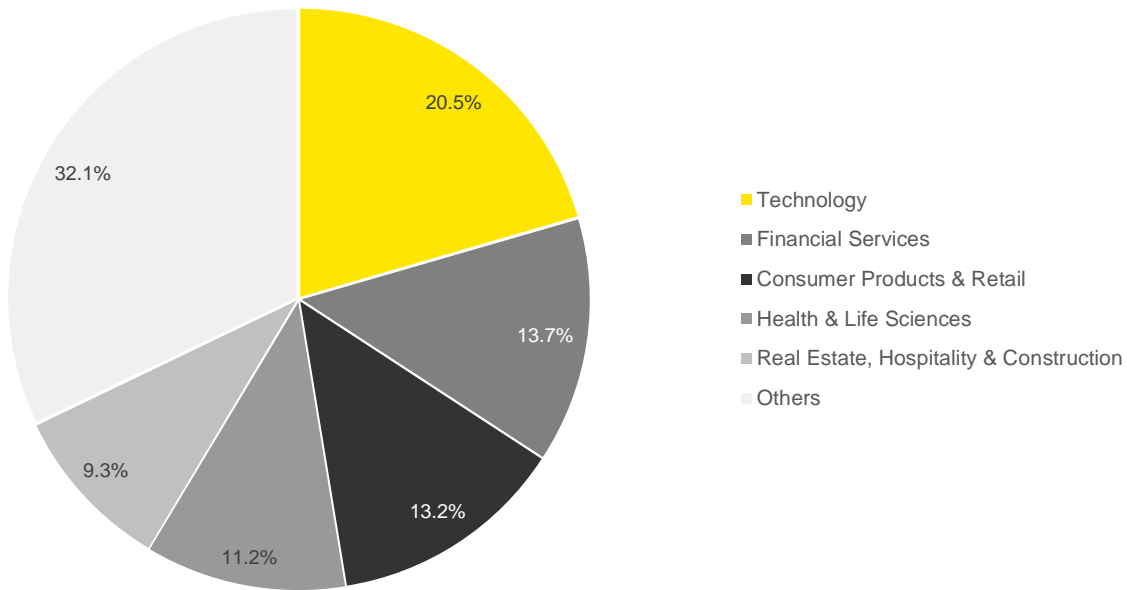
Consistent with results from the 2014 survey, respondents identified mergers, acquisitions, and disposals or takeovers, in addition to financial reporting, as the top two drivers for valuations over the next three years (Figure D30).

42% and 36% of respondents foresee growth in valuations for IPOs and fundraising, and investment analysis for share investments, respectively (Figure D29). Expected growth in these areas is in line with the start-up funding growth in ASEAN, which hit a record high of US\$2.6b in 2016, up over 60% from the previous year (source: Tech in Asia).



Industries with strong valuation growth

D31: In which industries will these efforts to be focused?



Technology will make the world go round...

21% of survey respondents believe that the technology industry will become the focal point of valuation growth, although only 2% of respondents primarily work in the technology industry (Figures D31 and D4).

Financial services and consumer products and retail are also expected to be industries of focus in ASEAN, as indicated by 27% of survey respondents (Figure D31).

In addition, 11% and 9% of respondents foresee a growth in demand for valuations in the health and life sciences and real estate hospitality and constructions sectors, respectively.

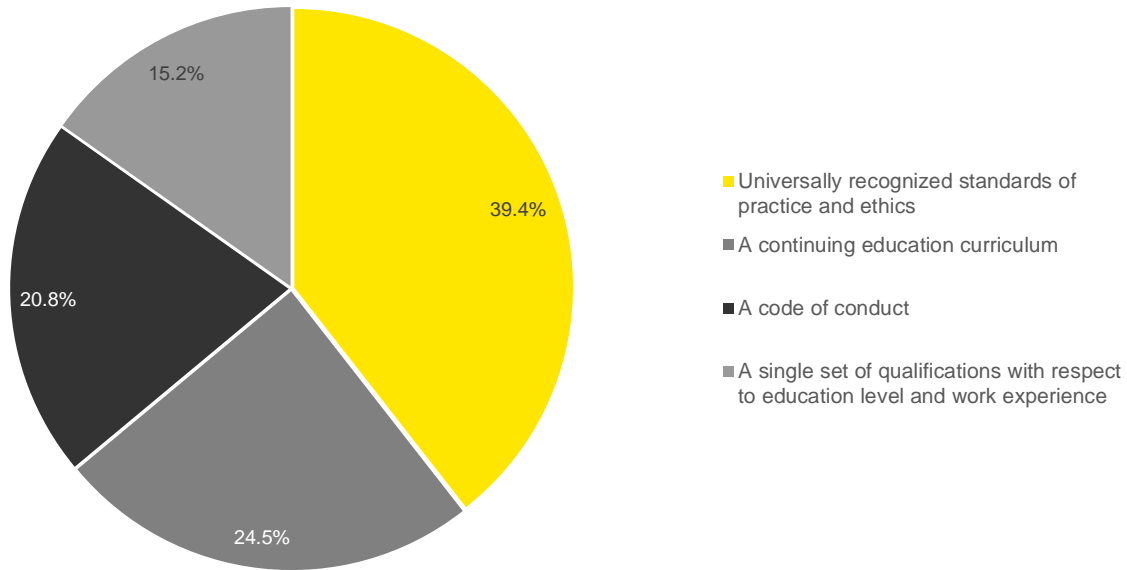


Survey highlight

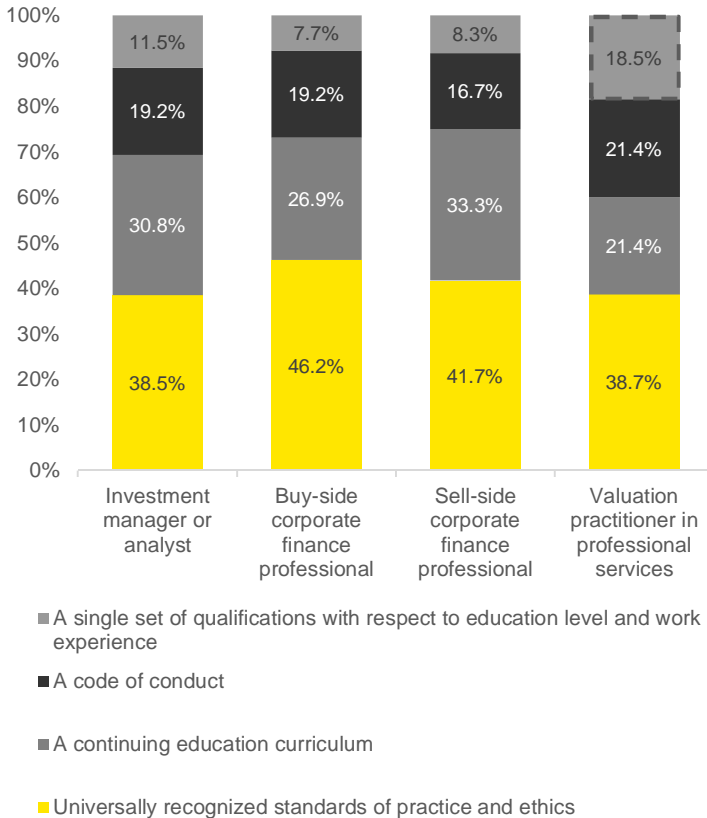
- ▶ Mergers, acquisitions, and disposals or takeovers, in addition to financial reporting, are the top two drivers for valuations over the next three years.
- ▶ Are we ready for the coming creation and disruption of industries caused by new technologies?

Standardization of valuation practices across ASEAN

D32: From the list below, select the relevant conditions you believe must exist for the quality and consistency of valuation practices to improve across ASEAN.



D33: Which of the following best describes you?



The need for universally recognized standards of practice and ethics, as well as a continuing education curriculum

The majority of respondents believe that universally recognized standards of practice and ethics is required to uphold the quality of the valuation profession, followed by a continuing education curriculum and a code of conduct (Figure D32).

Among respondents who work as practitioners in professional services, only 19% view a single set of qualifications as important for the quality and consistency of valuation practices (Figure D33).

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