The RBC Asian Equity Team Annual Environmental, Social and Governance Report 2021

Contents

Foreword

This is the RBC Global Asset Management (RBC GAM) Asian Equity team's second annual environmental, social and governance (ESG) report.

Since the inception of our first Asia and Japan strategies in April 2014 we have broadened our product range to include a China strategy (2018) and have continued to enhance our efforts to integrate ESG factors into our team's investment process. Those efforts continue to evolve our approach with a particular focus on assessing the sustainability of the businesses in which we invest.

We are fortunate to interact with - and invest in - some fantastic companies in the region. These have strong management teams that can take advantage of multi-year structural growth opportunities in a region that boasts a growing and aspirational consumer class. Whilst the region continues to lag other developed markets in terms of ESG awareness and commitments, especially in terms of environmental issues or social responsibilities, we feel that change is being effected and things are moving in the right direction. In some countries that change is happening relatively quickly, even if in others real progress is not as rapid as we would like.

Philosophically we focus on ESG in our process as a point of risk mitigation. We try to avoid management teams with the wrong incentive structures that may encourage unscrupulous practices that allow them to abdicate their broader responsibilities to both customers and employees.

We believe that such companies are on unsustainable trajectories that will have a negative impact on their returns to us as shareholders and ultimately our clients' capital. No company is perfect, however, and when we screen companies using our own proprietary methodologies, or when using our contracted third-party partners, each company we research is flagged for further investigation. We believe that it is our job to ensure the risks - from an ESG perspective - of every investment we make are researched in a disciplined manner and properly understood; this will help generate alpha over the longer term.

Incorporating ESG into our investment discipline is a dynamic and evolving process. We have learned a lot over the last six years and feel that we have made good progress, however we recognise that we must continue to refine and improve what we do.

With equity markets now placed at all-time highs, but with the real economy under immense pressure, we believe that the coming year should provide a unique insight into why portfolios of well-managed businesses that operate in a sustainable manner – and where asset managers integrate ESG into their processes – are likely to outperform their peers.

Our approach to ESG

ESG factors are an essential and integrated part of our fundamental active investment management process. The RBC Asian Equity team believes that incorporating ESG factors into our investment process allows for a more robust risk assessment and we have engaged with ESG issues since our investment track record began in 2014. The following section gives an overview of what ESG means to our team and how we integrate ESG factors into our investment process.

What is ESG integration?

ESG integration incorporates the consideration of material environmental, social, and corporate governance attributes of a company in the investment process. ESG factors are typically non-financial. We believe ESG integration enhances our fundamental investment process.

Environmental factors include sustainability and resource usage, while social factors address topics such as community impact and employee relations. Corporate governance focuses on factors including shareholders' rights and voting and board accountability. Of the three categories, when considering a company for investment, governance is the area in which we engage the most. For companies that we own in our portfolio, we exercise the voting rights of the accounts we manage in a considered way. This is discussed in more detail in the proxy voting section.

How we integrate ESG

Our approach to incorporating ESG is not one distinct step in our investment process; rather, the consideration of these factors is embedded throughout the process. To do this, we access and analyse information from a broad array of sources including external data providers and, more importantly, on-the-ground channel checks. The data points gathered from these sources can be both quantitative and qualitative. We believe that incorporating ESG factors will allow for more robust risk assessments at a stock and portfolio level.

Our investment process includes four stages (Exhibit 1). The first stage is based on a minimum market cap and minimum liquidity filter. ESG factors are important criteria that we incorporate into stage 2 and stage 3 of the process. In stage 2, the systematic prioritisation stage, our in-house quantitative scoring model incorporates third-party ESG data sources. Our proprietary model allows us to narrow down the number of stocks for fundamental research.

At the fundamental research stage we meet with management and we incorporate ESG questions into our in-house checklist. Finally, the portfolio construction stage is made up of the analysts' best ideas. This process is ongoing and after a stock has been incorporated into the portfolio we continue to consider ESG factors at both a stock and portfolio level; we also update each of our holdings' profiles over time.

ESG is key to our fundamental-based investment approach and is integrated through our entire investment process (Exhibit 2). In terms of quantitative tools, we rely on third-party research tools such as MSCI, Sustainalytics and GMT Research.[1] GMT Research is an accounting research firm that allows us to detect aggressive accounting and helps us to avoid companies that may be 'window dressing' their financial statements. On the qualitative front, we have in-house research notes and a robust checklist for our portfolio holdings. The checklist has a dedicated ESG section where we note down any specific ESG commentary the investment team has, based on our company meetings or channel checks. Finally, we conduct a significant number of company meetings and calls every year during which we discuss ESG matters directly with company management. We also conduct channel checks and have discussions with industry experts to provide an external and unbiased view of the companies in which we invest. Our sector specialist team structure allows the sector analyst to consider ESG on a wider industry perspective.

Proxy voting

As an asset manager, RBC GAM has an obligation to act in the best interests of the accounts that it manages. We take this responsibility seriously and it is our policy to exercise the voting rights associated with each of the securities held in the strategies we manage to enhance the long-term value of the securities held and, by extension, the long-term performance of our clients' portfolios.

[1] GMT Research is an accounting research firm focused on Asia and regulated by Hong Kong's Securities and Futures Commission. GMT Research develops proprietary methodologies to detect financial anomalies or traits similar to past accounting issues.

Exhibit 1: Investment process*

Investable universe	Systematic prioritization	Fundamental research	Portfolio construction
▪ Minimum market cap filter (US$100M) ▪ Minimum liquidity threshold (US$5-10M ADTV)	▪ In-house quant scoring model which incorporates third-party ESG sources ▪ Deprioritize stocks with suboptimal risk/returns	▪ In-house research with explicit consideration of ESG factors ▪ Management meetings where ESG is discussed ▪ Team discussions	▪ Analyst best ideas ▪ No underweight positions ▪ High awareness of risk, aligned with stock conviction

*Specific stock numbers vary by fund.

Exhibit 2: ESG is key to our fundamental, active investment management

	Quantitative	Qualitative	Beyond
Key activities	▪ Proprietary quant process / tools ▪ Accounting quality screens ▪ In-house audit / quant specialists ▪ 3rd party research (GMT, MSCI ESG, HOLT Risk, Sustainalytics)	▪ In-house research notes and robust checklist with explicit commentary on ESG ▪ Use of third-party data specializing in ESG e.g. past several years of company's litigation or media coverage	▪ Company meetings / calls where ESG is discussed ▪ On-the-ground channel checks ▪ Sector specialist team structure ▪ Interviews e.g. industry experts, regulators, competitors, local investors
Outcomes	▪ Aggressive accounting ▪ Sustainability of cash flows	▪ Holistic, thorough, consistent process ▪ Long-term view	▪ We consider ESG from both a company and industry perspective

Integrated by investment team throughout entire process

Source: RBC Global Asset Management, January 2021.

Engagement

We actively engage with all of our investee companies. When we meet with management, we raise any material ESG-related concerns we have to better understand how the company is approaching these risks and opportunities. This also allows us to convey our views to management on these issues.

Summary

The consideration of ESG factors is engrained within each step of our investment process, facilitating robust risk-and-reward assessments of each individual stock we consider, and at the portfolio level. The integration of ESG aligns with our investment philosophy of finding companies that display high and/or improving return on capital with strong balance sheets that can outpace market expectations.

ESG engagement cases

Our approach to engagement is to encourage in-depth and ongoing dialogues with the companies in which we invest and to establish long-term relationships with management teams. We believe that over time our suggestions could lead to positive change. We engage with management via three main methods: one-on-one updates either in person or via conference calls, group meetings, and finally via proxy voting. Examples of our engagement activities in 2020 are listed below.

Adopting global best practices

We are invested in an Asia-listed stock exchange and we discussed its progress in enhancing required and voluntary ESG disclosures listed on the exchange. We also suggested that the exchange consider best practices in Nordic countries which was something we had uncovered while undertaking our own research.

Board diversity

We believe a diverse board is beneficial to long-term returns and better risk management. We engaged with a Japanese test equipment manufacturer for the semiconductor industry to increase the number of independent directors and improve gender diversity. The company has made improvements and has been adopted as a constituent stock of the MSCI Japan Empowering women Index and into the FTSE4Good index.

Environmental impact

We believe companies should try to gradually reduce the consumption of resources and emission of pollutants wherever possible. We have invested in an Australian mining company and its management has highlighted targets to reduce its carbon emissions by 26% by 2030 and to achieve net zero operational carbon emissions by 2040 via investment in renewable energy. In our interactions, management also highlighted cultural heritage management plans to avoid mining in areas of cultural significance.

We are invested in a South Korean electronics manufacturer and we specifically discussed the steps the company is taking to reduce the discharge of micro plastics from its washing machines. The company is taking steps to improve its product line over the next three years.

Employer of choice and human capital development

Companies that are able to retain and develop their human capital typically can maintain a competitive advantage in today's knowledge economy. We are invested in an Asian insurance company that has repeatedly reported employee turnover that is lower than industry peers and employee satisfaction above that of peers. Through our interactions the company has highlighted that it is able to retain and develop its people by rewarding employees via both financial and non-financial means. The company is also able to provide a long-term development path and career opportunities within the organisation.

Stock incentive programme

We like to see management incentives that are aligned with our interests as minority shareholders. If incentive programmes are incorrectly structured, particularly employee stock option programmes (ESOPs), this can result in a focus on short-term rather than long-term returns and excessive risk taking. Our ideal ESOP structure would be one where shares are bought on the open market and awarded to management and employees for specific long-term operational performance that is aligned with minority interests. We have voted against management where ESOP plans are not aligned with those of minority interests.

ESG key performance indicators

Having tangible goals and incorporating ESG metrics as key performance indicators is a way to ensure management places adequate importance on ESG. We engaged with a South Korean measurement and inspection machine manufacturer and noted that it has introduced a performance-based environmental management system where remuneration will be partially determined by ensuring the company meets its emissions targets.

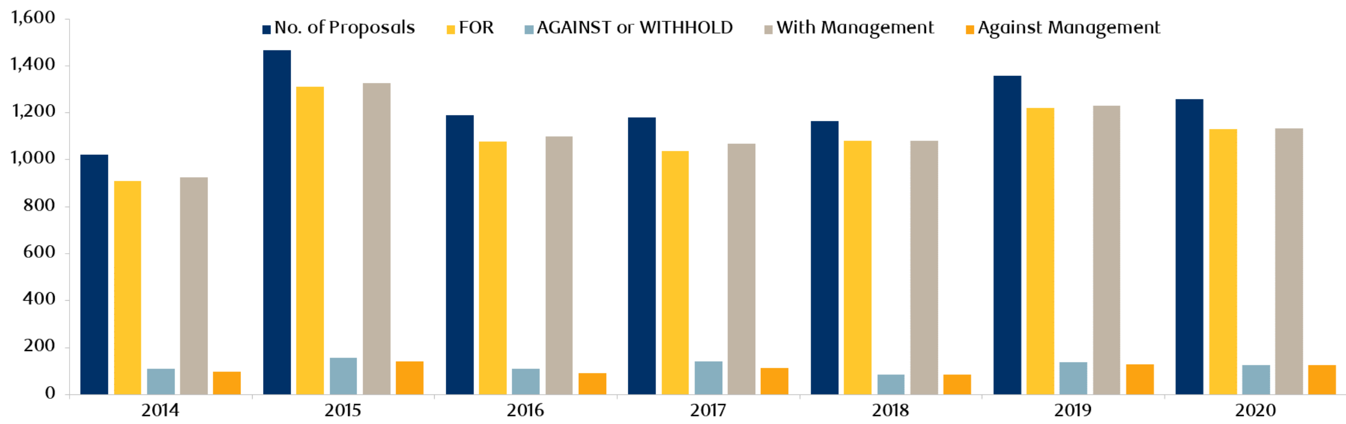
Shareholder surveys

As long-term shareholders we are in regular communication with company management. Aside from annual general meetings and proxy voting, on occasion companies would seek our opinions on matters such as ESG via a shareholder survey. Earlier in the year we provided written feedback on both ESG and non-ESG matters for a South Korean telecoms provider.

Proxy voting

Proxy voting is a key part of our active ownership as it provides an important way for us to convey our views to company boards and management teams. Voting responsibly is part of our fiduciary duty. In Asian markets we rely on our proxy advisor to make voting recommendations but we still review each ballot item and vote based on our own assessment of the specific company circumstances.

Exhibit 1: RBC Asian Equity team voting history since 2014



Source: RBC Global Asset Management, reflects combined voting data from RBC Asia Pacific ex-Japan strategy and RBC Japanese Equity strategy. Data as at January, 2021.

When considering voting recommendations, our Corporate Governance & Responsible Investment Group draws upon its own expertise, the expertise of our investment teams, utilises research from leading research firms, and engages with companies and other shareholders, if necessary, to arrive at its voting decision. RBC GAM also has a clear policy to manage conflicts of interest to protect the independence of our voting decisions and procedures from commercial or other influences.

Since 2014, the RBC Asian Equity team has voted at 921 meetings, voting in favour of management a total of 7,864 times and voting against management 741 times.

Exhibit 2: RBC Asia Equity Proxy voting proposal categories since inception

Proposal category	No. of proposals	WITH management	AGAINST management	% AGAINST management
Authorise reissuance of repurchased shares	75	4	71	94.7%
Approve issuance of equity or equity-linked securities without pre-emptive rights	114	30	84	73.7%
Approve remuneration policy or report	92	80	12	13.0%
Elect director	4788	4461	327	6.9%
Appoint internal statutory auditors	333	297	36	10.8%
Adopt, renew or amend shareholder rights plan (poison pill)	16	6	10	62.5%
Approve transaction with a related party	54	49	5	9.3%
Approve aggregate remuneration (ceiling) of directors	82	80	2	2.4%
Approve auditors and their remuneration/ratify auditors	240	222	18	7.5%

Source: RBC Global Asset Management, reflects combined voting data from RBC Asia Pacific ex-Japan strategy and RBC Japanese Equity strategy. Only key proposal categories have been listed for clarity purposes. Data as at January, 2021.

Investing in a company reflects, at least in part, our confidence in its management. That is why we often support management on routine matters which can be seen from our voting patterns shown in Exhibit 2.

We will not hesitate to withhold our support or oppose management, however, if we believe that it is in the best interests of shareholders and our clients to do so.

Country level ESG assessment

This section of the report focuses on country level ESG factors. Companies are affected by the operating environment of the country or countries in which they operate. We believe that countries that have improving or high ESG scores are more likely to deliver sustainable economic growth compared to countries with falling or low scores. In this section we chose to use independent third party indices to reflect changes in ESG performance over time.

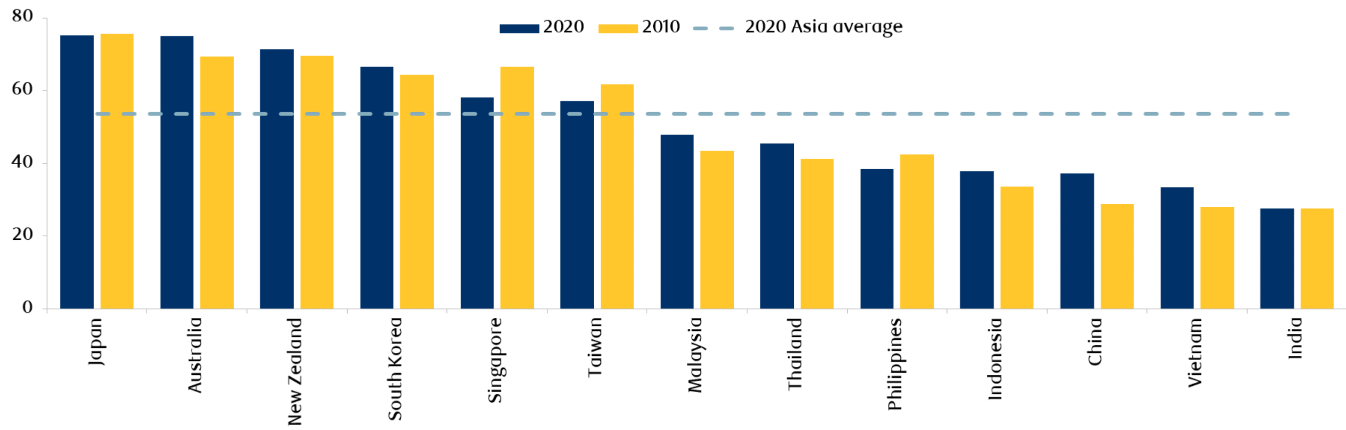
Methodology

For the environmental factor we use Yale University's Environmental Performance Index (EPI). The index is made up of two sub-categories: environmental health and ecosystem vitality. The overall score is driven by 32 individual performance indicators.

For the social factor we use Freedom House's Freedom in the World Index (FWI). FWI evaluates the state of freedom based on two sub-categories: political rights and civil liberties. Each country is assigned a score between zero and 4 points, based on 25 indicators, for a total score of 100.

For the country governance we use Transparency International's Corruption Perceptions Index (CPI). The CPI draws on 13 surveys and expert assessments to measure public sector corruption in over 170 countries and territories, giving each a score from zero (highly corrupt) to 100 (very clean).

Exhibit 1: Environmental Performance Index by country (out of 100)



Source: Yale University Environmental Performance Index. Data as at December, 2020.

Environmental

Observations

The average EPI score in Asia was 53.6 in 2020, a small increase from the 2010 average of 52.1. Overall Asia has a higher EPI score than the global average of 46.4 in 2020, which increased from the 2010 global average of 44.1.

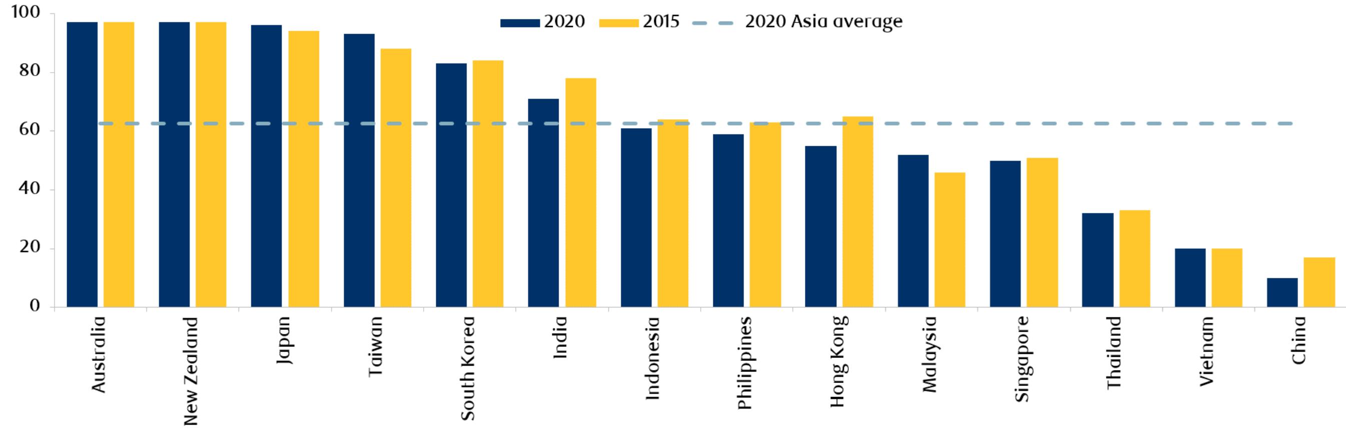
Unsurprisingly, the more developed countries in Asia have a higher environmental score as they are financially able and more willing to address their environmental footprints. It is encouraging to see that most developing countries in Asia have shown progress. Exceptions were the Philippines, which regressed, and India, which scored the lowest and showed no progress.

The countries with the most significant improvements include China, Vietnam and Indonesia. For China, the study has shown improvement in controlling the growth of greenhouse gases, including carbon dioxide, and a focus on improving biodiversity. Vietnam has shown progress on climate change mitigation and the protection of at-risk species and habitats. Indonesia has shown improvement in improving carbon intensity and lowering pollution emissions.

The countries with a drop in their environmental scores include Singapore and the Philippines, however both countries score well above the global and Asia averages. For Singapore, high greenhouse gas emissions per capita score was among the reasons for a drop in the overall score. For the Philippines, the score declined as the country's biodiversity score fell and the country scored poorly on pollution emissions.

India stands out for having high environmental risk and this is significant because it has a population of 1.4 billion. On closer inspection, the poor EPI scores reflect low scores in air quality and drinking water sanitation. There has been government investment in sanitation, but there remains much work to be done and this will require efforts from both the Indian government and the international community. We are cognisant that if India's environmental performance does not improve this could prove a risk to the country's long-term economic growth.

Exhibit 2: Freedom in the World Index by country (out of 100)



Source: Freedom House. Data as at December, 2020.

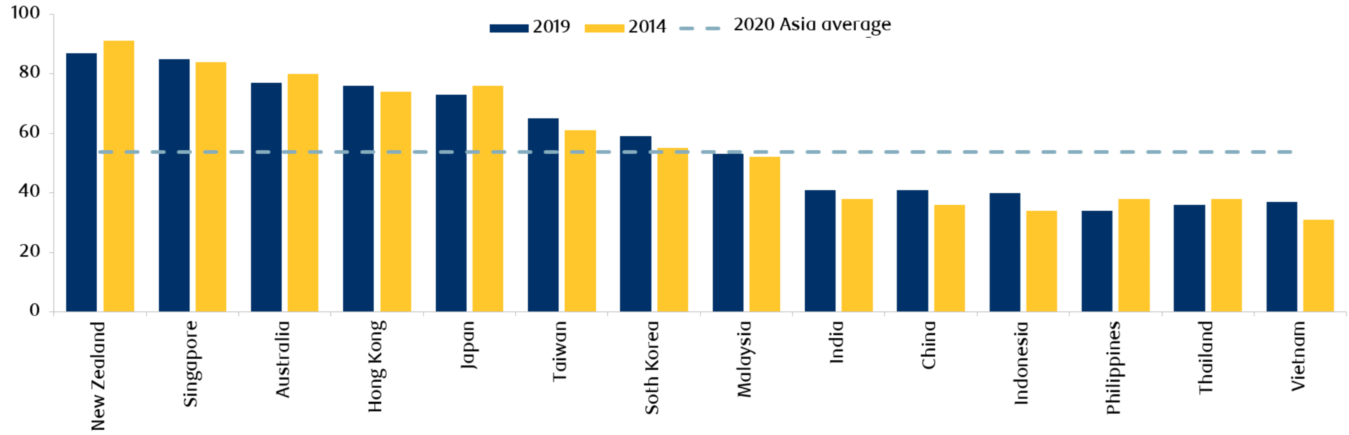
Social

Observations

The average FWI in Asia was 62.5 in 2020, a small decline from the 2015 average of 64.1. Overall, Asia has a slightly higher FWI score than the global average of 56.7 in 2020, which decreased from the 2015 global average of 59.0. This highlights that globally, and in Asia, we have seen a reduction in the political rights and civil liberties of citizens.

China has the lowest FWI index score in our universe and we have seen the score drop from 17 in 2015 to 10 in 2020. There continue to be reports of predominantly Muslim ethnic minorities being subjected to "political re-education" at facilities in Xinjiang China.[1] There has also been a decline in India's FWI score as there has been a series of measures that have negatively affected India's Muslim populations. This includes unilateral annulment of the semi-autonomous status of Jammu and Kashmir, India's only Muslim-majority state, in 2019. Federal authorities replaced the state's elected institutions with appointees and abruptly stripped residents of basic political rights.[2]

Exhibit 3: Corruption Perception Index by country (Out of 100)



Source: Transparency International. Data as at December, 2019.

[1] https://freedomhouse.org/country/china/freedom-world/2020. [2] https://freedomhouse.org/country/india.

Governance

Observations

The average CPI in Asia was 57.4 in 2019, a small improvement from the 2014 average of 56.3. Overall, Asia has a slightly higher CPI score than the global average of 43.2 in 2019, which was flat compared to the 2014 global average of 56.3.

We have seen improvements in China, Indonesia and Vietnam. Countries that have regressed include New Zealand, Australia and the Philippines.

The survey highlighted an improvement in Vietnam. While corruption remains commonplace, citizens have highlighted that the Vietnamese government is taking positive steps to fight it. This is a similar pattern to Indonesia, where government actions have had a positive effect on lowering corruption, however it remains widespread.

The CPI score in the Philippines has dropped, reflecting concerns over political and judicial corruption. In 2020 corruption came to light in the Philippines' public health insurance company PhilHealth. Allegations included false and inflated medical claims, non-existent patients, fabricated crediting of premia, overpayments and embezzlement of COVID-19 relief funds.[3] Australia and New Zealand have both seen a small decline in their scores, but overall their governments are highly regarded for their efforts to fight corruption and the citizens of those countries feel empowered to report cases of corruption.

Summary

This country analysis has highlighted that countries with high ESG risk include India (environmental), China (social), and Vietnam (governance). When we meet management teams of companies that are based in, or operate in, these countries we need to be particularly cognisant of the specific risks. Countries that have shown improvement include China (environment), Taiwan (social) and Indonesia (governance).

[3] https://knowledgehub.transparency.org/helpdesk/corruption-in-asean-regional-trends-from-the-2020-global-corruption-barometer-and-country-spotlights.

Improving corporate social responsibility in India

Executive summary

- India was the first country to legally mandate corporate social responsibility (CSR) in 2013; this introduced the rule that large companies are required to spend 2% of their average net profit for the past three years on CSR by law.[1]
- Often environmental, social and corporate governance (ESG) analysis on Indian corporates is considered to be overly optimistic or simplistic when assessing CSR efforts, and there is no recognition that it is actually mandated by law.
- We surveyed the top 30 publicly listed companies in India and our study shows that there is limited visibility on how the money is distributed and disclosure from companies remains insufficient.
- We suggest some ideas to improve upon the existing CSR mandate.

Background of the Indian mandated CSR legislation

In 2013, India was one of the first countries to adopt CSR legislation. The CSR framework adopted in Section 135 of the Companies Act, 2013 is premised on the principle that profit-making enterprises should contribute a prescribed amount to social and environmental causes such as eradicating hunger and poverty, promoting education and gender equality, and improving health care.[2]

Section 135 applies to both Indian companies and foreign companies doing business in India that, during the immediately preceding financial year, had (1) annual turnover of at least INR 10 billion (approximately USD 133 million), (2) net worth of at least INR 5 billion (approximately USD 67 million) or (3) net profit of INR 50 million (approximately USD 667,000).

In terms of CSR expenditure, under Section 135, companies that trigger any of the financial thresholds described above are required to spend at least 2% of their average net profits made during the three immediately preceding fiscal years on CSR activities. However, the current regime follows a "comply or explain" model. As such, companies subject to Section 135 that fail to make mandated CSR contributions are only required to explain in their annual board report the reasons for non-compliance. There currently are no financial penalties for non-compliance.

The dangers of ESG cheerleading

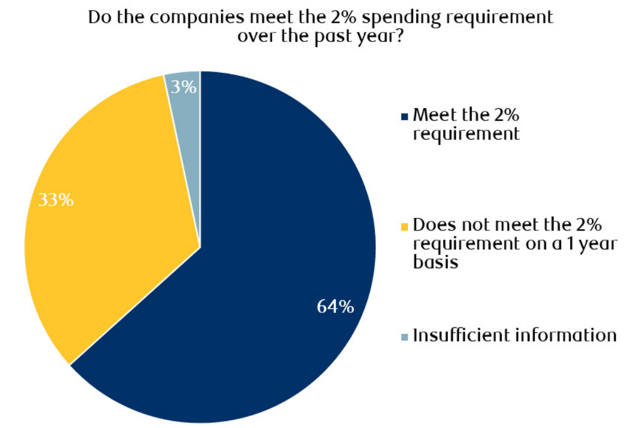
As international institutional investors ascribe increasing importance to ESG factors, we have noticed that Indian companies have been keen to highlight their CSR commitments, be it in annual reports or when we meet with them. Rarely, however, do these companies mention that these commitments are mandated by law.

As active investors we believe that it is important to carry out more detailed research on our investee companies' CSR contributions. We have noticed that many international third party ESG providers often take companies' efforts at face value but we would rather ask more searching questions to ascertain where these contributions are used, and not just take part in a box-ticking exercise. Of course, it is important to recognise that there are companies who put their CSR contributions to good use.

RBC Global Asset Management survey results – 30 largest companies in MSCI India Index

We reviewed the latest CSR reports of the largest 30 companies in the MSCI India Index to reach the findings below. These 30 companies combined make up 77% of the MSCI India Index by weight, as of November 2020. We highlight three key findings below (Exhibit 1).

Exhibit 1: 64% of the companies surveyed complied with the 2% spending guideline on a one year basis



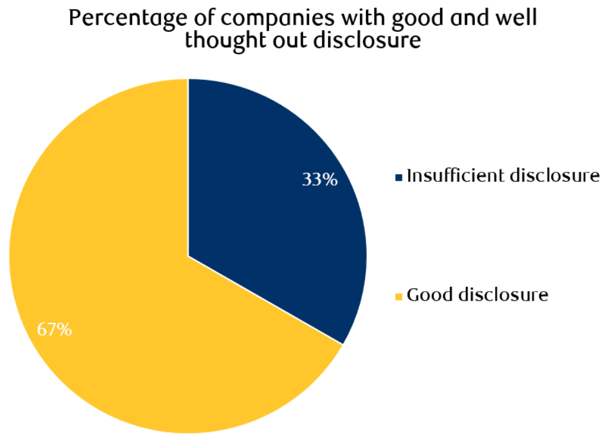
Source: 2020 Company Reports, RBC Global Asset Management. Data as at November, 2020.

[1] Business for Social Responsibility Organization, "India Companies Act 2013", November 2013. [2] Ropes and Gray LLP, "Corporate Social Responsibility in India", July 2020

Observations from the RBC Global Asset Management survey

Our study highlights that while all the companies we studied have a publicly disclosed CSR policy, 33% have insufficient disclosure (Exhibit 3). We deem insufficient disclosure as CSR policies with no clear or measurable goals, lack of transparency or lack of accountability. Quite a few media outlets have highlighted the risk of inefficiency, instability, corruption and interference under a mandated CSR regime.[3] We do see partial merits in these claims having reviewed the CSR reports of the top 30 companies.

Exhibit 2: Based on RBC's internal review of the CSR reports, we found 67% of companies had good and well thought out disclosures

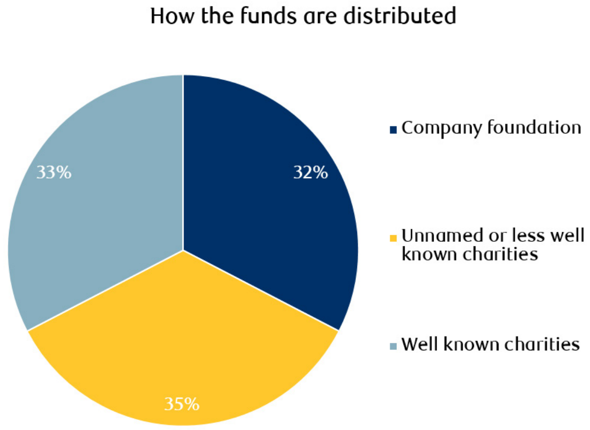


Source: 2020 Company Reports, RBC Global Asset Management. Data as at November, 2020.

Most companies implement their CSR projects through a combination of channels (Exhibit 2). These options include the company's own foundation, donation to well-known charities and the use of less reputable charities. We believe there is a lot more accountability when funds are given to well-known charities. This, of course, assumes that these charities have a clearer vision and focus, an established implementation process to assure efficiency, and adequate oversight and reporting to keep donors and the general public up-to-date on their progress. It is worth noting that Indian companies and charities operate in an often challenging environment in terms of corruption, even in the context of other emerging markets. India ranks below average on the corruption front, ranked 80 out of 180 countries by Transparency International.[4] A Transparency International survey from 2019 suggests that 63% of public service users paid a bribe in the previous 12 months. In the instances where funds are distributable via the company's foundation or through unnamed or less reputable charities or third parties, we see greater potential for weaker governance and a higher risk of corruption.

The RBC Asian Equity team believes that ESG factors are an essential and integrated part of our active investment management process and we highlight our approach

Exhibit 3: CSR funds are distributed via 3 main channels. Companies utilise multiple channels to distribute funds



Source: 2020 Company Reports, RBC Global Asset Management. Data as at November, 2020.

to ESG here. Corporate governance is an important consideration for us. We believe the survey results do influence our view of the individual company's corporate governance. We like to see that companies have a clear purpose for their CSR donations and that this is in line with the company's business strategy and positively contributes towards the community. Non-compliance with ESG requirements and/or a lack of transparency reflects poorly on a company's governance, and we take this into consideration in our investment process.

Ideas to improve upon the existing CSR framework

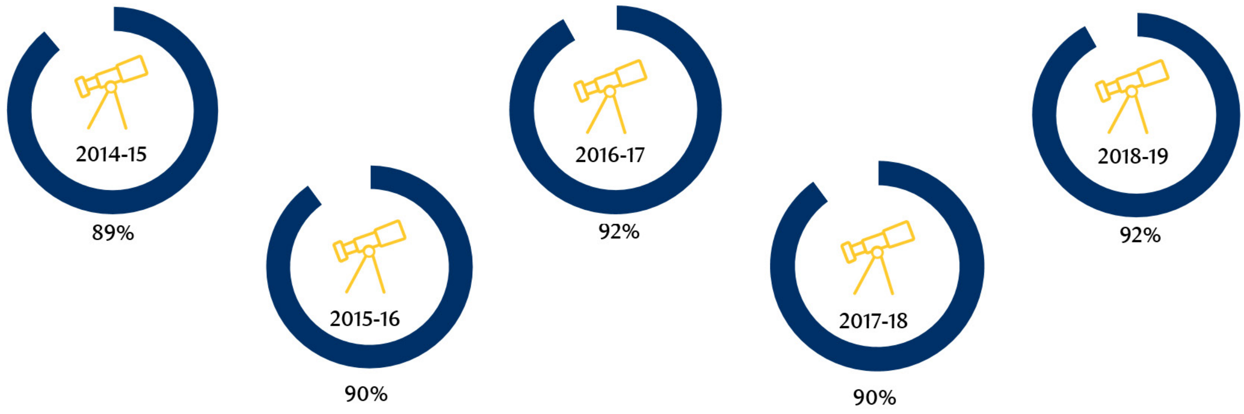
We highlight several ideas that we believe would improve upon the existing CSR framework in India.

First, we believe that companies should continue to allocate more of their CSR funds to well-known external charities (after sufficient due diligence), to improve governance and impact while lowering the risk of corruption.

Second, we would like to see more independent director oversight in the CSR committees. It is encouraging to note that KPMG has shown this to be trending in the right direction, both in terms of the number of independent directors and the formation of stand- alone CSR Committees (Exhibits 4 & 5).[5]

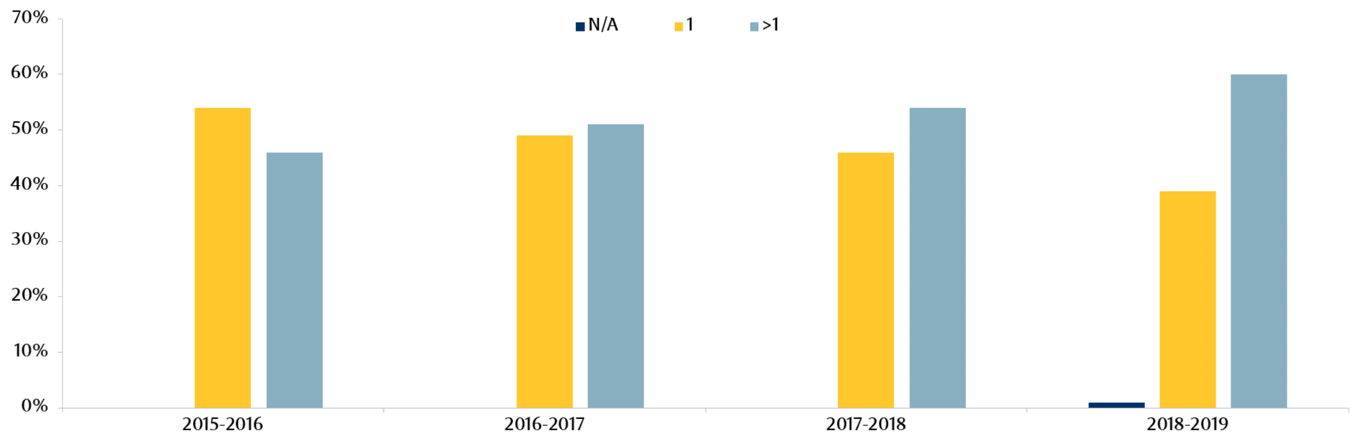
[3] Quartz India, "How political interference is killing corporate social responsibility in India", March 2019 November 2013. And, Hindu Business Line, "Why CSR does more harm than good", December 2019. [4] Transparency International, 2019 Survey, Published January 2020. [5] KPMG , India's CSR reporting survey 2019, Published February 2020.

Exhibit 4: Percentage of stand-alone CSR Committees



Source: KPMG in India's analysis based on India's CSR reporting survey. Data as at December, 2019.

Exhibit 5: Number of Independent directors in the CSR Committee

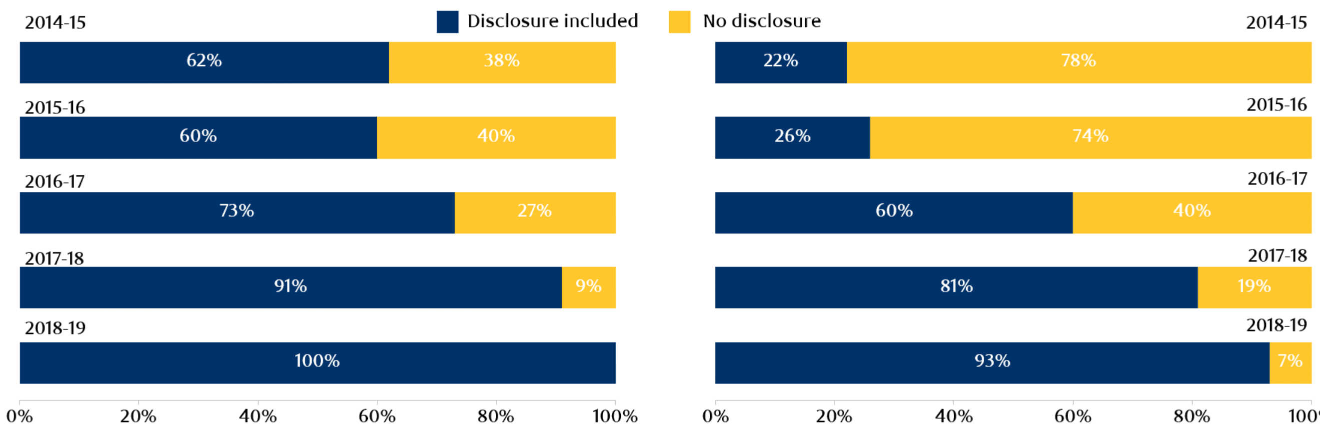


Source: KPMG in India's analysis based on India's reporting survey. Data as at December, 2019.

Third, we believe there is further room to improve upon transparency and disclosure in either the CSR reports or annual reports.

We have seen a marked improvement in reporting, but more progress needs to be made in identifying and monitoring the outcomes of key performance indicators (KPIs) (Exhibit 6).

Exhibit 6: Disclosure on focus areas of CSR & Disclosure on outreach/people impacted



Source: KPMG in India's analysis based on India's CSR report survey. Data as at December, 2019.

Summary

Since the CSR legislation was adopted in India in 2013, we have seen the creation of dedicated CSR committees and an increase in annual disclosure via annual reports or CSR reports. However there remains room for improvement, especially as concerns of inefficiency and corruption exist. We believe the increased allocation of funds to external, well-regarded and audited charities, along with increased oversight by independent non-executive directors, are ways to mitigate this risk. Despite the improvement in reporting, progress is needed in identifying and monitoring the outcomes of KPIs.

Managing accounting risk in Asia as stock pickers

Executive summary

- Rising incidences of corporate fraud mean it is important for investors to continue to develop an appropriate toolkit to analyse financial statements to reduce investment risk.
- It remains very difficult for auditors to uncover fraud, especially when dealing with management teams or other individuals who are being deliberately misleading.
- While particular attention is - and should be - paid to Asia given weaker governance historically, fraud is a global phenomenon. Chinese standards have risen significantly in recent years.
- The RBC Asian Equity team highlights some key 'red flags' that we look for and discuss other methods to mitigate the risks from aggressive accounting practices.

Our toolkit to identify aggressive accounting practices

In recent years there have continued to be incidents of accounting and corporate fraud, often uncovered by investment firms that specialise in short selling. In 2020 we witnessed two of the largest accounting scandals in recent memory: one involving one of the largest wireless payment services providers based in Europe, and the other the largest domestic coffee chain in China. According to PwC's 2020 Global Economic Crime and Fraud Survey, fraud is at the second highest level it has been in the past two decades.[1]

Fraud can take many forms and may be perpetrated by any individual(s) within an organisation. Many instances of fraud were made possible by aggressive accounting practices deployed by management teams, many of which had agendas that conflicted with acting in the best interests of minority shareholders. These accounting issues and scandals highlight the critical need for us, as fiduciary of our clients' assets, to focus on the anchors of sound investment practices and accounting scrutiny, both in developed and developing markets.

Here we look at how deliberate acts of fraud by a management team or a corporate board are very difficult to uncover, even by auditors. While there is no perfect screen or set of rules that allow us to be able to detect fraud, we rely on an internally developed forensic accounting toolkit as a valuable first line of defence. With a stringent framework of identifying accounting red flags, both qualitatively and quantitatively, we seek to identify companies within our investment universe that are most at risk of aggressive accounting practices.

Accounting standards are broadly aligned globally and the risk of accounting fraud is not necessarily higher in emerging markets

As Asian markets have grown in recent years to become a larger part of global equity markets, one prevailing perception is that developed markets in Europe and North America tend to exhibit fewer traits of profit manipulation or fraud. The reputation of Chinese companies has been hurt by high profile examples of reverse takeovers on the NASDAQ, where Chinese companies exploited regulatory arbitrage to their advantage. In truth, the risk of financial data manipulation is likely greater for Chinese-listed firms in the U.S. where American regulators are currently barred from inspecting Chinese audits. We believe such risks are not symptomatic of widespread governance problems in Chinese companies, however, but that a subset of mainland companies managed to use regulatory loopholes and more easily escape investors' scrutiny due to both Chinese and U.S. regulators' historical lack of attention to regulatory matters.

From an accounting assurance perspective, Asia-listed companies are bound by similar audit requirements, such as quarterly reviews and annual audits, in a similar manner to their counterparts in developed markets such as the U.S. and Canada. For example, the Chinese Accounting Standards (CAS) have been overhauled in the past 15 years in an effort to bridge the gap with the International Financial Reporting Standards (IFRS). Contrary to common belief, the current CAS are substantially converged with IFRS.[2]

We believe that the opportunity for financial data manipulation, aggressive accounting, or even outright fraud exists just as much in developed markets as emerging markets such as China.

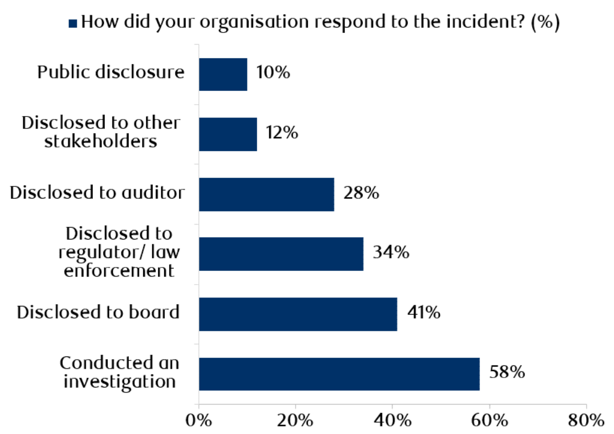
[1] PwC's Global Economic Crime and Fraud Survey 2020, https://www.pwc.com/gx/en/forensics/gecs-2020/pdf/global-economic-crime-and-fraud-survey-2020.pdf. [2] Deloitte IAS Plus, https://www.iasplus.com/en/jurisdictions/asia/china.

Most fraud goes undetected

Many of the largest frauds over the last 10 years happened under the watch of the 'big four' accounting firms (KPMG, PwC, Deloitte, and Ernst & Young). Large audit firms, by nature, are no guarantee that a company's financial statements are not fraudulent. While auditors are vitally important to ensure that financial statements are presented fairly according to relevant accounting principles, their ability to detect a management team's intentional fraudulent behaviour is very limited.

According to the above-mentioned PwC survey, most fraud goes undetected as only roughly 28% of the incidents are reported to the auditor and 12% to other stakeholders (Exhibit 1).[3]

Exhibit 1: Most fraud goes undetected



Source: PwC Global Economic Crime and Fraud Survey, Macquarie Research. Data as at October, 2020.

The primary role of the auditor is to state that the financial statements are management's responsibility; finding or rooting out fraud is not the auditing firm's duty. In instances where the auditors find evidence of a potential fraud, then they are obliged to report their findings. To circumvent the scope of its auditors, management teams committing fraud may forge documents and misrepresent data input assumptions.

On the other hand, some accounting standards are meant to be interpreted based on the management team's judgement. Although financial statements are perceived to reflect a company's true financial position, some of the numbers can actually be highly subjective.

Accounting toolbox is an integral part of our investment process

As equity investors, one of our primary objectives is to minimise the risk of investing in companies that are associated with fraudulent accounting. To achieve this our investment process is designed to try to weed out not just outright fraud, but also to try to identify aggressive (but entirely legal) accounting activity where companies may be bringing forward revenue or manipulating profit in an unsustainable manner. In other words, borrowing earnings from the future will at some point trigger a corresponding hit to future earnings.

Aggressive accounting practices are usually prerequisites for CFOs to manipulate profits. While this can be done in various forms, some accounting tricks are more prevalent owing to the scope of human interpretation as well as the specific industry in which they operate. One of the first steps of our financial statement scrutiny is to conduct a meeting, usually in person, with the 'C-suite'. More importantly, we strive to maintain continuous engagement with the management team. We take meetings with management teams very seriously and perform regular due diligence on most of the key members. Building on our collective experience of engaging with companies across the Asia Pacific region we have put together an accounting toolbox that combines qualitative and quantitative assessments and this is an integral part of our investment process.

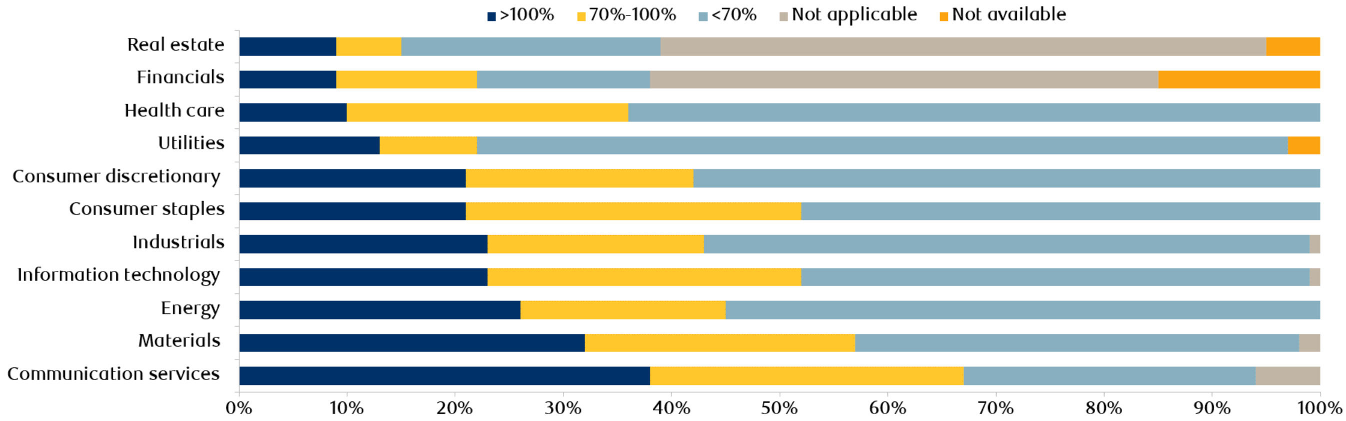
Accounting red flags

Collectively, the RBC Asian Equity team identified a list of accounting red flags which, in our opinion, are most pertinent to our investment philosophy. These red flags often guide our engagement with management and compel each of our analysts to ask questions to provoke the necessary research and analysis. Examples of red flags include:

- High debt or high cash levels: unless the company is in acquisition mode we are generally more sceptical of companies with either high cash or high debt ratios.
- Unusual capital expenditure/depreciation ratios compared to industry peers: significant capital expenditure programmes can be one of the easiest ways to siphon cash out of a business and this is why we investigate capital expenditure (capex) spending in detail and compare capex to depreciation ratios against industry. In 2016, the shares of China's largest dairy farm operator at the time plunged by as much as 90% within one hour after accusations by a short seller that the company had inflated its profitability and cash balance. The dairy company engineered a highly unusual capex manoeuvre in which it sold around fifty thousand cows to a finance company for approximately USD146 million, after which the buyer

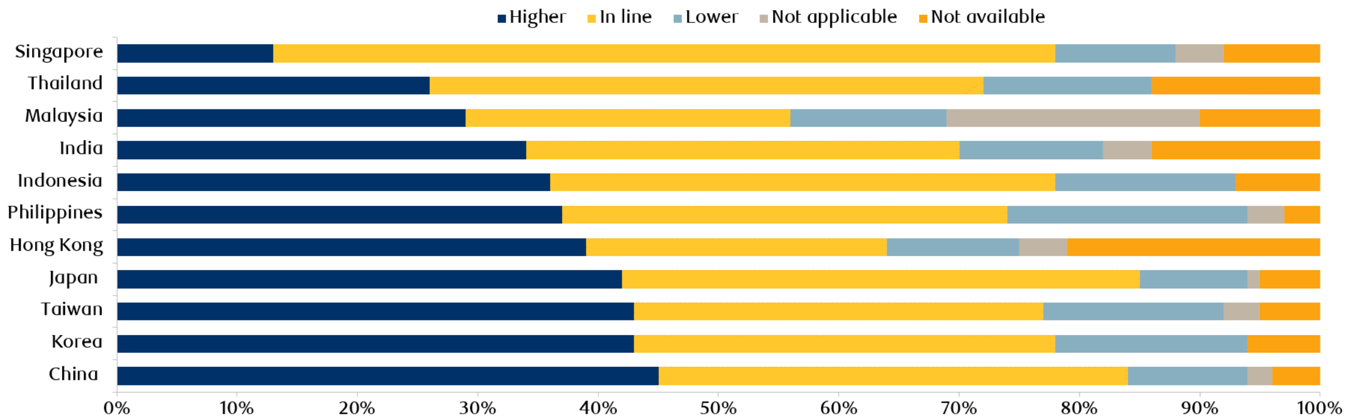
[3] PwC's Global Economic Crime and Fraud Survey 2020, https://www.pwc.com/gx/en/forensics/gecs-2020/pdf/global-economic-crime-and-fraud-survey-2020.pdf.

Exhibit 2: Depreciation/capex levels by sector



Source: Macquarie Research. Data as at October, 2020.

Exhibit 3: Margins vs. peers domestically



Source: Macquarie Research. Data as at October, 2020.

leased back the cattle to the company. This cow-leaseback transaction helped overstate spending on cattle farms, the likely purpose of which was to support the company's income statement fraud. While this was a real business, more than USD4 billion of market value was wiped out due to the capex fraud (Exhibit 2).

- Large build-up of goodwill on the balance sheet: we perform reasonability tests to assess whether or not goodwill has been impaired and whether assumptions such as growth rates and discount rates are in line with peers; this is particularly relevant for acquisitive firms.

- Frequent and large related party transactions including to/from unconsolidated joint ventures or affiliated entities.

- Outsized margins and profitability that are unusual for the industry and cannot be explained. Usually, operating expenses as a percentage of revenue can be predicted with some degree of accuracy (Exhibit 3).

Case study 1: Drawn by its high return on capital, strong cash-generative profile and high dividend payout ratio, the RBC Asian Equity team invested in a Singaporean software solutions provider which catered to the underpenetrated financial sector in SE Asia. While this software firm met many of our criteria, its founder and Chairman started to engage in extensive related-party transactions with private entities but provided little detail of the nature of these transactions. Many of these opaque private entities were in fact held by the founder of the company. This software provider was accused of shifting a large number of its payroll and off-balance sheet debt to these related parties, thereby inflating its reported results. While we divested from this software company upon learning of such poor governance practices, it became a critical case study in developing our accounting toolkit and ultimately the investment decision-making process. While a 'big four' audit firm subsequently released a report that stated no irregularities had taken place, the share price of the software firm has remained depressed.

Case study 2: China's largest retail coffee chain reported a material improvement in cost structures months before the financial misconduct was uncovered in mid-2020, even in the midst of the company's aggressive store expansion phase. Specifically, the company's gross margin expanded mysteriously from -17% to +48% percent in the span of three quarters. This was attributed to a 420% drop in sales and marketing expenses during 2018 and 2019, a period during which store count sky-rocketed throughout China. While this was a big tell-tale sign to us, the company's shares of continued to rise as more investors bought in to the story of growth and a magical reduction of expenses in what was a highly competitive retail coffee market. Ultimately, the Chinese rival to Starbucks confirmed that it had fabricated USD300mn in revenue and USD190 million in expenses, sending the shares plummeting and eventually having to de-list from NASDAQ.

The core of our investment criteria is assessing a company's cash stewardship. The quality of a company's capital management programme, such as a clear return on equity (ROE) or return on invested capital target, is generally a good indicator of the interest alignment between the management team and minority shareholders. Next, we examine the company's cash flow statements in detail and scrutinise how these funds are channelled into different areas of the business. Good quality companies tend to have efficient and stable working capital and reinvest free cash flows in the core business or pay dividends to shareholders.

A consistently high cash dividend pay-out ratio does not mean profits and cash cannot be misappropriated, as shown in our Singaporean case study where the majority 60% shareholder allegedly recycled his dividends into related parties in a complex series of transactions to supplement revenue growth for the listed entity. However it usually indicates that the business is generating decent cash flows organically and that the flow of profits is traceable (Exhibit 4).

Within Asia, in general Taiwanese corporates distribute their profits to their shareholders more than their regional peers; Japan, meanwhile, has a clear lead in disclosing transparent ROE targets. Some other capital management practices we consider include frequency of equity raises, change in asset turnover, and debt-to-free-cash flow.

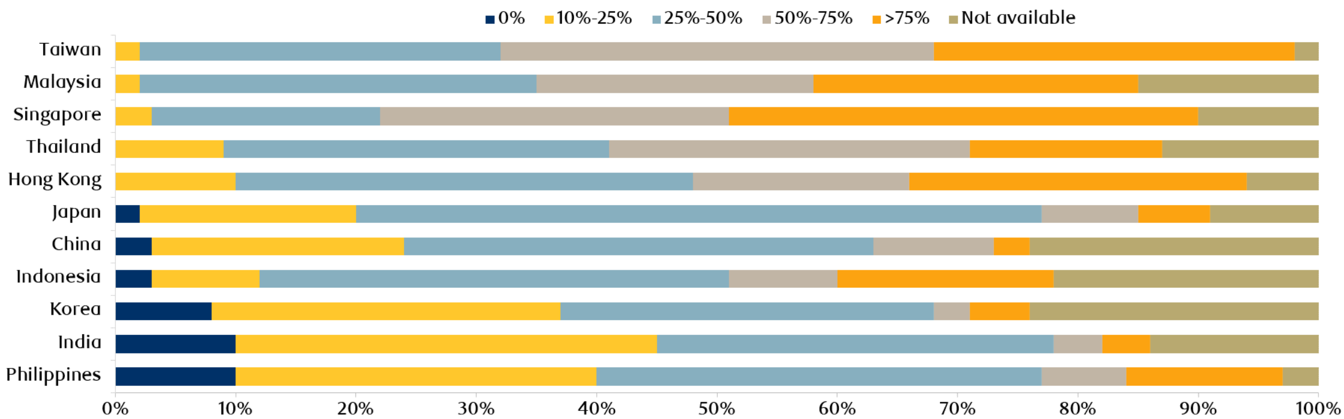
Finally, we also take into consideration the length, depth and transparency of the relationship between the company and the auditor as well as the composition and independence of the Board. Interestingly, the co-founder of the de-listed Chinese coffee giant was once sentenced to 18 months in prison for illegal business activity.

Quantitative screening

To complement our in-house process, we also utilise an external third party forensic accountant, GMT Research, to go through historical financial statements.[4] GMT Research's fake cash flow model measures the risk of profit manipulation through reconciliation of a firm's operating cash flows versus adjusted cash earnings over a specific timeframe. In doing so, GMT flags businesses that are at higher risk of fabricating their cash flows via manoeuvring working capital practices. In essence, GMT takes the focus on cash stewardship to a higher level and identifies firms that may be deploying manipulative accounting practices to portray a more favourable cash flow situation to the outside world.

As part of our process to evaluate all existing and potential investments, we utilise GMT Accounting Screens which summarise a firm's Beneish's M-Score and Altman Z-Score, as well as the nature of any accounting red flags.[5] We will then investigate and will require satisfactory explanations for any item that was flagged before we move on to the next step of investment analysis. In particular, we examine closely the following GMT considerations:

Exhibit 4: Average Cash payout ratio by country in 2017-2019



Source: FactSet, Macquarie Research. Data as at October, 2020.

[4] GMT Research is an accounting research firm focused on Asia and regulated by Hong Kong's Securities and Futures Commission. GMT Research develops proprietary methodologies to detect financial anomalies, or traits similar to past accounting shenanigans. [5] The M-Score is a mathematical model that uses eight financial ratios to identify whether a company has manipulated its earnings. The Altman Z Score is used to predict the likelihood that a business will go bankrupt within the next two years.

- Operating cash flows discrepancy versus dividends paid and capex spend over the past five years.
- Changes in working capital which would be indicative of channel stuffing, or similar unsustainable practices.
- Debt management that looks odd but may be trying to provide a false representation of the balance sheet.
- Strangely low or high auditor fees, or frequent changes to auditor.

Inevitably, GMT's methodology is less relevant for businesses in high-growth and loss-making stages as is often the case in the IT software and healthcare industries. If we identify companies in these sectors that we consider attractive investments for our portfolio we examine in detail their research and development spending and capitalisation policies. It is imperative to note that many companies we look at do raise red flags. What is important is how many flags there are, and whether we can find logical explanations that allay our concerns.

Summary

Despite years of effort on the part of regulators to adopt internationally recognised accounting standards, individual companies may continue to adopt unsound or aggressive accounting practices. Financial data can be presented in many different ways depending on a company's goals, and companies will often choose the option that casts their performance in the best light. Furthermore, opportunities for fraud and aggressive accounting are numerous in both developed and developing markets. As a result, critical examination of these financial statements is becoming increasingly important for equity investors who wish to uncover the true financial picture of a business.

We believe that the accounting risk assessment system we have in place allows us to work through our investment process diligently and significantly reduces the chances of us becoming the victim of any fraudulent activities. Despite this there will always be an element of risk attached to investment and the possibility of fraud cannot be completely eradicated. The core of our philosophy is to look for high quality businesses and this means we place a lot of emphasis on a company's management, the quality of its cash flows and the sustainability of its business practices.

Japan Stewardship Code

RBC GAM has accepted the Japan Stewardship Code and we have detailed how we comply with the code in our Commitment to the Japan Stewardship Code.

The Code describes the stewardship responsibilities of institutional investors towards their clients, beneficiaries and companies when they engage with corporates.

The principle-based Code has a 'comply or explain' approach, and commitments from over 280 signatories consisting of asset managers and asset owners.[1]

To increase the Code's impact, the council emphasised the importance of proxy advisors and investment consultants to provide support and advice to institutional investors, as well as the necessity to improve the quality of engagement between investors and companies.

There are 8 principles to the Japan Stewardship Code:

1. **Institutional investors should have a clear policy on how they fulfil their stewardship responsibilities and publicly disclose it.**

2. **Institutional investors should have a clear policy on how they manage conflicts of interest in fulfilling their stewardship responsibilities and publicly disclose it.**

3. **Institutional investors should monitor investee companies so that they can appropriately fulfil their stewardship responsibilities with an orientation towards the sustainable growth of the companies.**

4. **Institutional investors should seek to arrive at an understanding in common with investee companies and work to solve problems through constructive engagement with investee companies.**

5. **Institutional investors should have a clear policy on voting and disclosure of voting activity. The policy on voting should not be comprised only of a mechanical checklist; it should be designed to contribute to the sustainable growth of investee companies.**

6. **Institutional investors in principle should report periodically on how they fulfil their stewardship responsibilities, including their voting responsibilities, to their clients and beneficiaries.**

7. **To contribute positively to the sustainable growth of investee companies, institutional investors should develop skills and resources needed to engage appropriately with the companies and to make proper judgments in fulfilling their stewardship activities based on in-depth knowledge of the investee companies and their business environment and consideration of sustainability consistent with their investment management strategies.**

8. **Service providers for institutional investors should endeavour to contribute to the enhancement of the functions of the entire investment chain by appropriately providing services for institutional investors to fulfil their stewardship responsibilities.**

Additional information that complements our Commitment to the Japan Stewardship Code, such as information about our proxy voting practices and voting record, and our firm approach to responsible investing, can be accessed from this page.

[1] https://expertinvestoreurope.com/japans-revised-stewardship-code-seeks-structural-change/ March 2020.

Case study: TSMC

TSMC: combining innovation and a future of sustainability

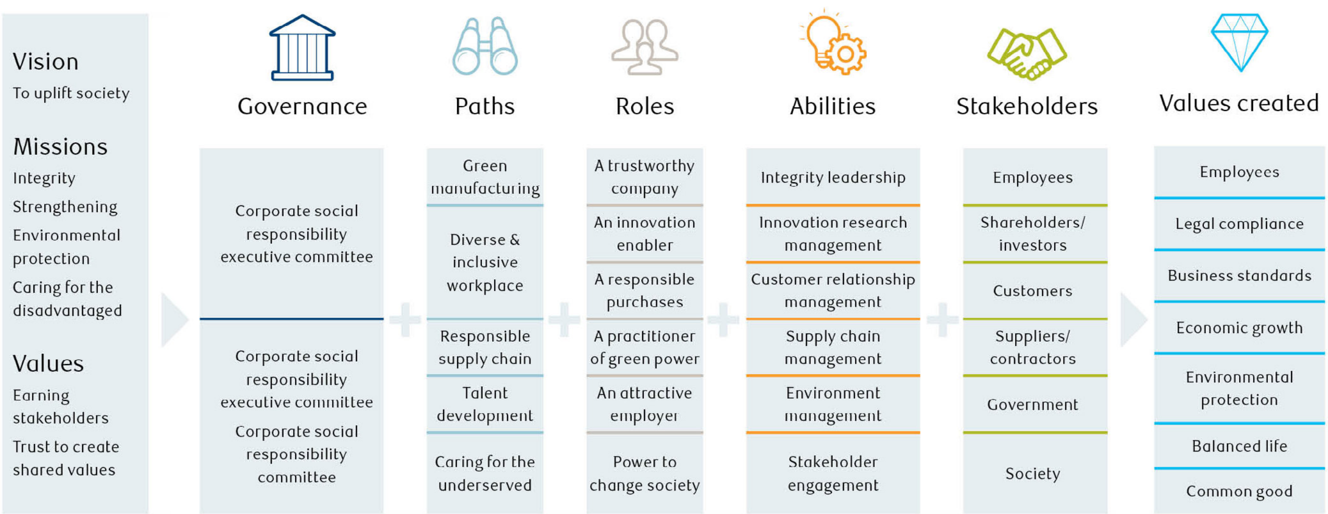
Taiwan Semiconductor Manufacturing Company (TSMC), the world's largest dedicated semiconductor foundry, is a good example of a company that is able to combine innovation and growth, while being concerned with the environment, society and corporate governance.

TSMC was established in 1987 and is the world's largest semiconductor foundry with its products used in smartphones, high-performance computing, and digital consumer electronics. Aside from impressive financial performance, the company prides itself on being a responsible global corporate citizen. TSMC has won major global awards and has been part of the Dow Jones Sustainability Index for nineteen consecutive years; it has also been recognised by Forbes as one of the world's best employers and by Fortune as one of the world's most admired companies.

TSMC's Corporate Social Responsibility (CSR) implementation framework below maps out how the company intends to remain a leader in its field and further improve in the area of CSR. It is a blueprint for sustainable development that connects TSMC's core advantages with the company's 2030 CSR goals. These goals were formulated in accordance with the United Nations' sustainable development goals.

Exhibit 1: TSMC CSR implementation framework

CSR implementation framework



Source: TSMC Corporate Social responsibility Report. Data as at December, 2019.

Below, we highlight six initiatives that TSMC has implemented in order to achieve its overall CSR Goals:

1. A trustworthy company: one of TSMC's core values is integrity and this is strengthened by working closely with its customers and supply chain to the mutual benefit of the industry.[1] TSMC has achieved a customer satisfaction exceeding 90% for six consecutive years. The company also focuses on training, with over 95% of employees completing annual courses on ethics and regulatory compliance.

2. An innovation enabler: the company continues to focus on research and development to produce sustainable high quality products with low energy consumption. The company spent over 8% of revenue on R&D in 2019 and this has allowed the company to accumulate over 3,600 patents. TSMC's products have achieved 100% compliance with hazardous substance regulations.

3. A responsible purchaser: the company has actively encouraged upstream and downstream suppliers to seek advancements in technology, environmental protection and safety. TSMC sources 100% conflict-free raw materials and has conducted audits on all of its high risk suppliers. Waste production among major local suppliers has also reduced by 28%.

4. A practitioner of green power: TSMC has been assimilating green management into its business and has improved in areas of energy management and waste management. In 2019 its waste recycling reached 96% with the percentage of waste sent to landfills at less than 1% for ten consecutive years. The company is a leader in purchasing renewable energy in Taiwan, with 910 GWH purchased.

5. An attractive employer: TSMC has been able to remain an employer of choice by providing attractive career prospects both in terms of remuneration and career opportunities. The average monthly salary of direct labour in TSMC's facilities in Taiwan was three times higher the minimum wage in Taiwan. Over 51% of all job vacancies were filled via internal transfer.

6. Power to change society: TSMC has devoted resources towards programmes for youth, culture and arts, the disadvantaged and the elderly.

We find TSMC to be a company that is committed towards both innovation and sustainability. Its CSR framework permeates all levels of the workforce, its suppliers, customers and the countries in which it operates. We believe the company's continued focus on CSR will help it to maintain its position as one of the world's leading semiconductor company.

[1] Initiatives 1 – 6: 2019 TSMC Corporate Social Responsibility Report.

Case study: Goodman Group

Goodman Group: a carbon-neutral industrial real estate operator by 2025

Goodman group, a leading owner, developer and manager of industrial real estate globally has set an aggressive target to use 100% renewable energy and be carbon neutral in its operations by 2025.

Goodman is a global property group. It owns, develops and manages industrial real estate in 13 countries, including logistics and industrial facilities, warehouses and business parks. The company has highlighted sustainability as part of its long-term strategy. Through our interactions with Goodman we believe the company understands that sustainability is not only right for the environment, stakeholders and the wider community, but that it is also a key part of delivering sustainable returns to investors. Goodman was awarded the 'global sector leader in the developer industrial peer group' by GRESB in 2020 (the global ESG benchmark for real estate).

Goodman's sustainability strategy is focused on three pillars: sustainable properties, people and culture and, finally, corporate performance. Within these pillars there are specific targets which allow us as investors to track progress as we engage with the company. More details on the specific targets are mentioned below.

Pillar 1 – sustainable properties

This pillar focuses on ensuring that properties are sustainably designed and managed and are built in strategic locations to meet customer demand. As a logistics and warehouse provider, demand for Goodman's space has accelerated during the COVID-19 pandemic and it has served as an important distribution centre for both online shopping and the distribution of essential goods.

The company has set aggressive targets to be carbon neutral in its operations and to use 100% renewable energy by 2025. Setting these tangible and easily understood goals

Exhibit 1: Targets to achieve sustainable properties

Target	Progress
400MV of solar PV capacity in operation by 2025	Increased our target of 100MW of solar PV installed on our rooftops by 2025 to 400MV Currently, there is approximately 50MW installed and operating globally Completed new installations in Australia, China and Europe with several more planned
100% renewable energy use within our operations by 2025	Continued investments in solar PV to provide renewable energy at our properties Significant current use of renewable energy in UK, Europe and New Zealand Looking at ways to supplement our transition to renewable energy through renewable power purchase agreements
Carbon neutral operations by 2025	Approximately 15% energy reduction across the Australian office portfolio Further investment in onsite solar energy and other efficiency projects Investigating ways to offset residual carbon to achieve carbon neutral day-to-day operations (excluding development activities)
Maintain >95% overall occupancy rate	Achieved a 97.5% occupancy rate

Source: Goodman Sustainability Report. Data as at December, 2020.

Pillar 2 - people and culture

Material issues relating to this pillar include workplace safety, employee diversity and inclusiveness, and prioritising business ethics in the supply chain.

As the progress chart below highlights, there remains work to be done on improving the working environment and expanding upon the business ethics programme. Good progress has been made on gender equality among executives and the promotion of company values.

Exhibit 2: Targets to improve upon people and culture

Target	Progress
Safe working environment	Implemented a safety framework across Goodman's operations Prioritised minimum safety standards and management of critical risk controls Rolled out safety training and contractor management procedures Unfortunately in FY20, a delivery driver suffered fatal injuries while unloading his truck at a Goodman property in Changqing, China and a person suffered a seizure while working from height on a principal contractor-controlled development site in Australia and later died ⬢⬢⬡⬡⬡
Global supply chain ethics policy	Commenced a modern slavery evaluation process in Australia and drafter Goodman's modern slavery statement Commenced the expansion of the business ethics program Completed a supply chain review in Australia with a focus on high-risk sectors ⬢⬢⬡⬡⬡
Gender ratio of 50/50, with 40% female senior executives	Assessed current gender ratio at 43% female and 57% male, with 23% female senior executives ⬢⬢⬢⬡⬡
100% of employees assessed as demonstrating Goodman's values	Implemented a process to monitor how well Goodman's people are meeting Goodman's values In August 2020, 98% of Goodman employees were assessed as 'demonstrating' or 'exceeding' Goodman's values ⬢⬢⬢⬢⬡

Source: Goodman Sustainability Report. Data as at December, 2020.

Pillar 3 – corporate performance

Material issues relating to this pillar include sustaintable operations and results, environmental stewardship, sustainable capital structure, and stakeholder and community engagement

As the chart below highlights, good progress has been made in adapting the task force on climate-related financial disclosures (TCFD), with Goodman delivering its first TCFD aligned statement in 2020, two years ahead of its original target. The sustainable operation and results enables the Goodman Group to provide funding to its foundation to contribute towards community and philanthropic causes.

Exhibit 3: Corporate performance targets

Target	Progress
Retain investment credit rating	Continued to meet financial targets to underpin capital sources and retain credit rating Maintain credit rating at BBB+ (S&P) and Baa1 (Moody's) ⬢ ⬢ ⬢ ⬢ ⬢
Adopt the TCFD guidelines for climate risk assessment and disclosure by 2022	Committed to adopting the TCFD framework Determined that the Risk and Compliance Committee will oversee Goodman's climate risk management and alignment with TCFD Continued working towards completing our first TCFD aligned statement in 2020 – two years ahead of our target ⬢ ⬢ ⬢ ⬢ ⬢
4 star Green Star GRESB rating average	Submitted GRESB responses for eight Goodman entities with results due in the second half of 2020 Achieved strong results in the 2019 GRESB survey including: • Goodman Group awarded the Global Sector Leader in the Developer Industrial group achieving 5 star Green Star status and an 'A' for public disclosure • Goodman Japan Core Partnership awarded Sector Leader for its peer group, for the second consecutive year, improving its previous score by 15% • Three of the eight participating entities achieved GRESB's top rating of 5 Green stars ⬢ ⬢ ⬢ ⬢ ⬢
$50m in social investment by the Goodman foundation by 2030	Contributed $13.7m to community and philanthropic causes including $6.5m to relief, recovery and firefighting efforts related to bushfires in Australia ⬢ ⬢ ⬢ ⬢ ⬡

Source: Goodman Sustainability Report. Data as at December, 2020.

Summary

Through our interactions with Goodman, we believe the company is committed to sustainability across its global operations. We find that Goodman's long-term decision making is designed to have positive economic, environmental and social outcomes.

RBC Asian Equity team profile

1 **David Soh**
Asia specialist in Consumer and Quant strategy with 16 years experience. Background in management consulting.

2 **Clement Cheng**
Head Trader with over 16 years experience. Background in Asian equity and derivatives.

3 **Chris Lai**
Asia specialist in Financial and Real Estate sectors with 9 years experience. Background in sell side research. CFA Charterholder

4 **Siguo Chen**
Asia specialist in Healthcare and China with 8 years experience. Background in sell side research.

5 **Kathy So**
Equity trader with 4 years of experience specializing in Asia.

6 **Mayur Nallamala**
Senior Portfolio Manager and Head of Asian Equities with 22 years experience in Asian Equity.

7 **David Huo**
Asia specialist in Tech, Communication and Utility sectors with 28 years experience. CFA Charterholder.

8 **Derek Au**
Asia specialist in Consumer and Tech sectors with 8 years experience. Background in financial advisory and audit. CPA, CA.

9 **Selina Lu**
Asia specialist in Energy, Utilities, and Consumer with 9 years experience. Background in corporate banking and credit risk. CFA Charterholder.

10 **Owen Ou**
Risk and Portfolio Construction specialist with 7 years of experience. CFA Charterholder.

11 **Maya Funaki**
Asia specialist in Industrials with 10 years of experience. Background in investment banking.

Mayur Nallamala

Head of RBC Asian Equity, Senior Portfolio Manager
RBC Global Asset Management (Asia) Limited
22 years of experience

BSc (Economics and Economic History) (1998), London School of Economics, UK.

Mayur is a senior portfolio manager and the head of the Asian Equity Team at RBC GAM. Prior to joining the firm in 2013, Mayur was a portfolio manager at a global asset management firm, responsible for Asia Pacific ex-Japan mandates, managing assets on behalf of sovereign wealth, institutional and retail clients around the world. Mayur began his career in the investment industry in 1998. He spent his early career in major brokerage firms in London and Hong Kong, working in derivatives and equity research.

Derek Au, CPA, CA

Associate Portfolio Manager
RBC Global Asset Management (Asia) Limited
8 years of experience

CPA, CA (2011); MAcc (2009), BSc (Accounting and Financial Management) (2008), University of Waterloo, Canada.

Derek is an associate portfolio manager on the Asian Equity Team at RBC GAM. He is the team's consumer, technology and internet specialist. Derek joined the firm in 2013 as part of a graduate program that allowed him to work in a variety of roles within in Toronto and Hong Kong, across fixed income, Canadian equities and Asian equities. Prior to this, Derek was at a global accounting firm, where he was responsible for the financial advisory and audit of publicly-listed corporations in Toronto.

Siguo Chen

Associate Portfolio Manager
RBC Global Asset Management (Asia) Limited
8 years of experience

MSc (Finance) (2012), HEC Paris, France; BSc (Mathematics and Applied Mathematics) (2010), Beijing University of Aeronautics and Astronautics, China.

Siguo is an associate portfolio manager on the Asian Equity Team at RBC GAM. She is the team's healthcare and China specialist. Prior to joining the organization in 2017, Siguo was at a multinational investment bank as a sell-side equity analyst, focused on Hong Kong China consumer stocks and investment strategy research. Siguo began her career in the investment industry in 2012.

Maya Funaki

Senior Analyst
RBC Global Asset Management (Asia) Limited
10 years of experience

BA (Financial Economics) (2011), Columbia University, U.S.

Maya is a senior analyst on the Asian Equity Team at RBC GAM. She is the team's industrials specialist. Prior to joining the organization in 2015, Maya was at a multinational investment bank as an analyst in their investment banking division. She has been working in the financial industry since 2011.

David Huo, CFA

Portfolio Manager
RBC Global Asset Management (Asia) Limited
28 years of experience

CFA (2000); MA (Economics) (1990), University of Saskatchewan; BSc (Political Science) (1982), Suzhou University, China.

David is a portfolio manager on the Asian Equity Team at RBC GAM. He is the team's technology and communications specialist. He has worked in a variety of roles in both Toronto and Hong Kong since joining the organization in 1993, ranging from research analyst to director of global equity research.

Chris Lai, CFA

Associate Portfolio Manager
RBC Global Asset Management (Asia) Limited
9 years of experience

CFA (2014); Senior Executive Leadership Program (non-degree certificate) (2018), Stanford University, U.S.; MBA (Finance Strategy) (2012), London Business School, UK; BBA (Finance) (2007), The McDonough School of Business, Georgetown University, U.S.

Chris is an associate portfolio manager on the Asian Equity Team at RBC GAM. He is the team's financials specialist. Prior to joining the organization in 2015, Chris was a sell-side equity analyst at a multinational investment bank where he specialized in the financial sector across Asia. Chris spent his early career at a major financial services holding company in a number of sales and risk management roles in different parts of the world.

Owen Ou, CFA

Portfolio Engineer
RBC Global Asset Management (Asia) Limited
7 years of experience

BEng (Civil Engineering) (2014), BBA (2014), Hong Kong University of Science and Technology, Hong Kong.

Owen is a portfolio engineer on the Asian Equity Team at RBC GAM. He focuses on portfolio construction and risk analysis. Prior to joining the organization in 2018, Owen was an analytics consultant at a major financial data and software company, specializing in quantitative modelling and portfolio analytics.

David Soh

Associate Portfolio Manager
RBC Global Asset Management (Asia) Limited
16 years of experience

MSc (Investment Management) (2013), Hong Kong University of Science and Technology, Hong Kong; BSc (Political Science) (2005), Korea University, South Korea.

David is an associate portfolio manager on the Asian Equity Team at RBC GAM. Prior to joining the organization in 2014, David worked at a multinational investment bank specializing in quantitative investment strategies for Asian equities. Before starting his career in the investment industry in 2007, he was a management consultant at a global consultancy firm and an intelligence specialist in the military.

Selina Lu, CFA

Senior Analyst
RBC Global Asset Management (Asia) Limited
9 years of experience

CFA (2015); AFM (2016); FRM (2013); MBA (2018), Rotman School of Management, BBA (Accounting) (2010), University of Toronto, Canada.

Selina is a senior analyst on the Asian Equity Team at RBC GAM. She is the team's energy, utilities, and consumer specialist. Selina joined the organization in 2018 as a part of a graduate program that allowed her to work in a variety of roles within Toronto and Hong Kong, across North American Equities and Asian Equities. Prior to this, she gained experience in corporate banking, credit risk and finance at a major Canadian financial institution. Selina began her career in the financial industry in 2010.

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Clement is a senior trader on the Asian Equity Team at RBC GAM. He manages the Hong Kong trading desk and executes trades for the organization's Asia Pacific, Japan and China funds. Prior to joining the firm in 2014, he gained experience at major buy-side and sell-side institutions. He began his career in the investment industry in 2005.

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