HSBC Global Research

30 June 2023

ESG – Under the hood

Semiconductors: Integrating social and governance material issues

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ESG & Equities - EM Asia

- Corporates identify priority material issues through engagement with stakeholders and management
- Material issues can affect the full value chain: supply chain, corporate operations and investment, and customer use
- Identifying and analysing material issues can help to identify opportunities and risks to long-term shareholder value

Our ESG – Under the hood *series examines sector and related company-level ESG and sustainability issues, detailing how we integrate these into our financials, valuations, and risks.*

Social and governance issues are receiving more attention from management teams and stakeholders, including employees, investors, and regulators. Materiality analysis helps to better identify near-term risks and understand longer term corporate prospects. Two examples can be found in recent disclosures from two leading semiconductor manufacturers: TSMC and Intel. Further examples are evident in our recent initiation on the ASIC chips sector.

Social issues: TSMC's 2021 Materiality Report provided a detailed explanation of how its 14 priority material issues were identified. The company also undertook an analysis of the specific impact of the material issues on three sections of the value chain: upstream procurement, TSMC operations, and customer use. Further, TSMC recently disclosed internal (employee) and external (supply chain) engagement initiatives, including an "ESG Award", which, in our view, contribute to a strong sustainability effort by the company.

Governance issues: We include the impact of external regulatory and tax policies in our integration as these governance issues can drive investment decisions. The recent conclusion of subsidy agreements between Intel and the German federal government (Bloomberg, 20 June 2023) solidifies investment plans totaling more than EUR30bn in new semiconductor manufacturing facilities. This follows various subsidies received by TSMC in Korea, Japan, and the United States.

Our sustainability analytical framework integrates social and governance issues. While these initiatives can be difficult to quantify in our models and valuations, we believe that more comprehensive analysis of material issues facilitates the integration of sustainability considerations into financial models and valuations over time.

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Thomas C Hilboldt*, CFA
Head of ESG Integration - Equities, Asia Pacific
The Hongkong and Shanghai Banking Corporation Limited

Frank Lee*
Head of Technology Research, Asia
The Hongkong and Shanghai Banking Corporation Limited

Ted Lin*
Analyst
HSBC Securities (Taiwan) Corporation Limited

Edison Hsia*
Analyst, Semiconductor
HSBC Securities (Taiwan) Corporation Limited

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Integrating ESG: Our analytical approach

Stages of ESG integration

Identify ESG issues relevant to a sector (locally, regionally, globally)

1 Identify issues

Understand how the issues affect / are affected by various sectors

Determine whether the ESG issue is a risk / opportunity for the company

2 Apply to company

Consider how well the company has addressed the issue over varying time horizons

Make adjustments to valuations, ratings, and target prices accordingly

3 Integrate into financials

Adjust cash flows (revenues, costs), weight average cost of capital or multiple

How is ESG "priced in" to stock valuation?

Corporate performance

Business perspective – over time, the operational performance of a business improves because it manages various ESG issues well

Stock valuation

Investor perspective – investors (and analysts) consider how well the business is dealing with ESG-related risks and opportunities and how this relates to the current market value

Reputation perception

General public perspective – a shock (usually negative) which may arise as a result of a publicly reported negative ESG-related incident such as an environmental violation or a major governance failing

How do ESG issues affect companies?

ESG matters can be morphed into business opportunities which generate new streams of income.

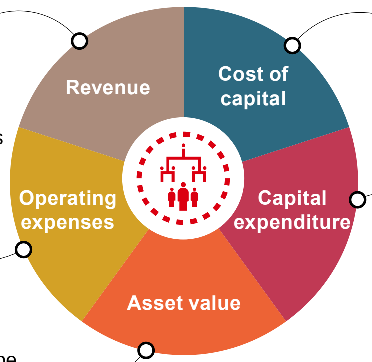
Example: Decarbonisation provides more business opportunities for the renewable energy value chain.

ESG issues can impact the operating cost of companies through efficiency enhancement and regulations.

Example: Increase in insurance costs for food delivery companies due to growing awareness of workers' rights and tightening regulations.

ESG factors may affect anticipated cash flows from company assets and thus the net present value.

Example: Fossil fuel assets of energy companies may be stranded or impaired long-term through energy transition.



Investors may require higher risk premiums for companies with poor ESG disclosures and practices. Green projects can enjoy more favourable rates in financing.

Example: Some central banks are providing lower-interest-rate loans to fund green projects.

The transition to a sustainable economy is likely to bring changes in capital expenditure for development and investment in more sustainable activities.

Example: Technology companies allocate capital, which enables them (and others) to be more sustainable.

Source: HSBC

ESG – Under the hood

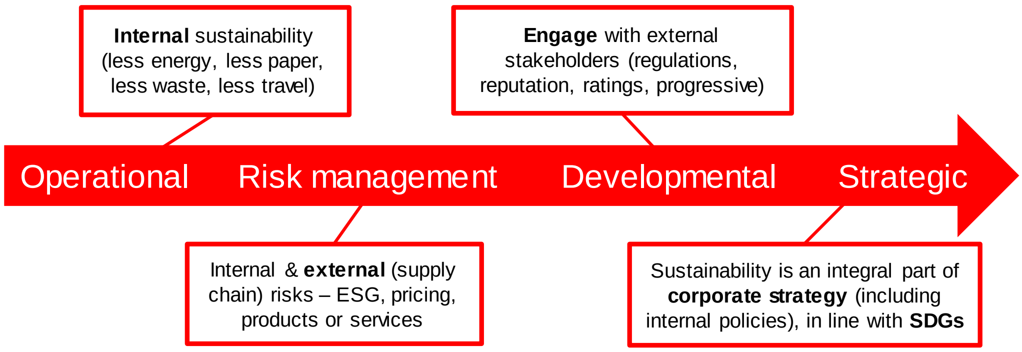
- The semiconductor industry is progressing on the path to sustainability
- Social issues, including supply chain sustainability, are increasingly being embedded into strategic planning
- More concrete strategies regarding sustainability and ESG plans are expected to evolve

Accelerating pace of sustainability and ESG plans

The ESG pace is picking up. Over the last two annual reporting cycles, we have observed a significant improvement in the overall specificity of sustainability and ESG plans. We use TSMC as one corporate example in this report, but we also highlight materiality issues at Intel and in the application-specific integrated circuit (ASIC) sector. What we observe from TSMC's reporting is significantly more concrete strategies with regard to its sustainability plans related to operational, risk management, development and strategic initiatives.

While a lot of companies in Asia now have tentative sustainability and ESG plans in place, many will also form more concrete strategies throughout the year as annual (and sustainability) reports are released.

1. ESG is a journey for corporates



Source: HSBC

This is a Free to View version of a report with the same title published on 30-Jun-23. The full note takes a deep dive into the sustainability efforts of TSMC, Intel and the ASIC sector. Please contact your HSBC representative or email AskResearch@hsbc.com for more information.

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