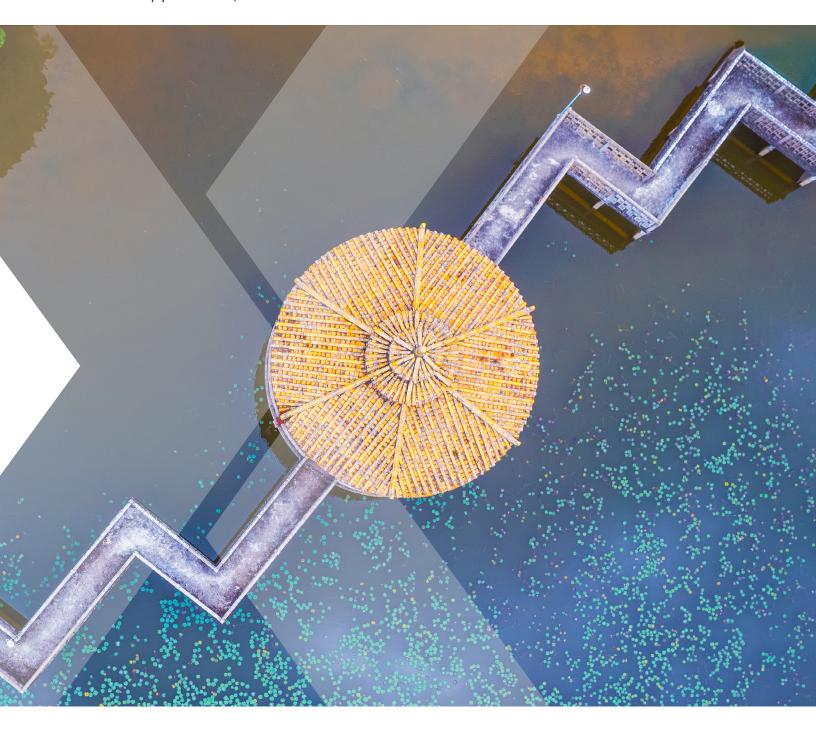
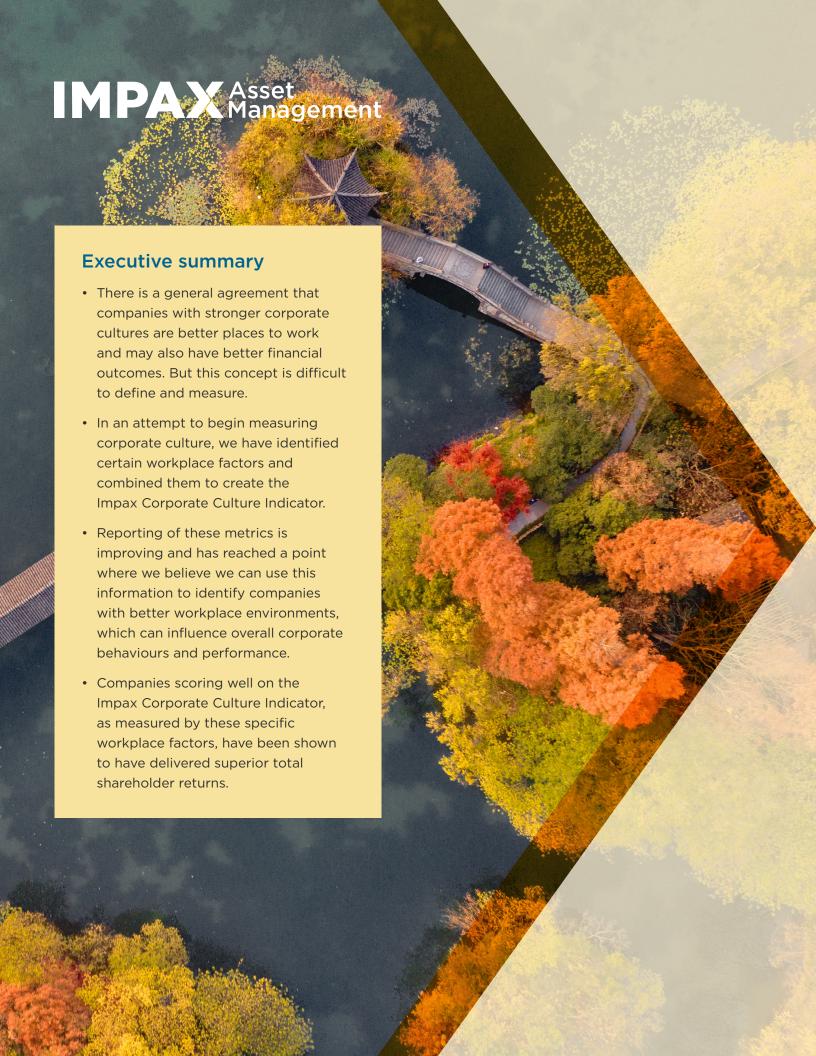


# Untangling the intangible asset of workplace culture

The Impax Corporate Culture Indicator as a tool for alpha generation

Christine Cappabianca, Amber Fairbanks and Charles French





## Introduction

In today's corporate world "culture" is a term that is heavily used and emphasised in different contexts, but often vaguely defined.

Deriving from the Latin, cultura, to mean caring and growing in relation to agriculture, in the 19th century the term developed to include social and behavioural elements, to refer to the cultivation of the mind. Today the word has evolved into a very broad societal concept, with the American Heritage Dictionary defining culture as the "totality of socially transmitted behaviour patterns, arts, beliefs, institutions and other products of human work and thought characteristics of a community or population".2

Within business there is a general understanding and agreement that companies with stronger "corporate cultures" are better places to work and may also have better financial outcomes.3 But for investors, good corporate culture, due to its intangible nature, is hard to measure and test quantitatively. This makes it a particularly interesting topic to research, as it may be a potential source of alpha generation, due to the information asymmetry. It is not likely to be included in company analysis and valuation, like many other intangible value drivers that now represent a large portion of companies' market value.4

There is a range of social science research supporting the hypothesis that stronger corporate culture can lead to positive company returns and outcomes.

A prominent book on the topic found that culture can account for 20% to 30% of the differential in corporate performance when compared with "culturally unremarkable" competitors. 5 An August 2023 report by Impax, The financial impact of diversity and culture, refers to further research and evidence on this topic.6

We believe that workplace culture, which includes professional standards, systems and behaviours, is an important component of corporate culture. It is tangible and can be measured in part and quantitatively tested via human capital metrics to measure company standards and systems that are likely to influence employee behaviour. The Impax Corporate Culture Indicator, presented in this paper, is a cumulative score based on these metrics.<sup>7</sup>

- 2 American Heritage Dictionary, 2024
- 3 Heskett, J. and Kotter, J., 2011: Corporate Culture and Performance
- 4 Garnham, A. et al, February 2024: Corporate Intangible Assets Grew to USD61.9 trillion in 2023
- 5 Heskett, J. and Kotter, J., 2011: Corporate Culture and Performance
- 6 Gorte, Julie F., August 2023: The financial impact of diversity and culture
- 7 Corporate culture and workplace culture are distinct, and the differences have implications when testing the relationship between culture and company performance. Per the Harvard Business Review and CultureWise:
  - Corporate culture refers to the shared beliefs, values, attitudes and perceptions of an organization. It encompasses the overall identity and character of a company. It influences decision-making and the overall work environment.
  - Workplace culture focuses on the professional standards, systems and behaviours within a company, it is how employees interact. communicate and collaborate on a day-to-day basis. It influences employee satisfaction, productivity and engagement.

# Building on gender and workplace equity research

While we may never be able to fully quantify culture, it is an interesting and relevant quantitative area for investors to explore given the potential for stronger corporate culture to add significant financial value over time. That exploration highlights the value of having both quantitative and fundamental analysts look at the same issue.

Impax has been quantifying workplace behaviour and linking it to potential alpha generation since 2007.

Impax's Gender Lens investment research began in 2007 and has evolved as the quality and breadth of information has improved. The Impax Gender Analytics team began creating a proprietary gender leadership dataset covering the MSCI World Index in 2013.

In 2019, a set of workplace equity factors were added to this dataset, including indicators around pay equity, talent pipeline development and gender-related diversity disclosure and targets, built using data gathered by Impax.8 These factors, when looked at as fundamental indicators of workplace equality and inclusion, show significant efficacy and alpha potential. The workplace equity factors analysed together as a unit are stronger and less volatile than any of the individual factors, and they continue to be associated with excess returns through a volatile period, across all regions in the MSCI World Index.

This promising result inspired us to seek additional factors to help form a more complete picture of workplace culture.

# Impax Corporate Culture Indicator analysis

In a continued effort to identify companies well-positioned to outperform, we looked for ways to quantitatively measure and analyse corporate processes and systems as metrics of workplace culture across regions. The Impax Corporate Culture Indicator research, undertaken by investment team, Quantitative Research Group and Impax Sustainability Centre colleagues, is intended to leverage our existing research, moving beyond our historic focus on gender and sustainability related factors.

Universe: The universe for all of our developed market analysis is an equal-weighted MSCI World ex-Energy Index. We remove any companies with share price returns more than four standard deviations from the period average to prevent any single name from having an outsized influence on the analysis.

Factor selection: We have analysed over 30 different factors across four regions: the US, EAFE (Europe, Australasia and the Far East ex-Japan), Japan and emerging markets (EM). We look at company disclosure and year-over-year changes, and adjust for the impact of elements such as sector or market capitalisation, with factor data that goes back as far as 2012. The factor selection process includes collaboration across teams to align quantitative insights with fundamental materiality. We chose factors that are clearly correlated with superior total shareholder returns for their regions, according to our analysis. The table in Figure 1 describes the factors and shows the regions where each applies. Underlying factors are normalised by cap and sector as appropriate.

<sup>8</sup> Please note that reporting is not required for most of these variables. Our research and analysis are therefore based on the data that is publicly available.

## Figure 1: Impax workplace factors with regional use

Workplace factor (start date)	Definition	US	EAFE	Japan	EM
Employee turnover (2012)	The percentage of employees that left the company in the last calendar year.	•	•	•	•
Y/Y change in women in management (2015)	The year-over-year change in the percentage of the management team that are women.	•	•	•	
Management of human capital (2012)	Comprehensive employee benefits package, training programs, employee engagement, employee stock ownership eligibility and external recognition as preferred employer.9	•	•	•	•
Workplace equity policies (2020)	A company's pay equity initiatives, hiring, promotion and retention; its disclosures of, and commitment to, diversity targets and progress.	•	•	•	
Race & identity disclosure (2016)	The disclosure of and external reporting on a company's board and management's race and LGBTQ data.	•			
Women on the board (2013)	The percentage of board members who are women.		•		
Gender leadership score (2013)	A weighted metric including woman CEO and CFO, those in the top 25% for board representation and management, and year-over-year change for women in management.			•	
Management of labour (2012)	Third-party score including inputs such as strength of worker protections, quality of restructuring policies and programs, support for degree or certification initiatives for employees and frequency of employee satisfaction surveys.				•
Profitability/employee (2012)	Annual profits (EBITDA) divided by average number of employees. <sup>10</sup>				•
Diversity disclosure (2012)	Measurement and reporting of board and/or management diversity data.				•
Safety and human rights policies (2020)	Presence of policies to safeguard employees and human capital across the value chain				•

<sup>9</sup> Current source for external recognition is MSCI. However, we recognise the shortcomings of any organization that attempts to recognise employers, and we continue to seek out this information through internal research.

<sup>10</sup> Earnings before earnings before interest, tax, depreciation and amortisation (EBITDA) is a standard metric for company profitability.



After choosing factors that showed promise, we have analysed their effectiveness at generating excess returns for each region, over both short and long holding periods. We apply factors only to regions where they demonstrate statistically significant distributions – that is, those in the top group generally outperformed those in the bottom group more with the passage of time. This in an iterative process and the regional factor mix will evolve over time.

We continue to look for ways to condition existing data, as well as seek new data sets to enhance the measurement of corporate culture.

For example, we are currently working with natural language processing to scrape data from sustainability reports, other company materials, and employee reviews to better gauge employee sentiment.

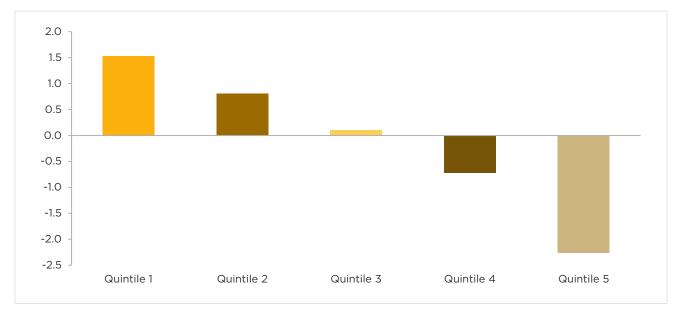
## The Impax Corporate Culture Indicator

The regional scores roll up to comprise the global Impax Corporate Culture Indicator. We believe companies' placement on this continuum is an interesting marker of corporate culture and brings us a step closer to measuring its value.

The multi-factor Indicator elicits a stronger signal than any single metric alone. Our findings have

led us to believe this Indicator, which has shown correlation to outperformance, can serve as a proxy for stronger corporate culture. **Figure 2** illustrates how, globally, the higher scoring quintiles have outperformed the lower scoring quintiles, in nearly perfect order over the past decade.<sup>11</sup>

Figure 2: Impax Corporate Culture Indicator average excess 12-month return by quintile 31 December 2012 - 30 June 2024 (%)



Source: Impax, as at 30 June 2024, based on total shareholder returns vs. MSCI ACWI ex-Energy. Figures refer to simulated past performance, which is not a reliable guide for future performance. See methodology section for important details and more information.

<sup>11</sup> Traditional quantitative analysis uses one-month forward excess returns, but we use a 12-month measure as it reflects our longer holding period while remaining dynamic.

This top-level Indicator performance covers the whole period and all regions and as such is easier to report succinctly. Our current use of the Indicator, which is to avoid companies with weaker scores, makes this quintile analysis particularly useful and gives the active investor a large universe for identifying potentially attractive investments.

Another way to evaluate the return forecasting efficacy of the Indicator is to estimate their information coefficient (IC).12 Figure 3 shows that over the 10+ years in the sample period, we have seen a positive IC and statistical significance in the T-stat. Interestingly, the introduction of the workplace equity factors in 2019 coincided with a noticeable improvement on both dimensions. One hypothesis is that post COVID-19 work structures have seen a notable shift in priorities for employees and employers, which have allowed businesses with supportive policies to benefit. According to this hypothesis, those with less supportive policies have been playing catch-up, in the face of additional headwinds not germane to their core business models.

Figure 3: Impax Corporate Culture Indicator information coefficient (IC) and IC T-stat

	Information coefficient	Information coefficient T-stat
31 December 2012 - 31 July 2024	0.014	0.739
31 July 2019 - 31 July 2024	0.033	1.745

Source: Impax, as at 31 July 2024, based on total shareholder returns. See methodology section for important details and more information.

The Impax Corporate Culture Indicator offers similar IC and volatility characteristics to a traditional style factor library, as seen in Figure 4. (The standard deviation of a metric is a common way of measuring its volatility.)

Figure 4: Impax Corporate Culture Indicator and Barra style factors information coefficient matrix

30 June 2019 - 30 June 2024



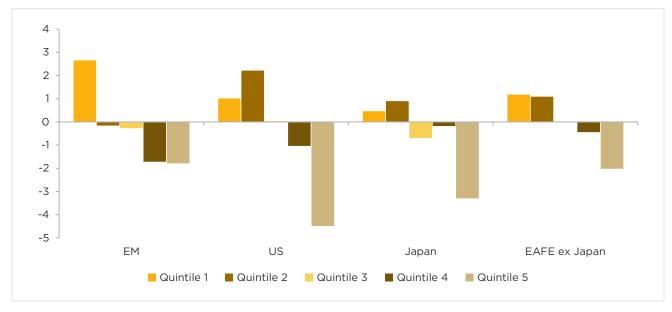
Source: Impax, as at 30 June 2024, based on total shareholder returns vs. MSCI ACWI ex-Energy. See methodology section for important details and more information.

<sup>12</sup> The information coefficient (IC) shows the correlation between predicted and actual stock returns. An IC of 1.0 indicates a perfect linear relationship between predicted and actual returns, while an IC of 0.0 indicates no linear relationship. The T-stat is the ratio of the difference in a number's estimated value from its assumed value to its standard error. A larger T-stat value indicates that the difference is likely to be statistically different.

Another interesting way to look at the overall Indicator's efficacy is by breaking it down into regions and sectors (Figure 5 and Figure 6). While the magnitude and spread shape varies in these different groupings the overall signal is fairly consistent and supports the outperformance of the leaders verse the laggards.

Figure 5: Impax Corporate Culture Indicator average 12-month holding period excess return by region

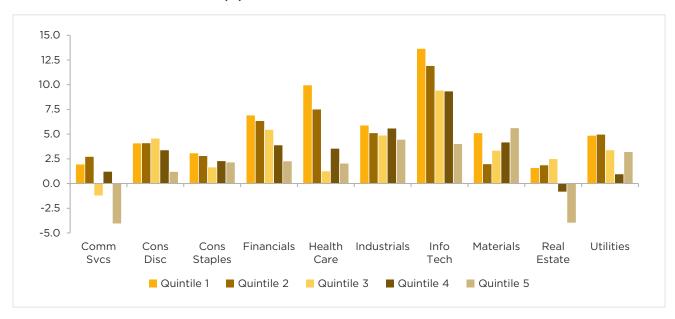
31 December 2012 - 30 June 2024 (%)



Source: Impax, as at 30 June 2024, based on total shareholder returns vs. MSCI ACWI ex-Energy. Figures refer to simulated past performance, which is not a reliable guide for future performance. See methodology section for important details and more information.

Figure 6: Impax Corporate Culture Indicator average 12-month holding period excess return by sector

31 December 2012 - 30 June 2024 (%)



Source: Impax, as at 30 June 2024, based on total shareholder returns. Figures refer to simulated past performance, which is not a reliable guide for future performance. See methodology section for important details and more information.



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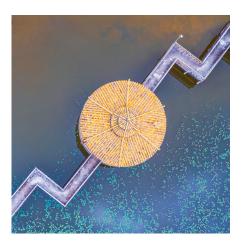
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#### Methodology

The graphics provided throughout this material are intended to show the effectiveness of the Impax Corporate Culture Indicators when used as a screening tool to evaluate the performance potential of securities within the MSCI ACWI based on their culture scores. The companies are quintiled monthly based on corporate culture criteria and then an equal weighted average of the forward month's return is used. There is no guarantee that these trends will continue and these scores are a single consideration in our investment process. These graphics do not represent performance of any product or managed account strategy. No representation is being made that any account will or is likely to achieve results similar to those shown. Source: FactSet as of 30 June 2024. The data shown is the cumulative monthly excess return and the information ratio of each equal weighted quintile in MSCI ACWI for the period from 31 December 2012 through 30 June 2024. Indexes are unmanaged and not available for direct investment.

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