

# Singapore Opportunity Index – A Methodological Approach

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## Abstract

The Singapore Opportunity Index (SOI) provides a systematic, data-driven framework to assess how firms create, sustain, and distribute career opportunities for workers. Adapted from the American Opportunity Index, the SOI methodology has been rigorously localised to Singapore's labour market context based on data from the Occupational Employment Dataset (OED) — a longitudinal administrative firm database – maintained by the Manpower Research and Statistics Department of the Ministry of Manpower. The SOI measures opportunity along five key dimensions: pay, progression, hiring, retention, and gender parity, captured through 12 sub-metrics, using a panel of around 1,500 firms and one million resident employees from 2020Q4 to 2024Q4. Firm-level indicators are occupation-weighted to reflect workforce composition, and recent data are given higher temporal weights to ensure current relevance. Each sub-metric is standardised and aggregated into a composite score, with equal weighting across metrics to ensure a balanced representation of diverse opportunity pathways. The SOI further classifies firms into a Model of Excellence—Career Launchers, Career Builders, and Career Anchors—based on their top-performing attributes. Collectively, this methodology provides an empirically robust and transparent approach to benchmarking opportunity creation, supporting policymakers and employers in advancing fair and inclusive labour-market outcomes.

## Introduction

The Singapore Opportunity Index (SOI) offers insights into career mobility and progression, and workforce development across firms and industries. We adapted the methodology of the American Opportunity Index (AOI) published by the Burning Glass Institute, Harvard Business School's Project on Managing the Future of Work, and the Schultz Family Foundation to Singapore's context.

The SOI comprises 12 sub-metrics, capturing insights across five broad metrics on pay, progression, hiring, retention and gender parity. It leverages the Occupational Employment Dataset (OED), a government-administrative longitudinal database comprising occupation and employment data of all companies with active CPF contributions in Singapore, maintained by the Manpower Research and Statistics Department of the Ministry of Manpower Singapore. The OED is updated on a quarterly basis with data available from 2020Q4.

## Scope and coverage

The SOI tracks the experiences of approximately one million residents, employed in almost 1,500 firms, representing close to 45% of resident employees. For this inaugural edition of the SOI, only firms employing at least 100 resident<sup>1</sup> employees per quarter since 2020Q4 to 2024Q4 were included.

## Occupation representativeness

To ensure that the SOI captures realistic career structures and workforce compositions, the aggregation of each sub-metric to the firm level is weighted by the occupation composition<sup>2</sup> for each firm, as different occupations within the same firm experience very different work realities. By accounting for the occupation mix, this will accurately reflect the experiences of the majority of their employees in each of the eligible companies.

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<sup>1</sup> Residents refers to Singapore Citizens and Permanent Residents.

<sup>2</sup> Occupation grouping relies on the Singapore Standard Classification of Occupations (SSOC) 2020 at the 3-digits level.

**Temporal relevance**

To account for temporal relevance, a weighting scheme that places greater emphasis on data from more recent years was used. Doing so ensures that the index better reflects the current state of workplace practices and outcomes. This was done for all sub-metrics under retention and hiring when scores per cohort of resident employees were aggregated to the firm level.

## SOI Metrics

### 1. Progression

The progression metric captures the experiences of employees progressing within a firm (**Advancement Within**) and whether they end up in a “better”<sup>3</sup> role after leaving the firm (**Advancement Beyond**).

#### 1.1 Advancement Within

A composite measure, comprising three sub-metrics: (1) Advancement Probability, (2) Leaders from within, and (3) Lateral mobility. Advancement probability is defined as the average number of promotions per employee-year. This measures how frequently promotions<sup>4</sup> occur, standardised by the length of time employees have been observed at the firm. Leaders from within is defined as the proportion of leaders who have progressed internally (i.e., have previously earned less than the top 20% wage threshold) among all employees in leadership roles<sup>5</sup>. Lateral mobility is defined as the average number of employees who have experienced a change in job title or job roles and responsibilities, without a change in job level, seniority or pay per employee-year. For these sub-metrics, only those with a minimum employment duration of at least 3 months were considered.

#### 1.2 Advancement Beyond

Evaluates how likely employees are to receive a promotion into a better role<sup>3</sup> when they leave to join a new employer. We track the experiences of new hires with an employment duration of at least 12 months. For each employee, we observe their advancements over the period till the latest quarter. If multiple transitions exist, only the first transition into a new firm is considered. For each firm, we calculate the proportion of employees who received a promotion among those who transitioned to another firm.

### 2. Pay

The pay metric compares how workers in the same occupation are paid at different employers (**Wage**) and the degree of wage growth over time (**Wage growth**).

#### 2.1 Wage

Measures how the pay of workers in similar occupations compares across firms, after factoring differences in work experience proxied by age. As older workers are likely to have spent more years in the workforce, age is used as a proxy for work experience. By adjusting for this, the metric allows us to compare firms on a level playing field — it highlights whether certain companies tend to pay more (or less) than others for the same type of job, beyond what can be explained by experience alone. This makes the results more reflective of genuine company practices rather than differences in workforce profiles.

#### 2.2 Wage growth

Examines how the pay of full-time employees changes over time. For each individual, we track their average monthly wage and calculate the percentage change from one year to the next, followed by taking a simple average over all years. Doing so provides a more stable and representative measure of an individual's percentage growth in wages over time as it smooths out short-term fluctuations caused by variable wage components such as overtime, bonuses and performance-related pay.

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<sup>3</sup> A “better” role is defined as the new role offered in the firm that the worker is moving into where it pays at least 10% more as compared to the last drawn salary of the worker.

<sup>4</sup> A promotion is defined as a wage change that exceeds the median wage growth of that SSOC 3-digits by 2 or more times.

<sup>5</sup> Employees in leadership roles are defined as full-time employees with wages among the top 20%.

### 3. Hiring

Measures how inclusive a company's hiring practices are. It captures the percentage of new hires whose education is below a bachelor's degree (**Degree Barriers**) as well as the percentage of new hires with less than 3 years of working experience (**Career Entrants/Re-Entrants**). New hires can refer to fresh graduates, early-career workers, mid-career switches, as well as re-entrants to the workforce.

#### 3.1 Degree Barriers

Measures the percentage of new hires who do not have qualifications equal to or higher than a bachelor's degree. This serves as a proxy for skills-first hiring where companies prioritise an individual's skills, competencies and experience rather than formal educational credentials.

#### 3.2 Career Entrants/Re-Entrants

For each new hire, we derive the total duration in months of prior work experience. Next, we determine the share of new hires with fewer than 36 months of prior work experience.

### 4. Retention

Captures how well firms can sustain their workforce over time. Retention is an important signal of employee satisfaction, organisational stability, and effective human capital practices. High retention rates suggest that employees see long-term value in staying with the firm, likely due to a supportive workplace culture, competitive compensation and/or clear career pathways. It includes both new hires (**Entry Retention**) and existing employees (**Continuous Retention**), providing a holistic view of whether firms can not only attract but also retain talent over time.

#### 4.1 Entry Retention

Measures the proportion of new hires who remain with the firm one year after joining. This captures the firm's ability to integrate and support employees in their first year, where mismatches between expectations and reality or a lack of development opportunities can often drive turnover.

#### 4.2 Continuous Retention

Measures the proportion of existing employees (excluding new hires) who remain with the firm one year later. This focuses on the firm's ability to sustain longer-term employment after the initial entry period.

## **5. Gender Parity**

Assesses whether firms provide equitable opportunities and outcomes for employees regardless of gender. It reflects the extent to which males and females are treated fairly in terms of compensation and advancement. A firm that performs well signals that it is actively reducing structural inequalities, ensuring that employees are remunerated and promoted based on merit, not on gender.

### **5.1 Advancement Parity**

Measures the differences in promotion rates<sup>6</sup> among overlapping occupations between male and female full-time employees with a minimum tenure of at least 3 months. A firm that provides fair access to progression pathways for both males and females will have a high advancement parity score.

### **5.2 Wage Parity**

Measures the differences in wages compared to market norms among overlapping occupations for both male and female employees. This captures whether one gender is systematically advantaged or disadvantaged compared to peers in the same occupation.

## **Model of Excellence**

Model of excellence bring together related measures to tell a clearer story about the kind of opportunities a firm creates for its employees. To be assigned a model of excellence, a firm must be among the Top 20% for the relevant sub-metric.

### **1. Career Launchers**

The Career Launchers model of excellence recognises firms that open doors for people at the early stages of their careers or those returning to the workforce. These firms reduce traditional entry barriers, such as strict degree requirements, instead focusing on the skills, competencies and experience of candidates. They also provide opportunities for individuals with little prior work experience, and those re-entering the job market after breaks for caregiving, family commitments, or further studies. This signals that they are committed to giving people a fair chance to begin or restart their careers, creating pathways that might otherwise be closed.

### **2. Career Builders**

The Career Builders model of excellence highlights firms that create opportunities for employees to advance in their careers. This can happen inside the company, where people are promoted, moved sideways into different roles or functions or even rise into leadership roles and go hand-in-hand with fair wage increases so that promotions reflect genuine progress. It can also happen outside the company, where workers who leave can secure better roles elsewhere, showing that the firm equips them with skills and experience that are valued in the job market.

### **3. Career Anchors**

The Career Anchors model of excellence recognises firms where most employees choose to stay year- after-year. High retention could signal that the organisation has a strong and positive culture; it may also suggest that people feel valued, supported, and engaged in their work. It reflects job security, meaningful and purposeful work, a sense of belonging and a healthy work-life balance. These factors encourage employees to build long-term careers with the company.

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<sup>6</sup> Defined as the total number of promotions (i.e. defined as a wage change that exceeds the median wage growth of that SSOC 3-digits by 2 or more times) over the number of years assessed.

## **Singapore Opportunity Index**

The SOI is a composite measure that integrates all sub-metrics defined above. Each sub-metric was standardised at multiple levels (i.e., across all firms by occupation, across all firms by sub-metric) by subtracting the mean value from the observed value and then dividing the result by its standard deviation. This allows comparability across metrics and expresses how far a firm's performance deviates from the average among all firms. To construct the firm-level SOI score, each metric was weighted equally, as no single aspect —pay, progression, gender parity, retention, and hiring — can fully capture the experiences of employees. Acknowledging that each of these areas represents a legitimate and valuable pathway to creating opportunities for workers.

## **References**

*American Opportunity Index. (n.d.). Home.* Retrieved June 17, 2025, from <https://americanopportunityindex.org/>