

TOTAL WORKFORCE INDEX™

2019 GLOBAL ANALYSIS



ManpowerGroup®

Introduction

In a digital-first global economy, skilled talent is the new currency for business and economic growth. The competitive, economic and regulatory landscapes continue to shift at rapid pace, while new waves of technologies create demand for new skills. In today's complex and unpredictable business environment, technological disruption opens new opportunities for businesses to grow and create value, provided they have the skilled workforce needed to remain competitive today and tomorrow.

Through the right combination of data and insight, organizations can ensure their workforce strategy is aligned to their business strategy. Just as the Gross Domestic Product (GDP) of a market is used as an economic indicator for measuring the size and performance of an economy, the Total Workforce Index™ can be used as an indicator of workforce potential and the availability of the best, most diverse talent and in-demand skills in each market.

The Total Workforce Index™ has been available for six years and evolved to incorporate new factors, from tax policies to workforce mobility. Industry leaders from fast-moving consumer goods to advanced manufacturing are customizing the tool to evaluate their global footprints, restructure their workforces and identify the right blend of contingent and permanent workers.

The combination of data and insight can help organizations prioritize their unique and most pressing workforce needs by answering questions, such as “Where can I find skilled workers as my organization moves to automated processes?” and “Where should we put our next call center?”. The Total Workforce Index™ is the only index of its kind that analyzes over 100 factors across 76 markets for a comprehensive and comparative view of four key factors: Workforce Availability, Cost Efficiency, Workforce Productivity and Regulation.

As the global economic environment continues to be uncertain and employees' expectations of work evolve, the Total Workforce Index™ helps companies make data-based decisions and compete in a talent-scarce global economy.



Becky Frankiewicz
President, ManpowerGroup North America

A sample of the over 100 unique factors measured by the Total Workforce Index™



How to Leverage the Total Workforce Index™ for Workforce Planning

Total Workforce Index™ (TWI) rankings provide important perspectives and insights that can influence organizations' short- and long-term workforce planning strategies. The rankings help to address critical planning questions, such as:

- Where are the best locations to find workers with the skills needed as technology adoption advances?
- Which markets have the available skills to support automation?
- What factors should organizations consider as they choose a new call center location?
- How can TWI enable organizations to plan workforce mix by city, province, state and/or country?
- What is the impact of shifting regulations and changing wages in a specific location?
- Where will flexible work schedules have the greatest impact?

A custom TWI analysis from ManpowerGroup provides organizations with deeper insights based on the factors most important to their business.

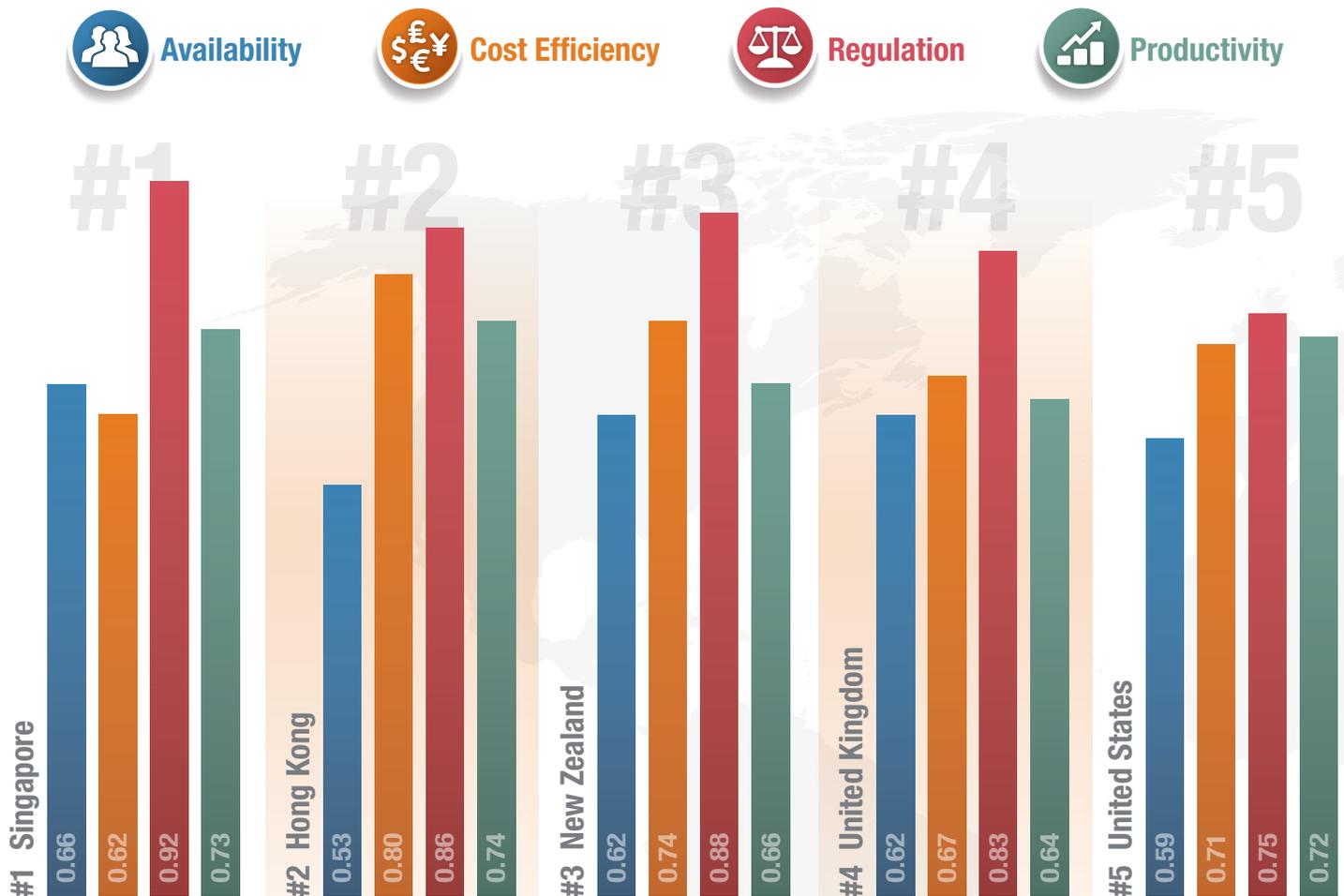
2019 Top 10 Highest Ranking Markets

The markets that rank highest in the Total Workforce Index™ are those with the highest relative performance across all four categories—Availability, Cost Efficiency, Regulation and Productivity. Countries that performed well have successfully responded to trends, such as automation, skills gaps, shifting regulations and the rapid pace of technology. These organizations have been able to demonstrate market stability, upskilling existing workforces, adequately skilling emerging workforces to meet changing job requirements and exhibiting favorable regulatory environments—all of which benefit organizations seeking to invest in workforce engagement (i.e., acquisition and retention of talent).

Top 10 Markets with Score by Category

For the second straight year, the top ten highest ranking markets overall are led by three Asia-Pacific markets—Singapore, Hong Kong and New Zealand. EMEA markets also continue to perform favorably in the top ten. The United Kingdom, Ireland and Israel rank fourth, seventh and ninth respectively, while Estonia remains in the eighth highest position. As for North America markets, the United States ranks fifth. The Philippines holds the tenth spot for the second year following a return to the top ten in 2018.

For the third consecutive year, New Zealand continues to drop in the top 10 rankings, due in part to a decrease in productivity scores driven by lower availability, higher cost and higher regulatory factors. The addition of new factors in TWI, such as language proficiencies and visa-free passport index scoring, have allowed other countries to rise in comparison to New Zealand. The data combined with additional analysis can help determine if New Zealand's decrease in ranking is primarily a result of adverse market conditions or merely more favorable market conditions amongst other competing markets.

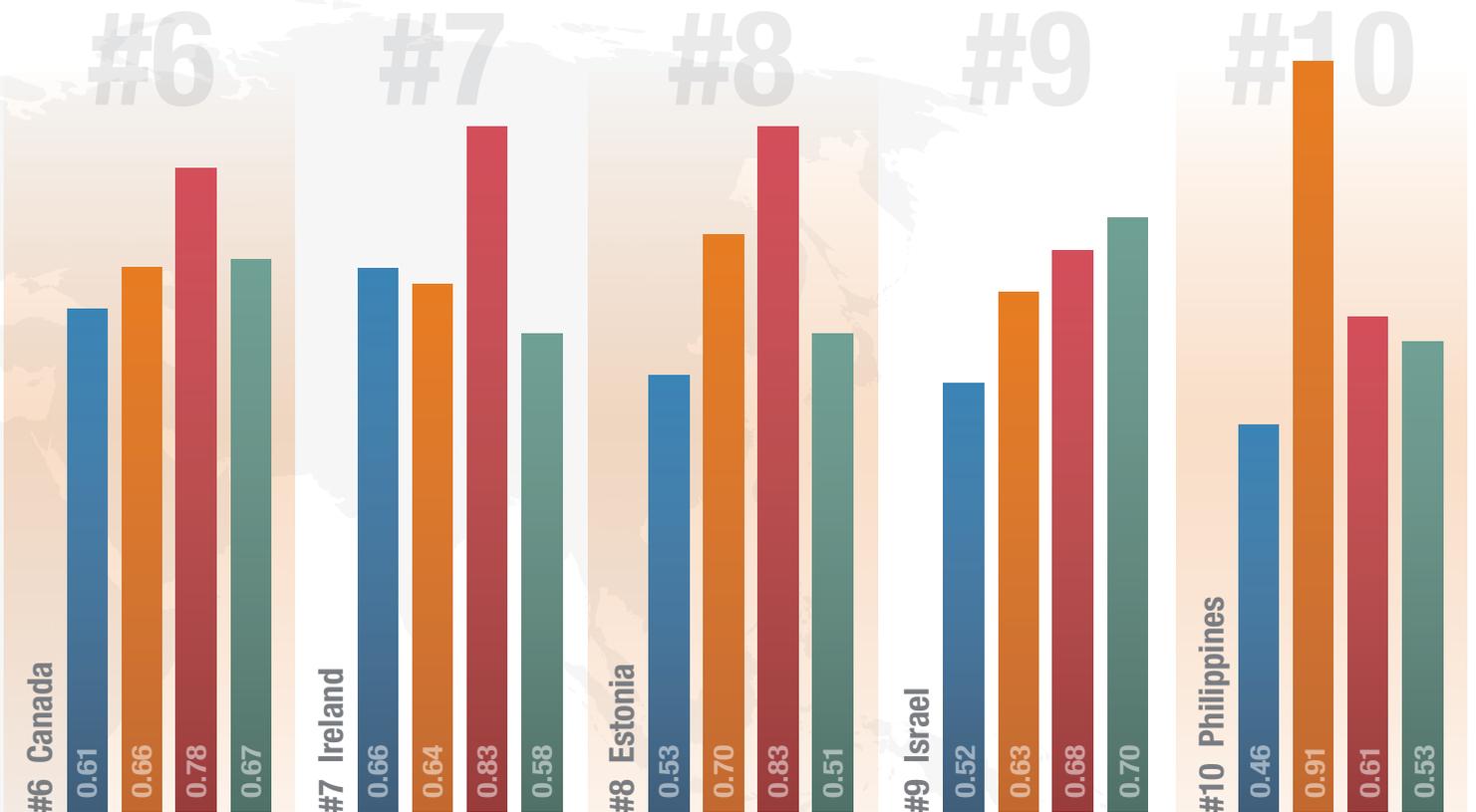


Organizations that observe these trends and engage in a data-driven analysis customized to their circumstances to understand the relative weight of these factors in their markets have a tremendous opportunity to unlock potential.

Dynamic Factors and Weightings

As specific factors, such as language proficiency, size of the contingent workforce, generational considerations, diversity, gender gap, etc., become higher priorities for employers, the weightings of these factors are increased and have a strong compound impact on rankings. For example, although New Zealand has remained consistently in the top five each year because of its highly skilled workforce with high English proficiency and a very favorable regulatory environment, it has dropped in the rankings due, in part, to the change in the weightings. Singapore and the United States have also remained in the top 5 for similar reasons. Like New Zealand, these markets continue to show that they are good investments due to strong skills and positive hiring dynamics.

Organizations that observe these trends and engage in a data-driven analysis customized to their circumstances to understand the relative weight of these factors in their markets have a tremendous opportunity to unlock potential and ensure their workforce and business strategies are aligned.



TOP 5 – Availability

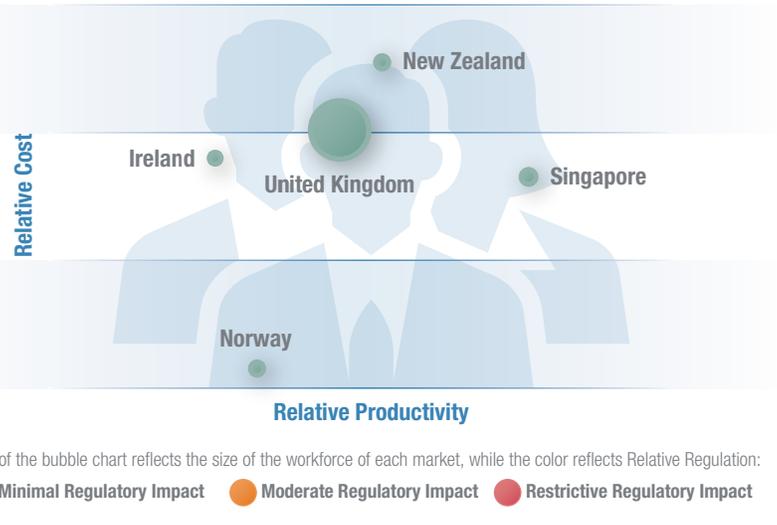
About the Availability Methodology

Workforce Availability measures the relative comparison of the current skilled workforce in each market and the likely sustainability of that workforce based on workforce demographic trends, such as the age of the workforce and influx of immigrants.

Markets scoring favorably in the Availability category are those with the highest availability of skilled workers with a high level of English proficiency and/or other common languages, such as Spanish and French. Other factors favored by organizations hiring in the current labor market, such as education, size of the contingent workforce, diversity, etc. also impact rankings. Though these markets have scored positively in the Availability category, they are not necessarily the largest or most mature markets as defined by the Total Workforce Index™.

As for skills, quantifying the skills available in markets has become increasingly complex as employers pursue multi-generational workforces in the face of decreased unemployment, increased turnover and higher levels of competition. Different generations of workers want different things from their employers given that age and culture tend to influence career expectations and goals. Utilizing the index to evaluate an aging workforce, workforce mix (e.g., gender, ethnicity, age) and to leverage the gig economy workforce can more effectively drive an organization's workforce strategy.

Comparison of the Top Five Markets for Workforce Availability



Key Findings

Singapore rose to the top ranking in availability due to a more highly skilled workforce and a higher emphasis placed on language proficiency, which prompted the addition of Spanish and French factors to the index. New Zealand also returns to the top five in availability ranking this year following an absence in 2018, which was attributed to the increased weighting on the factor for workforce population size in 2018.

The United Kingdom drops to the fourth position, continuing to decline from ranking second in 2017. This decline is due to the added consideration of generational impact of the workforce and how generations are segmented (fewer experienced workers), as well as the growing importance of French and Spanish languages to employment organizations and migration related to the separation of the United Kingdom from the European Union. These factors have created challenges, which have allowed other markets to rise and surpass the U.K. in the rankings.

Custom TWI Analysis Makes a Tech Company More Competitive

A global technology company sought to source talent across Europe to increase talent sustainability and delivery capabilities. ManpowerGroup leveraged the Total Workforce Index™ to evaluate over 40 European markets based on the availability of 16 different technology skills, including experience and language proficiency. The list was narrowed to ten countries that had both the available workforce and the desired skills followed by additional research conducted in 22 cities within those countries. The company selected the location of their new service centers from this narrowed list, and, as a result of their expansion into these markets, the client was able to double the capacity of their shared service centers while significantly lowering their overhead costs.

SUCCESS STORY

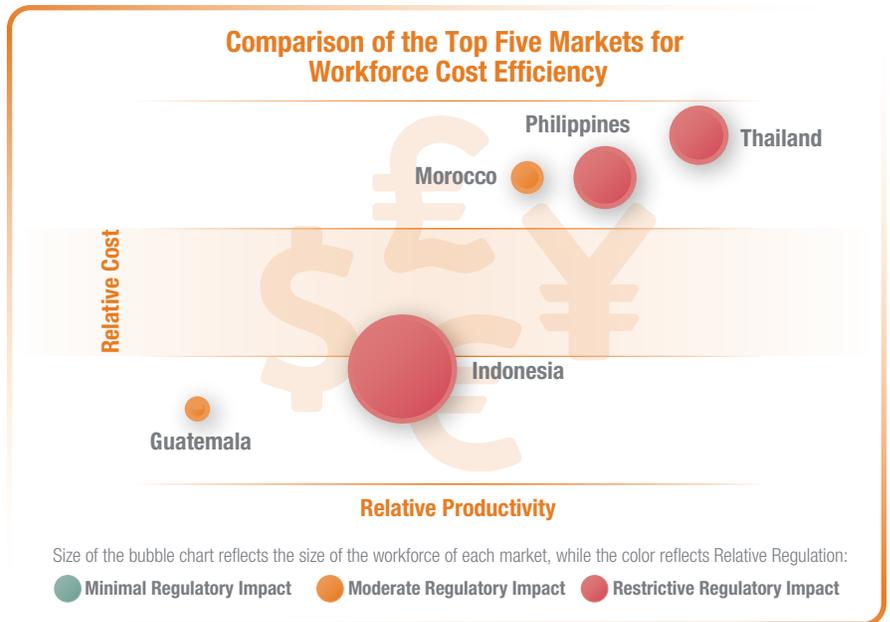
TOP 5 – Cost Efficiency

About the Cost Efficiency Methodology

Cost Efficiency measures the relative comparison of wage, benefits, tax and operations metrics to suggest potential cost efficiency.

Traditionally, the lowest-cost markets also tend to be the least mature and generally have less restrictive regulations and higher workforce availability. The Philippines, however, is an exception due to recent regulatory changes. In 2017, the Philippines passed legislation to ban subcontracting and enforce restrictions on contract terminations. This speaks to another common trend among emerging markets, as investment increases in a market such as the Philippines, so too does the impact of regulation in that market.

Shifting employment cost and statutory burdens, combined with the rising competition for talent, have resulted in the increased fluctuation of wages in all labor categories. Monitoring and comparing the total cost of labor supports not only accurate forecasting and budgeting but is a critical component of workforce planning as organizations seek to balance onsite and remote resources.



Key Findings

Due to the influence of cost-related factors, Morocco slipped to the third ranking in 2019, pushing the Philippines up into the second position. Despite being very appealing from a cost perspective, markets such as Morocco do not present a significant opportunity for investment due to a lack of skilled and English-proficient talent, a small workforce and a restrictive regulatory climate.

While Thailand secured the top cost efficiency ranking for the third consecutive year, Thailand is a low cost, low tax, low wage market with a heavy focus on industrial labor and increasing capability in technical skills. Thailand captures the top ranking for cost efficiency due to minimal overtime premiums, though the Philippines and Morocco rank just below Thailand due to their wage costs also being extremely low.

“Monitoring and comparing the total cost of labor supports not only accurate forecasting and budgeting but is a critical component of workforce planning.”

How a Manufacturer Used the TWI to Save Millions

A global manufacturer leveraged the Total Workforce Index™ in tandem with its own production workforce data. Evaluating over 300 facilities across 60 countries, the analysis focused on cost savings potential and sustainable growth objectives. Insight from this exercise resulted in the client identifying eight countries in which they could consolidate operations, ten facilities that needed to shift production capacity, and over 40 opportunities for cost savings that could be achieved through proactive compensation alignment.

SUCCESS STORY

TOP 5 – Regulation

About the Regulation Methodology

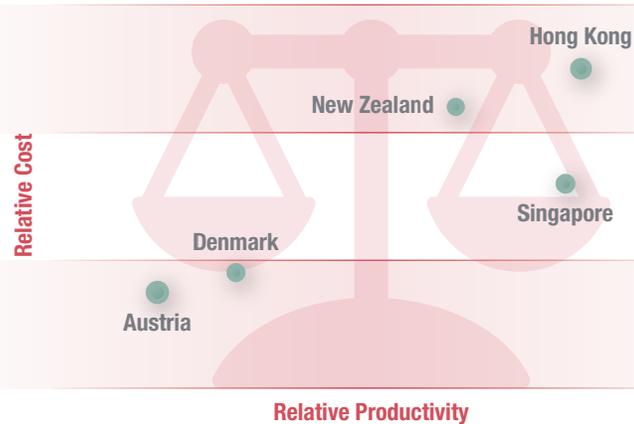
Regulation measures the relative comparison of how restricted the terms and practices of workforce engagement are based on a standard set of regulations.

Favorable regulatory environments are created when many types of workforce engagement, formal or informal work, are available to organizations and maximum contract lengths, notice periods and severance requirements are minimal or not required. The regulatory factors measured by the Total Workforce Index™ include topics such as severance and pension ages, geopolitical factors, contract limits and notice periods.

As more employers seek to invest in more flexible workforce models, ministries of labor continue to increase both the complexity and specificity of labor laws as they relate to different categories of labor and contractual types. Knowing how regulations have shifted and are about to shift, can mitigate the risk of noncompliance, allowing organizations to proactively support location strategy to balance employment strategy from both a cost and policy perspective.

Knowing how regulations have shifted and are about to shift, can mitigate the risk of noncompliance.

Comparison of the Top Five Markets for Workforce Regulation



Size of the bubble chart reflects the size of the workforce of each market, while the color reflects Relative Regulation:

● Minimal Regulatory Impact ● Moderate Regulatory Impact ● Restrictive Regulatory Impact

Key Findings

The top five markets in the regulatory category (Singapore, Denmark, New Zealand, Hong Kong and Austria) remain unchanged for the third consecutive year, which indicates regulatory stability across markets. Similar geopolitical factors in the top five markets allow them to maintain their previous rankings year-over-year. Some markets in the remainder of the top 10, however, did shift in ranking but not enough to impact the rankings in the top five.

More relaxed workforce regulation (e.g., related to items such as pension and severance) make these markets more competitive for future investment. This is especially important in markets and industries where the competition for certain skills is high, such as in manufacturing and IT. Some of these markets also have enacted legislation that gives preferential visa treatment to immigrants with skills considered desirable in that market.

A Heavily Regulated Company Looks for Opportunity

A European industrial service provider leveraged the Total Workforce Index™ to evaluate 20 markets for their expansion potential. Critical to this market selection was a comprehensive assessment of regulatory impact and restrictions germane to the company's workforce strategy, as well as its operational model. Ultimately, this client's market selection was driven by the regulatory analysis in addition to forecasted availability and cost efficiency. Leveraging the index, the client was able to identify a market with limited competition, that offered limited statutory burdens and increased operational cost efficiency by 7%.

SUCCESS STORY

TOP 5 – Productivity

About the Productivity Methodology

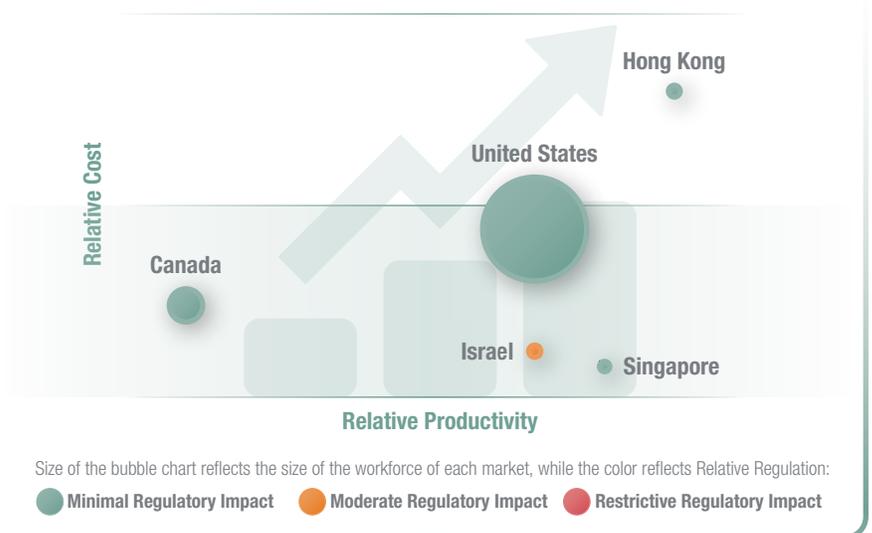
Productivity measures the relative comparison of the potential productivity of a workforce based on the number of hours an employer can compensate a worker at base pay.

Productivity is a category influenced by all three of the other categories (Availability, Cost Efficiency and Regulation). When the perfect mix aligns with workforce planning initiatives, optimal productivity goals can be met or exceeded. However, the top five markets in Productivity may not necessarily be the most productive markets for organizations in all industries and sectors of business.

Employers often make decisions based on primary wage considerations without taking into account the amount of labor legally possible and local customs (e.g., different holidays and workweeks) within a given market. The Total Workforce Index™ now equips employers with detailed analysis of true cost and operational efficiency, made possible through an evaluation of the shifts in a specific market and assessment of market restrictions.

“Employers often make decisions based on primary wage considerations without taking into account the amount of labor legally possible and local customs within a given market.”

Comparison of the Top Five Markets for Workforce Productivity



Key Findings

Canada returns to the top five ranking this year following its absence in 2018, edging out the United Arab Emirates. Canada has remained mostly unchanged year-over-year across all productivity metrics. The ranking shifts show how changes in other markets can affect the rankings of markets that remain unchanged. This shows the need for additional analysis beyond simple rankings, as it is often perceived that an increased ranking correlates directly with improvement in that market.

The improvements in technology infrastructure and wider adoption of technology in Israel (third) are not enough to maintain the country's second-place ranking from 2018. Subtle changes to the factors that influence productivity rankings were significant enough to add up to a shift in the ranked position of Singapore (second) and Israel (third).

TWI Boosts Productivity With Site Selection Insights

A global consumer goods and packaging company leveraged a predictive workforce model that was built on top of the Total Workforce Index™ to evaluate existing market operations. The company's goal was to determine where more operational efficiency could be gained over the next five years. After evaluating over two dozen sites across nine countries, key operations in 14 of these sites were selected for expanded growth and production output based on the results of the analysis.

SUCCESS STORY

Conclusion

There is consistency in the rankings of the majority of the top ten markets over the past five years. Despite movement in the annual rankings as ManpowerGroup has incorporated new factors and adjusted weightings to reflect new workforce dynamics, the top ten markets continue to remain strong from the perspective of both workforce opportunity and talent sustainability. One of the consistent top performers is Hong Kong, which may seem like a paradox given recent unrest. This situation demonstrates the need to perform a deeper analysis instead of relying solely on the data.

In all, global turnover grew by 11% in manufacturing, 7% in information technology, and 9% across other sectors, while time-to-fill has increased by 26%, **making retention a key component of hiring strategy**. The balance of availability, cost efficiency, regulation and productivity is one that is unique to each organization. Understanding how each operating market compares can help organizations to determine, among other things:

- Where to invest or divest
- How to source key talent
- When to look at remote workforce options
- Why they should contract or employ certain skills

Global unemployment is approximately 5% and nearly one quarter of markets fall below 3.5%.¹ Certain markets like Estonia and Israel have risen at different paces to emerge as strong workforce economies. These markets have increased in ranking driven primarily by technology and engineering talent availability that more employers are discovering and tapping into to offset the lack of available talent in other markets.

Turnover drove 61% of wage increases in the first half of 2019.² Global wages have increased by 6% overall, and wage inflation has risen by 1.3% on average beyond annual increases (i.e., beyond cost of living annual increases).

Any organization that does not have a proactive methodology in place to infuse market data into their workforce planning would benefit from a custom Total Workforce Index™ analysis.

¹ ManpowerGroup Solutions Analysis

² ManpowerGroup Solutions Analysis



Next Steps

Visit www.totalworkforceindex.com to:

1. **Explore Comprehensive Data**
Learn more about the Total Workforce Index™ and access comprehensive data.
2. **Request a Custom TWI Analysis**
Get your own custom TWI analysis to provide your organization with a deeper analysis based on the factors most important to your business.
3. **Access Related Content**
Find answers to your workforce challenges by viewing related papers, blogs, success stories and more.

Sources and Disclosures

The primary data sources for this Index are all based on statistics from the ministries of labour for the markets within the scope, the Central Intelligence Agency (U.S.), World Data Bank, Trading Economics and internal data collected as part of ManpowerGroup global reporting efforts. Learn more about the methodology at www.totalworkforceindex.com.

Disclaimer

This report is intended to provide an overview of general business information relative to global employment conditions and considerations. It should not be interpreted as legal advice. Please consult with legal counsel to ensure that you are in compliance with all applicable laws.



ManpowerGroup®

About ManpowerGroup

ManpowerGroup® (NYSE: MAN), the leading global workforce solutions company, helps organizations transform in a fast-changing world of work by sourcing, assessing, developing and managing the talent that enables them to win. We develop innovative solutions for hundreds of thousands of organizations every year, providing them with skilled talent while finding meaningful, sustainable employment for millions of people across a wide range of industries and skills. Our expert family of brands – Manpower®, Experis®, Right Management® and ManpowerGroup® Solutions – creates substantially more value for candidates and clients across 80 countries and territories and has done so for 70 years. In 2019, ManpowerGroup was named one of the FORTUNE Magazine World's Most Admired Companies for the seventeenth year and one of the World's Most Ethical Companies for the tenth year, confirming our position as the most trusted and admired brand in the industry. See how ManpowerGroup is powering the future of work: www.manpowergroup.com

Learn more about the Global Workforce Insights Portal: insights.manpowergroupsolutions.com

