S&P 500 Promotion Bottlenecks: Racial and Ethnic Representation Across the Corporate Leadership Pipeline

Executive Summary

This report examines whether racial and ethnic representation in the S&P 500 narrows as employees move from professional positions into management and senior leadership.

The analysis uses company-level U.S. workforce disclosures organized around the Equal Employment Opportunity Commission's EEO-1 job categories. Of the 500 companies in the dataset, 358 provide usable demographic data across Professionals, First/Mid-Level Officials and Managers, and Executive/Senior-Level Officials and Managers.

The central pattern is clear:

35.3% non-White professionals → 28.3% first/mid-level managers → 20.4% executive/senior managers

This decline is widespread across individual companies.

- 320 of 358 companies, or **89.4%**, have lower non-White representation among first/mid-level managers than among professionals.
- 324 of 358 companies, or **90.5%**, have lower non-White representation among senior leaders than among professionals.
- 300 of 358 companies, or **83.8%**, have lower senior-leadership representation than first/mid-management representation.
- 266 of 358 companies, or **74.3%**, show a strict decline at every stage: professionals → managers → senior leaders.

The severity of the bottleneck also increases higher in the hierarchy. Only 2.2% of companies retain less than half of their professional-pipeline representation at the first management rung, but 38.3% retain less than half by senior leadership.

Companies with more diverse management pipelines also tend to have more diverse senior leadership. Firms with less than 15% non-White representation among first/mid-level managers average only 12.0% non-White senior leadership, while firms with at least 45% non-White first/mid-level managers average 31.5%.

The dataset is therefore strongly consistent with a cumulative leadership-advancement bottleneck. Diverse professional talent exists within many S&P 500 companies, but that representation is substantially lower at the first management rung and lower again at senior leadership.

The analysis does not, by itself, establish why the decline occurs. Promotion decisions, attrition, employee tenure, occupational sorting, external hiring, geography, and differences between hiring cohorts could all contribute. The data show where representation narrows, not a single causal mechanism.

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1. Introduction

Corporate diversity is often discussed as a recruiting problem: whether companies are able to attract a sufficiently diverse pool of qualified workers.

That framing is incomplete.

A company can build a diverse professional workforce and still produce a much less diverse management team if representation does not persist as employees move upward.

Topic 3 therefore focuses on the internal leadership pipeline. Instead of beginning at the CEO level, it examines what happens between three standardized layers of the U.S. corporate workforce:

1. Professionals
2. First/Mid-Level Officials and Managers
3. Executive/Senior-Level Officials and Managers

These categories are useful because they are not custom definitions created for this project. They correspond to categories used in EEO-1 workforce reporting by the U.S. Equal Employment Opportunity Commission.

The EEOC separates first/mid-level managers from executive/senior managers based on their level of responsibility and influence within the organization.

This distinction allows the analysis to examine whether demographic diversity present in the professional workforce persists as employees move into positions with progressively greater managerial and organizational authority.

The central research question is:

Does the racial and ethnic diversity present in the professional workforce translate proportionately into management and senior leadership?

This matters because a company can theoretically have a highly diverse professional workforce while still producing a narrow leadership pipeline.

If representation consistently declines between professionals, managers, and executives, then the challenge is not only who enters the company. It is also whether the demographic composition of the professional workforce is translated into positions with increasing organizational authority.

Outside research suggests that similar patterns exist elsewhere in corporate America.

McKinsey's research on Black employees in large U.S. companies found that Black workers represented approximately 14% of employees overall but only 7% of managers, with representation declining further at senior levels.

That research has described the transition into management as a "broken rung," in which disparities early in the leadership pipeline reduce the number of employees available for later advancement.

The present dataset approaches the problem more broadly across the S&P 500 and examines the overall non-White share rather than focusing on only one racial or ethnic group.

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2. Data and Methodology

The dataset contains 500 S&P 500 companies.

For the core Topic 3 analysis, 358 companies have complete numeric demographic data across all three workforce levels. The remaining 142 companies are excluded from analyses requiring these variables because one or more relevant figures are unavailable.

The three primary workforce variables are:

Dataset Variable	Operational Meaning
U.S. Professional Pipeline Non-White Share (%)	Non-White share of employees classified as Professionals
U.S. First/Mid-Level Managers Non-White Share (%)	Non-White share of First/Mid-Level Officials and Managers
U.S. Executive/Senior Managers Non-White Share (%)	Non-White share of Executive/Senior-Level Officials and Managers

Two additional measures are calculated from these values.

First-Rung Representation Retention

First-Rung Representation Retention compares non-White representation among first/mid-level managers with non-White representation in the professional pipeline.

First-Rung Representation Retention = First/Mid-Level Manager Non-White Share ÷ Professional Non-White Share × 100

For example, if a company is 40% non-White among professionals and 30% non-White among first/mid-level managers:

30 ÷ 40 × 100 = 75%

This means that the non-White share at the first management rung is 75% as large as the non-White share in the professional pipeline.

Senior-Leadership Representation Retention

Senior-Leadership Representation Retention compares non-White representation among executive/senior managers with the professional pipeline.

Senior-Leadership Representation Retention = Executive/Senior Non-White Share ÷ Professional Non-White Share × 100

A value of 100% means representation at the higher level is equal to the professional-pipeline share.

A value below 100% means representation is lower.

A value above 100% means representation is higher.

Important distinction: representation retention is not employee retention

The word “retention” in these variables refers to the retention of demographic representation across job levels.

It does not measure whether individual employees stayed at the company and should not be interpreted as a turnover statistic.

How the averages are calculated

The headline percentages in this report are company-level averages.

Each company receives equal weight regardless of workforce size.

This means the analysis describes the typical company in the usable S&P 500 sample rather than calculating the demographic composition of the average employee across all 358 companies.

Definition of non-White

The non-White measure aggregates racial and ethnic categories other than the EEO-1 White, not Hispanic or Latino category.

This broad measure is useful for identifying overall representation patterns, but it has an important limitation: different racial and ethnic groups can experience corporate advancement very differently.

Black, Hispanic/Latino, Asian, Native American, Pacific Islander, and multiracial employees should therefore not be assumed to experience identical leadership pipelines simply because they are combined within the non-White measure.

Major methodological limitations

Several limitations should be considered when interpreting the results.

First, the analysis is cross-sectional. It compares the demographic composition of different workforce levels at a particular reporting period. It does not follow the same employees over time.

Second, companies do not necessarily publish workforce data from identical reporting years. The dataset uses the latest defensible public workforce information available for each company.

Third, public disclosure is incomplete. Companies that publish detailed workforce demographic data may differ systematically from those that do not.

Fourth, executive/senior categories can contain relatively small numbers of employees. At smaller companies, one or two executive appointments can substantially change the percentage.

Fifth, the analysis does not control for tenure, employee age, job function, geography, education, performance ratings, external hiring, or years of experience.

Finally, the aggregate non-White measure can conceal very different patterns between specific racial and ethnic groups.

These limitations mean the dataset should primarily be used to identify where representation narrows rather than to make definitive causal claims about why it narrows.

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3. Does Non-White Representation Decline as Employees Move Up the Corporate Hierarchy?

Workforce Stage	Average Non-White Share	Median Non-White Share
Professional Pipeline	**35.3%**	34.2%
First/Mid-Level Managers	**28.3%**	26.5%
Executive/Senior Managers	**20.4%**	19.4%

The clearest result in Topic 3 is the consistent decline in representation as organizational seniority increases.

Across the 358 companies with complete demographic data, average non-White representation falls from:

35.3% professional pipeline → 28.3% first/mid management → 20.4% senior leadership

The first transition produces an average decline of approximately **7.0 percentage points**.

The transition from first/mid management to senior leadership produces another decline of approximately **7.9 percentage points**.

Across the full professional-to-senior-leadership pipeline, the average representation decline is therefore approximately **14.8 percentage points**.

The medians tell a similar story.

Median non-White representation falls from 34.2% among professionals to 26.5% among first/mid managers and 19.4% among senior leaders.

This suggests the result is not being produced only by a handful of extreme companies.

The pattern is also widespread across individual companies.

- **320 of 358 companies — 89.4% — have lower non-White representation among first/mid managers than among professionals.**
- **324 of 358 — 90.5% — have lower senior-leadership representation than professional representation.**
- **300 of 358 — 83.8% — have lower senior-leadership representation than first/mid-management representation.**
- **266 of 358 — 74.3% — show a strict decline at every stage.**

In other words, nearly three-quarters of the usable S&P 500 sample follows the same ordering:

Professionals > First/Mid Managers > Senior Leadership

Interpretation

The result is strongly consistent with a leadership-advancement bottleneck.

The typical company in the usable sample has a meaningfully more diverse professional workforce than management population and a more diverse management population than senior leadership.

The decline begins before employees reach senior leadership.

That is important because it suggests that leadership inequality cannot be understood only by examining CEOs or executives at the very top.

Representation has already narrowed substantially by the first/mid-management stage.

The result does not prove that unequal promotion decisions are responsible.

For example, if companies have become significantly more diverse in recent years, younger professional cohorts may be much more diverse than the senior employees who entered the workforce decades earlier.

Differential turnover could also reduce representation before employees become eligible for promotion.

Additionally, the Professional category includes many different occupations, some of which have much stronger pathways into management than others.

Nevertheless, the consistency of the decline is difficult to dismiss as a small number of company-specific anomalies.

Nearly nine in ten companies show a professional-to-management decline, and more than nine in ten show a professional-to-senior-leadership decline.

The data therefore provide strong descriptive evidence that diversity present in the professional workforce is generally not being reproduced proportionately at higher levels of organizational authority.

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4. How Severe Is the Representation Loss at Different Stages?

Representation-Retention Range	First-Rung	Senior Leadership
Below 50%	8 companies — **2.2%**	137 companies — **38.3%**
50–74%	129 — **36.0%**	136 — **38.0%**
75–99%	183 — **51.1%**	51 — **14.2%**
100%+	38 — **10.6%**	34 — **9.5%**

The first management rung already represents a significant demographic bottleneck, but the senior-leadership distribution is considerably more severe.

At the first/mid-management level, only eight companies, or **2.2%**, have a representation-retention index below 50%.

This means that relatively few companies have already lost more than half of their professional-pipeline representation by the first management stage.

Most companies remain in the 50–99% range.

The picture changes dramatically at senior leadership.

By the executive/senior level, **137 of 358 companies — 38.3% — have a representation-retention index below 50%**.

In those companies, the non-White share of senior leadership is less than half as large as the non-White share of the professional workforce.

Another 136 companies, or 38.0%, fall between 50% and 74%.

Combined, more than three-quarters of the usable companies retain less than 75% of their professional-pipeline representation by senior leadership.

The median figures reinforce this conclusion.

The median First-Rung Representation Retention value is approximately **78.0%**.

The median Senior-Leadership Representation Retention value is only approximately **55.8%**.

This means the typical company preserves most, but not all, of its pipeline representation at the first management rung and then loses substantially more representation by senior leadership.

Interpretation

The pattern suggests that the leadership funnel is cumulative rather than being explained by a single transition.

Some representation is lost between professional roles and first management.

Additional representation is then lost between management and senior leadership.

This matters because leadership pipelines are multiplicative.

Even relatively small differences in advancement or attrition at several consecutive levels can ultimately produce a very large demographic gap at the top.

For example, if one group experiences slightly lower promotion rates at three consecutive stages, the effect at each stage reduces the pool of employees available for advancement at the next.

The resulting senior-leadership disparity can therefore be much larger than any single promotion-rate difference.

Outside research illustrates how this can occur.

McKinsey's research on Black employees found that Black workers were more likely than White workers to leave companies at almost every level and were substantially less likely to believe promotions were fair.

The same research found major differences in sponsorship access, with more than two-thirds of Black employees reporting that they did not have a sponsor.

These findings do not establish that the same mechanism operates in every company in the S&P 500 dataset.

However, they demonstrate how promotion, sponsorship, and attrition differences can compound across several stages and generate the type of cumulative representation decline observed here.

Why some companies exceed 100%

A representation-retention index above 100% does not mean the company has a promotion rate above 100%.

It means that the non-White share at the higher organizational level is greater than the non-White share among professionals.

This can occur for several reasons, including external hiring, small senior-leadership populations, historical hiring differences, or different occupational compositions.

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5. Does More Diverse First/Mid-Level Management Translate Into More Diverse Senior Leadership?

Non-White Share of First/Mid-Level Managers	Companies	Average Executive/Senior Non-White Share
Below 15%	36	**12.0%**
15–24%	113	**17.2%**
25–34%	118	**20.6%**
35–44%	62	**25.6%**
45%+	29	**31.5%**

The relationship between management-pipeline diversity and senior-leadership diversity is remarkably orderly.

As non-White representation among first/mid-level managers increases, senior-leadership representation rises in every successive category.

Companies with less than 15% non-White representation among first/mid managers average only **12.0% non-White senior leadership**.

Companies in the 15–24% management category average 17.2%.

Companies in the 25–34% category average 20.6%.

Companies in the 35–44% category average 25.6%.

Companies with at least 45% non-White first/mid-level management average **31.5% non-White senior leadership**.

The difference between the highest and lowest management-diversity groups is therefore approximately **19.5 percentage points**.

Across the full sample of 358 companies, the Pearson correlation between first/mid-management representation and senior-leadership representation is approximately:

r = 0.55

This indicates a meaningful positive relationship.

Interpretation

The result supports the idea that the middle of the leadership pipeline matters.

A company cannot consistently draw a highly diverse group of senior executives from a first/mid-management population that is itself demographically narrow.

The result therefore provides evidence for a sequential leadership pipeline:

Professional workforce → First/Mid Management → Senior Leadership

The relationship should not be interpreted as proving causation.

Companies with more diverse management teams may also operate in more diverse labor markets, hire more executives externally, operate in industries with different demographic talent pools, or have broader organizational practices that improve representation at multiple levels simultaneously.

Nevertheless, the monotonic relationship is important.

Senior-leadership diversity rises steadily as management-pipeline diversity increases.

That suggests the first and middle stages of the leadership pipeline are central places to investigate when trying to understand why representation at the top remains limited.

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6. Which Sectors Have the Largest Professional-Pipeline-to-Senior-Leadership Gaps?

Sector	Companies	Professional Pipeline	First/Mid Managers	Senior Leadership	Pipeline → Senior Gap
Real Estate	21	34.4%	26.3%	14.7%	**19.7 pp**
Information Technology	45	46.1%	36.0%	26.8%	**19.3 pp**
Consumer Discretionary	35	43.0%	38.2%	24.0%	**18.9 pp**
Communication Services	12	44.7%	38.0%	26.1%	**18.6 pp**
Health Care	46	37.1%	28.8%	18.8%	**18.3 pp**
Financials	60	36.1%	28.0%	17.8%	**18.2 pp**
Energy	17	27.9%	20.1%	13.2%	14.7 pp
Industrials	51	27.7%	23.2%	18.4%	9.3 pp
Utilities	28	27.6%	20.2%	18.3%	9.3 pp
Consumer Staples	24	32.3%	27.4%	26.3%	6.0 pp
Materials	19	25.2%	21.0%	21.1%	**4.2 pp**

The leadership bottleneck appears across most sectors, but the size of the decline varies substantially.

The professional-to-senior-leadership gap ranges from approximately **19.7 percentage points in Real Estate** to only **4.2 points in Materials**.

This variation is important because it suggests that there is not one universal corporate diversity pipeline.

Different industries appear to face different combinations of workforce composition, occupational structure, historical demographics, advancement patterns, and labor-market constraints.

Real Estate: 19.7-Percentage-Point Gap

Real Estate shows the largest average professional-to-senior-leadership gap in the dataset.

Non-White representation falls from:

34.4% among professionals → 26.3% among first/mid managers → 14.7% among senior leaders

This produces a **19.7-percentage-point decline**.

Because only 21 Real Estate companies have complete data, the sector average should be interpreted somewhat more cautiously than larger groups such as Financials or Industrials.

Nevertheless, the magnitude of the decline is substantial.

Outside research suggests that Real Estate may face both a broad demographic pipeline problem and an advancement problem.

CREW Network’s 2025 benchmark research on commercial real estate found that only a minority of workplaces had substantial racial and ethnic representation, while the industry remained disproportionately White overall.

This means that Real Estate's leadership bottleneck may begin before employees reach management.

The structure of the industry may also matter.

Many of the roles most closely connected to enterprise leadership involve acquisitions, development, investment management, asset management, capital markets, leasing, and major transaction responsibility.

These positions provide employees with experience allocating capital, managing portfolios, negotiating transactions, and generating investment returns.

Those experiences can become important credentials for later operating and executive leadership.

If racial and ethnic representation is lower in these commercial or investment tracks than in professional functions overall, the management and executive pipeline can become increasingly narrow even when a company has meaningful diversity elsewhere.

The Real Estate result should therefore not be interpreted as proof of discriminatory promotion decisions.

It is better understood as a signal that the industry's diverse professional workforce does not appear proportionately represented in the positions carrying increasing managerial and senior authority.

Information Technology: 19.3-Percentage-Point Gap

Information Technology provides one of the strongest examples of why the Topic 3 question matters.

The sector begins with one of the most diverse professional pipelines in the dataset:

46.1% non-White professionals

Representation then falls to:

36.0% first/mid-level managers

and:

26.8% senior leaders

The professional-to-senior decline is therefore **19.3 percentage points**, the second-largest sector gap.

This is especially important because the pattern cannot easily be explained by saying that the industry lacks non-White professional talent.

Almost half of the professional workforce in the usable technology sample is non-White.

The bottleneck appears after entry into the professional workforce.

The company-level pattern is also unusually consistent.

Among the 45 Information Technology companies with usable data:

- 44 have lower non-White representation among managers than among professionals.
- 43 have lower senior-leadership representation than professional representation.

External evidence points to a similar problem.

The EEOC's report *High Tech, Low Inclusion* found that several demographic groups remained underrepresented in managerial positions relative to their presence in the broader high-tech workforce.

Earlier EEOC analysis also showed that Asian employees could be highly represented in technical and professional roles while remaining substantially less represented in management.

That distinction is particularly important for Topic 3.

Because the dataset aggregates all non-White employees together, a sector can appear highly diverse while still containing very different advancement patterns for Black, Hispanic, Asian, and other employees.

The technology result therefore does not establish one common racial mechanism.

It does establish that a large and diverse professional talent pool is not translating proportionately into management and senior leadership.

Consumer Discretionary: 18.9-Percentage-Point Gap

Consumer Discretionary shows another large representation decline.

Average non-White representation falls from:

43.0% professionals → 38.2% first/mid managers → 24.0% senior leadership

The overall decline is **18.9 percentage points**.

The sector begins with a highly diverse professional pipeline but loses much of that representation by the senior level.

However, Consumer Discretionary is extremely heterogeneous.

The sector includes businesses such as retailers, automakers, hotels, restaurants, entertainment-related companies, and consumer-product firms.

These industries can have very different workforce structures and leadership pathways.

A retailer with thousands of frontline employees may have a fundamentally different management pipeline from an automaker or luxury-goods company.

The sector average should therefore be treated as a signal for deeper sub-industry analysis rather than evidence that one identical mechanism operates throughout Consumer Discretionary.

Communication Services: 18.6-Percentage-Point Gap

Communication Services has:

44.7% non-White professionals

38.0% first/mid managers

26.1% senior leaders

This produces an **18.6-point professional-to-senior gap**.

The company-level direction is highly consistent: 11 of the 12 usable companies show a strict professional-to-manager-to-senior decline.

However, the small sample means individual firms can have a large effect on the sector average.

The sector also combines different businesses, including telecommunications, media, entertainment, internet platforms, and communications companies.

As a result, the size of the bottleneck is clear, but the mechanism likely differs substantially across firms.

Health Care: 18.3-Percentage-Point Gap

Health Care has one of the most consistent leadership-pipeline declines in the dataset.

Average representation falls from:

37.1% professionals → 28.8% first/mid managers → 18.8% senior leadership

The overall decline is **18.3 percentage points**.

Among the 46 usable Health Care companies:

- 45 have lower manager representation than professional representation.
- 45 have lower senior-leadership representation than professional representation.

This is important because Health Care contains a large and diverse professional workforce.

The sector includes pharmaceuticals, biotechnology, health insurers, medical-device companies, hospital-related businesses, laboratories, and other organizations with very different occupational structures.

Some parts of Health Care also have highly diverse or female-dominated professional pipelines but much narrower representation in enterprise leadership.

This suggests that the industry's problem cannot be understood only as whether diverse employees enter the workforce.

Occupational sorting may play a major role.

Employees can reach senior levels within clinical, research, regulatory, HR, legal, or specialized professional functions without necessarily entering the operating or business-management tracks that lead toward broad enterprise leadership.

The Topic 3 data cannot determine how much of the decline is caused by promotion differences versus occupational structure.

However, the consistency of the company-level pattern shows that professional diversity is rarely reproduced proportionately at senior levels.

Financials: 18.2-Percentage-Point Gap

Financials provides one of the strongest sector findings because it has the largest usable sample: **60 companies**.

Average non-White representation declines from:

36.1% professionals → 28.0% first/mid managers → 17.8% senior leadership

The overall gap is **18.2 percentage points**.

Most strikingly, all **60 of 60** usable Financials companies have lower senior-leadership representation than professional representation.

That level of consistency makes the result difficult to explain as a few unusually low-diversity firms.

External research on racial equity in financial services shows similar pipeline dynamics.

McKinsey has found that promotion rates can vary significantly by race and by level in financial-services organizations.

In participating firms, Black employees were substantially less likely than White employees to receive promotions into several management levels, while Asian employees sometimes experienced stronger advancement into early management but weaker progression at later stages.

This is a reminder that the aggregate non-White measure can conceal different subgroup experiences.

Nevertheless, the S&P 500 data clearly show that racial and ethnic diversity present in the Financials professional workforce is not reproduced proportionately at the executive level.

Energy: 14.7-Percentage-Point Gap

Energy has lower diversity throughout the pipeline than many other sectors.

Average representation falls from:

27.9% professionals → 20.1% managers → 13.2% senior leadership

The overall decline is **14.7 percentage points**.

Energy therefore appears to face two potential challenges simultaneously.

First, the professional pipeline itself is less diverse than sectors such as Technology, Consumer Discretionary, and Communication Services.

Second, representation declines further as employees advance.

This means Energy's senior-leadership diversity cannot necessarily be explained only by an advancement bottleneck.

A broader industry talent-pipeline issue may also be contributing.

Industrials: 9.3-Percentage-Point Gap

Industrials shows a smaller but still meaningful decline.

Average representation falls from:

27.7% professionals → 23.2% managers → 18.4% senior leadership

The overall professional-to-senior gap is **9.3 percentage points**.

This is substantially smaller than the gaps in Technology, Financials, Health Care, or Real Estate.

The sector nevertheless still follows the same overall direction.

The result suggests that the strength of the bottleneck differs significantly across industries.

Utilities: 9.3-Percentage-Point Gap

Utilities has:

27.6% non-White professionals

20.2% first/mid managers

18.3% senior leaders

The overall decline is approximately **9.3 percentage points**.

One possible explanation is the industry's highly technical and experience-intensive leadership pipeline.

Many senior utility leaders come through engineering, field operations, infrastructure, generation, transmission, construction, and capital-project roles.

Because senior executives can require decades of industry-specific operating experience, changes in current hiring demographics may take a long time to reach executive leadership.

This makes cohort and tenure effects particularly important when interpreting the Utilities result.

Consumer Staples: 6.0-Percentage-Point Gap

Consumer Staples retains substantially more of its professional-pipeline representation than most sectors.

Average representation falls from:

32.3% professionals → 27.4% managers → 26.3% senior leadership

The overall gap is only **6.0 percentage points**.

The relatively small decline makes Consumer Staples an important counterexample.

It demonstrates that the large bottlenecks observed in other sectors are not an inevitable mathematical feature of EEO-1 workforce data.

Some industries appear to translate professional representation into senior leadership substantially more effectively than others.

Materials: 4.2-Percentage-Point Gap

Materials has the smallest professional-to-senior gap.

Average representation is:

25.2% professionals → 21.0% managers → 21.1% senior leadership

The overall decline is approximately **4.2 percentage points**.

Interestingly, senior representation is marginally higher than first/mid-management representation.

This does not necessarily mean Materials has a stronger promotion system.

The sector begins with one of the least diverse professional pipelines in the dataset.

Its smaller leadership gap could therefore reflect a relatively consistent demographic profile throughout the organization rather than exceptionally strong advancement outcomes.

This distinction illustrates why both the starting pipeline and the size of the leadership decline matter.

A company can have a small representation gap because it successfully preserves diversity—or because there is relatively little diversity to begin with.

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7. What Could Produce the Observed Bottleneck?

The dataset identifies a structural pattern, not a single causal explanation.

Several mechanisms can produce the same professional-to-leadership decline, and multiple mechanisms may operate simultaneously.

A. Promotion Differences

The most direct mechanism would be differences in promotion outcomes.

If similarly situated employees from different demographic groups are promoted at different rates, representation will decline as careers progress.

Outside research demonstrates that such differences exist in parts of corporate America.

McKinsey’s research on Black employees identifies a major drop between entry-level positions and management.

Its financial-services research similarly finds that promotion outcomes can vary significantly by race at different stages of the leadership pipeline.

However, company-level race-specific promotion-rate data remain rare.

This means the Topic 3 dataset cannot determine whether promotion differences directly caused the representation decline at any specific company.

B. Differential Attrition

Representation can decline even before a promotion decision occurs.

If non-White professionals leave the company at higher rates than White professionals, the pool of employees available for later promotion becomes less diverse.

Over several years, even moderate differences in turnover can substantially change the demographic composition of the management pipeline.

McKinsey's research has found higher attrition among Black employees than White employees at many organizational levels.

Reasons can include workplace culture, perceived advancement opportunities, compensation, managerial relationships, belonging, discrimination, or external job opportunities.

The Topic 3 dataset does not contain turnover data, so this mechanism cannot be separated from promotion.

C. Sponsorship and Access to Developmental Opportunities

Formal performance is only one part of advancement.

Senior managers often influence who receives high-visibility projects, major clients, important operational assignments, stretch roles, and sponsorship.

Employees who receive these opportunities can accumulate experience that makes them stronger candidates for future leadership.

Employees without sponsorship may perform well but remain less visible to decision-makers controlling future opportunities.

McKinsey's research found substantial sponsorship disparities for Black employees even at companies that formally operated sponsorship programs.

This provides a possible mechanism through which representation can decline without an explicit policy excluding employees from promotion.

D. Cohort and Tenure Effects

One of the most important alternative explanations is time.

If companies have become significantly more diverse in recent hiring cohorts, the professional workforce can change much faster than senior leadership.

Executives often have 15, 20, or more years of work experience.

The senior-leadership demographics observed today may therefore reflect the labor market and hiring pipeline that existed decades ago rather than the demographics of current professional employees.

This means a large professional-to-executive representation gap does not necessarily imply that current employees are being promoted unequally.

Longitudinal data would be needed to distinguish a historical cohort lag from a current advancement problem.

E. Occupational Sorting

The EEO-1 Professional category includes many different occupations.

For example, professionals can work in engineering, finance, medicine, law, research, human resources, design, information technology, communications, data science, and numerous other functions.

These occupations can have very different pathways into management.

If racial and ethnic groups are disproportionately concentrated in professional functions with weaker routes into general management, representation can decline between professionals and managers even if promotion rates within each function are equal.

Occupational sorting therefore represents another major alternative mechanism.

F. External Hiring

Senior leadership is not created entirely through internal promotion.

Companies can hire managers or executives from outside.

External hiring can either increase or decrease diversity depending on the external talent pool and the company's hiring decisions.

The Topic 3 data do not distinguish internal promotions from external hires.

This limits the ability to interpret differences between workforce levels as pure promotion outcomes.

G. Small Senior-Level Populations

The Executive/Senior-Level category can contain relatively few employees.

When denominators are small, one or two appointments can substantially change a company's demographic percentage.

For this reason, individual-company extremes should be interpreted carefully.

The broad cross-company distribution and sector averages are more informative than any one company's unusually high or low value.

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8. Supplementary Variable: Estimated Time to First Manager Promotion

The dataset also contains a final variable titled:

Est. Avg Years to First Manager Promotion

This variable should be interpreted differently from the first 13 columns and is not used as one of the four primary findings in this report.

The first 13 columns consist of:

- company and CEO metadata,
- reported workforce demographic figures,
- or calculations directly derived from reported workforce percentages.

The promotion-time variable is different because it is an **educated estimate** rather than a directly reported company statistic for most firms.

How the estimate was constructed

For most companies, the estimate begins with an external industry benchmark for the average number of years employees spend in non-managerial positions before reaching their first managerial role.

Approximate industry benchmarks used include:

Industry Benchmark	Estimated Years to First Manager
Leisure/Hospitality	4.9
Information	5.7
Professional Services	5.9
Trade/Transportation/Utilities	6.3
Construction	6.4
Health-related industries	6.9
Finance	7.1
Manufacturing	9.4

Each company was assigned to the closest applicable industry category.

For a limited number of companies where outside career-history research contained company-specific evidence about general promotion speed, the industry benchmark was adjusted depending on whether employees appeared to receive promotions faster or slower than the relevant sector average.

Conceptually:

Estimated Company Time to First Manager = Industry First-Manager Benchmark × Company Promotion Speed Relative to Sector

Across the 500 companies, the resulting values range from approximately **3.2 to 10.8 years**, with a median of **6.9 years**.

Important limitations

The values should not be interpreted as exact company promotion statistics.

They do not establish that employees at a particular company actually require exactly the listed number of years to receive their first promotion.

The estimates also do not:

- measure promotion timing separately by race or ethnicity,
- control for identical employee performance-review scores,
- track individual employees over time,
- or represent directly reported company promotion data for most firms.

Companies in the same industry may therefore have identical or very similar values because the industry benchmark is the dominant input.

The variable should also not be used to independently conclude that one industry has slower advancement than another when those industry differences were already incorporated into the estimation process.

For these reasons, estimated time to first manager should be treated as **supplementary contextual evidence rather than a primary finding of Topic 3**.

The strongest evidence remains the directly observed workforce progression:

Professional Pipeline → First/Mid-Level Management → Senior Leadership

The scarcity of stronger public promotion data is itself important.

Race-specific promotion-rate information remains far less commonly disclosed than workforce demographic composition.

Until companies report advancement and turnover outcomes more consistently, workforce structure provides a broad but less causal way of identifying potential promotion bottlenecks.

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9. What the Evidence Can and Cannot Establish

Supported by the dataset

The evidence supports the following conclusions:

- Non-White representation is lower at higher leadership levels in the typical usable S&P 500 company.
- The pattern is widespread across individual companies.
- Representation loss is substantially more severe at senior leadership than at the first management rung.
- Companies with more diverse first/mid-level management tend to have more diverse senior leadership.
- The magnitude of the bottleneck differs substantially by sector.
- Several sectors begin with highly diverse professional pipelines but fail to reproduce that diversity proportionately at higher levels.

Not established by the dataset

The evidence does not establish:

- that discrimination is the sole or primary cause of the representation gap;
- that every non-White employee is less likely to be promoted;
- that all racial and ethnic groups experience the same leadership pipeline;
- that today's professional employees are the direct cohort from which current executives were promoted;
- that workforce composition differences are caused only by promotion rather than attrition or external hiring;
- or that the estimated time-to-promotion values are exact company statistics.

This distinction is essential.

The dataset is strongest as a descriptive map of where representation narrows.

It identifies patterns that warrant deeper investigation but should not be presented as proving a single causal explanation.

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10. Overall Conclusion

Across the S&P 500 companies with usable demographic data, the same central pattern appears repeatedly:

35.3% non-White professionals → 28.3% first/mid managers → 20.4% senior leaders

The most important insight is not simply that senior leadership is less diverse.

It is that the decline begins before employees reach senior leadership and compounds as organizational authority increases.

Nearly nine in ten companies have lower non-White representation among first/mid managers than among professionals.

More than nine in ten have lower senior-leadership representation than professional representation.

Nearly three-quarters of the usable sample show a strict decline at every stage.

The severity of the bottleneck also increases higher in the hierarchy.

Only **2.2%** of companies retain less than half of their professional-pipeline representation at the first management rung.

By senior leadership, that figure rises to **38.3%**.

The management layer also appears strongly connected to senior-leadership outcomes.

Companies with the least diverse first/mid-management populations average only **12.0%** non-White senior leadership.

Companies with the most diverse management populations average **31.5%**.

This relationship does not prove that management diversity mechanically causes executive diversity, but it demonstrates the importance of the middle of the leadership pipeline.

The sector analysis reinforces the same conclusion while showing that the problem is not identical everywhere.

Information Technology begins with one of the most diverse professional pipelines in the dataset yet experiences one of the largest representation declines.

Financials shows a similarly large and highly consistent gap across 60 companies.

Real Estate has the largest average professional-to-senior decline.

Health Care also shows an unusually consistent company-level bottleneck.

Materials and Consumer Staples, by contrast, retain substantially more of their starting representation.

These differences suggest that industry structure, occupational pipelines, labor markets, historical workforce demographics, hiring practices, and company-specific advancement systems all influence leadership outcomes.

The evidence therefore shifts the question away from whether diverse professional talent exists.

In many companies and sectors, that talent is already present.

The more important question is whether that representation persists as employees move into positions with greater managerial and organizational authority.

The strongest defensible conclusion is:

For most S&P 500 companies with usable data, racial and ethnic diversity in the professional workforce does not translate proportionately into first/mid-level management or senior leadership. The pattern is strongly consistent with a cumulative leadership-advancement bottleneck, although the dataset alone cannot determine whether promotion, attrition, tenure, occupational sorting, external hiring, or other mechanisms are responsible.

A future version of Topic 3 would become substantially more causal if companies publicly disclosed race-specific promotion rates, turnover rates, tenure by level, and advancement outcomes for employees with comparable performance.

Until that information becomes broadly available, the present analysis provides a large-scale map of where representation narrows across the S&P 500 corporate hierarchy and identifies the companies and sectors where deeper investigation is most warranted.

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