Women leadership effectiveness: competitive factors and subjective and objective qualities

Bayan Yousef Farhan

Abstract: The purpose of this study is to identify the competitive factors that contribute to leadership effectiveness for women. I posed two research questions: How do women lead? And what are their competitive factors and leadership qualities? I used an instrumental cases approach to investigate the top 10 women CEOs leading Fortune 500 companies in 2021 and better understand how competitive factors and subjective and objective leadership qualities may drive women leadership effectiveness. Using an explanatory mixed-method design, I analyzed quantitative data about the profitability of these leaders’ organizations and secondary qualitative data of their own words regarding their competitive factors. Study results highlight women leaders’ competitive factors, which are grouped into soft and hard competitive advantages, as well as the subjective and objective qualities that contribute to the effectiveness of women’s leadership.

Subjects: Gender; Innovation Management; Leadership

Keywords: Women leadership; leadership effectiveness; competitive factors; leadership qualities

ABOUT THE AUTHOR

Dr. Bayan Yousef Farhan is an Associate Professor at the College of Business, Al Ain University since 2015. She holds a Doctorate in Leadership from the University of Calgary, Canada, and MA in Economic Policy and BA in Economics from McMaster University, Canada. Dr. Farhan teaches courses in leadership and management. Her fields of research interest include leadership development, strategic leadership, and economic perspective of leadership. Her research often integrates these areas to explore the leadership effectiveness and consequences of strategic leadership. Her current research is on strategic leadership and innovative mindset for sustainable business development. Dr. Farhan has published in leading peer-reviewed journals. She has also presented her work at several academic conferences.

PUBLIC INTEREST STATEMENT

This study used an explanatory mixed-method design, where quantitative data were collected first, followed by secondary qualitative data. The quantitative data include the profitability of the top 10 Fortune 500 companies led by women in 2021, which is taken as an indicator of their leadership effectiveness. The qualitative data include the actual words of leaders under study regarding their competitive factors that contribute to their leadership effectiveness. This study aims to identify competitive factors, as well as subjective and objective qualities, that help women leaders be effective at the organizational level. The results show, first, how women lead by highlighting their leadership style and practices. These styles are sorted into subjective and objective leadership qualities that influence women’s leadership effectiveness. The second part of the results shows women’s leadership and competitive advantages that influence their leadership effectiveness. This study contributes to the existing literature by proposing women leaders’ subjective and objective qualities, identifying their competitive factors, and developing recommendation that contribute to the effectiveness of women leadership.
1. Introduction

The United Nations’ (n.d.) fifth Sustainable Development Goal of gender equality emphasizes equal opportunities for women to get leadership positions at all levels. Unfortunately, in the business world, only 6.4% of the S&P 500 CEOs in 2022 are women (Institute for Women's Leadership, n.d.). Indeed, the gap between men and women in top leadership positions in business organizations is very clear. The recent report from Grant Thornton reported that in 2021, 31% of senior leadership positions globally were held by women (Grant Thornton, 2021). According to a 2015 report from Grant Thornton, women continue to be concentrated in management support functions such as human resource director rather than in leadership roles such as chief executive officer or chief operating officer. The key fact is that 24% of senior leadership positions is held by women, as shown in the respected source of The Institute for Women’s Leadership’s (n.d.).

Many scholars have examined the issue of a lack of women in leadership roles, pointing to causes but providing no solutions. According to Grant Thornton (2015), fewer women hold leadership positions because women have to make more sacrifices for parenthood and family care. Another obstacle is the assumption that women do not like to take on “challenging assignments” that will give them the experience necessary to become strong candidates for senior leadership positions. Further, fear of failure discourages women from handling challenging assignments in contrast to men who are ready to show up and learn by doing (Grant Thornton, 2015). Women’s self-perception is a key issue here, especially if competent women avoid putting themselves forward for top leadership positions. However, the appeal of a senior leadership position is also a consideration, since one study found that women believe that the cost of having a senior leadership position is greater than the benefits of it (Grant Thornton, 2015).

This study aims to identify competitive factors, as well as subjective and objective qualities, that help women leaders be effective at the organizational level. In this study, leadership effectiveness is defined as the ability to continuously achieve the organization’s goals and objectives. Subjective qualities include women leaders’ core values and principles, and objective qualities include women leaders’ practical ability, relying on facts and data to avoid personal bias. New women leaders can benefit from this study’s recommendations to enhance women’s leadership effectiveness, which also can improve their competitiveness. The main assumption will be examined to explain how competitive factors that women have can be considered as competitive advantage that contribute to organizational competitiveness and profitability.

2. Methodology

The focus of this study is on developing an in-depth understanding of women’s leadership effectiveness by analyzing data from public documents, reports, biographies, and literature. This study used an explanatory mixed-method design, where quantitative data were collected first, followed by secondary qualitative data. According to Creswell (2012), “the mixed methods researcher uses the qualitative data to refine the results from the quantitative data. This refinement results in exploring a few typical cases, probing a key result in more detail, or following up with outlier or extreme cases” (p. 542). The quantitative data include the profitability of the top 10 Fortune 500 companies led by women in 2021, which is taken as an indicator of their leadership effectiveness. The qualitative data include the actual words of leaders under study regarding their competitive factors that contribute to their leadership effectiveness.

An instrumental cases approach was used to provide insight into women’s leadership effectiveness “because it serves the purpose of illuminating a particular issue” (Creswell, 2012, p. 465). The purposeful sample of top 10 women CEOs leading Fortune 500 companies in 2021 was selected in order to develop a deep understanding of women’s leadership styles and competitive factors. These leaders are information rich and lead organizations with high revenue: Karen Lynch,
Rosalind Brewer, Mary Barra, Gail Boudreaux, Jane Fraser, Carol Tomé, Corie Barry, Tricia Griffith, Thasunda Brown Duckett, and Safra Catz.

This study contributes to the existing literature by proposing women leaders’ subjective and objective qualities, identifying their competitive factors, and developing recommendation that contribute to the effectiveness of women leadership.

3. Literature review: women in leadership positions
Byrne et al. (2020) aimed to answer the question of how to get women into leadership roles. According to Byrne et al., a supply-side strategy can be implemented by increasing the number of women qualified for leadership positions, along with a demand-side strategy by establishing policies that support the presence of women in top leadership positions. Gray et al. (2019) mentioned that women show leadership qualities such as empathy and compassion, but these reduce women’s opportunities in highly aggressive business environments. Other studies (Buvinic & King, 2007; Eagly & Carli, 2007; Hogue & Lord, 2007) have shown that parental responsibilities have mainly fallen to women, requiring them to reduce their working hours or take a career break, after which it might take years before they go back to the workplace. Cimirotic et al. (2017) mentioned the difficulties that women leaders might face such as motherhood, long working hours, and work-life balance, which cannot be handled without strong support from their family, friends, and partners. Indeed, ongoing family responsibilities have affected women’s ambitions and achievements, which explains why women need more time to reach their career goals.

A positive view is shown in a study by Han and Noland (2020), who explained that women’s leadership leads to increased profits and productivity in organizations due to their ability to improve the quality of management and diversity. Beddow (2018) discussed the need to rethink leadership development programs that ignore gender differences, pointing out these development opportunities are insufficient for women. Fazal et al. (2020) said that women's leadership development programs are ignored by about 41% of top management. Deficiency of job development opportunities, absence of flexibility and work-life balance, and stereotypes were identified by Kalaitzi et al. (2017) as barriers to women’s leadership. Hoyt (2005) stated that gender stereotypes explain why women leaders are seen as ineffective.

On the other hand, Akkaya and Bagieńska (2022) said that women’s leadership has a significant effect on team performance. Women leaders are effective due to their charismatic leadership style and trust relationships that they build with their team members, which enhance employees’ achievement of goals. Nekhili et al. (2018) explained that the dominant culture of an organization strongly impacts the effect of women’s leadership on the organization’s performance. Kalaitzi et al. (2017) confirmed that “strong resistance to women leadership in top positions is being fed to a certain extent by a culturally driven competition between men and women leaders” (p. 468). However, Burkinshaw and White (2017) discussed how women leaders use different language than do male leaders. Indeed, women leaders face a lot of challenges that might affect their leadership effectiveness—for example, they are judged harshly if they use the same type of language that men do (i.e., have a loud and domineering manner), their performance is evaluated differently, and they are not supported by their peers (Burkinshaw & White, 2017). Another challenge is that women’s involvement in both executive and political leadership, as Dessie (2021) discussed, is often determined by the attitude of society that observes women as housewives and caregivers. These challenges reduce women’s opportunities to get leadership positions, particularly because there is a need to behave based on what others expect a leader looks like. Cimirotic et al. (2017) provided a different explanation for the gender leadership gap, stating that women lack self-marketing skills, are less career oriented, and tend to be less aggressive in competitive situations than men. Cimirotic et al. confirmed that women attain leadership positions mainly because of their interpersonal skills and secondarily because of their expertise. Camarero-Figueroa et al. (2022) confirmed that teamwork, collaboration, social skills and connection with community, emotional intelligence, interpersonal skills, self-regulation, and flexibility were key success factors.
for leaders. Watkins and Clevenger (2021) explained general leadership traits such as integrity, empathy, honesty, the ability to recognize threats and moderate problems, and the capacity for making and communicating their decisions. Martin (2017) suggested that self-reflection, experience analysis, and communication skills are all tools that leaders can use to develop their own leadership abilities. Barrigüete et al. (2022) explained the neo-charismatic theory that discussed the two dominant leadership styles in the current era: transformational style and charismatic style. They confirmed that leaders need to show both empathy in their communication and ethical behavior as foundations for leadership effectiveness.

Limited research has been conducted on women’s leadership and the effectiveness of women leaders. Because women’s skills and abilities tend to be underestimated, this study aimed to shed light on what contributes to the leadership effectiveness of the top 10 women CEOs leading Fortune 500 companies in 2021.

4. Discussion and analysis
All of the CEOs I investigate have been listed on Forbes’ list of 100 Most Powerful Women in 2021 (Forbes Editors, 2021). As an objective indicator of women’s leadership effectiveness, revenues and profits for the organizations led by these women are displayed (see, Table 1 and Figure 1). These quantitative indicators show the financial performance and success of women leaders.

However, qualitative data is a must to provide a full picture of women’s leadership effectiveness. In this study, qualitative data is used to explore how the top 10 women at the head of Fortune 500 companies lead and what their competitive advantages are. The following paragraphs summarize the overall results.

4.1. Case 1: Karen Lynch, CEO of CVS Health
In an interview with The New York Times, Karen Lynch, CEO of CVS Health, described herself as a decisive leader who grew up with the values of responsibility and commitment. Her decisiveness was based on her belief that people should be strongly committed to their own decisions and then live with those decisions, right or wrong (Gelles, 2022). Lynch’s competitive advantages include her decisive personality, ability to make decisions, and flexibility to adjust her

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Table 1. Top 10 women CEOs leading fortune 500 companies (Revenues & profits)

| #  | CEO’s Name      | Organization’s Name | Revenues ($B) | Profits ($B) |
|----|-----------------|---------------------|---------------|--------------|
| 1  | Karen Lynch     | CVS Caremark        | 292.98        | 7.91         |
| 2  | Gail Boudreaux  | Anthem              | 144.3         | 6.24         |
| 3  | Rosalind Brewer | Walgreens Boots     | 135.9         | 6.29         |
|    |                 | Alliance            |               |              |
| 4  | Mary Barra      | General Motors      | 127           | 10.02        |
| 5  | Carol Tomé      | United Parcel       | 97.2          | 12.89        |
|    |                 | Service             |               |              |
| 6  | Jane Fraser     | Citigroup           | 79.9          | 18.23        |
| 7  | Corie Barry     | Best Buy            | 51.8          | 2.45         |
| 8  | Tricia Griffith | Progressive         | 48.1          | 2.18         |
| 9  | Safra Catz      | Oracle              | 41.8          | 7.56         |
| 10 | Thasunda Brown  | TIAA                | 41.6          | 5.58         |
|    | Dukett          |                     |               |              |

Note: From The Full List by Forbes, 2022 [Customized table].
1. From Forbes: The Global 2000. https://www.forbes.com/lists/global2000/?sh=2789af5ac0. In the public domain.
2. *From Fortune: TIAA Company profile. https://fortune.com/company/tiaa/fortune500/. In the public domain.
strategies and goals. Further, Lynch showed honesty and transparency, stating that being open and honest with employees helped them understand the needed changes, and this kind of leadership behaviour can help leaders serve employees more effectively (Leaders Online, 2016). Her competitiveness is shown through her focus on diversity and innovation. Lynch stated that in business, the talent management process is employed to develop leaders internally with the goal to attract and retain talented employees who have needed skills and who can drive the business and set the best strategies to achieve the company’s vision (Leaders Online, 2016). In addition, she is a competent leader because of her open mind and her willingness to listen to her employees’ perspectives and new ideas (Leaders Online, 2016). An effective leader must be a good communicator and good listener. However, Lynch also has a transformational leadership style and describes herself as a change agent: Lynch said that she leads the business as a strong communicator. She communicates targeted changes to employees and discusses the effect of any changes on them and on the business. She personally connected with 10,000 to 14,000 employees to build trusting relationships needed to reach the goal of being the best organization to serve customers (Leaders Online, 2016).

4.2. Case 2: Gail Boudreaux, CEO of Anthem

Gail Boudreaux’s responsible personality can be considered her key competitive advantage. Gail Boudreaux, CEO of Anthem, Inc., said that Anthem’s vision is to change for the better to improve their organization, community, and the world. As a leading health organization, their target is to improve lives and communities while operating to simplify healthcare for their customers (Anthem, n. d.). Boudreaux described her leadership style as that of a transformational leader whose major target is to move towards innovation and to be committed to moving health forward (Boudreaux, 2022). At the same time, an independent director on Anthem’s board of directors, George A. Schaefer Jr. described Boudreaux as a leader with an expertise leadership style, saying that in a changing industry, she shows the needed skills (Small, 2017). Her expertise represents one of her competitive advantages, as she is a competent leader in areas such as strategic growth and operational efficiency (Small, 2017).

4.3. Case 3: Roz Brewer, CEO of Walgreens Boots Alliance

In an interview, Roz Brewer, CEO of Walgreens Boots Alliance, said that regardless of her leadership position, she put herself in a learning position where she could be supportive and open-minded to discover future opportunities (Ignatius, 2021). Brewer attributed part of her competitive advantage to her leadership style, her strength of mind, and her commitment (Ignatius, 2021). Brewer described herself as a person who focuses on learning and experience. As an inspirational leader, Brewer encourages others by inspiring them to believe in themselves and their ability and willingness to achieve their targets and to have confident personalities (Ignatius, 2021). However,
the way she leads can be considered as part of her competitiveness, as she has a philosophy of linking teamwork to diversity:

One of the things that I began to do in my career is to put agile teams together. And what I mean by that is, a lot of times, you have your finance team working in their silo. You’ll have the tech team working in their silo. But what I really think works is when we create these agile teams and put them against the biggest problems to solve. … What that actually does: it gets the diversity of thought to happen. And then you have different people sitting around the table. (Ignatius, 2021, p. 9)

Brewer talked about her key points to lead including having a clear roadmap, a clear explanation regarding the desired goal and its priority, a clear strategy to achieve the goal, and a control and monitor process while avoiding micromanaging (Mason, 2021).

4.4. Case 4: Mary Barra, Chairman and CEO of General Motors
Mary Barra, CEO of GM, discussed some of her competitive advantages as a leader such as her expertise in her business area and how the business works. She considers employees as partners and valuable assets and tries to understand core business activities by being responsible for product development, improving employees' needed skills, having an understanding of human resources, and spending time with employees throughout the company, even in the assembly plant (Jiang, 2022). In addition, she highlighted one of her competitive advantages: her attempts to create a culture where employees are respected and valued. She explained how to learn from mistakes by focusing on transparency, problem-solving, and customers, which helps explain her competitiveness:

We gathered a team of people, and we were guided by three principles. … We’re gonna do everything we can. We’re going to be transparent. We're going to do everything we can to support the customer. And we’re gonna do everything in our power to make sure it never happens again. … As I reflect now, what I learned is that you've got to do the right thing, even when it's hard. (Jiang, 2022, para. 11)

Barra leads the business as an empathetic and visionary leader. Barra described her empathy in that she tries to understand all employees who are loyal and commit to the organization. She highlighted the benefits of having a unique vision with respect to working closely with people (Barra, 2022). Barra leads by listening; listening, for her, is an instrument for understanding, and understanding is an instrument for respecting others' arguments and opinions. Barra argued that it is important to listen carefully even if you have the answer (Barra, 2022). Her participative and authentic leadership style is noticeable:

Be honest, always. Your integrity is everything. It takes years to build and can crumble in a moment. Once it's gone, it's almost impossible to get back. So, protect it in everything you do Assume goodness in others. Do what you say you're going to do. … Don't wait for someone else to offer up your ideas and perspectives. Find a way to respectfully share your feedback. Everything works better when we're able to share and receive feedback graciously. You owe it to yourself and those around you. (Barra, 2022, para. 6)

4.5. Case 5: Carol Tomé, CEO of United Parcel Service
Carol Tomé's competitive advantages are seen in her expertise in the field. Her skills and experience played a key role in the leadership selection process at United Parcel Service (UPS). Carol Tomé, CEO of United Parcel Service shed light on the importance of hiring and retaining those who can understand the changing and competitive customer environment, especially those who have acceptable levels of experience that support understanding, such as e-commerce knowledge (Fortune Editors, 2021). Her aggressive and confident personality is evident as she explained that it is easy for her to reach the target and create value. Making money is a fun and interesting target, and one which she has a strong record achieving (Wilson, 2021). She walks the talk: Within the first 6 months of her leadership, UPS received its highest revenue, $85 billion (Edmonson,
In addition, she is leading as a change agent and transformational leader with a philosophy and strategies of customers first and a people-led and innovation-driven organization (Wilson, 2021). At the same time, she has a positive leadership style since she has an optimistic personality that has a sanguine view of the future. Her absolute truth is that she can do anything (Wilson, 2021). Carol Tomé, CEO of UPS, acts as an idealistic leader with a vision of better not bigger, which aligns with her organization’s vision: “UPS is a purpose-driven company with a proud past and an even brighter future” (Edmonson, 2021, para. 42). To reach this vision, she is focused on fairness and equity, saying that there is no room for racism or discrimination and holding zero tolerance for any discriminatory language or behavior at UPS (Edmonson, 2021).

4.6. Case 6: Jane Fraser, CEO of Citigroup

As the CEO of Citi, Jane Fraser’s compassion and humility are part of her competitive advantage. She showed empathy when she committed to set aside 1 hr each day (12–1 p.m.) free of meetings. Instead of meetings, employees are encouraged to provide ideas and collaborate with others, which offers immediate benefits from brainstorming and working together (Fraser, 2021). Flexibility is also part of her competitive advantage, as she allows employees to set their own schedules since she believes that flexibility in scheduling can enhance employees’ satisfaction levels and, as a result, allow them to balance work-life responsibilities (Surane, 2021). Empathy and equity are also parts of Fraser’s competitive advantage since her leadership goal is to close the racial wealth gap and enhance employees’ engagement to support equity (Fraser, 2022a). In addition, differentiation is a key strategy for Fraser that can be considered a competitive factor. She noted that her business has the ability to operate efficiently and effectively in different markets and in different regions, which helps Citi differentiate itself from others in the industry (Fraser, 2022b). However, Fraser acts as a servant leader who focuses on serving employees through flexibility. She described her leadership style and flexibility as beneficial tools that support her organizational success. She explained that a servant leadership style allows her to work with others and serve employees and customers; as a result, she is able to create prodigious value and play a key role in the business’s ongoing success (Fraser, 2021). As an ethical servant leader, Fraser serves customers and communities by serving employees. She explained her strategy as having a diverse organization with employees from different cultures, ages, genders, and religions and with pay equity and integrity (Fraser, 2022b). Fraser also explained her business commitment to promoting leaders and change agents within the company, which opens opportunities for internal leaders to advance into future critical leadership roles (Fraser, 2022b). As well, she acts like a strategy visionary leader, setting a vision that has informed Citigroup strategy (Fraser, 2022b).

4.7. Case 7: Corie Barry, CEO of Best Buy

Corie Barry’s self-confidence and critical thinking shape her leadership ability and are considered as part of her competitive advantage. She said, “I became a better student and leader because these professors pushed me to think critically and courageously express my thoughts” which to be comfortable and brave enough to raise her opinion and concern (Dunehew, 2021). Her ability to analyze data and come away with insight promote her leadership competitiveness (Dunehew, 2021). One of Barry’s competitive advantages is that she has a proactive personality; she always tries to be an effective leader by asking herself how to be a better leader, how to identify attributes that lead to increased risks, and how to proactively avoid these threats (Dunehew, 2021). In addition, her technical skills, human leadership capabilities, and humanity all are considered as part of her competitive advantage (Dunehew, 2021). At the same time, she has a human assets leadership style since she can easily build connections with employees and leaders. She leads by appreciating employees through giving a one-time gratitude bonus to show her recognition for their contribution to serving customers (Dunehew, 2021).

4.8. Case 8: Tricia Griffith, CEO of Progressive Insurance

Tricia Griffith, CEO of The Progressive Corporation, posted on LinkedIn in 2019 that “knowing your values can help guide you to do what’s right for you… staying true to myself and what I believed was right worked out” (paras.2, 4). This sheds light on competitive factors that influence her
leadership effectiveness such as values and emotional intelligence. She has a set of personal principles that influence her actions, decisions, and behavior (Griffith, 2019). She has built a personal value system and core values that guide her leadership and help her to understand what’s most important to her and enhance her ability to make decisions easily. Engagement with employees is one of her values as well one of her competitive factors; she hosts small groups of employees at her home and shares lunch with different employees. Tricia Griffith explained that investing in connections and networks by building strong, trusting relationships can serve a business well. Such investments pay dividends since they encourage employees to be more engaged, to share ideas, to think proactively, and to create comfortable workplaces to explore future innovations (Griffith, 2018). An authentic leadership style guides Griffith, who declared that her personal value system guides her in making decisions and taking actions that allow her to feel ethical (Griffith, 2019). She believes in walking the talk and being a role model, both of which can be considered as part of her competitive advantage. Griffith said that whether or not one has an official leadership position, leading by example and following the ethical rule of doing the right thing should be strategic ways for leaders to motivate employees to follow them both in business and in ethics (Griffith, 2019). As a role model, Griffith encourages honest conversations, useful feedback, and productive interactions that serve the purpose of encouraging others to behave the same. In addition, trust is given high weight by Griffith, as she focuses on building trusting relationships with employees that promote engagement, diverse ideas, and thinking outside the box (Griffith, 2019). In 2018, Griffith described her leadership style by saying that leadership is relationships and communication, which, in the long run, will encourage and inspire employees to show and do their best (Griffith, 2018).

4.9. Case 9: Safra Catz, CEO of Oracle

Safra Catz, CEO of Oracle, is a positive leader, which can be considered one of her competitive advantages. For example, Catz observes crises as opportunities, saying that due to increasing price inflation and rising interest rates, the market will react and create new opportunities for businesses (Orbach, 2022). She acts like entrepreneur who never gives up and catches opportunities immediately, which also can be considered as part of her competitive advantages. Catz discussed her experience with crises and her ability to overcome them starting from the 2000 tech bubble to the 2008 recession, and the 2020 COVID-19 pandemic (Orbach, 2022). Catz showed flexibility when she allowed employees to make a choice regarding where to work, saying that “our approach allows our employees to work from where it is best for them. We have opened the offices but working from there is optional” (Orbach, 2022, para. 15). She is not a dictatorial leader. She will not force people to work face-to-face in offices since she knows that some of them prefer to work from home to be free between meetings to take care of their children or other family responsibilities (Orbach, 2022). As a strategy leader, Catz has high commitments to achieve desired goals (Orbach, 2022). She is also an authentic leader since she focuses on integrity as an negotiable requirement for all employees as well as on the importance of having a clear, strict personal value system that guides one’s behaviours and decisions (Forbes, n.d.).

4.10. Case 10: Thasunda Brown Duckett, CEO of TIAA

Thasunda Brown Duckett is the last case in this analysis. The way she manages her time represents one of her competitive advantages. Thasunda Brown Duckett, CEO of TIAA, explained one of her leadership strengths as the ability to manage time through setting priorities and allocating time to accomplish her to-do list. She stressed that to reach targets, continuous work is required, and she encouraged everyone to track tasks in a schedule. Indeed, without tracking, she believes, nothing will happen (Duckett, 2021). Duckett is adept at setting priorities and allocating time. As an organized leader, she puts everything down on paper and focuses on the important tasks. Such behaviour, Duckett believes, will lead to superior results and, over time, will help to overcome many of life's challenges (Duckett, 2021). She focused on fairness and justice and addressing inequities when she raised the issue of women retiring with 30% less retirement income than men have (Duckett, 2021). At TIAA, she works to close the retirement income gap for women by setting good retirement plans. As an inspirational leader, she shared things that influence her leadership:
| Case # | Objective Leadership Qualities | Percentage |
|-------|--------------------------------|------------|
|       | Strategy Leadership | Expertise Leadership | Participative Leadership | Transformational Leadership | Visionary Leadership |
| 1     | No | No | No | Yes | No |
| 2     | No | Yes | No | No | No |
| 3     | Yes | No | No | No | No |
| 4     | No | No | Yes | No | No |
| 5     | No | No | No | Yes | Yes |
| 6     | No | No | No | No | No |
| 7     | No | No | No | No | No |
| 8     | No | No | No | No | No |
| 9     | Yes | No | No | No | No |
| 10    | Yes | No | No | No | No |

**Subjective Leadership Qualities**

| Case # | Human Assets Leadership | Supportive Leadership | Servant Leadership | Inspirational Leadership | Authentic Leadership | Positive Leadership |
|-------|-------------------------|-----------------------|-------------------|-------------------------|---------------------|---------------------|
| 1     | No | No | No | No | No | No |
| 2     | No | No | No | No | No | No |
| 3     | No | No | No | Yes | Yes | No |

(Continued)
| Case # | Human Assets Leadership | Supportive Leadership | Servant Leadership | Inspirational Leadership | Authentic Leadership | Positive Leadership |
|--------|-------------------------|----------------------|-------------------|------------------------|---------------------|-------------------|
| 4      | No                      | No                   | No                | No                     | No                  | No                |
| 5      | No                      | No                   | No                | No                     | Yes                 | Yes               |
| 6      | No                      | Yes                  | Yes               | No                     | No                  | No                |
| 7      | Yes                     | No                   | No                | No                     | No                  | No                |
| 8      | No                      | No                   | No                | No                     | Yes                 | No                |
| 9      | No                      | No                   | No                | No                     | Yes                 | Yes               |
| 10     | Yes                     | No                   | No                | Yes                    | Yes                 | Yes               |
| %      | 20%                     | 10%                  | 10%               | 20%                    | 50%                 | 30%               |

Note: Yes: There is an implementation of the leadership style
No: There is no implementation of the leadership style
morality, compassion, and humbleness (Duckett, 2022). Duckett sees difficulties as opportunities to learn and believes people should grow from their experiences and tough times. Values such as humility, openness, and curiosity all encourage people to benefit from available opportunities (Duckett, 2022).

5. Results and findings
This study aims to shed light on women’s leadership and competitive advantages. The results show, first, how women lead by highlighting their leadership style and practices. These styles are sorted into subjective and objective leadership qualities that influence women’s leadership effectiveness. As discussed before, subjective qualities relate to women leaders’ core values and principles, while objective qualities relate to women leaders’ reliance on facts and data to avoid personal bias. Table 2 shows that subjective leadership qualities influence the leadership effectiveness of the 10 CEOs as follows: authentic leadership influences about 50% of the leaders, positive leadership about 30%, inspirational leadership about 20%, human assets leadership about 20%, supportive leadership about 10%, and servant leadership about 10%. The results show that objective leadership qualities influence the leadership effectiveness of the 10 CEOs as follows: strategy leadership influences about 30% of the leaders, transformational leadership about 20%, expertise leadership about 10%, participative leadership about 10%, and visionary leadership about 10%.

In addition, objective leadership qualities such as transformational, participative, and expertise leadership influence 30% of the sample, while the subjective leadership qualities such as authentic, servant, supportive, and human assets leadership influence 30% of the sample. A combination of subjective and objective leadership qualities influences 40% of the sample.

The second part of the results shows women’s leadership and competitive advantages that influence their leadership effectiveness. Based on the analysis above, Figure 2 shows women leaders’ competitive factors that lead their effectiveness. These factors are first categorized into soft and hard factors, and then sorted into four soft factors of competitive advantages (morality, consultation, humbleness, mercy and compassion) and four hard factors of competitive advantages (strategy, responsibility, intelligence, persistence).

The results show that for 40% of the sample, leadership effectiveness is influenced by soft competitive advantages. For 30% of the sample, leadership effectiveness is influenced by hard competitive advantage. For 30% of the sample, leadership effectiveness is influenced by a combination of soft and hard competitive advantages (Table 3).
| Case # | Soft Factors of Competitive Advantage | Percentage |
|--------|---------------------------------------|-------------|
| 1      | Morality                              | Honesty     |             |
|        | Consultation                          | . . .        |             |
|        | Humbleness                            | Consultation|             |
|        | Merciful & Compassion                 | Willing To Listen |     |
| 2      | Morality                              | . . .        |             |
|        | Consultation                          | Flexibility  |             |
|        | Humbleness                            | Humbleness  |             |
|        | Merciful & Compassion                 | Compassion   | 40%         |
| 3      | Morality                              | Personal Value System |     |
|        | Consultation                          | Engagement   |             |
|        | Humbleness                            | . . .        |             |
|        | Merciful & Compassion                 | Emotional Intelligence |     |
| 4      | Morality                              | Morality     |             |
|        | Consultation                          | Optimistic View   | Flexibility |
|        | Humbleness                            | . . .        |             |
|        | Merciful & Compassion                 | . . .        |             |

(Continued)
| Case # | Hard Factors of Competitive Advantages |
|--------|----------------------------------------|
| 5      | Strategy: Responsibility |
|        | Intelligence: Persistence |
| 6      | Strategy: Teamwork, Control, Strategy 30% |
|        | Responsibility: Diversity, Monitor Process |
|        | Intelligence: Persistence |
| 7      | Strategy: Strategy |
|        | Responsibility: Persistence |
|        | Intelligence: Persistence |
|        | Persistence: Expertise |
| Case # | Morality | Consultation | Humbleness | Merciful & Compassion | Strategy | Diversity | Responsibility | Transparency | Intelligence | Innovation | Persistence | Decisiveness |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定义 |自定
Figure 3. Recommendations: soft and hard factors of competitive advantages and subjective and objective leadership qualities.

6. Conclusion and recommendation
This study was motivated by the need for information on women’s leadership effectiveness and competitive factors and leadership qualities that influence effectiveness. Women leaders are likely to have a number of unique soft and hard competitive factors, some of which contribute to their competitive advantage. The results suggest that in order to increase leadership effectiveness, leaders should take advantages from their soft and hard competitive factors. In addition, knowing their own qualities (subjective or objective) will help leaders to be more effective in leading and achieving goals. Some recommendations can be developed from this study and implemented in organizations (see, Figure 3). The first set of recommendations are related to the improvement of soft competitive factors and subjective leadership qualities: (a) Tell the truth, be guided by the truth, and do justice; (b) Advocate what is moral, and forbid what is immoral; (c) Consult followers and allow them to share ideas; (d) Be polite and gentle to followers; (e) Be an excellent example and have a great moral character; and (f) Have concern over followers’ suffering. The next set of recommendations are related to the improvement of hard competitive factors and objective leadership qualities: (a) Speak logically, and communicate ideas with evidences or valuable data; (b) Lead all and be leaders to all; (c) Clarify the vision and lead toward the vision; (d) Be an expert and have a clear message; (e) Be responsible and take responsibility with stakeholders; (f) Take care of leadership development and create successors; (g) Be ready to overcome resistance; (h) Identify your style and have confidence; and (i) Be strict and firm against the competitors.

7. Limitations and future research
In this study, a purposeful sample of the top 10 women CEOs leading Fortune 500 companies in 2021 was investigated to shed light on factors that influence their leadership effectiveness. Future research might focus on a sample from the world’s 100 most powerful women to shed light on their leadership effectiveness. Also, this study focused on women CEOs in business organizations, and future research might investigate women’s leadership effectiveness in other fields like the political arena. In addition, future investigation is needed to consider the culture in organizations that are led by women. Future research also needs to handle other issues like employee satisfaction, engagement, and workplace environment under women’s leadership.
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Author details
Bayan Yousef Farhan1
E-mail: bayan.farhan@ou.ac.ae
ORCID ID: http://orcid.org/0000-0001-6205-2285
1 Department of Business Administration, Al Ain University, Al Ain, United Arab Emirates.

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