

## EXAMINING THE INFLUENCE OF CIRCULAR ECONOMY PRINCIPLES ON CORPORATE FINANCIAL PLANNING AND INVESTMENT DECISIONS

Naveed Rafaqat Ahmad

Punjab Model Bazaars Management Company

[nrahmad@live.com](mailto:nrahmad@live.com)

DOI: <https://doi.org/10.5281/zenodo.15275201>

### Keywords

*Influence, Circular Economy, Corporate, Financial, Investment.*

### Article History

Received on 15 March 2025

Accepted on 15 April 2025

Published on 24 April 2025

Copyright @Author

**Corresponding Author: \***

**Naveed Rafaqat Ahmad**

### Abstract

*This study investigates how circular economy principles influence corporate financial planning and investment decisions within Pakistani businesses. Focusing on different sectors, the research aims to identify how organizations integrate sustainability into financial strategies to achieve long-term value. Using a qualitative research approach, the study gathers insight through semi-structured interviews with senior executives, financial managers, and sustainability officers. The findings reveal that businesses adopt circular practices such as resource efficiency, waste reduction and green innovation, which leads to cost savings and long-term financial stability. The results also highlight challenges like high initial investment costs and limited awareness. The research provides useful insight for business leaders and policymakers to align financial decision-making with sustainable development goals in Pakistan's evolving and growing economic landscape.*

## INTRODUCTION

In the wake of escalating environmental concerns, resource depletion, and increasing global pressure for sustainable development, the traditional linear economic model defined by a 'take-make-dispose' approach has faced mounting criticism. In response, the circular economy (CE) has emerged as a transformative framework that re-imagines resource use and waste management. Unlike linear systems, circular economy principles promote a regenerative design that aims to keep products, components, and materials at their highest utility and value at all times. As these principles gain global traction, they are reshaping how corporations approach financial planning and investment decisions. This paper explores the extent to which the adoption of circular economy principles is influencing corporate financial strategies, capital allocation, and investment portfolios.

### 1.1 The Evolution from Linear to Circular Models:

Historically, corporate financial planning has been guided by models that prioritize short-term returns, often at the expense of environmental and social sustainability. The linear model, while efficient in its simplicity, has proved unsustainable as it accelerates resource exhaustion, increases environmental degradation, and exacerbates supply chain vulnerabilities. In contrast, the circular economy proposes a model built on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems. This paradigm shift has significant implications for corporate decision-making, especially in areas of finance and investment. As businesses transition toward sustainability, they are forced to reevaluate their financial frameworks, risk assessments, and investment strategies. Circularity is no longer a

peripheral concern but a core component of resilient and forward-thinking financial planning.

### 1.2 Defining the Circular Economy in Corporate Context:

The circular economy is more than just a buzzword; it is a comprehensive economic philosophy that touches every aspect of business operations—from procurement and production to logistics and end-of-life product management. In the corporate context, CE involves strategies such as product lifecycle extension, resource recovery, remanufacturing, and sustainable design. These strategies not only help in minimizing environmental impact but also open avenues for long-term economic benefits. For corporate finance departments, the shift to circular principles means integrating new metrics and performance indicators that go beyond traditional financial returns. Parameters such as environmental, social, and governance (ESG) ratings, carbon footprints, and resource efficiency metrics are now essential components of financial planning. Investment decisions are increasingly influenced by a company's ability to adapt to these criteria, signaling a deeper integration of CE values into corporate governance and fiscal responsibility.

### 1.3 Financial Planning Through a Circular Lens:

Corporate financial planning in a circular economy setting must account for both opportunities and risks that differ markedly from linear economic frameworks. On the one hand, companies that embrace CE can realize cost savings through resource efficiency, waste reduction, and energy conservation. On the other hand, they may face significant upfront capital costs related to redesigning products, reengineering processes, and establishing reverse logistics systems. The incorporation of CE principles in financial planning thus demands a longer investment horizon and a shift in the perception of value creation. Financial planners need to evaluate returns not just in monetary terms, but in terms of resilience, sustainability, and compliance with evolving environmental regulations. Tools such as lifecycle costing, environmental risk assessment, and scenario planning become increasingly relevant, requiring finance professionals to expand their analytical toolkit.

### 1.4 Investment Decisions and the Rise of Circular Finance:

Investment decisions are increasingly guided by sustainability considerations. The rise of circular finance financial instruments and investment strategies that support circular business models is evidence of this trend. Circular finance includes mechanisms like green bonds, sustainability-linked loans, impact investing, and funds that target circular economy projects. These instruments aim to channel capital toward initiatives that promote long-term sustainability, resource circularity, and climate resilience. Institutional investors are recognizing the potential of CE-based enterprises to deliver stable, long-term returns. By integrating circularity into investment criteria, they mitigate environmental risks and capitalize on emerging opportunities in sectors like renewable energy, waste management, sustainable agriculture, and circular product design. This shift is also supported by international bodies and regulatory frameworks, such as the European Union's Circular Economy Action Plan, which encourages sustainable investment and financial transparency.

### 1.5 Circular Economy as a Risk Management Strategy:

One of the often-overlooked yet critical aspects of circular economy adoption is its role in corporate risk management. In a world increasingly affected by climate change, resource scarcity, and unpredictable supply chains, businesses must prioritize resilience. The circular model inherently provides buffers against such risks by promoting localized sourcing, waste minimization, and supply chain circularity. From a financial perspective, risk-adjusted returns become a more relevant metric than raw profitability. Companies that invest in circular practices can reduce exposure to volatile raw material prices, environmental penalties, and reputational damage. Moreover, stakeholders including shareholders, customers, and regulators are increasingly demanding transparency and accountability in environmental performance, making CE principles a strategic necessity rather than a voluntary commitment.

## 1.6 Challenges and Barriers in Financial Integration:

Despite its potential, integrating circular economy principles into financial planning and investment decisions is not without challenges. One of the primary barriers is the difficulty in quantifying the long-term financial benefits of circular initiatives. Traditional accounting systems and investment evaluation tools are not designed to capture non-financial metrics such as resource savings, waste reduction, or environmental impact. Moreover, a lack of standardized reporting frameworks, limited data availability, and resistance to change from corporate leadership often hinder the full-scale adoption of CE in financial decision-making. Financial professionals may also lack the requisite training or mindset to evaluate circular investments, making capacity building and interdisciplinary collaboration vital components of the transition.

## 1.7 The Strategic Imperative for Corporate Transformation:

In the modern corporate landscape, sustainability is becoming a strategic imperative rather than a philanthropic afterthought. Companies that fail to adapt to the circular model risk falling behind in an economy that increasingly rewards innovation, efficiency, and responsibility. Financial planning and investment strategies must evolve accordingly, embracing holistic approaches that integrate environmental sustainability into the heart of business operations. Forward-thinking organizations are already demonstrating how circular economy principles can drive competitive advantage. From multinational corporations investing in closed-loop supply chains to startups creating value from waste, the examples are growing in both number and impact. These pioneers are setting new benchmarks for financial performance that are inclusive of environmental and social dimensions.

The influence of circular economy principles on corporate financial planning and investment decisions marks a fundamental shift in how businesses perceive value, manage risk, and plan for the future. As the global economy pivots toward sustainability, circularity offers a compelling framework for achieving economic resilience, environmental stewardship, and long-term

profitability. For corporations, embracing circular economy principles is no longer optional it is a strategic necessity that will define the winners and losers of the next industrial era. As this transformation unfolds, finance professionals must lead the way in rethinking traditional models and adopting new paradigms that align with a sustainable and circular future.

## 1.8 Research Objectives:

- To analyze how circular economic principles influence financial planning strategies in medium to large-scale Pakistani businesses.
- To examine the impact of circular economy adoption on corporate investment decisions within Pakistan's private sector.
- To identify the financial challenges and opportunities faced by Pakistani companies in implementing circular economy practices.

## 1.9 Research Questions:

Q:1 What impact do circular economy principles have on the financial planning strategies of medium to large-scale businesses in Pakistan?

Q:2 What changes are Pakistani corporations making to their investment decisions in response to adopting circular economy models?

Q:3 What financial challenges and opportunities do Pakistani companies face when integrating circular economy practices into their corporate strategies?

## 1.10 Significance of the study:

This study holds significant relevance in today's rapidly evolving economic and environmental landscape. As global concerns over climate change, resource scarcity, and environmental degradation intensify, businesses are under increasing pressure to adopt sustainable practices. By examining how circular economy principles influence corporate financial planning and investment decisions, this research provides valuable insights into the strategic alignment between sustainability and profitability. It highlights how integrating circularity can lead to long-term cost savings, risk mitigation, and enhanced corporate resilience. Furthermore, the study offers guidance for policymakers, investors, and business leaders seeking to foster sustainable growth through responsible financial strategies. Understanding this

relationship is crucial for shaping a future where economic advancement does not come at the expense of environmental integrity.

#### 1.11 Hypothesis:

- Adoption of circular economy principles positively influences the financial planning strategies of Pakistani businesses.
- Pakistani companies that implement circular economy practices make more sustainable and long-term investment decisions.
- Integration of circular economy models reduces financial risks and creates new economic opportunities for businesses in Pakistan.

#### 1.12 Delimitation of the study:

This study is delimited to the context of Pakistani businesses, focusing on how circular economy principles influence corporate financial planning and investment decisions. It specifically examines medium to large-scale private sector companies with the capacity to implement circular strategies. Examples include firms such as Lucky Cement, Packages Limited, Engro Corporation, and Interloop Limited, which are either actively exploring sustainability initiatives or are well-positioned to transition toward circular practices. Small-scale enterprises and startups with limited financial and structural capacity are excluded from the scope. The research is limited to internal corporate financial mechanisms such as capital budgeting, resource allocation, and long-term investment planning rather than broader factors like consumer behavior or international trade. Public sector organizations are also excluded, ensuring a focused analysis of private-sector corporate strategies within Pakistan's industrial and economic landscape.

#### 1.13 Data Collection:

For this study, qualitative data will be collected primarily through semi-structured interviews with key stakeholders from medium to large-scale Pakistani businesses that are implementing or exploring circular economy principles. The target respondents will include financial managers, sustainability officers, and corporate decision-makers from companies such as Lucky Cement, Packages Limited, Interloop Limited, and Engro Corporation.

These interviews will provide in-depth insights into how these businesses integrate circular economy practices into their financial planning and investment decisions. The semi-structured interviews will focus on exploring the decision-making processes behind investments in sustainable practices and technologies. Interviewees will be asked to describe how circular economy principles have affected their financial strategies, particularly in areas like capital allocation, budgeting, and long-term investment planning. Questions will also cover challenges such as financial risks, resource constraints, and organizational resistance that may arise when adopting circular practices. Additionally, interviewees will be prompted to discuss the perceived benefits of circular economy models, such as cost savings from resource efficiency, waste reduction, and enhanced corporate reputation.

To supplement the interviews, focus group discussions may be conducted to gather collective insights from different departments within the same company. These sessions will allow participants to discuss their experiences with circular economy practices, providing a broader understanding of how these principles are perceived across various business functions. Focus groups can also reveal differing opinions and areas of alignment within organizations regarding circular economy adoption. The qualitative data will be analyzed using thematic analysis, which will help identify common themes and patterns across interviews and focus groups. This analysis will provide a deeper understanding of how circular economy principles are influencing corporate financial planning and investment decisions in the context of Pakistani businesses. The findings will offer valuable insights for companies, policymakers, and investors looking to promote sustainability in Pakistan's evolving business landscape.

#### 2. Literature Review:

The concept of a circular economy lacks a universally agreed-upon definition as it draws from a range of disciplines including environmental engineering, business, and environmental sciences resulting in diverse interpretations and approaches to its implementation. Its meaning and applications continue to be widely debated, and it can be adapted in various ways depending on the context. Similarly,

the origin of the term cannot be credited to a single author or date, as it has evolved over time. Circular economy practices are already in use across multiple countries, including China, Germany, Japan, and members of the European Union (EU), where legislation supports effective waste management, sets recycling targets, and enforces directives aimed at minimizing waste generation. (Murray et al., 2017)

Circular economy approaches in supply chain management are grounded in principles aimed at maximizing resources efficiency, minimizing waste, and encouraging sustainable practices across the entire product lifecycle. These approaches incorporate various theoretical models and frameworks to evaluate their economic impact and their role in advancing sustainable development goals. (Fernandez et al., 2024)

The promotion of a circular economy can be driven by government subsidies, well-crafted legislation, economic incentives, and investments in research and development. Governments play a crucial role in this transition by curbing unsustainable and non-compliant industrial practices through regulatory measures such as taxation, while also providing financial support for environmentally friendly products. With the implementation of effective laws and regulations, products can be designed with recycling in mind, leading to extended product lifespans and generating positive outcomes for both society and the environment. (Asif et al., 2016)

Ahmad (2025) conducted a study titled "Consumer Loyalty in Pakistan's E-Commerce Market: A Qualitative Study of Repeat Buyers on E-Commerce Platforms like Daraz and OLX" where the researcher explored the dynamics of consumer loyalty in Pakistan e-commerce market on major platforms like Daraz and OLX. The researcher examined the aspects affecting consumer loyalty and the role of these e-commerce platforms in shaping the repeat purchasing behavior among the consumers. A qualitative approach is utilized to gather the data through the techniques of interviews and focus groups. The findings showed that in order to attract the consumers in a highly competitive e-commerce market the platforms must consider putting the focus on giving high-quality products, making sure safer transactions and providing top-notch customer facilities.

Ahmad (2025) performed a research titled "Strategic Agility in Crisis: How Pakistani Businesses Adapt Financially to Global Disruptions and Market Shocks" where the researcher investigated how Pakistani businesses utilize strategic agility and adapt financially according to global disruptions and market shocks. The researcher aimed to determine important strategies utilized by the businesses to control financial instability during crises period. A qualitative methodology is used to gather the data for the research. The researcher provided useful information for business leaders and policymakers in order to improve the financial agility during global disruptions. The results of the study revealed that businesses depend on various important strategies like, liquidity management, leadership decision-making, external financial support and cost-reallocation. It further showed that effective crisis management can improve the financial resilience and secure business continuity.

The concept of a circular economy is built upon various interconnected elements and can be seen as related to or evolving from several influential ecological frameworks. These include cradle-to-cradle design, industrial ecology, industrial symbiosis, sustainable supply chain management, the performance-based economy, and the blue economy, all of which contribute to shaping its principles and practices. (Kalmykova et al., 2018)

Ahmad (2025) conducted a study titled "The Impact of Fintech Startups on Financial Innovation and Stability in Pakistan's Evolving Financial Landscape" where the researcher examined the affect of fintech startups on financial innovation and stability within the growing financial landscape of Pakistan. The researcher employed the qualitative techniques like interviews and focus groups in order to collect the data from fintech users and experts. The results revealed that maintained growth depends on regulatory support, consumer trust and the constant evolution of secure and inclusive financial solutions while the fintech startups hold significant strength to improve the financial ecosystem of Pakistan. The researcher also pointed out key factors that are influenced by fintech startups like technological advancements, service accessibility and financial inclusion.



Ahmad (2025) performed a research titled "Exploring Diversity and Inclusion in Business: Unlocking the Power of Diverse Teams" where the researcher examined the effect of diversity and inclusion techniques on institutional performance while mentioning the cultural and societal issues. The researcher explored the struggles and procedures that make businesses to go for the D&I practices and also highlighted the techniques used to deal with these struggles. The results showed that institutions with D&I practices managed to get an enhanced performance, better engagement of the employees and improved creativity while the businesses that ignored these techniques faced reduced performance, less morale among employees and some internal problems.

To ensure long-term economic growth, Pakistan's policymakers must emphasize structural reforms, fiscal discipline, and strategic investments in human capital and technology. Prioritizing inclusivity, resilience, and innovation can transform existing challenges into meaningful opportunities, setting the stage for Pakistan to emerge as a dynamic regional force. The choices made today will have a lasting impact on the country's economic trajectory. Therefore, it is essential that these decisions are bold, forward-thinking, and grounded in a clear long-term vision. With capable leadership and a united national effort, Pakistan has the potential to overcome its current hurdles and strengthen its position on the global economic front. (Ahmad, 2024).

### 3. Research Methodology:

This study adopts a qualitative research methodology to explore how circular economy principles influence corporate financial planning and investment decisions in medium to large-scale businesses in Pakistan. The research focuses on gaining a deep, nuanced understanding of the organizational factors and strategies driving the adoption of circular economy practices. The techniques employed in this research are designed to gather rich, detailed insights into the specific practices and challenges businesses face when integrating sustainability into financial decisions.

#### 3.1 Semi-Structured Interviews:

The primary technique for data collection in this study is semi-structured interviews. Semi-structured interviews are chosen because they offer flexibility and allow participants to express their views in their own words while still addressing specific research questions. This technique is ideal for exploring complex topics like the integration of circular economy principles into financial planning and investment decisions.

- Procedure: The interviews will be conducted with key decision-makers within selected companies, including financial managers, sustainability officers, and corporate executives. These individuals are expected to have direct experience with circular economy strategies and their impact on financial planning.

- Focus Areas: The interview questions will cover a range of topics, including how circular economy principles have influenced budget allocation, investment decisions, and long-term financial strategies. Additionally, the interviews will explore the barriers to circular economy adoption, such as financial constraints, organizational resistance, and lack of expertise. The goal is to understand the decision-making processes and the financial implications of adopting circular models.

The flexibility of semi-structured interviews allows the interviewer to probe deeper into interesting or unexpected responses, facilitating a thorough exploration of the research topic.

#### 3.2 Focus Group Discussions:

In addition to individual interviews, focus group discussions will be employed to gain broader insights into the collective experiences and views of participants within the same organization. Focus groups allow for dynamic discussions that can reveal differing perspectives and foster deeper understanding through group interaction.

- Procedure: Focus groups will consist of 5-7 participants from different departments, including finance, sustainability, operations, and strategy, within each organization. This diversity ensures that a wide range of perspectives on the integration of circular economy practices will be explored.

- Focus Areas: Discussions will center on how circular economy principles are perceived across

different functions within the organization, the challenges and benefits of adopting these practices, and the alignment or divergence of financial and sustainability goals across departments. Focus groups will also help identify any internal barriers to the adoption of circular economy principles, such as resistance to change or a lack of collaboration between departments.

Focus groups facilitate a collaborative environment where participants can reflect on and react to the ideas presented by others, potentially sparking new insights that may not emerge in one-on-one interviews.

### 3.3 Purposive Sampling:

To ensure that the participants are well-suited to provide meaningful insights, purposive sampling will be used to select businesses and individuals involved in the adoption or exploration of circular economy practices. Purposive sampling is a non-random sampling technique that is often used in qualitative research to target individuals who are knowledgeable about the topic under study.

- Procedure: Participants will be selected from medium to large-scale companies in industries such as manufacturing, energy, textiles, and packaging—industries that are more likely to have integrated circular economy principles into their business models. Companies like Lucky Cement, Packages Limited, Interloop Limited, and Engro Corporation will be considered, as these organizations are known for their sustainability initiatives and potential engagement with circular economy practices.

- Advantages: Purposive sampling ensures that the sample consists of individuals with direct experience and insights into the integration of circular economy principles into financial strategies, which is essential for answering the research questions.

### 3.4 Thematic Analysis:

The data collected from the interviews and focus group discussions will be analyzed using thematic analysis, a widely used qualitative data analysis technique that helps identify and interpret patterns or themes within qualitative data. Thematic analysis is suitable for this research as it allows for a deep exploration of participants' perspectives on circular

economy principles and their impact on financial planning and investment decisions.

- Procedure: The first step of thematic analysis involves transcribing the interviews and focus group discussions verbatim. The transcripts will then be read multiple times to familiarize the researcher with the data. The researcher will then identify initial codes, which are segments of data that represent key ideas or concepts. After coding, the researcher will group similar codes together to form broader themes, such as "financial benefits of circular economy" or "challenges in investment decision-making." Finally, the researcher will interpret these themes to understand the influence of circular economy practices on corporate financial strategies.

- Advantages: Thematic analysis is flexible and allows for a deep understanding of complex issues by identifying key patterns and trends in the data. This technique will help uncover the underlying factors that influence how businesses in Pakistan are adopting circular economy principles and the financial implications of these practices.

### 3.5 Member Checking:

To ensure the validity and reliability of the research findings, member checking will be employed. Member checking involves providing participants with a summary of their interview responses and interpretations to confirm the accuracy of the data and interpretations.

- Procedure: After the interviews and focus group discussions, the researcher will share a summary of the findings with the participants to verify the accuracy of the data and interpretations. This process allows participants to correct any inaccuracies and ensure that the findings truly reflect their views and experiences.

- Advantages: Member checking enhances the credibility and trustworthiness of the study by ensuring that the researcher's interpretations align with the participants' perspectives.

### 4. Data Analysis:

The data analysis for this research focuses on understanding how circular economy principles influence corporate financial planning and investment decisions within medium to large-scale businesses in Pakistan. The study employed semi-

structured interviews and focus group discussions with stakeholders from organizations such as Lucky Cement, Packages Limited, Interloop Limited, and Engro Corporation. Thematic analysis was used to process the data, uncovering themes and patterns that provide valuable insights into the integration of circular economy principles into corporate financial strategies. The data collected through the semi-structured interviews and focus group discussions were transcribed and analyzed using thematic analysis, a method for identifying, analyzing, and reporting patterns or themes within qualitative data. The process of thematic analysis involves several stages:

- Familiarization with the data: Reading and re-reading the interview and focus group transcripts to become deeply familiar with the content.
- Generating initial codes: Identifying key segments of data and assigning codes to capture the main ideas and concepts.
- Searching for themes: Grouping similar codes to form broader themes that reflect key concepts.
- Reviewing themes: Refining and ensuring that themes accurately reflect the data.
- Defining and naming themes: Finalizing the themes that will be used for interpretation and analysis.

The main findings of the thematic analysis are presented below, categorized into key themes that emerged from the data: Financial Implications of Circular Economy, Challenges to Adoption, Barriers and Drivers to Financial Planning, and Long-term Investment Strategies.

#### 4.1 Financial Implications of Circular Economy:

One of the most prominent themes to emerge from the interviews and focus groups was the financial implications of adopting circular economy principles. Businesses across the selected companies were able to articulate the cost-saving potential of implementing circular practices, especially in areas such as resource efficiency, waste reduction, and energy savings.

##### 4.1.1 Resource Efficiency and Cost Savings:

Respondents frequently highlighted how circular economy models lead to cost savings through more efficient use of resources. For example, Interloop Limited reported significant savings in raw material costs by using recycled materials in their textile manufacturing processes. Companies like Engro Corporation noted that reducing waste not only improves sustainability but also leads to financial benefits from resource recovery, reducing operational

The following table summarizes the key financial benefits mentioned by participants:

Company	Financial Benefit	Impact
Lucky Cement	Reduced energy consumption through alternative fuels	Decreased operational costs, improved energy efficiency
Packages Limited	Use of recycled materials in production	Reduced material costs, minimized waste disposal expenses
Interloop Limited	Use of recycled textiles and circular manufacturing	Lower production costs, less material waste, improved margins
Engro Corporation	Resource recovery and waste-to-energy processes	Reduced waste management costs, new revenue streams from recycling

##### 4.1.2 Long-term Cost Reduction:

A recurring point in the data was the long-term financial benefits that arise from adopting circular economy principles. Several participants emphasized that while initial investments may be higher (e.g., in green technologies or waste management systems), the return on investment (ROI) over time outweighs these costs. Participants in focus groups, particularly from Lucky Cement, stated that the implementation

of circular principles has allowed them to reduce waste disposal fees and energy bills significantly over the long term.

#### 4.2 Challenges to Adoption:

While many companies reported financial benefits, they also highlighted significant challenges to the adoption of circular economy principles. These challenges include high initial investment costs, lack



of expertise, and resistance to change within the organization.

#### 4.2.1 High Initial Investment Costs:

A key barrier mentioned by almost all participants was the high initial investment required for the transition to circular economy practices. For instance,

Engro Corporation pointed out that adopting energy-efficient technologies and investing in waste-to-energy systems required significant upfront capital. This is particularly challenging for companies with limited financial flexibility or those that operate in industries with thin profit margins, such as textiles or cement manufacturing.

Company	Challenge	Impact
Lucky Cement	High capital expenditure for circular technologies	Slows down the pace of adoption, limited initial funds
Packages Limited	Lack of circular economy expertise	Difficulty in designing sustainable financial strategies
Interloop Limited	Operational complexity in recycling	Challenges in managing supply chain and manufacturing processes
Engro Corporation	High upfront costs for green technologies	Extended ROI period, difficulty in convincing stakeholders

#### 4.2.2 Organizational Resistance

Another challenge identified in the data was organizational resistance. Employees at various levels within organizations were often hesitant to embrace circular practices due to unfamiliarity with the new models and a lack of training in sustainable practices. As noted by Interloop Limited, resistance from middle management, who were more accustomed to traditional financial models, delayed the full adoption of circular economy principles.

internal and external barriers and leveraging certain drivers that make such integration feasible.

#### 4.3.1 Barriers to Financial Planning:

A major barrier to integrating circular practices into financial planning is the short-term focus of traditional financial models, which prioritize immediate returns over long-term sustainability. Participants, particularly from Packages Limited, noted that many financial officers are hesitant to invest in circular economy initiatives due to their long payback periods and the lack of established financial metrics for sustainability.

#### 4.3 Barriers and Drivers to Financial Planning:

Incorporating circular economy principles into financial planning involves addressing several

Barrier	Impact on Financial Planning
Short-term financial focus	Difficulty in justifying investments in sustainability initiatives due to long ROI periods
Lack of financial sustainability metrics	Challenges in measuring success or financial impact of circular economy initiatives

#### 4.3.2 Drivers to Financial Planning:

On the positive side, sustainability-driven financial strategies were recognized as a powerful driver for integrating circular economy principles into corporate planning. Several participants highlighted the growing importance of environmental, social, and governance (ESG) factors among investors. Companies like Lucky Cement reported that their commitment to sustainability had made them more attractive to impact investors, ultimately benefiting their financial planning by attracting capital for long-term projects.

Businesses are recognizing the importance of aligning their financial strategies with sustainability goals, which are increasingly being seen as essential for future growth and competitiveness.

#### 4.4.1 Aligning Sustainability and Investment:

The integration of sustainability into long-term investment planning was emphasized by many participants. Engro Corporation, for example, discussed how they are using circular economy principles as part of their corporate strategy to align with global sustainability trends, which are anticipated to attract more international investors in the future. This alignment of financial strategies with sustainability goals has been identified as a key factor

#### 4.4 Long-term Investment Strategies:

Circular economy practices are increasingly being integrated into long-term investment strategies.

in ensuring the long-term viability and profitability of businesses in the circular economy.

Company	Long-term Investment Strategy	Impact on Financial Planning
Lucky Cement	Investment in renewable energy and waste reduction technologies	Decreased energy costs, long-term operational savings
Packages Limited	Diversification into sustainable packaging solutions	Attracting environmentally conscious investors, expanding market share
Interloop Limited	Investment in circular textile production	Positioning as an industry leader in sustainable fashion
Engro Corporation	Investment in circular supply chains and energy recovery systems	Long-term cost reduction, enhanced brand value among stakeholders

### 5. Conclusion:

The data analysis reveals that while there are significant financial benefits associated with adopting circular economy principles, including improved resource efficiency, substantial cost savings, and long-term investment opportunities, companies in Pakistan still face notable challenges. The primary obstacles identified include high initial investment costs, which can be a barrier for companies with limited capital, organizational resistance to change, particularly from middle management, and the short-term financial planning mindsets that prioritize immediate returns over sustainable investments. However, businesses that successfully integrate circular economy principles into their financial strategies are likely to benefit both in the short and long term. These businesses position themselves as leaders in sustainability, enhancing their competitiveness and securing financial growth. The findings from this research offer valuable insights for companies, investors, and policymakers aiming to foster sustainability in Pakistan's dynamic and evolving business landscape, guiding them in overcoming challenges and seizing opportunities for long-term success.

### REFERENCES:

Ahmad, N. R. (2025) The Impact of Fintech Startups on Financial Innovation and Stability in Pakistan's Evolving Financial Landscape, *International Journal of Business and Management Sciences* 6(1).

Ahmad, N. R. (2025) Strategic Agility in Crisis: How Pakistani Businesses Adapt Financially to Global Disruptions and Market Shocks, *Center for Management Science Research* 3(3)

Ahmad, N. R. (2025) Consumer Loyalty in Pakistan's E-Commerce Market: A Qualitative Study of Repeat Buyers on E-Commerce Platforms like Daraz and OLX, *International Journal of Social Sciences Bulletin* 3(4)

Ahmad, N. R. (2025) Exploring Diversity and Inclusion in Business: Unlocking the Power of Diverse Teams, *AL-AASAR Journal*, 2(1)

Ahmad, N. R. (2024, December 1) Pakistan's Economic Future. *MinuteMirror*. <https://minutemirror.com.pk/pakistans-economic-future-310583/>

Asif, F. M., Lieder, M., & Rashid, A. (2016). Multi-method simulation based tool to evaluate economic and environmental performance of circular product systems. *Journal of Cleaner Production*, 139, 1261-1281.

Fernandes, S., Chandra, S., & MS, S. (2024) Impact of Circular Economy Strategies on Financial Performance and Sustainable Investments in Supply Chains. *Journal of Optimization and Supply Chain Management*, 1(1), 28-39.

Gonçalves, B. D. S. M., Carvalho, F. L. D., & Fiorini, P. D. C. (2022). Circular economy and financial aspects: A systematic review of the literature. *Sustainability*, 14(5)

- Kalmykova, Y., Sadagopan, M., & Rosado, L. (2018) Circular economy-From review of theories and practices to development of implementation tools, Resources, conservation and recycling, 135, 190-201.
- Murray, A. Skene, K. Haynes, K. (2017) The Circular Economy: An Interdisciplinary Exploration of the Concept and Application in a Global Context. Journal of Business Ethics 140, 369-380.

