The Project Evaluation for An Acquisition of a Synthetic Leather Manufacturing Plant: Case Study

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ABSTRACT

This case study is an applied research project which concerns on finding the financial viability of a company integration done by D Samson Industries (Pvt) Ltd. Company integrations are carried out with sensible and dubious reasons and identified variously based on the nature of the integration. This thesis explores the topic of company integrations and their financial implications by employing various financial evaluation techniques, namely Net Present Value (NPV), Internal Rate of Return (IRR), Payback Period, Sensitivity Analysis and Synergy benefits. The work has carried out a comprehensive financial analysis of selected integration project, considering factors such as initial investment costs, projected cash flows, and the time value of money. NPV calculations are employed to determine the present value of future cash flows, while IRR is used to assess the project's potential return on investment. Additionally, the payback period is analyzed to ascertain the length of time required to recover the initial investment and sensitivity analysis to determine the changes in NPV with the changes in key input variables. Calculations and discussions are completed with final synergy benefit calculation to wrap up the financial understanding of the company integration. This applied research project serves as a valuable resource for professionals involved in corporate finance, mergers and acquisitions, and strategic management, providing them with a comprehensive understanding of the financial implications of integration projects and providing practical insight and guidance for financial evaluation and aiding in the decision-making process.

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CHAPTER 1

INTRODUCTION

Footwear industry in Sri Lanka is one of the largest industries in the country with much more potential to develop in the future. Local companies are fighting a cut-throat competition with Chinese cheap imports while trying to maintain healthy working environments for their employees, keep up with latest technology and use sustainable management methods.

The labor-intensive footwear and leather industry are working towards an ambitious target of meeting 80 percent of local needs in the next two years, Jayasuriya(2020). D. Samson Industries (PVT) Ltd as the number one footwear brand in Sri Lanka plays a major role in this vision.

One of the major challenges faced by local industries regardless the sector they are in is the difficulties in sourcing raw materials and this has been the same when it comes to footwear industry as well, Fernando(2021). Even though Sri Lanka is rich in rubber and leather for footwear it is still behind when it comes to sourcing synthetic leather which has high demand from consumers. Low cost, abrasion-resistance, and water-resistance nature of synthetic leather has created this high demand for which local industry is struggling to cater.

Over the years synthetic leather is mainly sourced from China and they export these products all over the world to consumers in Asia, Europe, South America, and North America. But with recent events of Sri Lankan economy and government encouraging Sri Lankan entrepreneurs to invest in local industry, country is looking for new sourcing options for its synthetic leather requirement and this has resulted in encouraging more local suppliers to engage in this industry.

D. Samson Industries (PVT) Ltd has also faced this same challenge and was looking for ways to overcome it in the most preferable way. Company is looking for local suppliers for synthetic leather instead of imports but decided to take a further step forward and launched a Synthetic Leather Manufacturing plant by acquiring a state-of-the- art production facility in Katana in the Negombo area.

1.1 Objectives and the Importance of the Study

Acquisitions are a common strategy adopted by corporate players looking to expand their business, gain market share, or access new technologies and resources. The increased activity in acquisitions reflects the allure of potential benefits. However, the outcomes of acquisitions are often complex and varied, leading to mixed performance results for the diverse stakeholders involved.

This applied research project is carried out to understand and evaluate the decision made by D. Samson Group of Companies to acquire a synthetic leather manufacturing plant in terms of financial viability.

It is important to know the type of acquisition a company decided to go ahead with as it impacts the overall dynamics of both the companies. The financial impacts and the financial health, the financial-operational-market related and other risks that will arise, management styles, the strategic decision making, synergies sharing, company operational integrations, resource allocations, stakeholder interests, cultural alignments and the outlook both the companies will give to the outside corporate world will be decided based on the type of acquisition the companies go ahead with.

Once the acquisition style is confirmed it is important to understand the type of financial and mathematical tools available to evaluate the decided acquisition. A correct selection of evaluation tools will facilitate accurate financial assessment, correct information for decision making, proper due diligence and a comprehensive

understanding of the project. These tools will vary depending on the type of industry the company is in to, company size, company financial and strategic goals and objectives, the statutory requirements as well as the company leadership requirements, market conditions, the financial and non-financial information available and the possibility to manipulate this information to make decisions.

Reason for the Study:

The study was conducted to evaluate the viability and strategic value of acquiring a synthetic leather manufacturing plant. As synthetic leather has become an increasingly important material in industries such as fashion, automotive, and furniture, the acquisition presents significant opportunities for growth and competitive advantage. The objective was to assess whether this acquisition would yield long-term profitability, align with industry trends, and offer sustainable business opportunities.

Selection of theme:

The theme is selected because of the rising global demand for eco-friendly and sustainable alternatives to genuine leather, along with the growing importance of synthetic materials in various industries. The acquisition of a synthetic leather manufacturing plant represents a strategic decision that could enhance operational capabilities, diversify product offerings, and meet the demands of a rapidly evolving market. The study also allowed for a deep dive into financial analysis, market trends, and operational efficiencies, all of which are critical when evaluating a major business acquisition.

Being employed at DSI during the acquisition of the new synthetic leather plant provided firsthand experience of the entire process, from formulating a plan that aligned with the company's strategic direction to executing it. The involvement in data gathering, forecasting, and financial evaluation during this period inspired the development of this case study.

Analysis Objective:

The objective of the analysis was to conduct a comprehensive project evaluation, which included financial modeling, market analysis, risk assessment, and operational feasibility studies. The outcome of this analysis aimed to determine whether the acquisition was a financially sound decision, capable of generating sustainable returns, and aligning with the company's strategic goals. It also provided a framework for decision-makers, giving them a clear understanding of the potential benefits, risks, and long-term implications of acquiring the synthetic leather manufacturing plant.

Research Question 01:

Is the acquisition of the synthetic leather manufacturing plant a financially sound decision for D. Samson Group of Companies?

Research Question 02:

Can outside financial factors contribute to the deterioration of the calculated financial outcome of the acquisition (Time zone 2020 to 2023)?

In Chapter 2 a literature review is carried out to understand the theoretical aspects and the research, case study aspects of company acquisitions done in the past. Publications, journals and other referencing materials published by previous researchers are evaluated to understand the best application of theories specially in real life case studies and the challenges they have faced in doing so.

In Chapter 3 we briefly introduce Samson Group of Companies and their products mainly focusing on D. Samson Industries (Pvt) Ltd which is the footwear manufacturer of the group. Afterwards we focus on the Synthetic Leather Manufacturing plant acquired and its capabilities. The purpose of this chapter is to provide the reader with a better understanding of the company that underwent the acquisition process, and to emphasize the importance of conducting a thorough

project validation before making any investment decisions. By providing this background information, the report aims to demonstrate the need for a comprehensive analysis of a target company's operations and financial performance before proceeding with an acquisition.

Chapter 4 focuses on the calculations for the Net Present Value, IRR, Sensitivity Analysis, Payback Period and the Synergy Benefit of the company acquisition. Financial forecasts up to 3 years are considered and discussed for these calculations. This chapter presents the expected revenues and expenses through accounting Profit and Loss accounts. The necessary adjustments made to the Accounting Profit and Loss accounts to arrive at cash flows, reasons for such adjustments and the final NPV, IRR and Payback Period calculations for the acquisition. Key variables are adjusted and Sensitivity Analysis is carried out to understand the impact on NPV calculations. Finally, a Synergy Benefit is calculated with an explanation of the indicated figure.

In Chapter 5, we discuss what we have done so far in this work and what we can continue to obtain ongoing validation for the acquisition. Furthermore, this chapter provides guidelines to future work by sensitivity analysis and relooking at the assumptions we made for a more realistic and real time outcome.

Chapter 6 includes the Bibliography underlining all the books, articles, journals, publications and other resource materials used to write the given applied research project.

CHAPTER 2

LITERATURE REVIEW

The acquisition of companies and project evaluations within the corporate landscape has been a subject of extensive research, with numerous studies delving into the intricacies of decision-making, financial assessments, and overall success factors.

Campbell, Stonehouse, & Houston(2002), introduces business strategy and explores different strategic options, including various forms of integration. It covers topics such as backward and forward vertical integration, conglomerate strategies, and horizontal integration, offering insights into how these strategies impact organizational performance and competitiveness. These strategies are highly relevant to evaluating the acquisition of a synthetic leather manufacturing plant, as they offer a framework for understanding how such a move fits within a company's strategic goals. Campbell, Stonehouse, & Houston(2002) goes beyond theoretical discussions by offering practical insights into how the discussed strategies impact organizational performance and competitiveness, which is crucial for assessing the potential benefits of the acquisition, such as improved cost efficiency, supply chain control, and market position enhancement.

Brealey, Myers, & Allen(2020), 13th edition is a comprehensive and authoritative resource that covers essential principles, offers practical applications, and stays current with the dynamic field of corporate finance. The chapter "Mergers, Corporate Control, and Governance" specifically pinpoints sensible and dubious motives for mergers and acquisitions with reasonings and educate on estimating merger gains and costs.

Additionally, the chapter educates on how to estimate merger gains and costs, which is crucial for evaluating the financial viability and long-term benefits of acquiring the synthetic leather manufacturing plant in the case study.

Harding & Rovit(2004), provides insights into the critical decisions that are pivotal in ensuring the success of a merger or acquisition. It draws on extensive research and case studies to offer practical advice on navigating the complexities of company integrations. According to, Harding & Rovit(2004), mastering critical decisions is essential for the success of a merger. A laser like focus on just four key imperatives before executives finalize the deal can dramatically improve the odds of merger and acquisition success. They reveal that the best merger and acquisition performers channel their efforts into (1) targeting deals that advance the core business; (2) determining which deals to close and when to walk away; (3) identifying where to integrate and where not to; and (4) developing contingency plans for when deals inevitably stray. Top deal makers also favor a succession of smaller deals over complex "megamergers" and essentially institutionalize a success formula over time. Helping executives zero in on what matters most in the complex world of merger and acquisition, Mastering the Merger offers a blueprint for the decisions and strategies that will beat the odds. Harding & Rovit (2004) provides practical guidance on the critical decisions that ensure the success of mergers and acquisitions, such as acquiring the synthetic leather manufacturing plant. The emphasis on focusing on deals that align with the core business, knowing when to walk away, and selectively integrating areas of the business can directly inform the evaluation of this acquisition. Additionally, their insights on developing contingency plans and favoring smaller, manageable deals offer valuable strategies for navigating the complexities and risks associated with the acquisition process, ensuring better alignment with DSI's strategic goals.

The evaluation of the success or failure of mergers is derived from a diverse array of sources and viewpoints. Typically, the effectiveness of a merger or acquisition is gauged by considering financial parameters, as demonstrated in studies like that of, Hoskisson, Johnson, & Moesel(1994). Larsson & Finkelstein(1999) introduced additional functional perspectives to enhance the assessment of merger outcomes. Success or failure is measured by strategic management through the achievement of strategic objectives, economics tends to rely on accounting-based metrics, finance employs stock market-based measures, organizational research concentrates on the

integration process post-combination, and human resource management examines psychological aspects, effective communication, and career planning. It's essential to recognize that each of these perspectives mirrors the preferences of a predominant stakeholder. This highly resonates with the case study because it provides a multi-dimensional approach to assessing the acquisition's success. These perspectives—ranging from financial metrics to organizational integration and human resource management—allow for a holistic evaluation of the acquisition's effectiveness. By considering strategic objectives, stock market reactions, and post-merger integration processes, reader can better assess whether the acquisition of the synthetic leather manufacturing plant aligns with DSI's overall business goals and long-term performance.

The financial viability and the success of an acquisition can be measured using several tools. But as the three main investment criteria: Net Present Value (NPV), Internal Rate of Return (IRR), and Payback Period is discussed in, Dai, Li, Wang, & Zhao(2022). It suggests NPV as a primary consideration in conflicts between NPV and IRR. The paper emphasizes the need to consider project sizes, discount rates, and cash flows when choosing between NPV and IRR. This approach ensures a thorough financial assessment, helping to determine if the acquisition aligns with DSI's long-term financial objectives and generates value.

Additional to above tools sensitivity analysis is used to evaluate the potential outcomes and risks of a merger or acquisitions. It involves changing one or more key variables in a financial model and observing how they affect the target valuation, synergies, and returns. Christopher & Patil(2002) provides an examination and assessment of various sensitivity analysis methods aiming to identify and review the strengths and limitations of each approach. The focus is on understanding how these methods contribute to the analysis of risk. This serves as a comprehensive resource for researchers and practitioners involved in sensitivity analysis within the context of risk assessment.

This is directly applicable to the case study, as it allows for a more nuanced understanding of how changes in key variables, such as market conditions or cash

flows, could impact the valuation, synergies, and returns of DSI's acquisition of the synthetic leather manufacturing plant. By assessing these risks, it ensures a more robust financial evaluation and decision-making process.

Macro-economic factors that affect Economic Growth and Industry Trends including GDP growth, inflation, and sector-specific trends, plays a vital role in shaping the synthetic leather industry. according to Mankiw (2020), macroeconomic stability, driven by strong growth rates and controlled inflation, encourages investment in capital-intensive industries. The synthetic leather industry, being a capital-intensive sector, would be positively impacted by such macroeconomic conditions. A stable or growing economy ensures that there is both demand for synthetic leather and that capital is more affordable for businesses. This ties into the thesis by evaluating how the acquisition aligns with broader economic conditions.

Government Policy and Trade is another macro-economic factor that would affect the given case study. Government policies related to taxation, subsidies, and trade agreements can influence the feasibility of an acquisition. As per Dornbusch et al. (2011), favorable trade policies and tariff exemptions for raw materials used in manufacturing could reduce operational costs for a synthetic leather plant. If Sri Lanka or the region has favorable trade agreements that support synthetic leather exports, this can positively impact the plant’s long-term viability, making it a more strategic acquisition.

Environmental Regulations also played a critical role to the success of the given acquisition, The synthetic leather industry often faces strict environmental regulations due to the chemical processes involved in production. Literature from Porter & Van der Linde (1995) suggests that stringent regulations can drive innovation and push industries toward more sustainable practices. This is highly relevant to the acquisition decision, as future environmental policies could affect operational costs and compliance requirements. The study would need to consider potential regulatory risks in its financial forecasts.

At the micro level, understanding the supply and demand for synthetic leather in local and global markets is critical for the given case study. *Samuelson & Nordhaus (2010)* highlight that analyzing the elasticity of demand and the potential for substitute products can guide pricing and production decisions. The acquisition analysis should consider whether demand for synthetic leather is stable, growing, or shrinking, as well as how competitors are positioned in the market. This directly affects future revenue projections and risk assessments for DSI.

In the same context of Micro-Economic Factors, understanding the cost structure of producing synthetic leather and the potential for economies of scale is essential. Literature from *Stigler (1958)* notes that larger operations often benefit from reduced per-unit costs, which can be a strong argument in favor of acquisition if the new plant can scale production efficiently. The thesis would assess whether the acquisition allows the company to benefit from economies of scale, thus improving profitability. Analyzing the fixed and variable costs before and after the acquisition helps determine the financial benefits of the expansion to the company and group at large.

Porter (1985) provides a framework for analyzing the competitive forces that shape an industry, including the threat of new entrants, supplier power, and rivalry among competitors which are important Micro-Economic Factors for the synthetic leather industry. By analyzing competitors, the acquisition could give the company a competitive advantage in terms of production capacity, cost efficiencies, or market reach, which would justify the investment.

Moving from theoretical points to the real-life scenario, DSI enters into synthetic leather manufacturing, 2021) discuss the outlook D. Samson Group of Companies have towards the acquisition of the synthetic manufacturing plant and the future opportunities it will bring along to the company.

CHAPTER 3

SAMSON GROUP OF COMPANIES – GROUP PROFILE AND ITS COMPANIES

In this chapter we discuss about Samson Group of Companies giving special attention to D. Samson Industries (PVT) Ltd, the footwear manufacturer of the Group; their global presence, manufacturing capabilities and the product portfolio in brief. Furthermore, we introduce the Synthetic Leather Manufacturing Plant the Company acquired recently to strengthen their supply chain and the synergies within.

3.1 Samson Group of Companies – Overview

Samson Group of Companies was found by Late Mr. D. S. Rajapaksa initially as a footwear company. But with hard work and persistence the Company now has grown in to a group of companies including footwear, retail and trading, tyres and tube, rubber products, rubber compounding, reclaim rubber, apparel, engineering, brushes, clay tiles, information technology, food, beverages and agriculture, hydro power, services and bikes. Group, Our Sectors(n.d.) Samson group has strengthened their market presence through a diversified company portfolio covering manufacturing and service industries. Initially started as a local business, the Group cater in to local and export market covering more than 40 countries worldwide.

3.2 D. Samson Industries (PVT) Ltd – Overview

D. Samson Industries (Pvt) Ltd known as DSI established in 1962 and the market leader in manufacturing, retailing and also the leading exporters of footwear in Sri Lanka. Group, D Samson Industries (Pvt) Ltd(n.d.) The Company manufactures

footwear for the whole family with products ranging from gent's to ladie's and children's footwear to rubber and EVA slippers; while D. Samson and Sons Ltd. distributes footwear across the island through their network of showrooms and dealers.

DSI is the first shoe manufacturing plant in Sri Lanka to obtain the ISO 9001:2015 certification. DSI product range includes EVA/rubber flip flops, sandals, vulcanized shoes, leather shoes, rubber boots, school shoes, PU sandals, indoor slippers and industrial shoes. The Company currently produces more than 24 million pairs of footwear per year and has a workforce of more than 2,500 employees. DSI footwear is manufactured in 5 large well-designed and modern production facilities with state-of-the-art technology ranging from EVA, PVC/Rubber Injection and Direct Vulcanizing combined with the advanced machinery and tools such as PVC Injection Machines, Polyurethane Machines, EVA Injection Machines, PVC V-Strap Machines, PVC Sole Injection Machines & Hydraulic presses.

All DSI products are REACH complied, meanwhile factory has acquired Fairtrade, GOTS, OCS, VEGAN and FCS certifications along with BSCI and SMETA social compliance certifications.

Company exports its products to more than 40 countries across the world, and is the local representative for international brands, such as Reebok, Fila, Clarks, Puma, Dell and Avira. D. Samson Industries (Pvt) Ltd is the perfect example that a South Asian manufacturer could indeed produce high quality footwear worthy of the most respected and reputed brand names in the world. Company has more than 200 Showrooms and 5,000 Dealers Island wide, positioning themselves among the Sri Lanka's largest family-owned Group of Companies.

Figure 1- D. Samson Industries (Pvt) Ltd factory view- Galle

Source: DSI Facebook

3.3 DSI Synthetic Leather Manufacturing Plant – Overview

D. Samson Industries (PVT) Ltd, a subsidiary of DSI Samson Group Ltd, has entered into synthetic leather manufacturing by acquiring a state-of-the-art production facility in Katana in the Negombo precincts, during a crucial period in which the Government has encouraged Sri Lankan entrepreneurs to take a step forward to invest in the manufacturing industry. DSI enters into synthetic leather manufacturing(2021)

This was part of the business-related integration initiatives under the 2020-2022 strategic plan and a much-needed investment to manufacture the raw materials that is being used for footwear manufacturing. It will also cut down the supply chain and logistics lead time when it comes to sourcing materials while reducing much needed foreign exchange spent on imports of raw materials.

While manufacturing the internal raw material requirements for DSI footwear manufacturing, DSI Synthetic Leather Manufacturing Plant will also cater its full

range for the local footwear manufacturers, upholstery, automotive, bags and stationery sectors in the country as well as export to UK and Europe.

3.4 Benefits to the Group

Samson Group of Companies hope to carry out the acquisition of a Synthetic Leather Manufacturing Plant with the hope of increasing the market penetration to the current Sri Lankan footwear market as well as entering in to new market segments such as Sri Lankan furniture industry, automobile industry, government health care sector, overseas markets as well as for the company own consumption. DSI enters into synthetic leather manufacturing(2021)

As a vertical integration the Group of Companies will benefit from increase revenue in shoe/manufacturing sector as well as in the group. Company will be able to entertain manufacturers' margin on products resulting increase in profitability sector/group. In addition, the Group of Companies will enjoy great advantage in synergy effect as well as additional export revenue to the group.

CHAPTER 4

RESULTS AND DISCUSSION

This chapter focuses on the crucial aspect of calculating the Payback Period, Net Present Value (NPV) for the company acquisition and the Sensitivity Analysis as well as Synergy Benefits. The chapter centers around a comprehensive financial forecast spanning up to 3 years, which forms the basis for these calculations. It delves into the expected revenues and expenses through detailed analysis of Profit and Loss accounts.

This chapter serves as a guide for understanding the financial implications of the company acquisition. It highlights the significance of translating accounting figures into meaningful cash flow projections. Through meticulous analysis of the profit and loss accounts and subsequent adjustments, the NPV calculation offers valuable insights into the profitability and financial viability of the acquisition over the specified time horizon.

By considering the expected revenues, expenses, and cash flows, this chapter provides stakeholders with a comprehensive framework for assessing the financial impact of the company acquisition. It equips decision-makers with quantified information regarding potential returns and risks, enabling them to make informed and strategic choices throughout the acquisition process.

In arriving at below calculations of payback period, NPV and IRR as well as calculating the sensitivity analysis as well as synergy benefits below assumptions has been made to simplify the calculation process, have consistency throughout the project and to incorporate the risk factors as well to accommodate the limitations of the financial tools we use.

Assumptions:

- Company acquisition has been evaluated across maximum of 3 years with the assumption a project lengthier than that will not support the current financial and manufacturing requirements of the Company.
- Revenues, resource utilization and capacity utilization was calculated assuming the company can venture in to below markets: Sri Lankan Footwear Market, Sri Lankan Furniture Industry, Sri Lankan Automotive Industry, Government Health, Tri-forces, Overseas Markets and Own Consumption. DSI enters into synthetic leather manufacturing(2021)
- Revenue and the material consumption will remain the same throughout each financial year of 2021/2022 and 2022/2023 independently.
- Discounted rate of 12% considered based on the past financial rates used by the D. Samson Group of Companies and the relationships the Company has with the financial institutes.
- In average factory overhead cost was assumed to remain the same throughout the time of evaluation.
- Benefits of economies of scale will impact the revenue of the acquisition.
- Certain expenses such as audit fee, training and development can be absorbed by the group of companies without passing it to the new acquisition.
- Due diligence expenses, advisory fees, regulatory and compliance costs have been identified as sunk cost and removed from the calculations.

4.1 Profit and Loss Accounts

Below Table 5.1, Table 5.2, and Table 5.3 show the summary of assumed Profit and Loss Accounts for the acquiring Synthetic Leather Manufacturing Plant for the financial years of 2020/21, 2021/22 and 2022/23.

SYNTHETIC LEATHER PROJECT
PROJECTED MONTHLY WISE INCOME STATEMENT - 2020/2021

Values are in Rs.	2020/21													
	Notes	April	May	June	July	August	September	October	November	December	January	February	March	Total
Revenue	1		42,593,804	51,576,020	68,807,657	68,807,657	68,807,657	75,664,316	75,664,316	75,664,316	75,664,316	75,664,316	75,664,316	754,578,691
Cost Of Material Consumed	2		24,685,973	32,418,974	48,853,436	48,853,436	48,853,436	54,778,487	54,778,487	54,778,487	54,778,487	54,778,487	54,778,487	532,336,179
Contribution Earned		-	17,907,831	19,157,046	19,954,221	19,954,221	19,954,221	20,885,829	20,885,829	20,885,829	20,885,829	20,885,829	20,885,829	222,242,513
Direct Cost - Direct Labour & Power	3	-	2,376,481	2,959,661	5,864,779	5,864,779	5,864,779	5,864,779	5,864,779	5,864,779	5,864,779	5,864,779	5,864,779	58,119,155
Factory Overhead	4	-	2,583,065	2,977,273	3,371,481	3,371,481	3,371,481	3,371,481	3,371,481	3,371,481	3,371,481	3,371,481	3,371,481	35,903,664
Cost Of Sales		-	**29,645,518**	**38,355,908**	**58,089,696**	**58,089,696**	**58,089,696**	**64,014,747**	**64,014,747**	**64,014,747**	**64,014,747**	**64,014,747**	**64,014,747**	**626,358,997**
Gross Profit		-	**12,948,286**	**13,220,112**	**10,717,961**	**10,717,961**	**10,717,961**	**11,649,569**	**11,649,569**	**11,649,569**	**11,649,569**	**11,649,569**	**11,649,569**	**128,219,694**
			30%	26%	16%	16%	16%	15%	15%	15%	15%	15%	15%	17%
Administrative Expenses	5	-	3,961,851	4,237,464	4,513,004	4,513,004	4,513,004	4,513,004	4,513,004	4,513,004	4,513,004	4,513,004	4,513,004	48,816,350
Selling and Distribution Expenses	6	-	1,400,936	1,600,936	1,867,602	1,867,602	1,867,602	1,867,602	1,867,602	1,867,602	1,867,602	1,867,602	1,867,602	19,810,292
Profit / (Loss) from Operations		-	**7,585,499**	**7,381,713**	**4,337,354**	**4,337,354**	**4,337,354**	**5,268,963**	**5,268,963**	**5,268,963**	**5,268,963**	**5,268,963**	**5,268,963**	**59,593,052**
Less : Finance Expenses	7		3,085,121	3,538,855	3,494,231	3,375,507	3,255,785	3,280,043	3,151,690	3,022,259	2,891,739	2,760,123	2,627,401	34,482,756
Net Profit / (Loss) 1 line		-	**4,500,378**	**3,842,858**	**843,123**	**961,847**	**1,081,570**	**1,988,919**	**2,117,272**	**2,246,704**	**2,377,223**	**2,508,839**	**2,641,562**	**25,110,296**
Benefit against import Cost 2 line			**11,925,092**	**11,925,092**	**11,925,092**	**11,925,092**	**11,925,092**	**11,925,092**	**11,925,092**	**11,925,092**	**11,925,092**	**11,925,092**	**11,925,092**	**131,176,008**
Gain from the project			**16,425,470**	**15,767,949**	**12,768,215**	**12,886,939**	**13,006,661**	**13,914,011**	**14,042,364**	**14,171,796**	**14,302,315**	**14,433,931**	**14,566,653**	**156,286,304**
Profit Before Interest			19,510,591	19,306,804	16,262,446	16,262,446	16,262,446	17,194,054	17,194,054	17,194,054	17,194,054	17,194,054	17,194,054	

Table 1-Profit and Loss Account of Year 2020/21 (Year 1)

SYNTHETIC LEATHER PROJECT
PROJECTED MONTHLY WISE INCOME STATEMENT - 2021/2022

Values are in Rs.	Notes	2021/22												
		April	May	June	July	August	September	October	November	December	January	February	March	Total
Revenue	1	87,392,285	87,392,285	87,392,285	87,392,285	87,392,285	87,392,285	87,392,285	87,392,285	87,392,285	87,392,285	87,392,285	87,392,285	961,315,135
Cost Of Material Consumed	2	59,950,787	59,950,787	59,950,787	59,950,787	59,950,787	59,950,787	59,950,787	59,950,787	59,950,787	59,950,787	59,950,787	59,950,787	659,458,658
Contribution Earned		27,441,498	27,441,498	27,441,498	27,441,498	27,441,498	27,441,498	27,441,498	27,441,498	27,441,498	27,441,498	27,441,498	27,441,498	301,856,477
Direct Cost - Direct Labour & Power	3	6,147,847	6,147,847	6,147,847	6,147,847	6,147,847	6,147,847	6,147,847	6,147,847	6,147,847	6,147,847	6,147,847	6,147,847	67,626,318
Factory Overhead	4	3,169,266	3,169,266	3,169,266	3,169,266	3,169,266	3,169,266	3,169,266	3,169,266	3,169,266	3,169,266	3,169,266	3,169,266	34,861,930
Cost Of Sales		**69,267,901**	**69,267,901**	**69,267,901**	**69,267,901**	**69,267,901**	**69,267,901**	**69,267,901**	**69,267,901**	**69,267,901**	**69,267,901**	**69,267,901**	**69,267,901**	**761,946,906**
Gross Profit		**18,124,384**	**18,124,384**	**18,124,384**	**18,124,384**	**18,124,384**	**18,124,384**	**18,124,384**	**18,124,384**	**18,124,384**	**18,124,384**	**18,124,384**	**18,124,384**	**199,368,229**
		21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%
Administrative Expenses	5	4,872,548	4,872,548	4,872,548	4,872,548	4,872,548	4,872,548	4,872,548	4,872,548	4,872,548	4,872,548	4,872,548	4,872,548	53,598,024
Selling and Distribution Expenses	6	1,967,313	1,967,313	1,967,313	1,967,313	1,967,313	1,967,313	1,967,313	1,967,313	1,967,313	1,967,313	1,967,313	1,967,313	21,640,447
Profit / (Loss) from Operations		**11,284,523**	**11,284,523**	**11,284,523**	**11,284,523**	**11,284,523**	**11,284,523**	**11,284,523**	**11,284,523**	**11,284,523**	**11,284,523**	**11,284,523**	**11,284,523**	**124,129,758**
Less : Finance Expenses	7	2,657,031	3,085,121	3,538,855	3,494,231	3,375,507	3,255,785	3,280,043	3,151,690	3,022,259	2,891,739	2,760,123	2,627,401	37,139,787
Net Profit / (Loss) 1 line		**8,627,492**	**8,199,402**	**7,745,668**	**7,790,292**	**7,909,017**	**8,028,739**	**8,004,480**	**8,132,833**	**8,262,265**	**8,392,784**	**8,524,400**	**8,657,122**	**86,989,971**
Benefit against import Cost 2 line		**10,945,235**	**10,945,235**	**10,945,235**	**10,945,235**	**10,945,235**	**10,945,235**	**10,945,235**	**10,945,235**	**10,945,235**	**10,945,235**	**10,945,235**	**10,945,235**	**131,342,818**
Gain from the project		**19,572,727**	**19,144,637**	**18,690,903**	**18,735,527**	**18,854,251**	**18,973,974**	**18,949,715**	**19,078,068**	**19,207,499**	**19,338,019**	**19,469,635**	**19,602,357**	**218,332,789**
Profit Before Interest		22,229,758	22,229,758	22,229,758	22,229,758	22,229,758	22,229,758	22,229,758	22,229,758	22,229,758	22,229,758	22,229,758	22,229,758	

Table 2- Profit and Loss Account of Year 2021/22 (Year 2)

Table 3-Profit and Loss Account of Year 2022/23 (Year 3)

SYNTHETIC LEATHER PROJECT
PROJECTED MONTHLY WISE INCOME STATEMENT - 2022/2023

Values are in Rs.	Notes	2022/23 April	May	June	July	August	September	October	November	December	January	February	March	Total
Revenue	1	112,904,734	112,904,734	112,904,734	112,904,734	112,904,734	112,904,734	112,904,734	112,904,734	112,904,734	112,904,734	112,904,734	112,904,734	1,354,856,814
Cost Of Material Consumed	2	76,390,288	76,390,288	76,390,288	76,390,288	76,390,288	76,390,288	76,390,288	76,390,288	76,390,288	76,390,288	76,390,288	76,390,288	916,683,457
Contribution Earned		36,514,446	36,514,446	36,514,446	36,514,446	36,514,446	36,514,446	36,514,446	36,514,446	36,514,446	36,514,446	36,514,446	36,514,446	438,173,357
Direct Cost - Direct Labour & Power	3	7,076,485	7,076,485	7,076,485	7,076,485	7,076,485	7,076,485	7,076,485	7,076,485	7,076,485	7,076,485	7,076,485	7,076,485	84,917,821
Factory Overhead	4	3,442,741	3,442,741	3,442,741	3,442,741	3,442,741	3,442,741	3,442,741	3,442,741	3,442,741	3,442,741	3,442,741	3,442,741	41,312,898
Cost Of Sales		**86,909,515**	**86,909,515**	**86,909,515**	**86,909,515**	**86,909,515**	**86,909,515**	**86,909,515**	**86,909,515**	**86,909,515**	**86,909,515**	**86,909,515**	**86,909,515**	**1,042,914,176**
Gross Profit		**25,995,220**	**25,995,220**	**25,995,220**	**25,995,220**	**25,995,220**	**25,995,220**	**25,995,220**	**25,995,220**	**25,995,220**	**25,995,220**	**25,995,220**	**25,995,220**	**311,942,638**
		23%	23%	23%	23%	23%	23%	23%	23%	23%	23%	23%	23%	23%
Administrative Expenses	5	4,899,099	4,899,099	4,899,099	4,899,099	4,899,099	4,899,099	4,899,099	4,899,099	4,899,099	4,899,099	4,899,099	4,899,099	58,789,186
Selling and Distribution Expenses	6	2,330,154	2,330,154	2,330,154	2,330,154	2,330,154	2,330,154	2,330,154	2,330,154	2,330,154	2,330,154	2,330,154	2,330,154	27,961,846
Profit/ (Loss) from Operations		**18,765,967**	**18,765,967**	**18,765,967**	**18,765,967**	**18,765,967**	**18,765,967**	**18,765,967**	**18,765,967**	**18,765,967**	**18,765,967**	**18,765,967**	**18,765,967**	**225,191,606**
Less : Finance Expenses	7													(26,667,003)
Net Profit / (Loss) 1 line		**18,765,967**	**18,765,967**	**18,765,967**	**18,765,967**	**18,765,967**	**18,765,967**	**18,765,967**	**18,765,967**	**18,765,967**	**18,765,967**	**18,765,967**	**18,765,967**	**251,858,609**
Benefit against import Cost 2 line		**10,945,235**	**10,945,235**	**10,945,235**	**10,945,235**	**10,945,235**	**10,945,235**	**10,945,235**	**10,945,235**	**10,945,235**	**10,945,235**	**10,945,235**	**10,945,235**	**131,342,818**
Goin from the project		**29,711,202**	**29,711,202**	**29,711,202**	**29,711,202**	**29,711,202**	**29,711,202**	**29,711,202**	**29,711,202**	**29,711,202**	**29,711,202**	**29,711,202**	**29,711,202**	**383,201,427**
Profit Before Interest		29,711,202	29,711,202	29,711,202	29,711,202	29,711,202	29,711,202	29,711,202	29,711,202	29,711,202	29,711,202	29,711,202	29,711,202	356,534,424

A key component of the NPV calculation involves making necessary adjustments to the profit and loss account in order to align it with cash flows. These adjustments are essential for accurately reflecting the actual cash inflows and outflows associated with the acquisition. By incorporating these adjustments, the final NPV calculations are performed, providing a thorough evaluation of the investment.

4.2 Cash Flows

Table 5.4 and Table 5.5 provide the summary details for years 2020/21, 2021/22 and 2022/23 cash flows. Provisions for depreciation of assets and financial cost amendments specifically carried out.

Table 4-Cash Flow Statement of Year 2020/21 (Year 1)

SYNTHETIC LEATHER PROJECT
PROJECTED CASHFLOW STATEMENT - FIRST YEAR

BALANCE SHEET	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Net Profit From Operations		19,510,591	19,306,804	16,262,446	16,262,446	16,262,446	17,194,054	17,194,054	17,194,054	17,194,054	17,194,054	17,194,054
+/- Adjustments												
Depreciation		1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000
Provision		110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000
Changes in Working Capital												
Inventory		10,000,000	(30,000,000)	20,293,127	-	-	(11,850,101)	-	-	-	-	-
Debtors		-	(51,576,020)	(51,635,465)	-	-	(10,284,989)	-	-	-	-	-
Creditors		-	10,000,000	22,568,958	-	-	3,950,034	-	-	-	-	-
Net Cash Generated From Operations	-	30,870,591	-50,909,216	8,849,066	17,622,446	17,622,446	368,999	18,554,054	18,554,054	18,554,054	18,554,054	18,554,054
Investing Activities												
Acquisition		(398,000,000)										
Finance Cost		-	-	-	-	-	-	-	-	-	-	-
Net Cash Flows	-	(398,000,000)	-	-	-	-	-	-	-	-	-	-
Cash at the Beginning of the Year			(367,129,409)	(418,038,625)	(409,189,560)	(391,567,114)	(373,944,668)	(373,575,669)	(355,021,615)	(336,467,560)	(317,913,506)	(299,359,451)
Cash at the end of the Year	-	(367,129,409)	(418,038,625)	(409,189,560)	(391,567,114)	(373,944,668)	(373,575,669)	(355,021,615)	(336,467,560)	(317,913,506)	(299,359,451)	(280,805,397)
Net Cash Flows		30,870,590.68	(50,909,216)	8,849,066	17,622,446	17,622,446	368,999	18,554,054	18,554,054	18,554,054	18,554,054	18,554,054
												117,194,603

Table 5 - Cash Flow Statement of 2021/2022/2023 -Year 2 and Year 3

SYNTHETIC LEATHER PROJECT
PROJECTED CASHFLOW STATEMENT - FIRST YEAR

BALANCE SHEET	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Mar-23
Net Profit From Operations	22,229,758	22,229,758	22,229,758	22,229,758	22,229,758	22,229,758	22,229,758	22,229,758	22,229,758	22,229,758	22,229,758	22,229,758	356,534,424
+/- Adjustments													
Depreciation	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	15,000,000
Provision	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	1,584,000
Changes in Working Capital													
Inventory	(10,344,600)	-	-	-	-	-	-	-	-	-	-	-	(30,786,117)
Debtors	(17,591,953)	-	-	-	-	-	-	-	-	-	-	-	(35,948,714)
Creditors	3,448,200	-	-	-	-	-	-	-	-	-	-	-	10,262,039
Net Cash Generated From Operations	(898,595)	23,589,758	23,589,758	23,589,758	23,589,758	23,589,758	23,589,758	23,589,758	23,589,758	23,589,758	23,589,758	23,589,758	316,645,631
Investing Activities													
Acquisition													
Finance Cost	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Cash Flows	-	-	-	-	-	-	-	-	-	-	-	-	-
Cash at the Beginning of the Year	(280,805,397)	(281,703,992)	(258,114,234)	(234,524,475)	(210,934,717)	(187,344,959)	(163,755,201)	(140,165,442)	(116,575,684)	(92,985,926)	(69,396,168)	(45,806,409)	(22,216,651)
Cash at the end of the Year	(281,703,992)	(258,114,234)	(234,524,475)	(210,934,717)	(187,344,959)	(163,755,201)	(140,165,442)	(116,575,684)	(92,985,926)	(69,396,168)	(45,806,409)	(22,216,651)	294,428,980
Net Cash Flows	(898,595)	23,589,758	23,589,758	23,589,758	23,589,758	23,589,758	23,589,758	23,589,758	23,589,758	23,589,758	23,589,758	23,589,758	316,645,631
												258,588,745	

4.3 Project Evaluation Calculations

Profit and Loss Account – 3 Years

Table 6 - Profit and Loss Account – 3 Years

SYNTHETIC LEATHER PROJECT PROFIT & LOSS ACCOUNT - 3 YEARS			
PROJECT SUMMERY	**Y 1**	**Y 2**	**Y 3**
Capacity	2,200,000	2,400,000	3,600,000
Sales Volume (Mtrs)	1,608,444	2,163,795	2,973,109
Capacity Utilisation	73%	90%	83%
Revenue	**754,578,691**	**961,315,135**	**1,354,856,814**
GP	128,219,694	199,368,229	311,942,638
	17%	21%	23%
Operational Profit	59,593,052	124,129,758	225,191,606
	8%	13%	17%
Net Profit 1	25,110,296	86,989,971	251,858,609
	3%	9%	19%
Net Profit 2	131,176,008	131,342,818	131,342,818
Total Gain from the project	**156,286,304**	**218,332,789**	**383,201,427**

Working Capital
Payback

	Y 1	Y 2	Y 3
Cash Flows at the end of the year	(280,805,397)	(22,216,651)	294,428,980
Net Cash Flows	117,194,603	258,588,745	316,645,631

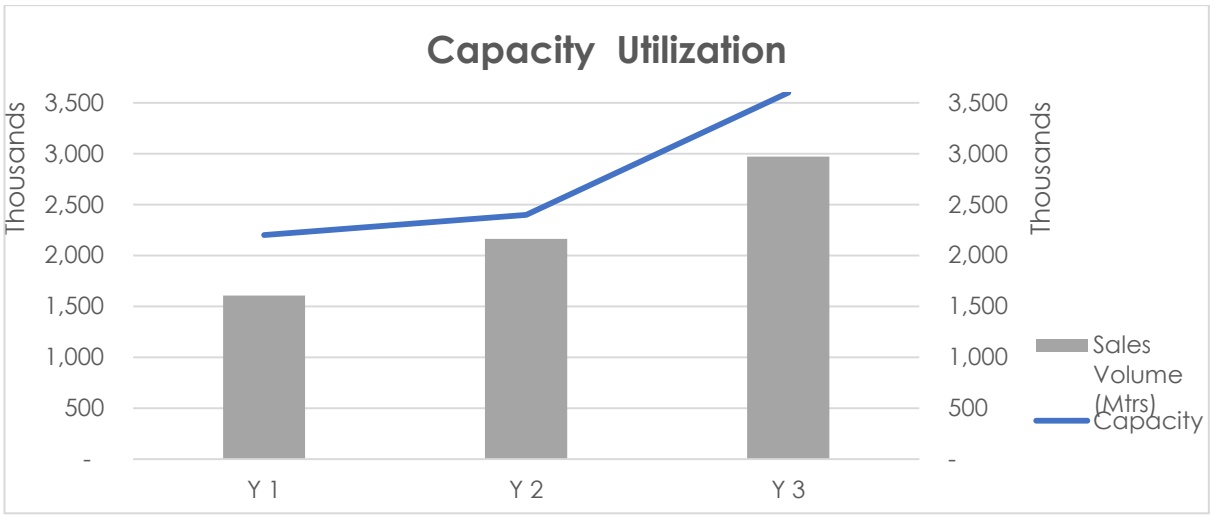

Figure 2 - Capacity Utilization

NPV, IRR and Payback Period

Table 7 - NPV, IRR, Payback Period Summary

Investment	(400,000,000)
Cash Flow Year 01	117,194,603
Cash Flow Year 02	258,588,745
Cash Flow Year 03	343,312,635
Net Cash Flows	719,095,984
Discount Rate	12%
PV of Cash Flows	555,146,556
NPV	**155,146,556**
IRR	**29.91%**
Simple Payback Period	**24 Months and 26 Days (25 Months)**

4.4 Sensitivity Analysis

Sensitivity analysis is carried out changing the variables, the discounted rate and monthly revenue based on mentioned assumptions and the most sensitive factor is identified.

Discount Rate:

D. Samson Industries with its strong financial back up and banking facilities has considered Discounted Rate of Return to be 12%. But with the economic conditions, inflation rates, monetary policy, government fiscal policies and Covid 19 situations of the country the Discounted Rate of Return became one of the most volatile variables during the given time.

According to the International Monetary Fund:

Sri Lanka LK: Discount Rate: End of Period data was reported at 15.000 % pa in 2017. This stayed constant from the previous number of 15.000 % pa for 2016. Sri Lanka LK: Discount Rate: End of Period data is updated yearly, averaging 15.000 % pa from Dec 2002 to 2017, with 16 observations. The data reached an all-time high of 18.000 % pa in 2002 and a record low of 15.000 % pa in 2017. Sri Lanka LK: Discount Rate: End of Period data remains active status in CEIC and is reported by International Monetary Fund. The data is categorized under Global Database's Sri Lanka (Sri Lanka LK: Discount Rate: End of Period)

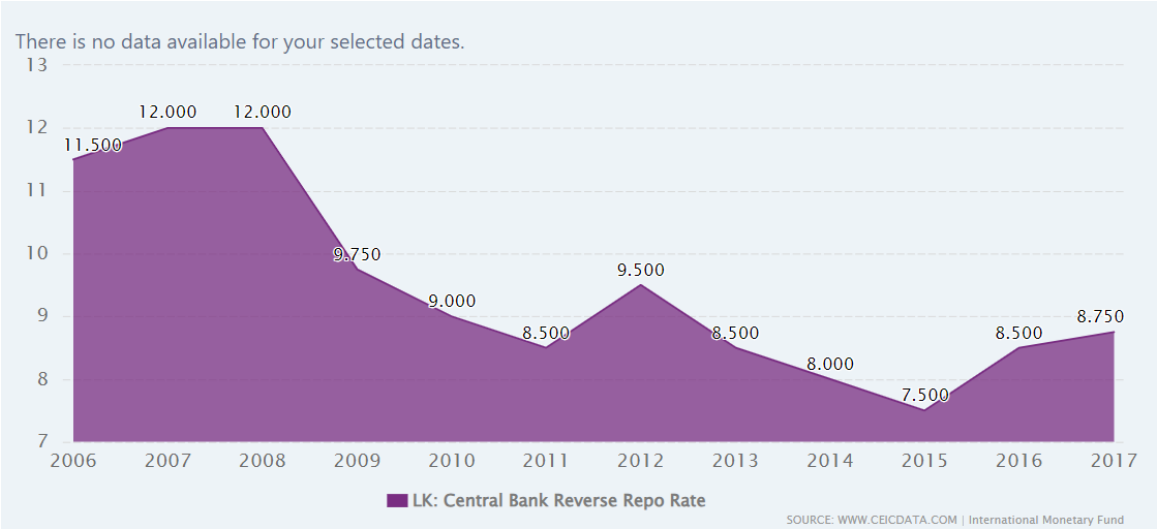

Figure 3 - Central Bank Reverse Repo Rate

Source: International Monitory Fund Website

Hence under the sensitivity analysis, Discounted Rate of Return has been considered as a major variable of change.

NPV calculations has been carried out for the change in discount rates from 12% to 15%, 18% and 20% towards the increasing end as well as 9%, 6% and 4% towards the decreasing end and the change in NPV % has been observed.

Decrease in Discounted Rate

Table 8 - Decrease in Discount Rate/ Sensitivity Analysis

Investment	(400,000,000)
Cash Flow Year 01	117,194,603
Cash Flow Year 02	258,588,745
Cash Flow Year 03	343,312,635
Net Cash Flows	719,095,984
Discount Rate	12%
PV of cashflow	555,146,556
NPV	155,146,556
Discount Rate	9%
PV of cashflow	590,267,303
NPV	190,267,303
Discount Rate	6%
PV of cashflow	628,955,918
NPV	228,955,918
Discount Rate	4%
PV of cashflow	656,970,632
NPV	256,970,632

Increase in Discounted Rate

Table 9 - Increase in Discount Rate/ Sensitivity Analysis

Investment	(400,000,000)
Cash Flow Year 01	117,194,603
Cash Flow Year 02	258,588,745
Cash Flow Year 03	343,312,635
Net Cash Flows	719,095,984
Discount Rate	12%
PV of cashflow	555,146,556
NPV	155,146,556
Discount Rate	15%
PV of cashflow	523,172,223
NPV	123,172,223
Discount Rate	18%
PV of cashflow	493,982,540
NPV	93,982,540
Discount Rate	20%
PV of cashflow	475,913,980
NPV	75,913,980

Change in NPV vs Discount Rate

Table 10 - NPV vs Discount Rate

Change in Discount Rate	Change in NPV
-8%	66%
-6%	48%
-3%	23%
3%	-21%
6%	-39%
8%	-51%

It can be observed that change in discount rate has a significant impact on the change in NPV. This impact increases when the discount rate decreases in a larger slope compared when the discount rate increases. Average 7.298% variation in NPV can be seen for every 1% variation in discount rate.

Revenue:

Sri Lanka is facing considerable economic fluctuations due to countless factors that makes revenue generation a sensitive topic in corporates.

Sri Lanka's total exports for 2023 were 14.49 billion U.S. dollars, a minor decline of 0.39 percent compared to 2022, data from the Export Development Board (EDB) showed on Monday. The EDB said that cumulative merchandise exports in 2023 decreased by 9.54 percent to 11.85 billion dollars, compared to 2022. Sri Lanka's export earnings decline slightly in 2023(2024)

According to csf-asia organization Sri Lanka is facing export crisis due to policy missteps, foreign currency crisis, loss of buyer confidence, fuel crisis, electricity crisis and brain drain; Dahanayake & Wijayasiri(2022) which in return makes revenue a sensitive factor currently for the companies.

Considering all above; sensitivity analysis is carried out to calculate the NPV with % increments and decrements to the revenue.

Sensitivity analysis of Revenue with decremental changes to revenue

Table 11 - Decremental changes to revenue/ Sensitivity Analysis

	Projected Revenue	3% Decrease in Revenue	6% Decrease in Revenue	8% Decrease in Revenue
Investment	(400,000,000)	(400,000,000)	(400,000,000)	(400,000,000)
Cash Flow Year 01	117,194,603	108,176,820	99,159,036	93,147,180
Cash Flow Year 02	258,588,745	231,060,176	203,531,606	185,179,226
Cash Flow Year 03	343,312,635	343,312,635	343,312,635	343,312,635
Net Cash Flows	719,095,984	682,549,630	646,003,276	621,639,041
Discount Rate	12%	12%	12%	12%
PV of cashflow	555,146,556	525,149,356	495,152,156	475,154,022
NPV	155,146,556	125,149,356	95,152,156	75,154,022
Change in Revenue		-3%	-6%	-8%
Change in NPV		-19.33%	-38.67%	-51.56%

Sensitivity analysis of Revenue with incremental changes to revenue

Table 12 - Incremental changes to revenue/ Sensitivity Analysis

	Projected Revenue	3% Increase in Revenue	6% Increase in Revenue	8% Increase in Revenue
Investment	(400,000,000)	(400,000,000)	(400,000,000)	(400,000,000)
Cash Flow Year 01	117,194,603	126,212,387	135,230,171	141,242,027
Cash Flow Year 02	258,588,745	286,117,315	313,645,885	331,998,265
Cash Flow Year 03	343,312,635	343,312,635	343,312,635	343,312,635
Net Cash Flows	719,095,984	755,642,337	792,188,691	816,552,927
Discount Rate	12%	12%	12%	12%
PV of cashflow	555,146,556	585,143,756	615,140,956	635,139,089
NPV	155,146,556	185,143,756	215,140,956	235,139,089
Change in Revenue		-3%	-6%	-8%
Change in NPV		19.33%	38.67%	51.56%

With 3%, 6% and 8% changes in revenue, NPV has changed by 19.33%, 38.67% and 51.56% which shows an average change of 6.4% in NPV for every 1% change in revenue.

4.5 Synergy Calculation

According to the above calculations of the company acquisition by D Samson Industries at discount rate of 12%;

NPV - 155,146,556

Cost of acquisition – 400,000,000

Synergy – (244,853,444)

When the synergy value is negative in a merger, it suggests that the combined entity is expected to be less valuable than the sum of the individual companies operating independently. This can occur when the anticipated benefits of the merger, such as cost savings or revenue enhancements, fail to materialize or are outweighed by integration challenges, risks, or other factors. Gaughan, Mergers, Acquisitions, and Corporate Restructurings(2010)

The negative synergy value of (244,853,444) indicates that even though the acquisition is financially viable according to positive NPV, the Company might not benefit from positive synergy which will put more strain on the practical aspects of the acquisition to actually materialize the positive NPV.

Research Question 01:

Is the acquisition of the synthetic leather manufacturing plant a financially sound decision for D. Samson Group of Companies?

Based on above calculations the positive NPV of Rs 155,146,556/= indicates that the acquisition is expected to generate more cash flow than its acquisition cost, making the acquisition project financially attractive.

The IRR of 30% suggests that the investment's returns exceed the cost of financing, further supporting its viability.

The relatively short payback period of 24 months and 26 days indicates that the initial investment will be recovered relatively quickly. Specially since this fall inside the 3 year window the Company consider when going for the acquisition.
Hence it can be considered that according to the financial analysis of NPV, IRR and Payback Period the acquisition of Synthetic Leather Manufacturing Plant made by D Samson Industries is Financially viable.
But looking at the synergy benefit of LKR (244,853,444/=) it can be assumed that even though the merger is financially viable it doesn't bring any synergetic benefit to the group of companies and from practical point of view, achieving the positive NPV could be challenging.

Looking at sensitivity analysis its visible that the changes in discount rate hold more weightage than the changes in the revenue. Hence the company needs to be more vigilant about the discount rate.

In overall yes, the acquisition of the synthetic leather manufacturing plant is a financially sound decision for D. Samson Group of Companies.

Research Question 02:
Can outside financial factors contribute to the deterioration of the calculated financial outcome of the acquisition (Time zone 2020 to 2023)?

Economic Recession

The time duration considered for the acquisition of the Leather Manufacturing Plant by D Samson Industries, which is 2020 – 2023 has been a financially versatile time

for Sri Lanka. In early 2022, Sri Lankans started experiencing power cuts and shortages of basics such as fuel. The rate of inflation rose to 50% a year. In early 2023 the country introduced income taxes for higher earners, ranging from 12.5% to more than 36%. Perera(2023)

The average monthly household income of a Sri Lankan over the past few years vs the percentage contribution of the income for clothing, textile and footwear has dropped from 5.3% in 2012 to 4.1% in 2019. Household Income and Expenditure Survey – 2012/13(2013)

All above indicate the economic recession or slowdown Sri Lanka is facing resulting in consumer spending and business activity to decline and to impact the acquired company's forecasted sales and profitability, potentially leading to lower cash flows than anticipated.

	2009/10		2012	
	Value (Rs.)	(%)	Value (Rs.)	(%)
Total non-food expenditure	**18,064**	**100.0**	**25,529**	**100.0**
Housing	3,446	19.1	4,533	17.8
Fuel & Light	1,278	7.1	1,724	6.8
Personal care & Health	1,429	7.9	2,228	8.7
Transport	2,317	12.8	3,607	14.1
Communication	755	4.2	891	3.5
Education	1,018	5.6	1,430	5.6
Cultural & entertainment	402	2.2	546	2.1
Household non-durable goods & household Services	362	2.0	552	2.2
Clothing , Textiles & Foot wear	903	5.0	1342	5.3
Durable household	780	4.3	1099	4.3
Other expenses	4,709	26.1	6,837	26.8
Liquor, Drugs and Tobacco	665	3.7	738	2.9

Figure 4 - Average monthly household expenditure by major non-food expenditure groups - 2009/10,2012

Source: Household Income and Expenditure Survey – 2012/13(2013)

Item	2019		2016	
	Value (Rs.)	(%)	Value (Rs.)	(%)
Total non-food	41,000	100.0	35,885	100.0
Housing	8,744	21.3	6,873	19.2
Fuel & Light	2,085	5.1	1,757	4.9
Clothing, Textiles & Foot wear	1,688	4.1	1,581	4.4
Health & Personal care	2,663	6.5	2,529	7.0
Transport & Communication	5,830	14.2	5,548	15.5
Education	2,401	5.9	2,066	5.8
Cultural & entertainment	959	2.3	908	2.5
Non-durable goods	446	1.1	362	1.0
Durable household goods	4,511	11.0	2,261	6.3
Other non-consumer expenditure	10,712	26.1	10,945	30.5
Liquor, Narcotic drugs & Tobacco	960	2.3	1,056	2.9

Figure 5 - Average monthly household expenditure by major non-food expenditure groups - 2019 and 2016

Source: Household Income and Expenditure Survey – 2019/2016

Credit Availability

Fitch Ratings has downgraded Sri Lanka's Long-Term Local-Currency (LTLC) Issuer Default Rating (IDR) to 'C' from 'CC'. The issue ratings on local-currency bonds have also been downgraded to 'C' from 'CC'. The Long-Term Foreign-Currency (LTFC) IDR has been affirmed at 'RD' (Restricted Default) and the Country Ceiling at 'B-'; Fitch Downgrades Sri Lanka's Long-Term Local-Currency IDR to 'C'(2023)

In simple terms, the downgrade of Sri Lanka's Long-Term Local-Currency IDR to 'C' suggests that Fitch Ratings has assessed Sri Lanka's ability to meet its financial obligations in its local currency as highly uncertain or at a significantly high risk of

default. This downgrade could be driven by various factors such as economic challenges, high levels of debt, fiscal concerns, or other macroeconomic issues that have raised concerns about the country's financial stability.

It's important to note that credit ratings are crucial for investors, lenders, and policymakers as they help assess the risk associated with lending money to a country or investing in its securities. A lower credit rating can impact borrowing costs and investor confidence, potentially affecting a country's ability to access international financial markets on favorable terms.

This in return made importing synthetic leather expensive and difficult creating a void in the local market. Local manufactures of footwear and other products using synthetic leather had to seek for local suppliers which helped D Samson Industries Synthetic Leather Manufacturing Plant to have an increased sale in additional to forecasted sales and boost the overall project revenue.

Currency Exchange Rates

“During the year up to 19th August 2022, the Sri Lankan rupee depreciated against the US dollar by 44.5 per cent”, Weekly Economic Indicators(2022).

With the Rupee depreciation there are two implications the country is facing. First, devaluation makes the country's exports relatively less expensive for foreigners. Second, the devaluation makes foreign products relatively more expensive for domestic consumers, which discourages the imports. Both these scenarios worked in favour for the D Samson Industries Synthetic Leather Manufacturing Plant to increase inhouse sales and to create high demand in the overseas markets.

In the given time period of 2020 to 2023 it can be seen that economic recession, currency exchange rates and even credit ratings have worked in favour for the synthetic leather manufacturing plant. Import restrictions have gone creating a gap in the local market and export market has boomed comparatively. Both the points have helped the synthetic leather plant increase its revenue considerably.

CHAPTER 5

CONCLUSION

Company acquisitions are made throughout the history of corporations basing the financial benefits as well as the non-financial benefits. Focusing mainly on the financial benefits, this chapter concludes the viability of the synthetic leather manufacturing plant acquisition made by D Samsons Group of Companies.

In this work we studied the company integrations under mergers and acquisitions, specifically for a vertical integration. We assumed all the non-financial factors relating to a company acquisition will be favorable hence not a factor to determine the success of the acquisition and focused mainly on the financial factors for evaluation. In this work we have used the actual details used by Samson Group of Companies when making the decision to acquire a synthetic leather manufacturing plant. Macro and micro economical situations will remain the same as well as the exchange and interest rates.

Initially we looked at the theoretical aspect of company integrations. We studied various methods of company integrations, reasons for such integrations such as sensible and dubious and pin pointed the type of integration Samson Group of Companies is undergoing relating to acquiring a synthetic leather manufacturing plant. Then we looked at different evaluation methods and processes used to determine the financial viability of a company acquisition with the necessary steps and action steps. We determined NPV, IRR, Payback Period, Sensitivity Analysis and Synergy Benefit as basic numerical methods of evaluation.

In numerical chapter we looked at forecasted company financials for 3 years for the acquired synthetic leather manufacturing plant as well as the production capacity and revenue generations. Three year forecasted Profit and Loss accounts were carefully

depicted and reworked only to showcase the forecasted cashflows which were used in calculating the financial viability of the acquisition.

Through the selected financial calculation tools it was concluded the acquisition of the Synthetic Leather Manufacturing Plant was financially viable to D Samson Group of Companies.

This work can be further improved with higher variables for sensitivity analysis and can be carried out as an ongoing calculation until the company acquisition becomes a financial success in reality.

BIBILIOGRAPHY

1. Barkema, H., & Schijven, M. (2008). How do firms learn to make acquisitions? A review of past research and an agenda for the future. *Journal of Management*, 594-634.
2. Bassiouny, A., Toma, E., Dawood, F., Aljammali, H., Seif El Nasr, S., & Mohy El Din, Y. (2021). Dice manufacturing company: the acquisition decision. *Emerald Emerging Markets Case Studies*, 1-26.
3. Boardman, A., Greenberg, D., & Vining, A. (2018). *Cost-Benefit Analysis: Concepts and Practice.* Cambridge University Press.
4. Bourgeois III, L. (1980). Strategy and environment: A conceptual integration. *Academy of management review, 5(1)*, 25-39.
5. Brealey, R., Myers, S., & Allen, F. (2020). *Principles of Corporate Finance (13th ed.).* New York: NY: McGraw-Hill Education.
6. Campbell, D., Stonehouse, G., & Houston, B. (2002). *Business strategy: an introduction.* Routledge.
7. Capron, L., & Mitchell, W. (2009). Selection capability: How capability gaps and internal social frictions affect internal and external strategic alignment. *Strategic Management Journal*, 1255-1288.
8. Capron, L., & Pistre, N. (2002). When do Acquisitions Relocate Target Corporate Headquarters? *Strategic Management Journal*, 511-527.
9. Christopher, F., & Patil, S. (2002). Identification and review of sensitivity analysis methods. *Risk analysis*, 553-578.
10. Dahanayake, N., & Wijayasiri, J. (2022, August 05). *Impact of Sri Lanka's Economic Crisis on the Exports Sector.* Retrieved from Center for a Smart Future: https://www.csf-asia.org/impact-of-sri-lankas-economic-crisis-on-the-exports-sector-2/
11. Dai, H., Li, N., Wang, Y., & Zhao, X. (2022). The Analysis of Three Main Investment Criteria: NPV IRR and Payback Period. *7th International Conference on Financial Innovation and Economic Development (ICFIED)* (pp. [8] Dai, H., Li, N.,

Wang, Y. and Zhao, X., 2022, March. The Analysis of Three Main Investment Criteria: NPV IRR and Payback P185-189). Atlantis Press.

12. Deloitte. (2019). *Global M&A Trends*. Retrieved from https://www2.deloitte.com/global/en/pages/mergers-and-acquisitions/articles/ma-trends-q2-2019.html

13. *DSI enters into synthetic leather manufacturing.* (2021, February 09). Retrieved from Daily FT: https://www.ft.lk/business/DSI-enters-into-synthetic-leather-manufacturing/34-712865

14. Eckbo, B. E. (2009). Mergers and Acquisitions in the U.S. Economy: An Aggregate and Historical Overview. In B. E. Eckbo, *Handbook of Corporate Finance: Empirical Corporate Finance* (pp. 211-287). Elsevier.

15. Eisenhardt, K. M. (1989). Building Theories from Case Study Research. *Academy of Management Review*, 532-550.

16. Fernando, N. (2021, November 01). *Local industries face higher costs, difficulties in sourcing raw materials and capital goods.* Retrieved from Daily Mirror: https://www.dailymirror.lk/print/business-news/Local-industries-face-higher-costs-difficulties-in-sourcing-raw-materials-and-capital-goods/273-223753

17. *Fitch Downgrades Sri Lanka's Long-Term Local-Currency IDR to 'C'.* (2023, July 05). Retrieved from Fitch Ratings: https://www.fitchratings.com/research/sovereigns/fitch-downgrades-sri-lanka-long-term-local-currency-idr-to-c-05-07-2023

18. Flyvbjerg, B. (2006). Five Misunderstandings About Case-Study Research. In C. Seale, G. Gobo, J. Gubrium, & D. Silverman, *Qualitative Research Practice* (pp. 390-404). Sage Publications.

19. Gaughan, P. A. (2010). *Mergers, Acquisitions, and Corporate Restructurings.* John Wiley & Sons.

20. Gaughan, P. A. (2010). *Mergers, Acquisitions, and Corporate Restructurings (5th ed.).* John Wiley & Sons.

21. Group, D. S. (n.d.). *D Samson Industries (Pvt) Ltd*. Retrieved from DSI Samson Group: https://www.dsi.lk/en/mens-womens-childrens-footwear-manufacturer-exporter-dsi.html

22. Group, D. S. (n.d.). *Our Sectors*. Retrieved from DSI Samson Group: https://www.dsi.lk/en/sectors

23. Haass, O., & Guzman, G. (2019). Understanding Project Evaluation – A Review and Reconceptualization. *International Journal of Managing Projects in Business*.

24. Harding, D., & Rovit, S. (2004). *Mastering the merger: Four critical decisions that make or break the deal.* Harvard Business Press.

25. Haspeslagh, P., & Jemison, D. (1991). *Managing Acquisitions: Creating Value Through Corporate Renewal.* Free Press.

26. Hoskisson, R., Johnson, R., & Moesel, D. (1994). Corporate divestiture intensity in restructuring firms: Effects of governance, strategy, and performance. *Academy of Management journal*, 1207-1251.

27. (2013). *Household Income and Expenditure Survey – 2012/13.* Department of Census & Statistics. Retrieved from Household Income and Expenditure Survey – 2012/13.

28. Jayasuriya, S. (2020, February 9). *Footwear industry gears to meet 80% of local needs.* Retrieved from Sunday Observer: https://archives1.sundayobserver.lk/2020/02/09/business/footwear-industry-gears-meet-80-local-needs

29. Jensen, M., & Ruback, R. (1983). The Market for Corporate Control: The Scientific Evidence. *Journal of Financial Economics*, 5-50.

30. Kaplinsky, R., Shams, R., & Webb, D. (2020). COVID-19 and corporate bankruptcy. *Journal of Corporate Law Studies*, 251-279.

31. Larsson, R., & Finkelstein, S. (1999). Integrating strategic, organizational, and human resource perspectives on mergers and acquisitions: A case survey of synergy realization. *Organization Science*, 1-26.

32. Lazonick, W. (1992). Controlling the Market for Corporate Control: The Historical Significance of Managerial Capitalism. *Industrial and Corporate Change*, 445-488.

33. *M&A Integration: How to do it.* (2020). Retrieved from PwC : https://www.pwc.com/us/en/services/consulting/library/mergers-acquisitions/merger-integration.html

34. *M&A Value Creation: The Keys to Success.* (n.d.). Retrieved from McKinsey & Company: https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/ma-value-creation-the-keys-to-success

35. Macher, J., & Richman, B. (2008). Transaction cost economics: An assessment of empirical research in the social sciences. *Business and Politics*.

36. Miles, M., & Huberman, A. (1994). *Qualitative Data Analysis: An Expanded Sourcebook (2nd ed.).* Sage Publications.

37. Mody, A., Srinivasan, T., & Wheeler, T. (2012). Financial Globalization and the Revival of the IPO Market. *IMF Economic Review*, 372-403.

38. Osborne, M. J. (2010). A resolution to the NPV–IRR debate? *The Quarterly Review of Economics and Finance*, 234-239.

39. Perera, A. (2023, March 29). *Sri Lanka: Why is the country in an economic crisis?* Retrieved from BBC: https://www.bbc.com/news/world-61028138

40. Peterson, P., & Fabozzi, F. (2002). *Capital Budgeting: Theory and Practice.* John Wiley & Sons.

41. Resnik, D. B. (2015). *What is Ethics in Research & Why is it Important?* National Institutes of Health.

42. Shapiro, C. (2010). Corporate Governance and Securities Class Actions. In B. E. Eckbo, *Handbook of Corporate Finance: Empirical Corporate Finance* (pp. 1-51). Elsevier.

43. Shleifer, A., & Vishny, R. (2003). Stock market driven acquisitions. *Journal of Financial Economics*, 295-311.

44. Siems, M. M. (2007). Shareholder Protection Around the World ('Leximetric II'). *European Business Organization Law Review*, 343-373.

45. Mankiw, N.G. (2020). Macroeconomics. Worth Publishers.

46. Dornbusch, R., Fischer, S., & Startz, R. (2011). Macroeconomics. McGraw-Hill Education.

47. Porter, M.E., & Van der Linde, C. (1995). Toward a New Conception of the Environment-Competitiveness Relationship. Journal of Economic Perspectives, 97-118.

48. *Sri Lanka LK: Discount Rate: End of Period.* (n.d.). Retrieved from CEIC: https://www.ceicdata.com/en/sri-lanka/money-market-and-policy-rates-annual/lk-discount-rate-end-of-period

49. *Sri Lanka's export earnings decline slightly in 2023.* (2024, January 31). Retrieved from Sunday Island: https://island.lk/sri-lankas-export-earnings-decline-slightly-in-2023/#:~:text=Sri%20Lanka's%20total%20exports%20for,billion%20dollars%2C%20compared%20to%202022.

50. Stake, R. E. (1995). *The Art of Case Study Research.* Sage Publications.

51. Talvitie, J., Renfors, M., & Lohan, E. (2015). *Distance-based Interpolation and Extrapolation Methods for RSS-based Localization with Indoor Wireless Signals.* Trepo: Tampere University.

52. Weber, Y., & Shenhar, A. (1998). The Role of Cultural Clustering in Innovation. *Academy of Management Journal, 41(6),* 607-619.

53. (2022). *Weekly Economic Indicators.* Statistics Department, Central Bank of Sri Lanka.

54. Yin, R. K. (2018). *Case Study Research: Design and Methods (5th ed.).* Sage Publications.

55. Samuelson, P.A., & Nordhaus, W.D. (2010). Economics. McGraw-Hill Education.

56. Stigler, G.J. (1958). The Economies of Scale. Journal of Law and Economics, 54-71.

57. Porter, M.E. (1985). Competitive Advantage: Creating and Sustaining Superior Performance. Free Press.