



RATHINAM EDUCATIONAL INSTITUTIONS



CHENDUR PUBLISHING HOUSE
CHENNAI



PROCEEDINGS OF ICSSR-SRC SPONSORED ONE DAY NATIONAL SEMINAR ON
“GREEN FINANCE FOR A VIKSIT BHARAT”

“GREEN FINANCE FOR A VIKSIT BHARAT”

RATHINAM COLLEGE OF ARTS & SCIENCE

(An Autonomous Institution Affiliated to Bharathiar University, Accredited by NAAC with A+ (3.60 CGPA) in 3rd cycle, NIRF Ranked, Approved by AICTE and recognized by UGC under sections 2(f) & 2(b). Recognized under CBT STAR College Scheme by DBT, Ministry of DBT, Govt. of India, Meenambakkam Campus, Coimbatore, Tamilnadu, 641021. www.rathinamcollege.ac.in / info@rathinam.in / 0422-4040906



Proceedings of
ICSSR-SRC SPONSORED ONE DAY NATIONAL SEMINAR ON
“GREEN FINANCE FOR A VIKSIT BHARAT”



EDITED BY
Dr. B. Geethpriya
Dr. T. M. Hemalatha
Dr. G. Arut Geevitha

Proceedings of the
**INDIAN COUNCIL OF SOCIAL SCIENCE RESEARCH SOUTHERN
REGIONAL CENTRE (ICSSR-SRC)**



Sponsored

**One-Day National Seminar on
GREEN FINANCE FOR A VIKSIT BHARAT**

29th January 2025

Editors

Dr.B. Geethpriya

Dr.T.M. Hemalatha

Dr.G. Arut Geevitha

Organized By

SCHOOL OF COMMERCE

RATHINAM COLLEGE OF ARTS AND SCIENCE

(An NIRF Autonomous Institution affiliated to Bharathiar University,
Recognized by UGC under 2(f) & 12 B and Star College Scheme by DBT,
Accredited by NAAC with A++ (3.60 CGPA) In 3rd Cycle and Approved by AICTE)

Rathinam Techzone, Eeachanari, Coimbatore-641021, Tamil Nadu.

<http://www.rathinamcollege.ac.in> email:info@rathinamcollege.in

Title	: ICSSR-SRC Sponsored One Day National Seminar on Green Finance for a Viksit Bharat
Editors	: Dr.B. Geethpriya Dr.T.M. Hemalatha Dr.G. Arut Geevitha
Published and Printed by	: Chendur Publishing House, Chennai Mobile: +91 8838702557
ISBN	: 978-81-984034-0-7

Copyright 2025 by Chendur Publishing House

All right reserved. Authorized reprint of the edition published by Chendur Publishing House. No part of this book may be reproduced in any form without the written permission of the publisher. Limits of liability/disclaimer of warranty: The authors are solely responsible for the contents of the paper in the volume. The publishers or editors do not take any responsibility for the same in any manner. Errors, if any, are purely unintentional and readers are required to communicate such errors to the editors or publishers to avoid discrepancies in future. No warranty may be created or extended by sales or promotion materials. The advice and strategies contained herein may not be suitable for every situation. The work is sold with the understanding that the publisher is not engaged in rendering legal, accounting or other provisional services. If professional assistance is required, the services of a competent professional person should be sought. Further, should be aware that internet website listed in this work may have changed or disappeared between when this was written and when it is read.

Chendur Publishing House also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books.

S.No	Topic	Page Number
1	GREEN BOND MARKET TRENDS AND INVESTOR BEHAVIOUR: OPPORTUNITIES AND CHALLENGES Dr. R.Manickam	5
2	THE ROLE OF GREEN VENTURE CAPITAL IN DRIVING SUSTAINABLE STARTUPS IN INDIA Dr.S. Balasubramanian	10
3	GREEN BONDS AND THE TRANSITION TO A LOW-CARBON ECONOMY Dr.S.N.Suresh	15
4	INTEGRATING GREEN FINANCE INTO TRADITIONAL INVESTMENT PORTFOLIOS Dr.K P V Sabareesh	20
5	THE EVOLUTION OF GREEN FINANCE AND IMPACT INVESTING: CHALLENGES AND OPPORTUNITIES IN EMERGING Dr. T.M. Hemalatha	26
6	EMPLOYEES' PERCEPTION TOWARDS WORKFORCE AGILITY IN SMALL SCALE MANUFACTURING INDUSTRIES Dr .V.T Dhanaraj	32
7	GREEN FINANCE AND ITS IMPACT ON INVESTING Dr.G.Arut Geevitha	39
8	A STUDY ON THE FUTURE OF GREEN BONDS ON PAVING THE WAY FOR SUSTAINABLE FINANCE Dr.A.Saravanakuma	47
9	TECH-DRIVEN SUSTAINABILITY AND THE ROLE OF DIGITAL INNOVATION IN GREEN FINANCE Dr.N.Rajendran	53
10	INVESTMENT STRATEGIES FOR GREEN VENTURE CAPITAL Dr.T.Mohana Sundari	60
11	GREEN FINANCE AND IMPACT INVESTING Ms.D.Saranya	67
12	A STUDY ON GREEN BONDS INVESTMENT STRATEGIES Dr.R.Ramya	75
13	GREEN BONDS IN INDIA: CATALYZING SUSTAINABLE DEVELOPMENT AMIDST CHALLENGES Dr.D.Divya	80
14	INVESTMENT STRATEGIES FOR SOCIAL IMPACT FUND Ms.Varshini V & Ms.Lohitha K	87
15	AN ANALYSIS OF THE ROLE OF SUSTAINABLE TOURISM IN THE ECONOMIC DEVELOPMENT OF LAKSHADWEEP ISLAND Mrs. Supriya Das.T	92
16	INNOVATIVE STRUCTURES FOR GREEN BONDS Mrs. Suganya.K	100
17	INNOVATIVE STRUCTURE FOR GREEN BONDS Y S Irine Jiji & Arch David B I	106
18	GREEN FINANCE AND IMPACT OF INVESTING Ms. Athulya K	115
19	AN OVERVIEW TOWARDS THE ROLE OF VENTURE CAPITAL Dr.M.Deepa	123

AN OVERVIEW TOWARDS THE ROLE OF VENTURE CAPITAL

Dr.M.Deepa, Assistant Professor,

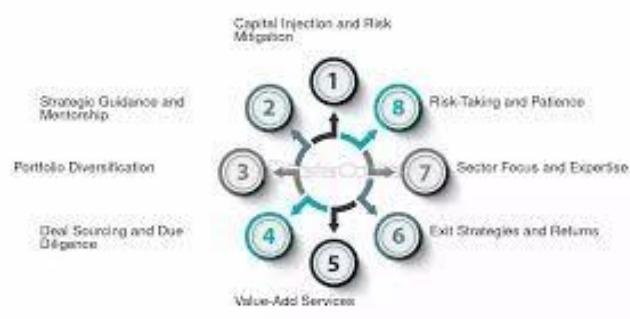
NGM College,Pollachi - 642001

I.INTRODUCTION

At the start of the last decade, venture capital (VC) investments in clean energy experienced a boom and bust. From 2005 to 2008, the share of venture capital investments going to clean energy technologies more than tripled before falling in subsequent years. Today, once more, billions of dollars are pouring into green businesses. We argue that this renewed interest in clean technologies warrants further study of the initial failure of VC in this sector. Years have passed since the original assessments of the cleantech bust (Gaddy, Sivaram, Jones, & Wayman, 2017; Nanda, Younge, & Fleming, 2015), and greater data availability today allows us both to draw a more complete picture and to contemplate the possibility of success for this new wave of green venture capital investment. Moreover, providing support for green startups remains a popular policy tool.

In 2016, California created the Energy Innovation Ecosystem to support clean technology ventures, which includes seed funding through California Sustainable Energy Entrepreneur Development Initiative (CalSEED) awards. Similarly, the NY Green Bank, founded in 2014, leverages private sector financing to increase clean energy investments (Popp, 2020). The potential success of these initiatives depends on why early venture capital efforts failed. If issues such as high capital intensity or long delays between initial investment and commercialization create additional barriers for clean energy to raise funds, government financing can help bridge that gap. But if these investments are not successful because of a lack of demand for clean energy, government investments in these startups will be no more successful than private-sector VC investments.

Understanding the Role of Venture Capital Firms



II.TYPES OF VENTURE CAPITAL

- Pre-Seed: This is the earliest stage of business development when the startup founders try to turn an idea into a concrete business plan. They may enroll in a business accelerator to secure early funding and mentorship.
- Seed Funding: This is the point where a new business seeks to launch its first product. Since there are no revenue streams yet, the company will need VCs to fund all of its operations.
- Early-Stage Funding: Once a business has developed a product, it will need additional capital to ramp up production and sales before it can become self-funding. The business will then need one or more funding rounds, typically denoted incrementally as Series A, Series B, etc.

III.ANGEL INVESTORS

Venture capital can be provided by high net-worth individuals (HNWIs), also often known as angel investors, or venture capital firms. The National Venture Capital Association is an organization composed of venture capital firms that fund innovative enterprises.⁷

Angel investors are typically a diverse group of individuals who have amassed their wealth through a variety of sources. However, they tend to be entrepreneurs themselves, or recently retired executives from business empires. The majority look to invest in well-managed companies, that have a fully-developed business plan and are poised for substantial growth.

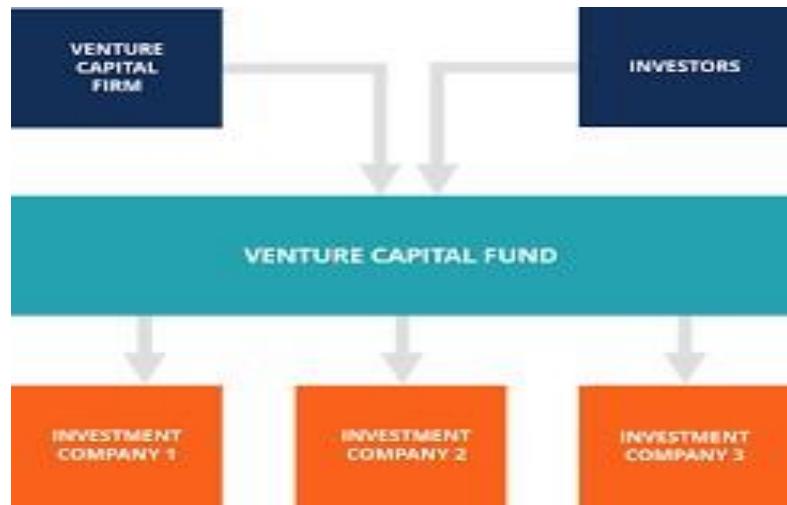
These investors are also likely to offer to fund ventures that are involved in the same or similar industries or business sectors with which they are familiar. Another common occurrence among angel investors is co-investing, in which one angel investor funds a venture alongside a trusted friend or associate, often another angel investor.

IV.VENTURE CAPITAL SUCCESS

Due to the industry's proximity to Silicon Valley, the overwhelming majority of deals financed by venture capitalists occurred in the technology industry—the internet, healthcare, computer hardware and services, and mobile and telecommunications. In 2023, San Francisco still ranked highest among VC investments.⁸ While technology dominates VC funding, other industries have also benefited from VC funding. VC has matured over time and the industry comprises an assortment of players and investor types who invest in different stages of a startup's evolution.

Regarding VC success rates, it's important to note that venture capital is a high-risk, high-reward investment strategy. According to research more than 75% of venture-backed startups fail

to return investors' capital, and less than 75% of startup founders receive anything at all upon exit. Indeed, the majority of VC-backed firms fail, with only 5-7% of all investments accounting for the majority of returns. VC firms generate most of their returns from only a small number of successful "home runs" that produce excess returns. While the average VC fund returns can be upwards of 15% annually, the median VC-backed startup fails to return investor capital.

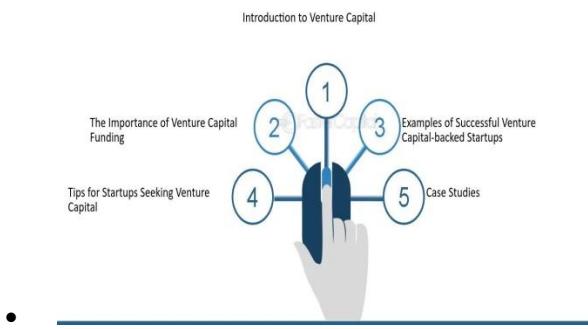


V. VENTURE CAPITAL INVESTMENTS

- Apple: In 1978, Apple received \$250,000 in VC funding from Sequoia Capital and Arthur Rock. This early investment helped Apple develop its first mass-market personal computer, the Apple II.
- Google: In 1998, Google received \$100,000 from angel investor Andy Bechtolsheim. Shortly after, Sequoia Capital and Kleiner Perkins invested a combined \$25 million, which helped Google develop its search engine technology.
- Facebook: In 2005, Accel Partners invested \$12.7 million in Facebook at a roughly \$100 million valuation. This investment helped Facebook expand beyond college campuses and become a global social network.
- Amazon: In 1995, Amazon received \$8 million in Series A funding from Kleiner Perkins. This early investment helped Amazon build its initial infrastructure and expand its product offerings beyond books.

- Uber: In 2011, Uber raised \$11 million in Series A funding led by Benchmark Capital. This investment helped Uber expand its ride-hailing service to new cities and develop its technology platform.
- Coinbase: In 2013, Andreessen Horowitz led Coinbase's \$25 million Series B funding round, which helped the company become one of the largest cryptocurrency exchanges globally

The Role of Venture Capital in Financing Startups



VI.ROLE OF VENTURE CAPITAL

1. Increase Business Activities

One of the benefits of venture capital that is quite important is to help increase business activity. Without realizing the capital injection provided by investors, it helps startup companies move more actively. So this of course leads to the creation of good and optimal business dynamics. Where the increased business activity means that it leads to more optimal business profits and income as well

2. Better Business Potential



Venture capital can be a better business potential for the future. Because, through the capital provided, a business can carry out a predetermined plan to be able to get better. Therefore, it is quite common if capital acquisition will usually be immediately utilized by business owners

to expand their business. In this case, startup companies use capital from investors to innovate better. In the end, the business becomes more advanced and better. With this progress, of course, profits will also be higher.

3. Gaining Bank Trust

The indirect injection of funds also helps to provide better and higher confidence in the bank. Generally, only good companies can receive some funds from investors. Therefore, the existence of venture capital brings benefits for startup businesses to be more trusted by many banks. So when you need loan assistance in the future it will also be easier.

4. Optimal Marketing

Another function of venture capital is help to support more optimal marketing. A good marketing system is at the heart of a business. Similarly, most startup businesses certainly need to be supported by the right marketing methods. Through the capital of investors, supporting optimal marketing will certainly be more likely.

5. Rentability



Venture capital illustration. (source: Freepik)

The last benefit of venture capital for startup businesses, especially for their development, is obtaining better rentability. Where through this one mechanism, startup companies will be easier to reduce the required production costs. So, of course, this leads to better company profits in the future.

Those are all the main role of venture capital mainly for the startup business. The information above at least can describe how much important is venture capital. Mainly if connected to a startup business that wants to grow better. In conclusion, any business that wants to develop bigger will need to consider this venture capital in their business.

VII.FEATURES OF VENTURE CAPITAL

Some of the features of venture capital are –

- Not for large-scale industries – VC is particularly offered to small and medium-sized businesses.
- Invests in high risk/high return businesses – Companies that are eligible for VC are usually those that offer high return but also present a high risk.
- Offered to commercialise ideas – Those opting for VC usually seek investment to commercialise their idea of a product or a service.
- Disinvestment to increase capital – Venture capital firms or other investors may disinvest in a company after it shows promising turnover. The disinvestment may be undertaken to infuse more capital, not to generate profits.
- Long-term investment – VC is a long-term investment, where the returns can be realised after 5 to 10 years.

ADVANTAGES AND DISADVANTAGES OF VENTURE CAPITAL

- Help gain business expertise : One of the primary advantages of venture capital is that it helps new entrepreneurs gather business expertise. Those supplying VC have significant experience to help the owners in decision making, especially human resource and financial management.
- Business owners do not have to repay: Entrepreneurs or business owners are not obligated to repay the invested sum. Even if the company fails, it will not be liable for repayment.
- Helps in making valuable connections: Owing to their expertise and network, VC providers can help build connections for the business owners. This can be of immense help in terms of marketing and promotion.
- Helps to raise additional capital: VC investors seek to infuse more capital into a company for increasing its valuation. To do that, they can bring in other investors at later stages. In some cases, the additional rounds of funding in the future are reserved by the investing entity itself.
- Aids in upgrading technology: VC can supply the necessary funding for small businesses to upgrade or integrate new technology, which can assist them to remain competitive.

DISADVANTAGES

- **Reduction of ownership stake**

The primary disadvantage of VC is that entrepreneurs give up an ownership stake in their business. Many a time, it may so happen that a company requires additional funding that is

higher than the initial estimates. In such situations, the owners may end up losing their majority stake in the company, and with that, the power to make decisions.

- **Give rise to a conflict of interest**

Investors not only hold a controlling stake in a start-up but also a chair among the board members. As a result, conflict of interest may arise between the owners and investors, which can hinder decision making.

- **Receiving approval can be time-consuming**

VC investors will have to conduct due diligence and assess the feasibility of a start-up before going ahead with the investment. This process can be time-consuming as it requires excessive market analysis and financial forecasting, which can delay the funding.

- **Availing VC can be challenging**

Approaching a venture capital firm or investor can be challenging for those who have no network.

In 2019, the total value of venture capital deployed throughout India was worth \$10 billion. This is an increase of 55% compared to the previous year and is currently the highest.

VC was introduced in the country back in 1988, after economic liberalisation. IFC, ICICI, and IDBI were the few organisations that established venture capital funds and targeted large corporations. The formalisation of the Indian VC market started only after 1993.

REFERENCES

1. Gaddy, B. E., Sivaram, V., Jones, T. B., & Wayman, L. (2017). Venture Capital and Cleantech: The wrong model for energy innovation. *Energy Policy*, 102, 385–395.
<https://doi.org/10.1016/j.enpol.201>