

B.A. (VS) MATERIALS MANAGEMENT
DSE 6.1: Supply Chain Finance

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Supply Chain Finance DSC: 6.3	4	3	1	-	Pass in Class XII	NIL

Learning Objectives:

Supply Chain Finance is a specialized field that focuses on managing financial aspects within the supply chain, including the flow of funds, working capital optimization, risk management, and collaboration between various stakeholders. This course aims to provide students with a comprehensive understanding of supply chain finance principles, practices, and strategies to enable effective decision-making and value creation in the context of supply chain management.

Learning outcomes:

After completion of the course, learners will be able to:

1. explore the financial aspects of supply chain management and their impact on Financial performance in an organization.
2. analyze the risks and challenges associated with supply chain finance and develop strategies to mitigate them.
3. identify the different sources of financing available for supply chain operations and to optimize working capital and improve cash flow within the supply chain.
4. examine the role of technology and digitalization in supply chain finance.
5. develop skills in financial analysis, forecasting, and financial modeling for supply chain decision-making develop the collaboration and coordination among supply chain partners for effective financial management.

Unit 1: Introduction to Supply Chain Finance

9 hours

Definition and scope of supply chain finance, Evolution and importance of supply chain finance, Key stakeholders and their roles in the supply chain finance ecosystem, Trends and challenges in supply chain finance, Financial Aspects of Supply Chain Management, Financial flows in the supply chain: procurement, production, transportation, and distribution, Working capital

management and its impact on supply chain performance. Cost of capital and its implications for supply chain decision-making, Financial performance metrics in supply chain management

Unit 2: Risk Management in Supply Chain Finance

9 hours

Identification and assessment of supply chain risks, Strategies for managing supply chain risks through financial instruments, Insurance and hedging techniques in supply chain finance, Supply chain resilience and its relationship with risk management

Unit 3: Financing Strategies in Supply Chain Operations

9 hours

Traditional and alternative sources of financing for supply chain activities, Factoring, invoice discounting, and supply chain finance platforms, Capital structure decisions and supply chain financing options, Government initiatives and programs to support supply chain finance

Unit 4: Working Capital Optimization and Cash Flow Management

9 hours

Inventory management and optimization techniques, Accounts payable and accounts receivable management, Cash conversion cycle and its impact on supply chain liquidity, Techniques for improving cash flow within the supply chain. Role of technology in automating financial processes in the supply chain, Integration of supply chain and financial systems

Unit 5: Financial Analysis and Forecasting in Supply Chain Finance

9 hours

Financial statement analysis for supply chain performance evaluation, Forecasting techniques for demand, costs, and cash flows, financial modelling and simulation for supply chain decision-making, Sensitivity analysis and risk assessment in financial forecasts

Collaboration and Coordination in Supply Chain Finance: Collaborative planning, forecasting, and replenishment (CPFR), Vendor-managed inventory (VMI) and collaborative financing models, Cross-functional integration and coordination among supply chain partners, Building trust and effective communication in supply chain finance relationships

Exercise

1. Company XYZ is a manufacturer that sources raw materials from multiple suppliers and distributes finished products to various retailers. They are interested in implementing supply chain finance practices to optimize their financial operations. Define supply chain finance and discuss its scope, highlighting how it can benefit Company XYZ in their procurement, production, transportation, and distribution processes.
2. The supply chain finance department of a multinational corporation is responsible for managing the financial aspects of their global supply chain. The team consists of key stakeholders, including suppliers, logistics providers, and financial institutions. Describe the roles and responsibilities of each stakeholder in the supply chain finance ecosystem, and explain how their collaboration is crucial for effective financial management.

3. A manufacturing company wants to protect itself from potential losses due to fluctuations in commodity prices. Discuss the insurance and hedging techniques available in supply chain finance that can help the company manage the financial risks associated with volatile commodity markets. Provide examples to support your answer.
4. A company is considering implementing a supply chain finance platform to improve its working capital management. Explain the concept of factoring, invoice discounting, and supply chain finance platforms. Assess the potential benefits and challenges the company may encounter by adopting these financing strategies.
5. A company wants to implement collaborative planning, forecasting, and replenishment (CPFR) with its suppliers and retailers to improve supply chain efficiency. Explain the concept of CPFR and discuss the potential benefits and challenges associated with its implementation. Provide recommendations for building effective collaboration and coordination among supply chain partners.

Suggested Readings

- Bals, L., & Tate, W. L. (Eds.). (2017). Handbook of strategic supply chain management. Springer.
- Bowersox, D. J., Closs, D. J., & Cooper, M. B. (2013). Supply chain logistics management. McGraw-Hill Education.
- Cai, W., & Song, D. P. (Eds.). (2016). Supply chain finance and blockchain technology: The case of reverse securitisation. Palgrave Macmillan.
- Fabbe-Costes, N., Jahre, M., Roussat, C., & Vallet, F. (Eds.). (2016). Advances in production management systems. Initiatives for a sustainable world: IFIP WG 5.7 International Conference on Advances in Production Management Systems, APMS 2016, Iguassu Falls, Brazil, September 3–7, 2016, Proceedings, Part I. Springer.
- Harland, C. M., Lamming, R. C., & Cousins, P. D. (Eds.). (2017). Handbook of supply chain management. Routledge.
- Hugos, M. H. (2018). Essentials of supply chain management. John Wiley & Sons.
- Mangan, J., Lalwani, C., & Lalwani, C. L. (2022). Global logistics and supply chain management. John Wiley & Sons.
- Rogers, D. S., & Tibben-Lembke, R. S. (2018). Going backwards: Reverse logistics trends and practices. Reverse Logistics Magazine.
- Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. (2014). Designing and managing the supply chain: Concepts, strategies, and case studies. McGraw-Hill Education.

Notes:

- **Suggested readings shall be updated and uploaded on the college website from time to time.**
- **Examination scheme and mode shall be prescribed by the Examination branch, University of Delhi from time to time.**