UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

# Economic Interdependencies in Supply Chains

**2627-2-E3304M009-E3304M009-1**

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### Learning objectives

Recent years have witnessed remarkable changes in the world economy and the nature of trade.
During the first wave of globalization, trade was an “inter-industry” phenomenon, relying on comparative advantages and involving different goods and different countries. Then, under the second wave of globalization, trade became “intra-industry”, meaning that similar countries exchanged similar goods exploiting increasing returns to scale in imperfectly competitive markets. Nowadays, most trade is neither inter-industry nor intra-industry: It is “intra-firm”, in that it takes place within the boundaries of multinational enterprises. Indeed, a new feature of globalization is the increasing interconnectedness of production processes in a vertical trading chain that stretches across many countries, with each country specializing in a particular stage of production, rather than manufacturing final goods from start to finish. “Outsourcing”, “global value chain”, “disintegration of production” are just a few labels for the same phenomenon of vertical specialization that pushes modern firms toward a global structure. This evidence clearly begs for new analytical tools to model trade flows and interpret recent empirical evidence.
This course addresses economic interdependencies in supply chains through a balanced mix of theoretical and applied classes.

These are the intended learning outcomes:

Knowledge and Understanding
Students will acquire an in-depth understanding of theoretical and empirical models on the economics of supply chains. By the end of the course, they will know: theories of international trade; advanced economic frameworks to study supply chains; key concepts regarding outsourcing, integration, and foreign direct investment.

Applying Knowledge and Understanding
Students will learn to apply economic theory to real-world business and regulatory problems. They will be able to: formulate and solve formal economic models regarding global sourcing and supply chains; utilize quantitative and empirical methods to evaluate sourcing strategies and firm-level performance.

Making Judgements

Students will develop the analytical skills to critically evaluate supply chains. They will be able to: assess the main drivers of global sourcing decisions; analyze the complex relationship between supply chains and firm-level performance.

Communication Skills
Students will effectively articulate complex economic concepts to both specialized and non-specialized audiences. They will demonstrate the ability to: draft rigorous economic and policy reports; present analytical findings, research papers, and case study evaluations in collaborative environments.

Learning Skills
Students will develop a rigorous methodology to study economic interdependencies in supply chains. This will be an essential skill for their future career inside and outside university. By the end of the course, they will be able to: independently read, interpret, and review advanced academic literature and working papers in International Economics; apply rigorous analytical tools to understand new evolving market dynamics.

## Contents

The course introduces students to the main theoretical models and empirical applications in the economics of supply chains.

## Detailed program

Theories of international trade
Intra-firm trade
Multinational firms and foreign direct investment
Global sourcing and global value chains
Global sourcing and firm-level performance

## Prerequisites

This course requires preliminary notions in Microeconomics and Mathematics.

## Teaching methods

This course is based on frontal lectures and e-tivity. A balanced mix of in presence and online classes will be provided, with the latter amounting to 30% of the course approximately.

## Assessment methods

This course ends with a written exam, based on open questions and exercises on the programme covered in class.

The exam is intended to assess problem solving capacities and competencies on the economics of supply chains.

## Textbooks and Reading Materials

Essential readings:

Barba Navaretti G. and A. Venables (2006), "Multinational Firms in the World Economy", Princeton University Press

Krugman P., Obstfeld M. and M. Melitz (2023), "International Economics: Theory and Policy", Pearson

Ponte S., Gereffi G. and G. Raj-Reichert (2019), "Handbook on GLobal Value Chains", Edward Elgar Publishing

Additional readings are suggested in class.

## Semester

Second semester.

## Teaching language

English.

## Sustainable Development Goals

INDUSTRY, INNOVATION AND INFRASTRUCTURE | RESPONSIBLE CONSUMPTION AND PRODUCTION