KEY ISSUES IN SUPPLY CHAINS: MARKET-BASED GOVERNANCE

Lecture 9

EAS 501

Tuesday, September 23, 2025

Key Issues in Supply Chains

Module #2: Key Issues in Supply Chains				
Tues, Sept 16 Lecture 7	Sustainability and Supply Chains	O'Rourke (2014)	•Lecture •Discuss readings	Overview of challenges and foci
Thurs, Sept 18 Lecture 8	Traceability vs. Opacity	Fripp et al (2023); Zu Ermgassen et al (2022)	•Lecture •Discuss readings	Strategies for traceability
Tues Sept. 23 Lecture 9	Market-based Governance	Lambin et al (2018)	•Lecture •Discuss readings	Key governance mechanisms and strategies
Thurs, Sept 25 Lecture 9	Certification	TBD	•Lecture •Discuss readings	Private Sector Initiatives
Tues, Sept. 30 Lecture 10	Government-Led: EUDR (Guest lecture: Charlotte Sedlock)	Chandra et al (2024)	•Lecture •Discuss readings	Multilateral government efforts
Thurs, Oct 2	Scope 3 Emissions	Stenzel and Waichman (2023)	•Lecture Discuss readings	GHG supply chain accounting
Tues, Oct 7	Midterm Exam Review	No Required Reading	•Review material for exam	
Thurs Oct 9	Midterm Exam	No required reading	•Multiple choice and short answer exam	MIDTERM

Structure

- Overview of Market-based governance
- Lambin et al article
- Pair up to analyze an initiative and representative case in more detail.

Market-based Environmental Governance

Regulatory mechanism	Concept	Market component	Role of the state
Green taxes	Individuals or firms participate in “greener” behavior by avoiding more costly “brown” alternatives.	Incentivized behavior.	Sets and collects taxes.
Cap and trade	Total amount of pollutant or other “bad” is limited and tradable rights to pollute are distributed to polluters.	Rewarding efficiency.	Sets limits and enforces contracts.
Green consumption	Individual consumers choose goods or services based on their certified environmental impacts, typically paying more for more benign commodities.	Willingness to pay.	Oversees and authenticates claims of producers and sellers.

Green Consumerism

"Purchasing of products that are purportedly environmentally friendlier or less harmful than their alternatives; a model of environmental production that relies on consumer choices to change the behavior of firms or industries rather than regulation." – Robbins et. al, 2010.

‘Ethical’ Consumption or ‘Green’ Consumerism

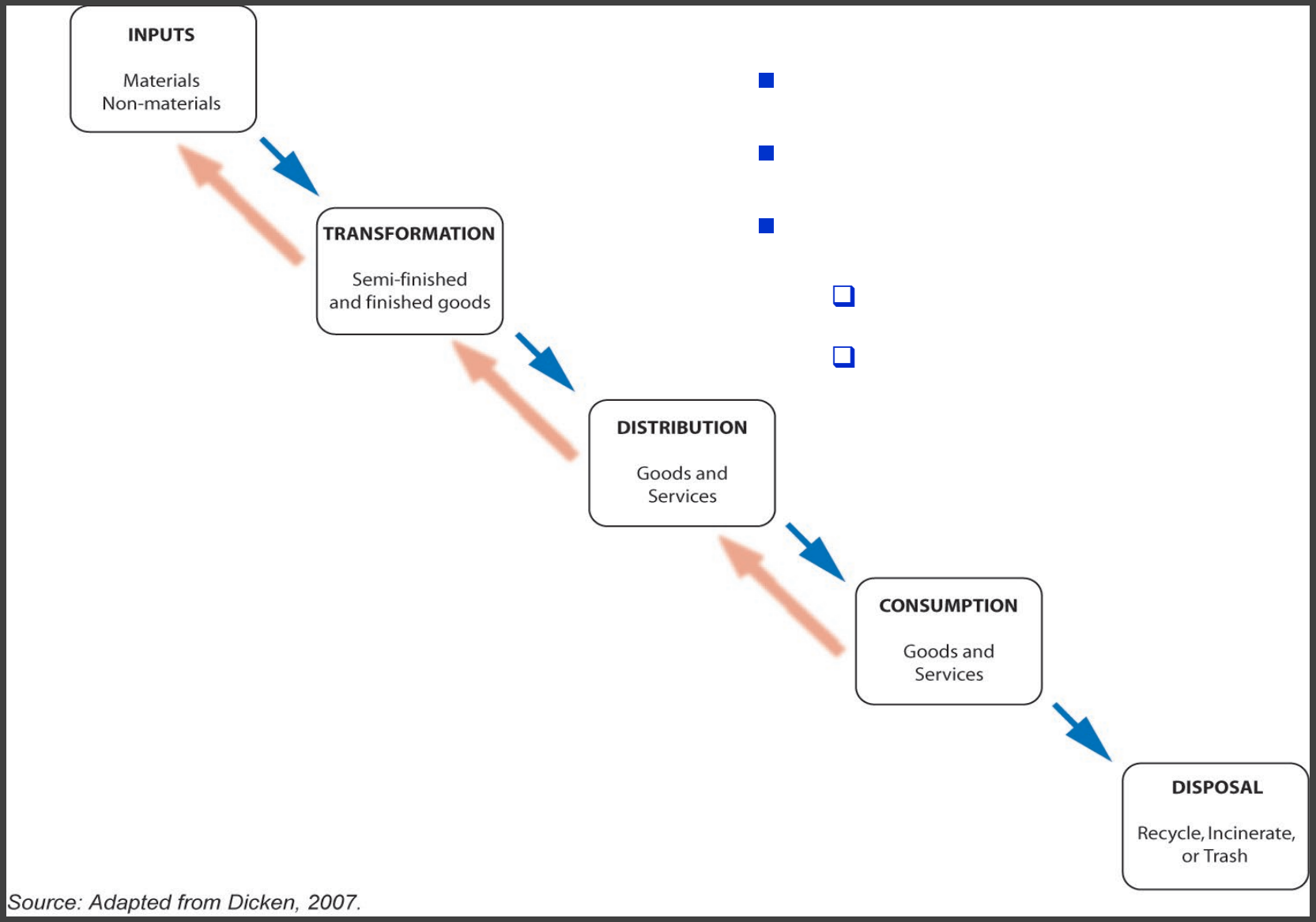
Three features

- Harness the power of consumer to rescale governance
- Promise to bridge distance through transparency
- Standards of varying rigor

Two threads

- Establish ‘new’ alternative trade networks
  - Enable communities
- Reform existing commodity flows by inserting standards (e.g. Nike, Home Depot)

Global Commodity Chain Theory



Source: Adapted from Dicken, 2007.

Fordism vs. Post-Fordism

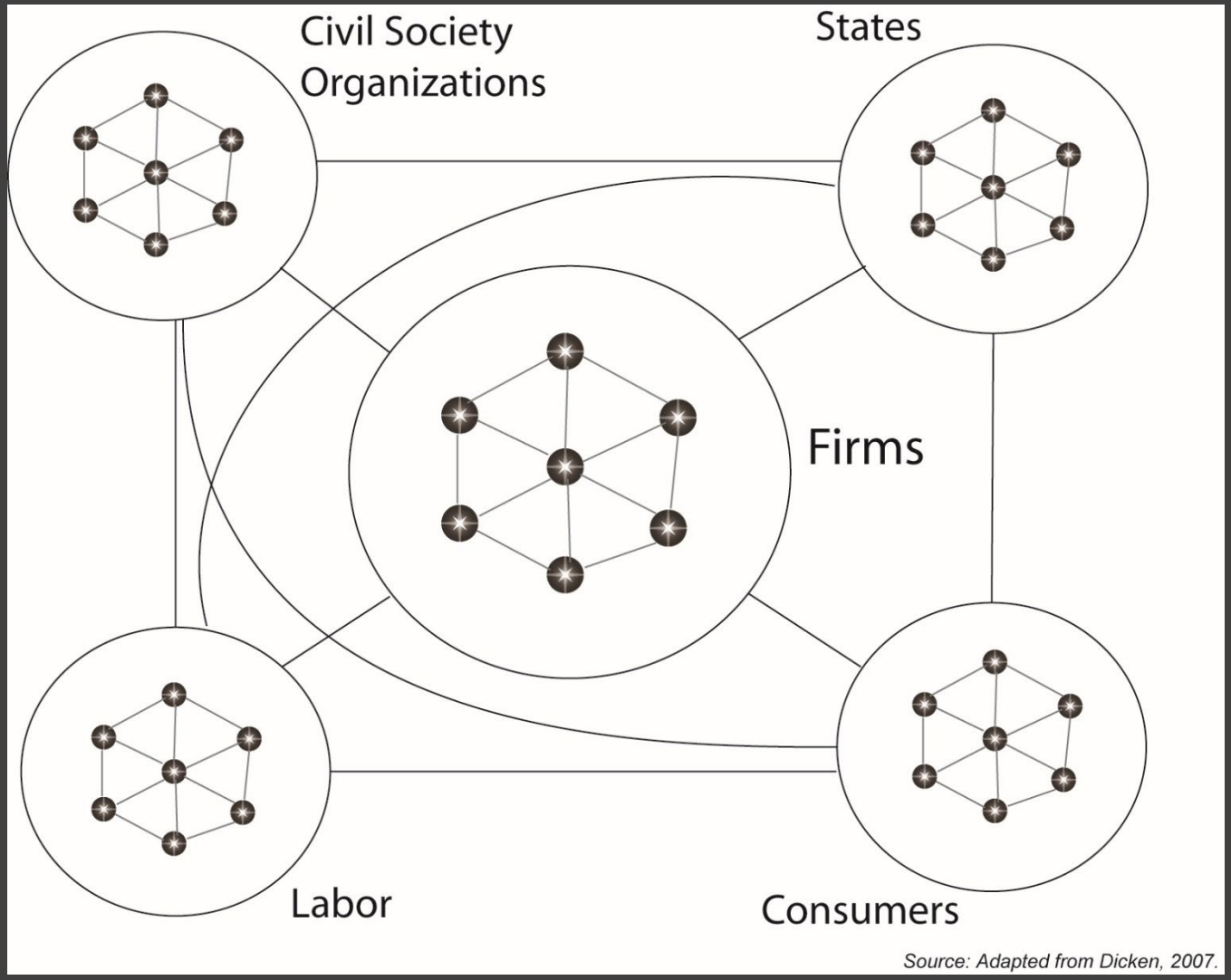
- Fordism

Relations of production in the first several decades of 20th Century; large, vertically integrated corporations, high wages and rates of consumption, and considerable state power

- Post-Fordism

Current relations of production in most industrialized countries; marked by decentralized, specialized, and often subcontracted production, prominence of transnational corporations and diminished state power

“Movers and Shapers” in Transnational Production (Consumption) Networks



THE ROLE OF SUPPLY-CHAIN INITIATIVES IN REDUCING DEFORESTATION

Lambin, Gibbs, Heilmayr, Carlson, Fleck, Garrett, le Polain de Waroux, McDermott, McLaughlin, Newton, Nolte, Pacheco, Rausch, Streck, Thorlakson & Walker

Nature Climate Change (2018) – Perspective

Why this matters

- Deforestation drives climate change and biodiversity loss.
- Private-sector efforts ("zero-deforestation") have surged across major commodities (palm, timber & pulp, soy, cattle, cocoa).
- Key questions: What initiatives exist? Are they effective? Where do they fall short? What public–private mixes work best?

Supply Chain Initiatives To Promote Zero Deforestation

Table 2 | Characteristics of the main supply chain initiatives used to promote zero deforestation

Initiative		Examples	Approach	Opportunities	Challenges*
Collective aspirations		Consumer Goods Forum, TFA2020, and 2014 New York Declaration on Forests	Broad, collective objective by a group of stakeholders	Potential to affect multiple commodities and regions	On their own, may lack accountability and fail to provide a clear path for implementation
Company pledges		Zero deforestation commitments by Wilmar, GAR, APP, Unilever, Cargill and McDonald	Establish and communicate a company's commitment to reducing deforestation	Combine a vision of change with clear accountability	Uncertain implementation, sometimes vague criteria and timeline
Codes of conduct		Approved supplier lists, and Unilever's Responsible Sourcing Policy	Set internal policies for production and sourcing practices	Provide actionable steps to reduce deforestation, tailored to a specific company's needs	May overlook perspectives of other stakeholders; often low transparency; difficult to monitor or verify. Potential for misaligned incentives to pass suppliers
Sectoral standards	Incentives	Certification programmes for sustainable production of palm oil, soy and sugarcane (developed by Roundtables or by certification bodies — for example, the Sustainable Agriculture Network)	Standardize sustainable production practices across participants; enable the assignment of market access or price premiums	If sufficiently stringent, changes behaviour at the property level; may address sustainability broadly	May reward those who comply easily (little additionality); unlikely to influence large regions
	Sanctions	Brazil's soy and cattle moratoria	Identify practices to be discouraged through market penalties by other actors within the supply chain	May reduce deforestation in a large region or biome for specific commodities; easy to monitor and communicate	Risk of leakage to other geographies and commodities: may shift patterns of clearing without stopping deforestation overall

*In general, and unless efforts are made to mitigate harm to local communities, these initiatives risk having disproportionately negative impacts on small-scale producers due to their dependence on local resources and unclear land rights in forest frontiers.

Collective aspirations

- Examples: New York Declaration on Forests (NYDF), Consumer Goods Forum, TFA2020.
- Pros: broad legitimacy, potential to influence many regions/commodities.
- Limits: weak accountability, limited implementation pathways without follow-through.

Company pledges

- Public commitments to eliminate deforestation in operations/supply chains.
- Often commodity-specific and variably defined (zero, zero-net, zero-illegal).
- Implementation gaps: many pledges lack clear timelines, definitions, and verification.

Codes of conduct (company-level implementation)

- Internal sourcing/production rules (approved supplier lists, no-buy from hot spots, audit programs).
- Potential: actionable, tailored steps to reduce deforestation.
- Evidence: limited transparency; mixed results without third-party oversight; audits can miss violations.

Sectoral standards – incentives

- Certification schemes (FSC/PEFC, RSPO, RTRS, etc.).
- Standardize criteria; facilitate market access/premiums; broader sustainability beyond forests.
- Evidence: mixed; some cases show reduced deforestation or fire, others minimal effects; adoption bias common.

Sectoral standards – sanctions

- Market-exclusion mechanisms (e.g., Soy Moratorium; Zero-Deforestation Cattle Agreements; Chile timber standard).
- Pros: fast to implement, easy to communicate/monitor; can reduce deforestation in target biomes.
- Risks: leakage across geographies/commodities; monitoring indirect suppliers is hard.

Evidence highlights

- Soy Moratorium (Brazil): soy expansion over forests declined alongside stronger public enforcement.
- Cattle Agreements (Brazil): direct suppliers monitored; enrollment in rural registry increased.
- RSPO (Indonesia): reduced deforestation/fire in some contexts; often fewer forests left to clear in certified areas.
- FSC outcomes: varied—Chile/Indonesia positive; Mexico/Cameroon/Peru limited.
- Coffee certifications: yield and good practices improved; landscape tree cover increased in some regions.
- Overall: implemented supply-chain rules can shift behavior but are insufficient alone.

Core challenges

- Leakage: production shifts to unregulated places or other commodities; laundering via indirect suppliers.
- Low & selective adoption: voluntary programs taken up by actors already near compliance.
- Smallholder impacts: risk of exclusion or consolidation without safeguards and support.

Supportive Public Policies

1. Supporting legal reforms and enforcement: credible threat of sanctions; align private standards with law.
2. Reform of Land tenure: essential for linking suppliers to land use; guard against tenure reforms that spur clearing.
3. Reaching marginal/domestic forest users: PES and targeted support to high-impact groups.

Scaling scope & adoption

4. Broadening scope of interventions.

   Broaden coverage across geographies, commodities, and tiers (indirect suppliers).

   Jurisdictional approaches (e.g., province/state-wide certification pilots).

- Share costs/risks across value chains; stepwise entry for producers; mix monetary and non-monetary incentives.

Traceability & transparency

- Invest in monitoring/verification (public data infrastructures; satellite systems; registries).
- Complement with NGO/third-party platforms (e.g., supply-chain transparency tools) when state capacity is limited.
- Balance detail vs. scale; ensure data validation, interoperability, and open access where feasible.

Demand-side levers

- Public procurement, investor standards, labeling, and consumer campaigns.
- Broaden leadership beyond Europe to emerging economies to expand markets for verified deforestation-free goods.

Conclusion

Private commitments are necessary but not sufficient.

Measurable reductions require enforceable company actions + sectoral standards, backed by public policy.

Policy mixes must minimize leakage, raise adoption, protect smallholders, and enable credible monitoring.

Class Discussion

- Form pairs – Choose an initiative type (aspiration, pledge, code, standard) aimed at reducing or eliminating deforestation. Then choose a case study to explore the effectiveness of the initiative. Be prepared to present to the class after.
- If you want, you can choose the compare strategy. For example, Soy Moratorium vs. RSPO, to understand the trade-offs and leakage risks.
- If time permits, consider how the role of the state and government policy in making these initiatives more or less effective.