

# Supply Chain Resilience

30 June 2020

Innovate,  
Impact,  
Inspire!



LUXEMBOURG CENTRE FOR LOGISTICS AND SUPPLY CHAIN MANAGEMENT



MIT GLOBAL SCALE NETWORK

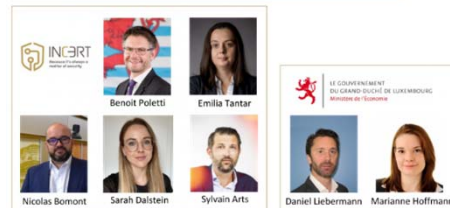


FACULTY OF LAW, ECONOMICS AND FINANCE

## Task Force



- Unprecedented global disruptions
- Supply and demand shocks
- Objectives:
  - Local effects
  - Lessons learned
  - How to prepare?



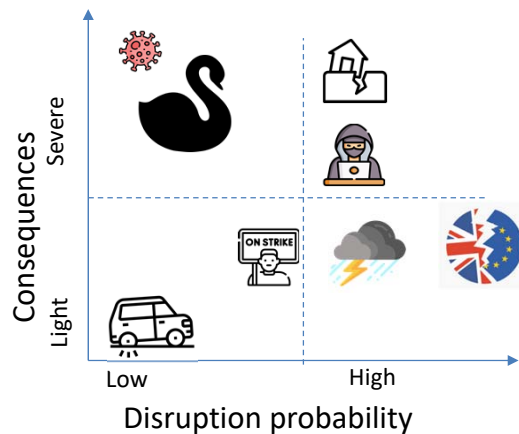
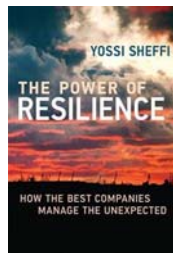
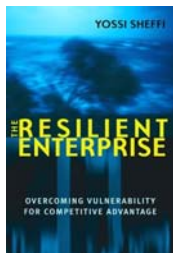
# Some local observations

-  Sectorial shift
-  Staffing
-  Liquidity
-  Coordination & consolidation
-  Business resumption plan
-  Supply chain risk analysis

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# Resilience: First steps

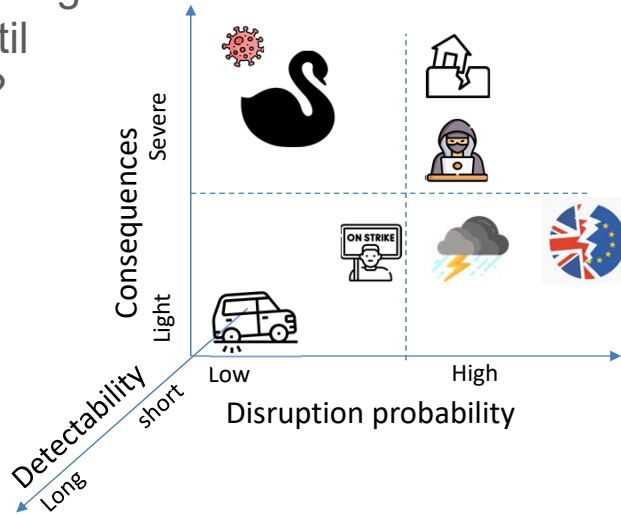
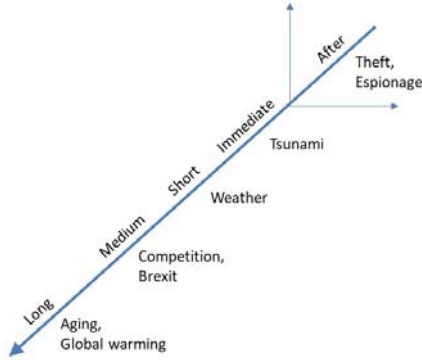
- Educate
- Map supply chains
- Identify and quantify risks
- Prepare responses



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# Resilience: Detectability

From the moment of sensing:  
how long does it take until  
the impact occurs/is felt?



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# Understanding supply chains

**Legend**

**Globalization:**

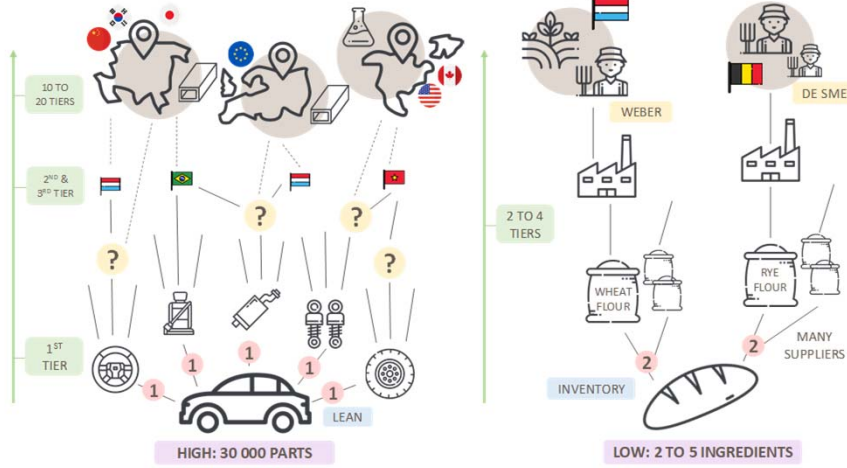
**Transparency:**

**Length of SC:**

**Narrowness:**

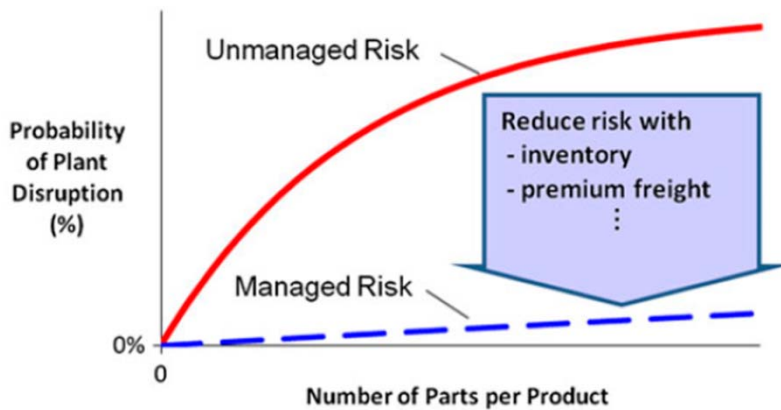
**Slack/Lean:**

**Complexity:**



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# Why Complexity?






Source: Inman and Blumenfeld (2014)

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# Understanding supply chains

## Legend

<b>Globalization:</b>	Reshoring pertinent activities	<b>Automation/ digitization:</b>
<b>Transparency:</b>	Gain more visibility into upstream activities	<b>Embrace technologies</b>
<b>Length of SC:</b>	Shorten the supply chain	  
<b>Narrowness:</b>	Alternative/additional suppliers	<b>Coordination:</b>
<b>Slack/Lean:</b>	Balance lean and safety buffers	<b>Communicate to reach stability</b>
<b>Complexity:</b>	Simplify products	

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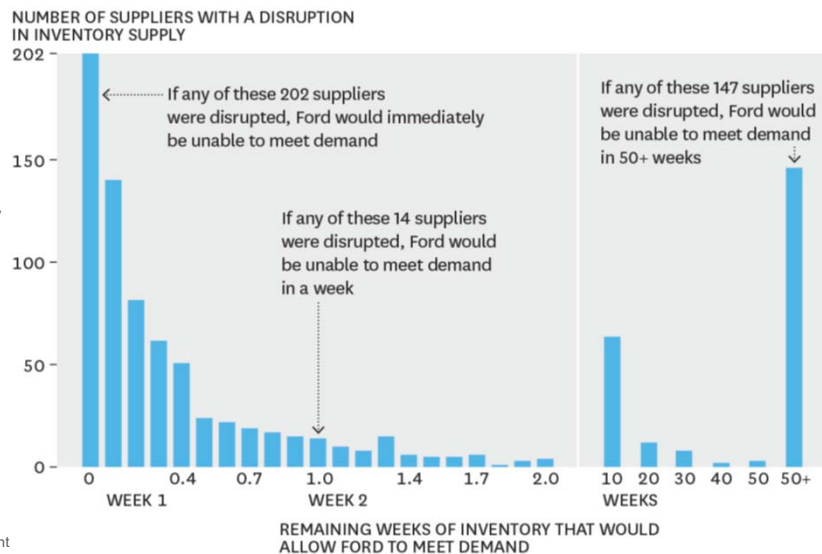
# Mapping your supply chain

- Identify nodes
- Stress test
- For each node:
  - Time to recovery
  - Time to survive
  - Objective:  $TTS > TTR$

Source: Simchi Levi (2015, 2020)

## Time to Survive

A closer look at what a disruption could do to Ford's\* supply chain.



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## In conclusion

- Supply chains are inherently complex
- Embrace resilience
- Identify the right levers

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**Thank you!**  
Any questions?



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