# Resilience and Public Policy

Quentin Grafton

Public Policy Fellow

(quentin.grafton@anu.edu.au)

6 June 2013

# Overview

I. Resilience, Systems and Networks

II. Resilience and Public Policy

III. Resilience Thinking

# I. Resilience, Systems and Networks

# Resilience Concepts

**(1) Impact Resilience**

"…the *capacity* of a **system** to absorb a **disturbance** and reorganise while undergoing change so as to still retain the same function, structure, identity and feedbacks."

[greater the persistence and ability to adapt, more resilience]
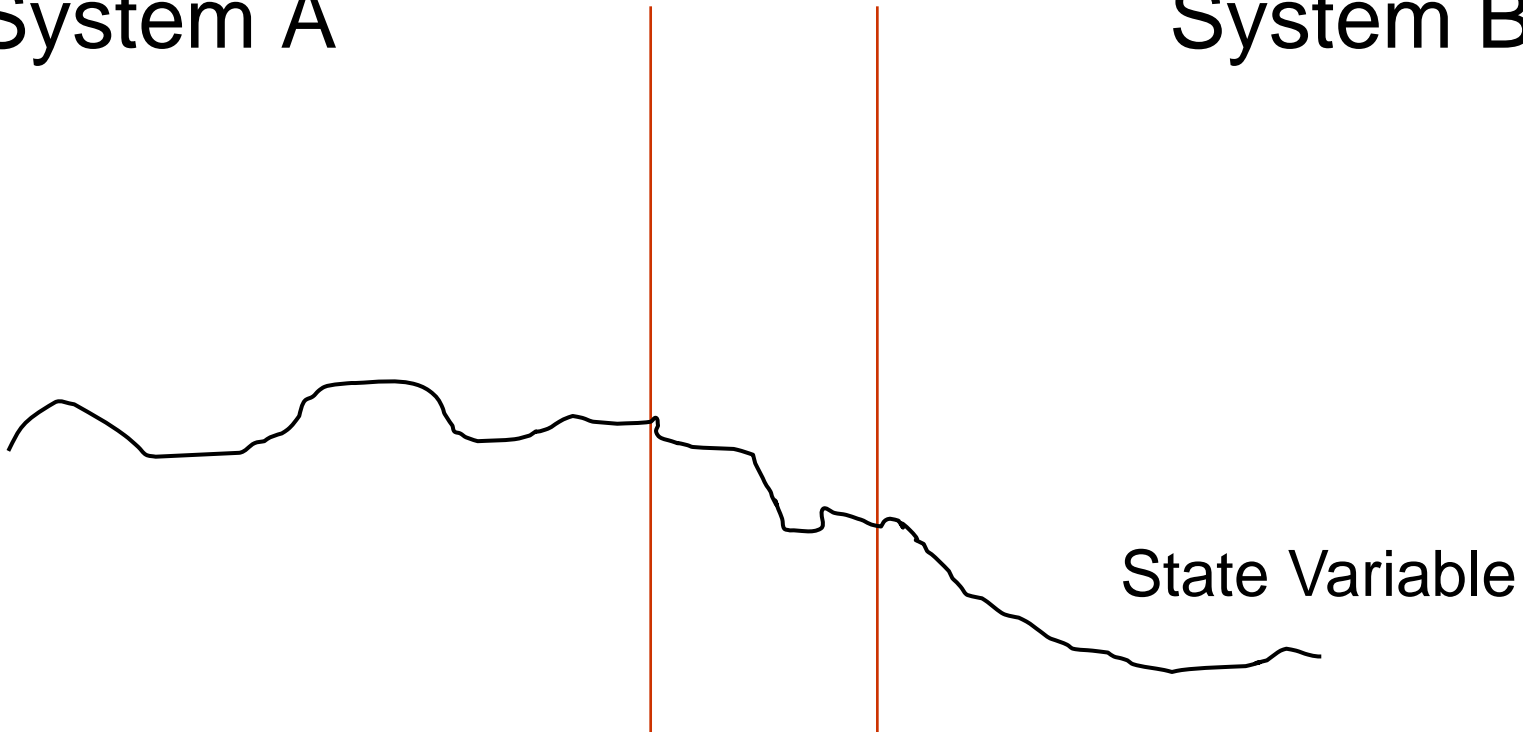
**(2) Rapidity Resilience**

" ability and rapidity of a system or variable to return to a former or similar state following a disturbance"

[faster the bounce back, more resilience]
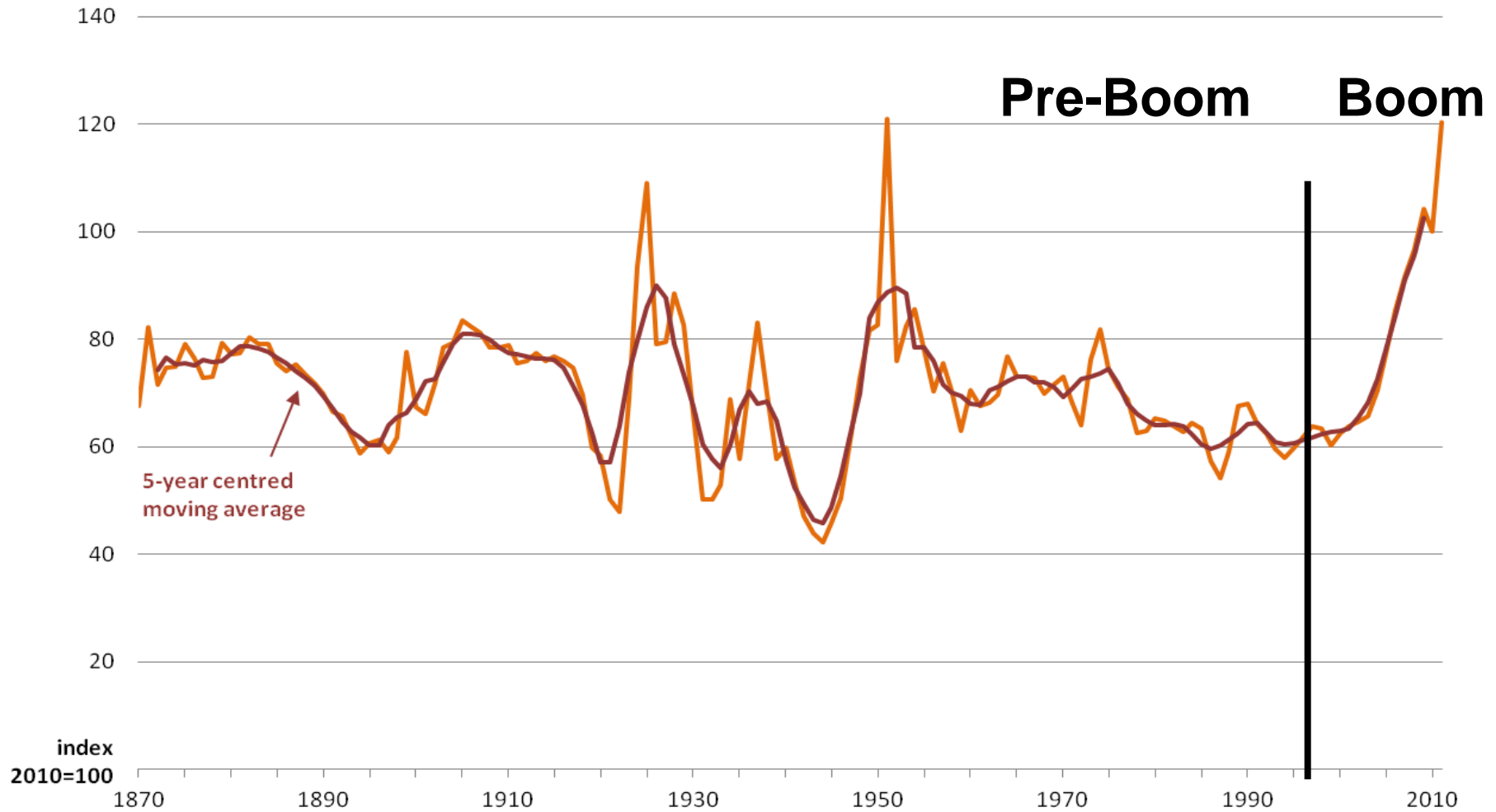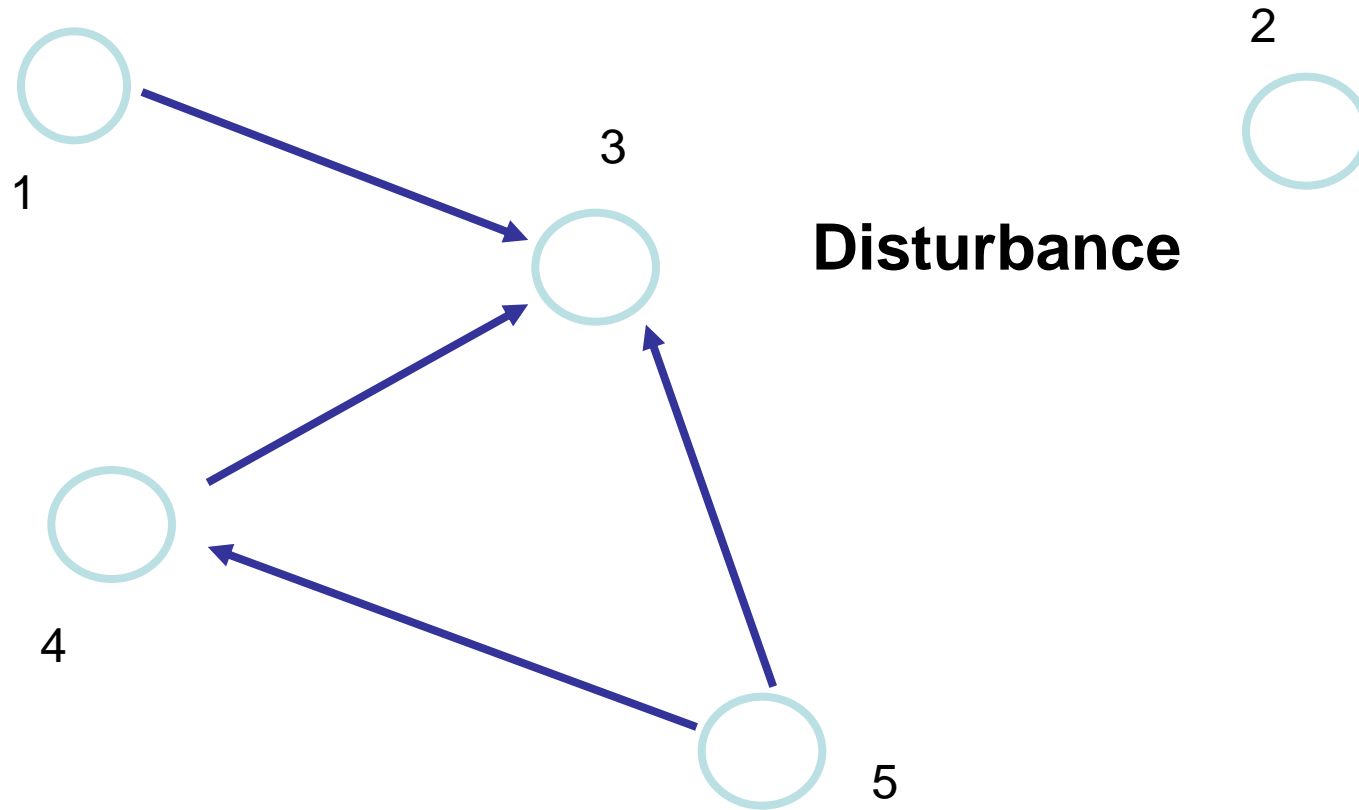
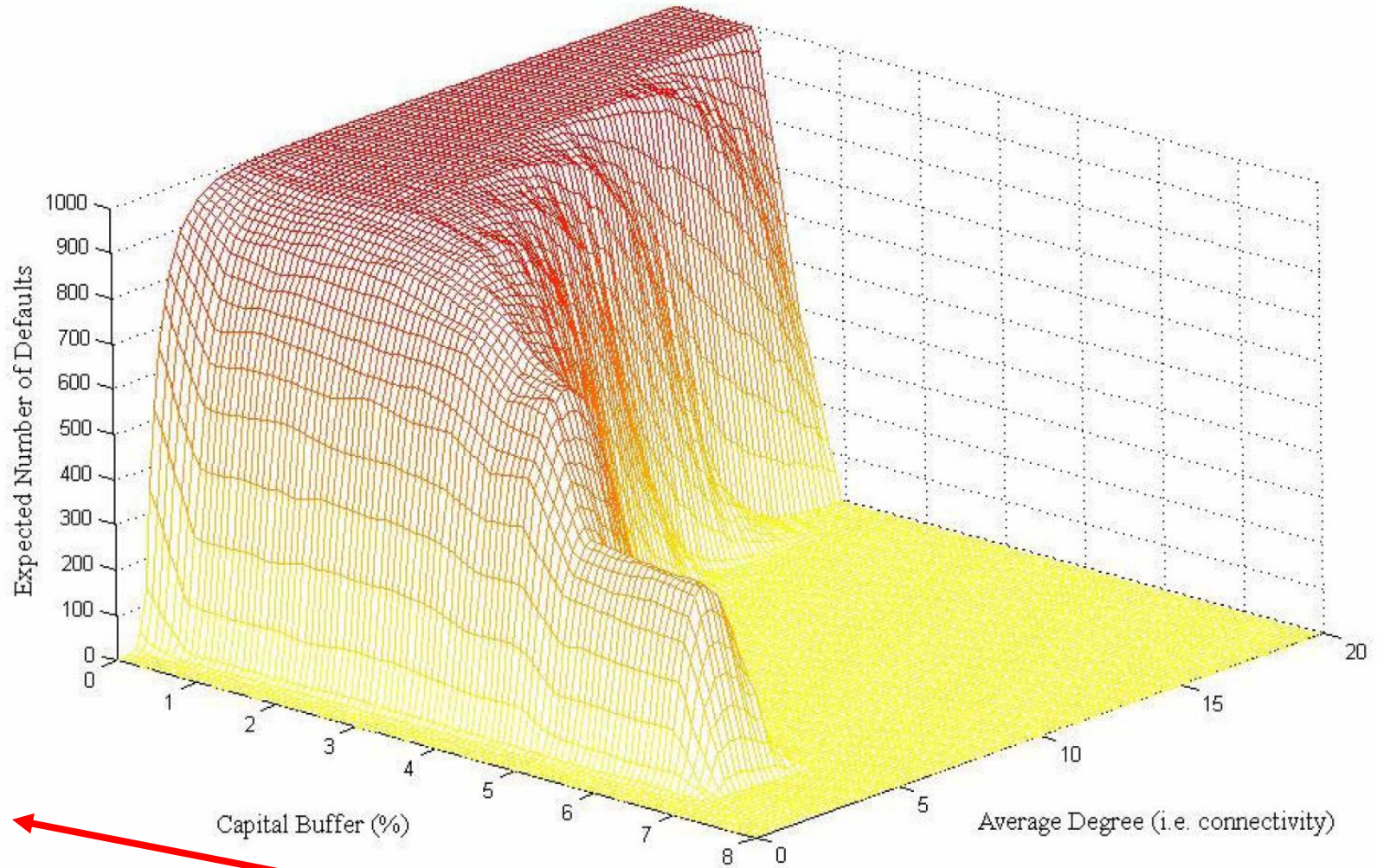# Systems and Resilience

System A

System B

State Variable

Uncertain threshold

# Australia's Terms of Trade



Adapted from BREE (2012).

# Networks



**Disturbance**

# Connectivity & Contagion



**Critical variable**

8

Source: Gai and Kapadia (2010)

# Failure to Understand Resilience

"Just when risk seemed most remote on the basis of market indicators and complacency was at its highest, the system was most fragile"

Jaime Caruana, General Manager of Bank for International Settlements (quoted by Alan Mitchell in Aus. Fin. Review 13-14 February 2010)

# II. Resilience and Public Policy
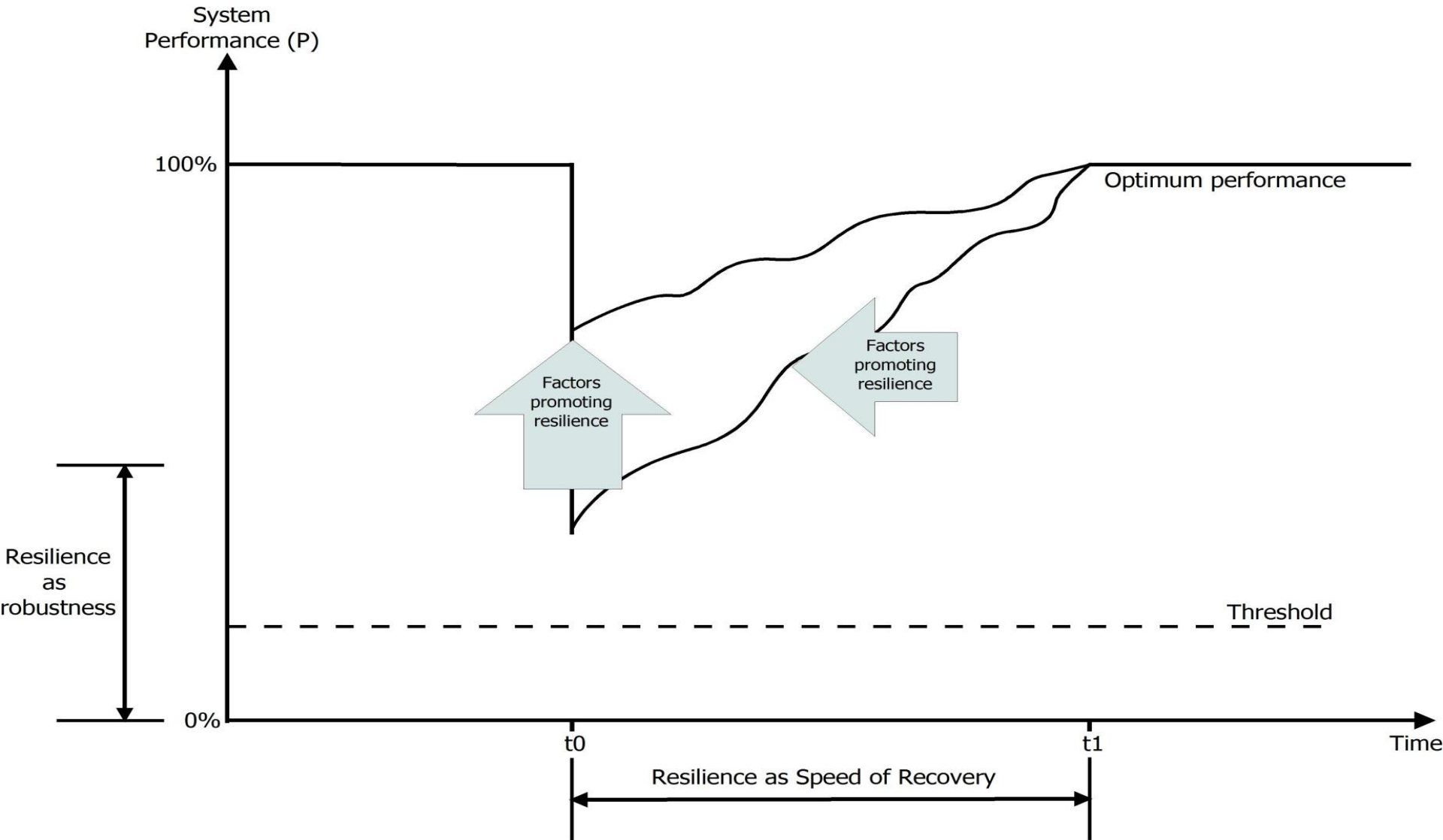
# Public Policy and Systems

- **Public policy** is a deliberative collection and review of evidence, decision making, stakeholder engagement and actions by public agencies for particular purposes.

- Public agencies operate within a set of **socio-economic systems**. Effective public policy explicitly accounts for the behaviour of these systems and acknowledges that public policy can change system behaviour.
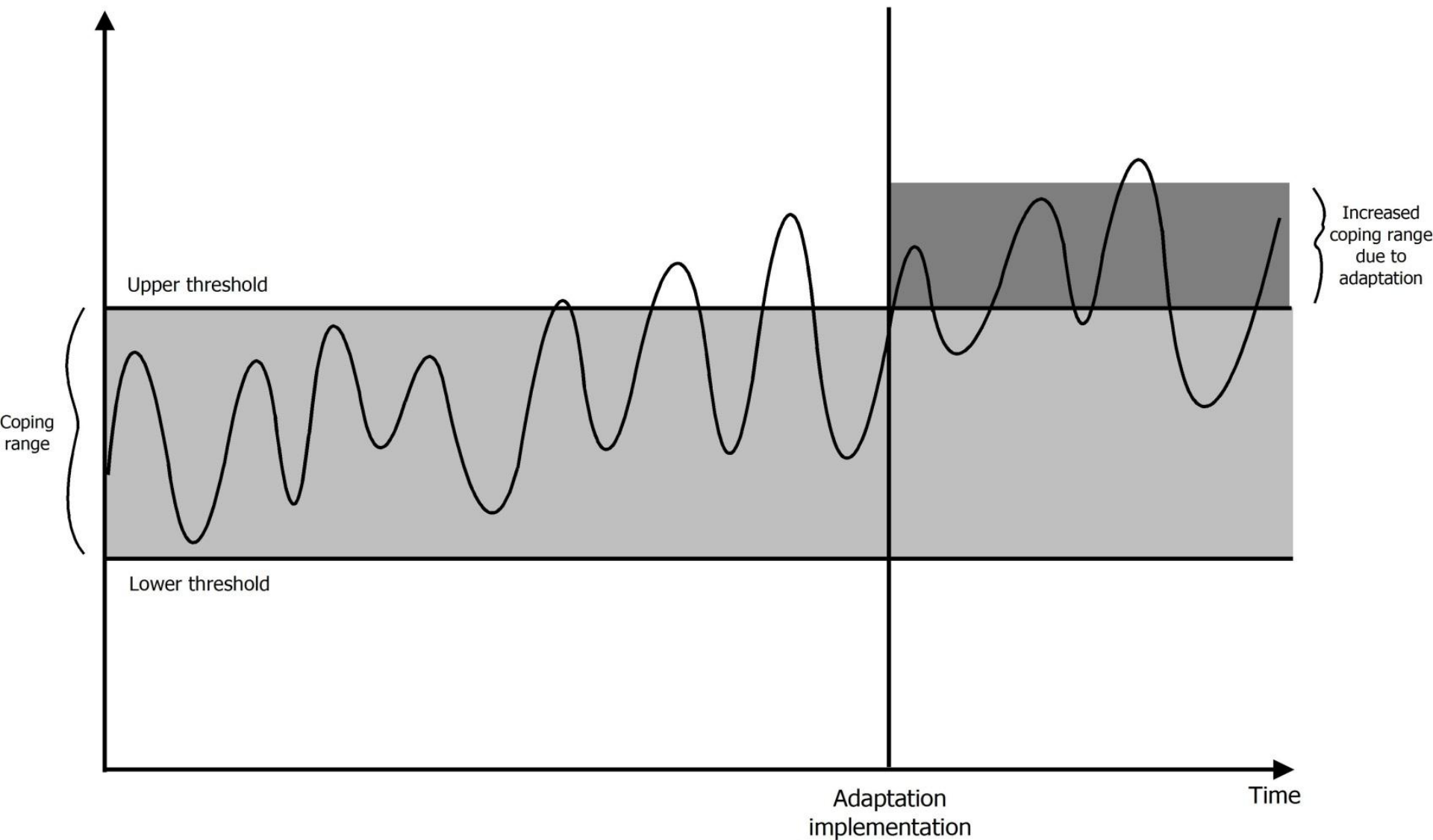
# Resilience and Public Policy

Effective public policy must account for:

(1) Resilience to disturbance of the **socio-economic systems** in which public policy operates; and

(2) Resilience to disturbance of the **public policy agencies**

# Resilience and System Performance



Adapted from Linnenluecke and Griffiths (2012).

13

# Building Resilience in Public Policy



Upper threshold

Coping range

Lower threshold

Increased coping range due to adaptation

Adaptation implementation

Time

Adapted from Linnenluecke and Griffiths (2012).

14

# III. Resilience Thinking…

- Redundancy
- Networks and Connectivity
- Diversity
- Threshold and Resilience Indicators
- Adaptability and Experimentation
- Flexibility
- Simulation and Scenario Analysis
- Case-studies and Analogues
- System Boundaries
- Risks and Rewards
- Critical Variables
- Feedback Loops

# Remarks

- Disturbances (expected and otherwise) can derail effective public policy.

- Resilience Thinking offers the potential to:

(1) Make public policy more effective in the event of disturbances (e.g., financial or trade shocks; collapse of asset price bubbles; etc.)

(2) Improve the organisational performance of public sector agencies in response to disturbances (e.g., critical variables and policy levers).