Business-friendly Ecosystem as an Element of Economically Resilient Cities in Japan

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Initial phase of the 3rd stage of a research project on economically resilient cities

- Measures to promote the policies
- Policies to develop such characteristics
- Characteristics of resilient cities
- Identifying resilient cities
- What is it that a city with economic resilience?
Contents

- Who I am is a “clinical economist” (Sachs, 2005)

- Concepts
  - Economic resilience
  - Business-friendly “ecosystem”

- Analysis to identify resilient cities

- Brief tale of two small cities

- Research issues
Economic resilience

- The capacity of local economy to regain or exceed the pre-shock growth rate in manufacturing output and/or employment after an economic shock.

- “Capacity of a system to maintain core performances despite shocks by adapting its structure, functions and organization.”

Martin and Sunley (2015)
Economically resilient with positive growth path if growth rate is higher than the pre-shock period.

Simmie & Martin (2010), Martin (2012),
Business-friendly “ecosystem”

- Physical, Human, Natural, Locational Capital
- Network of entrepreneurial key individuals
- Formal & informal rules
  - Rules on which key individuals are asked to dance

- Local SMEs can be transformed into
  - Sleeping dragons & baby phoenixes 伏龙凤雏
  - Tortoises 乌龟
Comparative Analysis

- Research period: 2003-2013
  - Long recession end: 2003
  - GFC shock year: 2007
  - Worst effect year: 2009
  - “Abenomics” started: 2013

- National Census
  - 2010

- Manufacturing Statistics

- 813 cities
# 14 Resilient cities identified

<table>
<thead>
<tr>
<th>Specialized (1-2 Industries)</th>
<th>Resistant Resilient</th>
<th>Sensitive Resilient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shiraoka Tosa Munakata</td>
<td></td>
<td>Osaki Ohta Takahari Karatsu</td>
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<table>
<thead>
<tr>
<th>Diversified (3 or more industries)</th>
<th>Resistant Resilient</th>
<th>Sensitive Resilient</th>
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<tbody>
<tr>
<td>Noboribetsu</td>
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<td>Hidaka Nomi Awara Kasai Maniwa</td>
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<tr>
<th>Otherwise (statistically ambiguous)</th>
<th>Resistant Resilient</th>
<th>Sensitive Resilient</th>
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<tr>
<td>n.a</td>
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<td>Hatsukaichi</td>
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Maniwa City - Overview

- Pop. 48,964 (2010) ▲ 6% annually
- Diversified among **forestry-related** manufacturing
  - wood products & food products
  - electronic machinery
- Manufacturing industries share 27% of GCP
- 33% of GCI transferred in and paid out
  - Subsidies from national and prefectural governments
  - Payment for “imports”
地域経済循環図
2010年
指定地域：岡山県真庭市

所得への分配 1,325

所得からの支出 1,958

支出による生産への還流 1,325

生産（付加価値額）

分配（所得）

支出
Kasai City - Overview

- Pop. 47,993 (2010) ▲ 4% annually
- Diversified among **machinery** manufacturing
  - electronic machinery
  - general machinery
  - transportation machinery

- Manufacturing industries share 48% of GCP
- 97.5% of GCP circulate within the city
Determinants of resilience

- Inherent economic dynamism
- Economic openness
- Sectoral structure
- Export concentration
- Competitiveness / productivity
- Technological profile
- Policy regime
- External relations and linkages

(Martin and Sunley, 2015)
### Finding from Literature

<table>
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<tr>
<th></th>
<th>Maniwa</th>
<th>Kasai</th>
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</thead>
<tbody>
<tr>
<td>Economic dynamism</td>
<td>Entreprenuerial</td>
<td>Entreprenuerial</td>
</tr>
<tr>
<td>Economic openness</td>
<td>Moderately open</td>
<td>Highly open</td>
</tr>
<tr>
<td>Sectoral structure</td>
<td>Forestry-related manufacturing; SMEs</td>
<td>Machinery manufacturing; Large firm + SMEs</td>
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<tr>
<td>Export concentration</td>
<td>Low</td>
<td>High</td>
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<tr>
<td>Competitiveness</td>
<td>Infant stage</td>
<td>Competitive</td>
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<tr>
<td>Technological profile</td>
<td>Biomass technology</td>
<td>Improved conventional technology</td>
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<tr>
<td>Policy orientation</td>
<td>Self-sustainability</td>
<td>Export orientation</td>
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<tr>
<td>External relations</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Key individuals</td>
<td>Community businesses Public officials</td>
<td>SME presidents COC leaders</td>
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<td>Ground rules</td>
<td>?</td>
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Into the Future

- Research issues
  - How do resilient cities differ with each other?
    - Classification
    - Are determinants of resilience complete?
  - Do they (really) have business-friendly ecosystem?

- Looking for collaborative research opportunities
  - Subject to funding opportunities…
Ecosystem exists, but hard to see

“What is essential is invisible to the eye.”

*The Little Prince*

“The thing about perfection is that its unknowable. It's impossible... but its also right in front of us all the time.”

*Tron: Legacy*
Thank you
谢谢
ありがとう

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