Misattribution in Welfare Dynamics: the puzzling dynamics of recidivism

International System Dynamics Conference
July 2002

George P. Richardson, David F. Andersen, Yi Jung Wu
Rockefeller College of Public Affairs and Policy
University at Albany

Overview

Context: U.S. welfare reform
Brief history of the effort
The model developed by three groups
The “swamping insight” model
Analysis of dynamics emerging from structure
  - Vensim simulations
  - “Digest” analyses
Back to reality

1996 U.S. welfare reform

- Since 1930, a guarantee of lifetime Federal support
- 1996 legislation ended that:
  - Temporary Assistance for Needy Families - TANF
  - At most five years of Federal support in one’s lifetime
  - The clock started for everyone on TANF in 1997
  - People will begin timing out in 2002
  - Financial burden will begin shifting to the states and counties
- A series of facilitated group modeling efforts in three New York State counties tried to help counties cope

History of the NYS Effort

- Initial interest within NYS Department of Social Services
- TANF model in Cortland County
- Safety net model in Dutchess County
- Joined TANF/SafetyNet model in Dutchess
- Calibration in Cortland, Dutchess, & Nassau
- Implementations in Cortland & Dutchess

The TANF Sector

- TANF SECTOR
- Loss of TANF eligibility
- Family size
- Initial TANF eligibility
- TANF exit
- Loss of TANF eligibility
The “Safety Net”

Simulated vs Actual Caseload

Three Policy Mixes

- Base run (for comparison)
  - Flat unemployment rate
  - Historical client behaviors
- Investments in the “Middle”
  - Additional services to TANF families
  - Increased TANF assessment & monitoring
  - Safety net assessment & job services
- Investments on the “Edges”
  - Prevention
  - Child support enforcement
  - Self-sufficiency promotion

Investing in the “Middle”

Investing on the “Edges”

Base, “Edges,” and “Middle” Compared: Populations on the Welfare Rolls
Total Job-Finding Flows from TANF

Program Expenditures

Populations in the Welfare System

Total Recidivism Flows (back to TANF)

A Stock-and-Flow Archetype at Work Here
<table>
<thead>
<tr>
<th>Time (Month)</th>
<th>Enter TANF</th>
<th>Families on TANF</th>
<th>Outflow from post-TANF employment</th>
<th>Post TANF employed</th>
<th>Time in post-TANF employment</th>
<th>Job finding rate</th>
<th>Recidivism</th>
<th>Probability of recidivism</th>
<th>Time to find first job</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>30</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>60</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>90</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Notes:**
- Enter TANF: Families entering Temporary Assistance for Needy Families (TANF) program.
- Families on TANF: Number of families currently receiving TANF assistance.
- Outflow from post-TANF employment: Number of families transitioning from post-TANF employment.
- Post TANF employed: Number of families currently employed post-TANF.
- Time in post-TANF employment: Duration of time families have been employed post-TANF.
- Job finding rate: Percentage of families finding employment.
- Recidivism: Number of families returning to TANF.
- Probability of recidivism: Likelihood of a family returning to TANF.
- Time to find first job: Average time it takes for families to find employment.

**Support Capacity:**
- TANF support capacity: Capacity of TANF program.
- Employment support capacity: Capacity of employment support initiatives.
- Post-TANF employment support capacity: Support capacity post-TANF.
### Other Systems
- Vocational preparation in mental health
- Foster care
- Chronic care
- Private sector management?

### Summary
- The “swamping” insight: upstream improvements can swamp downstream capacity and make matters worse.
- The source of the dynamics are self-reinforcing and balancing tendencies in capacity loads.
- Real improvement requires coordinated (sequenced) additions to capacity.