Unlucky Cohorts? Income and Consumption effects of the 1995 and 2009 Economic Downturns in Mexico

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13th Global Meeting on Population and the Generational Economy, August 7, 2020
Motivation: Phases of Economic Development

Economic Development & Birth Cohorts

“Development with Stability”

“Shared Development”

“Economic Adjustment”

“Stagnation with Stability”

Silent Generation (1925-1945)

Baby Boomers (1946-1964)

Generation X (1965-1980)

Millennials (GenY) (1981-2000)

Generation Z (2001-2014)

Unlucky Cohorts? Compensation of Employees


- Economic crisis: 1982-83
- Economic crisis: 1994-95
- Economic recession: 2001
- Financial crisis: 2009

- GDP share
- "Shared Development"
- "Economic Adjustment"
- "Stagnation with Stability"

- Real wages
- Informal employment (~60% in 2010)
- Salary gap between low and high educated workers

Source: Samaniego, 2014 with data from OECD.Stat
NTA Data: Labor Income & Consumption

- Biennial Cross-sectional Labor Income and Consumption
  NTA estimates: 1992-2014 (excludes 2012) (in constant Mx Pesos, 2011=100)
Labor Income: Age-Period
Labor Income: Age-Cohort

The graph shows the distribution of labor income by age cohort. The x-axis represents age, ranging from 0 to 90 years, and the y-axis represents constant Mx Pesos, ranging from 0 to 140. Several lines represent different cohorts, with each line indicating the labor income profile for a specific year, such as 1992, 1925, 1935, and so on. The profiles peak at different ages, indicating variations in the age at which peak labor income is achieved across different cohorts.
Total Consumption: Age-Period
Total Consumption: Age-Cohort
Identification Problem: Age = Period – Cohort

1. Median Polish (MP)
   • Step 1: $Y_{ijk} = \mu_i + \alpha_i(j) + \beta_j(k) + \epsilon_{ij}$
   • Step 2: $\hat{\epsilon}_r = \mu_k + \gamma_k + e_k$

2. Hierarchical APC (HAPC)
   • 2-level cross-classified random intercepts model:
     \[ Y_{ijk} = \mu_0 + \alpha_{ijk} + \beta_{0j} + \gamma_{0k} + \epsilon_{ijk} \]

   Fixed-effects \hspace{1cm} Random-effects

   - Age
   - Period
   - Cohort
Labor Income: APC Profiles

**Labor Income Period Profile (MP)**

**Labor Income Period Profile (HAPC)**

**Labor Income Cohort Profile (MP)**

**Labor Income Cohort Profile (HAPC)**
Consumption: APC Profiles

Consumption Period Profile (MP)

Consumption Period Profile (HAPC)

Consumption Cohort Profile (MP)

Consumption Cohort Profile (HAPC)
Work in Progress

- Further sensitivity analysis (Deaton & Paxson APC)
- Include 2012 NTA estimates
- Educational expansion & work status across generations

Thank you!