Precarious Work and Future Careers

South Africa Case Study

Data insights from NIDS
Table of Contents

Youth unemployment in SA

NIDS Data

Modelling & SA Results

Conclusion
Youth unemployment in South Africa

In 2017, the official unemployment rate was 29%. The expanded definition of unemployment was 38.5%.

Post-pandemic estimates suggest that youth unemployment has climbed up to 70%. More than half of the country is living below the poverty line.

Women and young people in rural areas are the most disadvantaged.
Apartheid systems in South Africa

- Bantu education system
- Exploitation at work
- Spatial injustice

Post-Apartheid South Africa

- Poor education system
- Geographical segregation
- Limited access to labour markets
- National Minimum Wage policies
Youth in the National Income Dynamics Study (NIDS)

NIDS INCEPTION
Established in 2008. Survey is conducted every 2 years.
Nationally representative sample with over 28000 individuals and 7300 households.
There are currently 5 waves of data.
In 2020, a Special Covid-19 Survey was conducted.

DEMOGRAPHICS
There are 7663 individuals aged 15-29 in Wave 1(2008)

Age Categories
Age 15-19: 36%
Age 20-25: 40%
Age 26-29: 24%
Equal gender split across ages

DEMOGRAPHICS
Geographic Location
Urban: 60%
Traditional: 35%
Farms: 5%

Urban: communities built around cities including towns, townships, and small towns.
Traditional: communally owned land under the jurisdiction of traditional leaders (i.e. villages).
Farms: land allocated for and used for commercial farming including the structures and infrastructure on it.
Youth in the National Income Dynamics Study (NIDS)

SOCIOECONOMIC STANDING

**Employment Status**
- Not Economically Active: 46.3%
- Unemployed (Discouraged): 6.2%
- Unemployed (Strict): 17.9%
- Employed: 29.5%

**Education**
- Less than Primary: 7.5%
- Primary Completed: 5.6%
- Less than secondary: 54.3%
- Matric Completed: 23.4%
- Tertiary Education: 9.2%

PARENTS BACKGROUND

**Mother's Occupation**
- Never worked: 48.9%
- Elementary work: 27.8%
- Non-elementary work: 23.3%
  - Usually employed as professionals, sales or service workers

**Mother's Education**
- No schooling: 24.2%
- 1-7 years of schooling: 26.9%
- 8-11 years of schooling: 28.9%
- Matric Completed: 20%

PARENTS BACKGROUND

**Father's Occupation**
- Never worked: 26.8%
- Elementary work: 11.4%
- Non-elementary work: 61.8%
  - Mainly employed as sales, plant/machine operators or in craft & relate trades

**Father's Education**
- No schooling: 30.4%
- 1-7 years of schooling: 23.4%
- 8-11 years of schooling: 23.6%
- Matric Completed: 30.4%
Precarious Work from NIDS Data

**Stable Employment**
- Written contract
- UIF (Unemployment Insurance Fund) Benefit
- If self-employed, business is registered for tax
- Income from job or self-employment is above NMW (R3200 per month)

**Precarious Work**
- Employed with no written contract
- No UIF Benefit
- If self-employed, business is registered for tax
- Income from job or self-employment is below NMW
- N=3022

**Unemployed**
- Unemployed under the expanded definition: have not looked for a job 4 weeks prior to being interviewed.

*Sample size reduces from 7316 in W1 to 5527 in W5*
Who transitions out of precarious work?
Precarious Work Transitions

Positive Transition
Move from precarious work to a stable job
N = 1425 of 3022

Negative Transition
Move from a stable job to precarious work
N = 376 of 3022

No Transition
Remain in precarious work
N = 1222 of 3022
Modelling Transitions

Notes from literature
- Panel Data is best
- Probit estimation with lagged independent variables
- Logit estimation with Fixed Effects

Model Selection
- Do we need a more complex model for precarious work transitions?
- Key assumptions for our datasets?
- Variables to include in the model

Example results from South Africa
Household Income
Education
Father’s Occupation and Education
Location

Probit Estimation with lagged independent variables for South Africa

<table>
<thead>
<tr>
<th>Probability of transition at time t</th>
<th>Positive Transition</th>
<th>Negative Transition</th>
<th>No Transition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coeff.</td>
<td>Std. Error</td>
<td>Coeff.</td>
</tr>
<tr>
<td>Age</td>
<td>-0.027</td>
<td>0.023</td>
<td>-0.047*</td>
</tr>
<tr>
<td>Household Size</td>
<td>-0.032</td>
<td>0.042</td>
<td>0.030</td>
</tr>
<tr>
<td>Household Income</td>
<td>0.000***</td>
<td>0.000</td>
<td>-0.000</td>
</tr>
<tr>
<td>Education [Matric]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than primary</td>
<td>-0.706</td>
<td>0.452</td>
<td>1.424***</td>
</tr>
<tr>
<td>Primary</td>
<td>-0.056*</td>
<td>0.469</td>
<td>1.354**</td>
</tr>
<tr>
<td>Less than secondary</td>
<td>-0.849***</td>
<td>0.228</td>
<td>0.741***</td>
</tr>
<tr>
<td>Tertiary</td>
<td>-0.402</td>
<td>0.303</td>
<td>0.453</td>
</tr>
<tr>
<td>Mother’s Occupation (Never Worked)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-elementary</td>
<td>0.379</td>
<td>0.272</td>
<td>-0.455</td>
</tr>
<tr>
<td>Elementary</td>
<td>-0.019</td>
<td>0.214</td>
<td>-0.352</td>
</tr>
<tr>
<td>Father’s Occupation (Never Worked)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-elementary</td>
<td>-0.452**</td>
<td>0.219</td>
<td>0.473*</td>
</tr>
<tr>
<td>Elementary</td>
<td>-0.612**</td>
<td>0.287</td>
<td>-0.178</td>
</tr>
<tr>
<td>Mother’s Education (No schooling)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-7 Years</td>
<td>-0.212</td>
<td>0.262</td>
<td>0.808</td>
</tr>
<tr>
<td>8-11 years</td>
<td>-0.050</td>
<td>0.280</td>
<td>0.347</td>
</tr>
<tr>
<td>Matric</td>
<td>-0.038</td>
<td>0.429</td>
<td>1.434**</td>
</tr>
<tr>
<td>Father’s Education (No schooling)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-7 Years</td>
<td>0.109</td>
<td>0.252</td>
<td>-0.257</td>
</tr>
<tr>
<td>8-11 years</td>
<td>-0.781**</td>
<td>0.320</td>
<td>-0.670*</td>
</tr>
<tr>
<td>Matric</td>
<td>-0.043</td>
<td>0.351</td>
<td>-0.799</td>
</tr>
<tr>
<td>Household receives social grant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>-0.378*</td>
<td>0.204</td>
<td>-0.114</td>
</tr>
<tr>
<td>Geography Type (Traditional)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>0.636***</td>
<td>0.235</td>
<td>-0.465*</td>
</tr>
<tr>
<td>Farms</td>
<td>0.294</td>
<td>0.291</td>
<td>-0.311</td>
</tr>
</tbody>
</table>
What's Next?

- Model Selection
- Training
- Analysis
- Paper Compilation