Center for Studying Disability Policy

Mathematica

The Impact of the Great Recession on SSDI Awards

A Birth-Cohort Analysis

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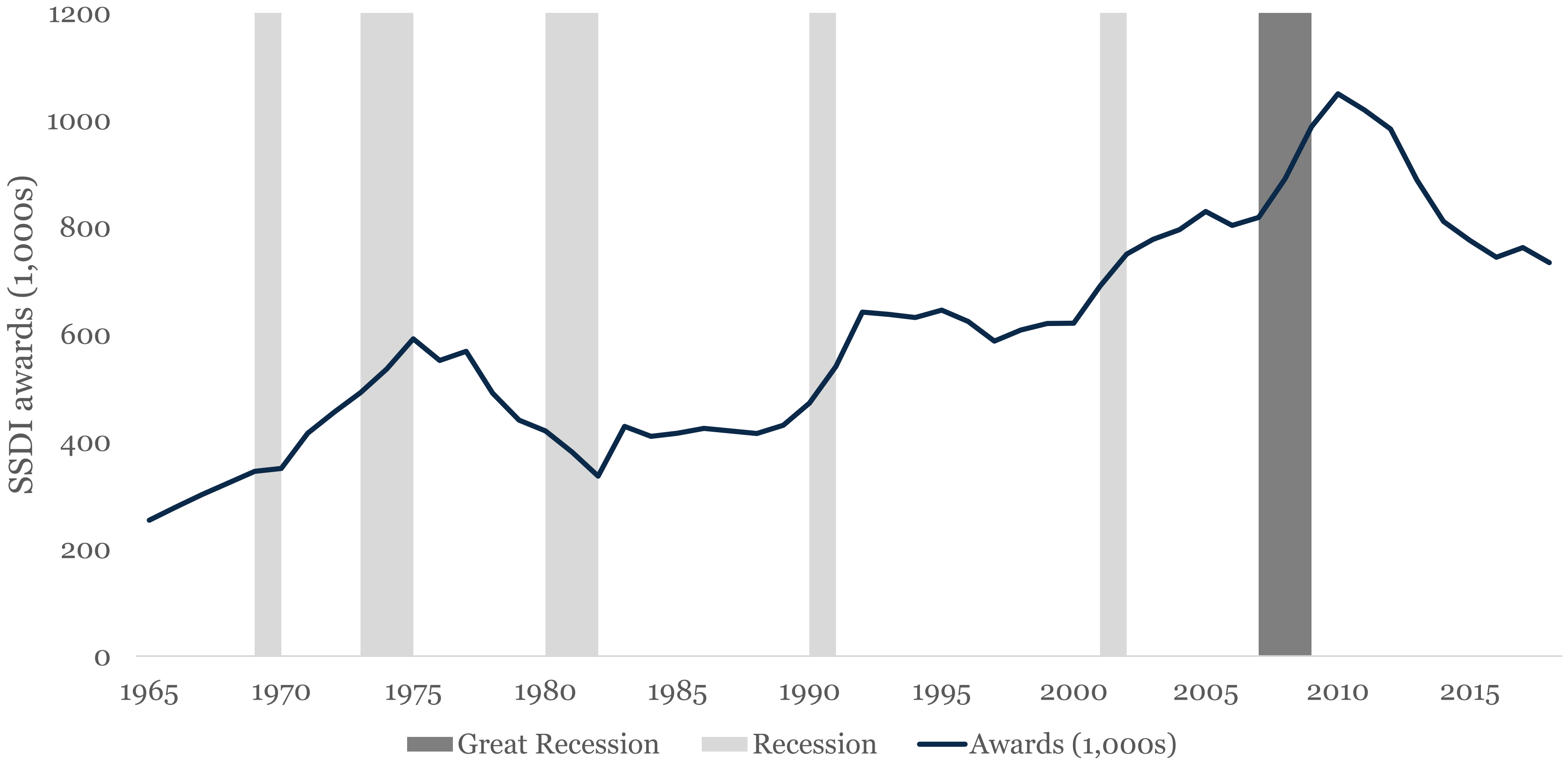
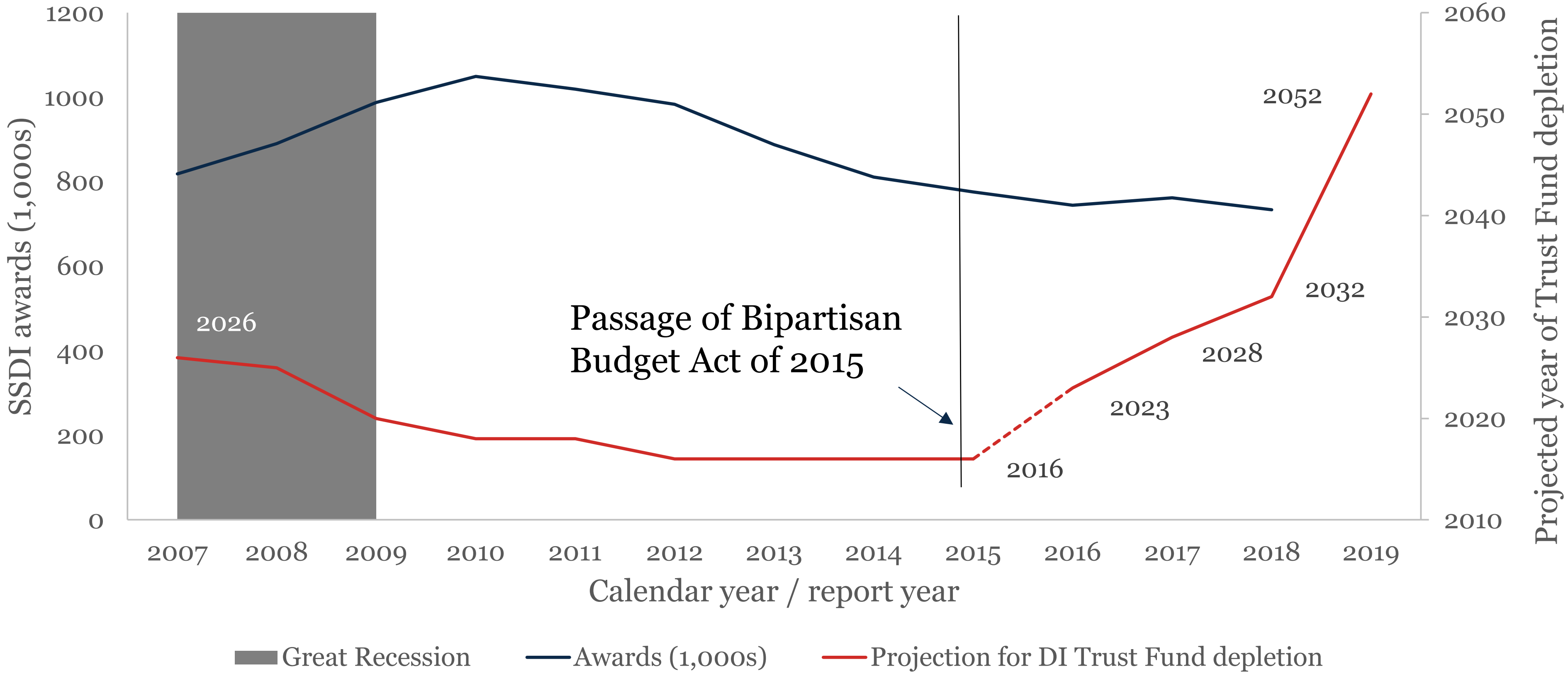
SSDI awards began to decline in 2011

Social Security Disability Insurance (SSDI) awards and recessions, 1965 to 2018



Forecasting is difficult when awards fluctuate

SSDI awards and projected date of SSDI Trust Fund depletion



The dynamic effect of recessions on awards

The recession ended in 2009

The lag in the impact of the recession depends on the worker's path from layoff to award:

- Apply immediately after layoff
- Exhaust Unemployment Insurance before application (maximum duration extended in this period)
- Search for work before application
- Onset of disability follows job loss

Maestas et al. (2018): recession induced 400,000 SSDI awards between 2008 and 2012

In the recovery period:

- Reductions in layoffs reduce awards to those newly laid off
- More unemployed workers at risk for SSDI are able to find jobs

Did the Great Recession lead to a reduction in awards after 2010?

Acceleration hypothesis:

- The recession accelerated awards to some workers who would have applied and been awarded benefits later in the period had the recession not occurred
- Acceleration of awards contributed to both the initial increase and the later decline

Empirical strategy

Analyze individual birth-year cohorts:

- Construct counterfactual: expected awards if no recession
- Measure the deviation between observed awards and the counterfactual
- Predict deviation using cross-state variation in the business cycle

Novelties

- Birth-cohort method: needed to test the acceleration hypothesis; avoids confounding of changes in age/sex composition of labor force
- Business-cycle measure: employment ratio not sensitive to “discouraged worker” effect

Counterfactual awards

Counterfactual: estimate of awards in 2008 to 2014 if no recession

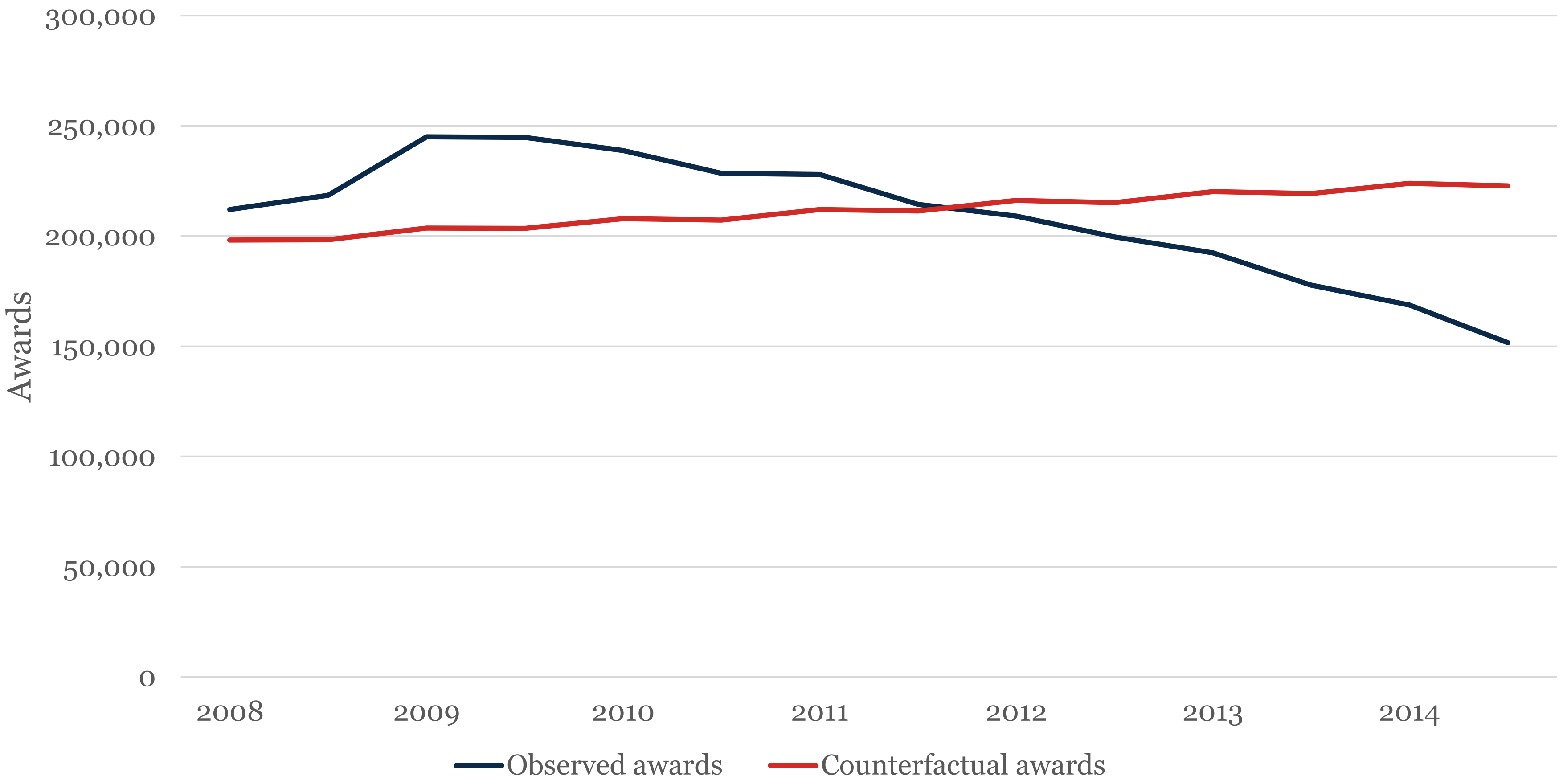
Data: 2016 Disability Analysis File
SSDI awards in 1996–2014
Beneficiaries age 20 to 65 in 2007

Example: projected award growth for a 55-year-old female in Ohio is based on:

Ohio females born in:	Award growth at age 55 from:
1942	1996 to 1997
1943	1997 to 1998
…	…
1951	2005 to 2006

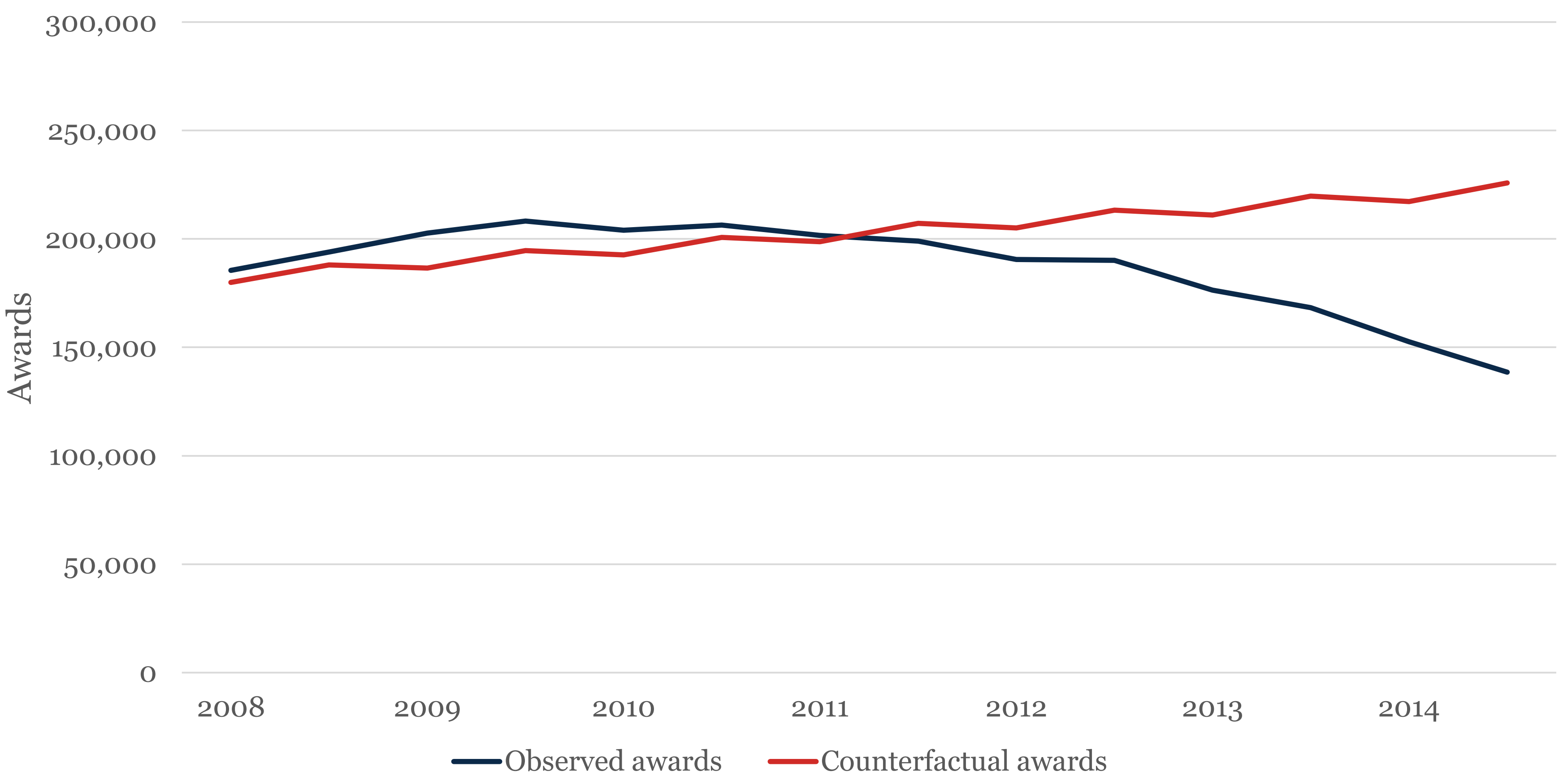
Use the counterfactual growth rates to construct counterfactual awards in 2008 through 2014

For males, the early increase is offset by a later decrease



Note: figure shows males born from 1941 to 1986.

For females, the counterfactual is too steep



Note: figure shows females born from 1941 to 1986.

Three variables to characterize the business cycle

Source: Local Area Unemployment Statistics.

Cross state regression models

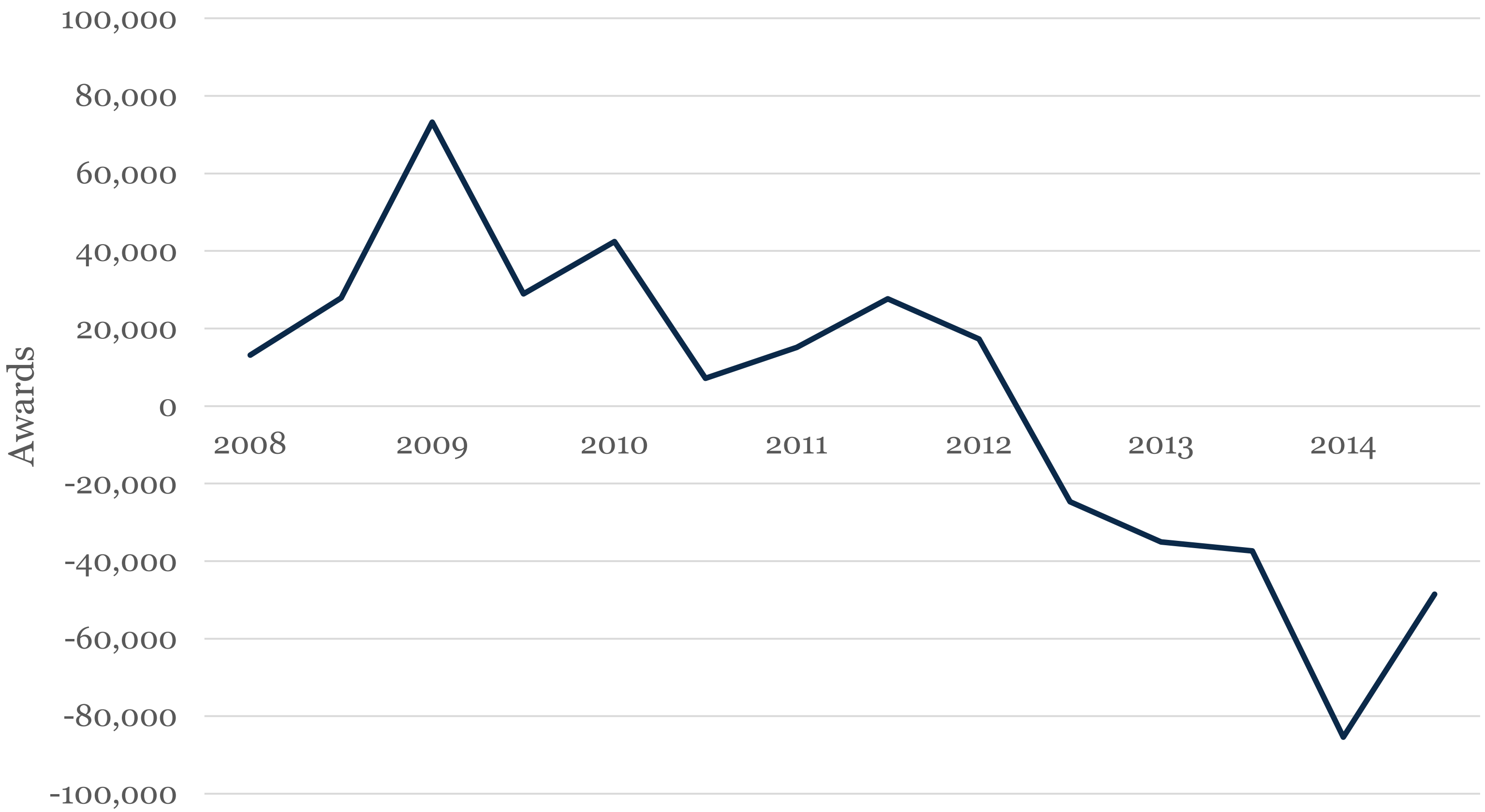
Estimate models by birth-year and sex in 6-month periods from 2008 through 2014

Dependent variable: deviation of observed awards from counterfactual

Explanatory variables: the business cycle variables and an intercept

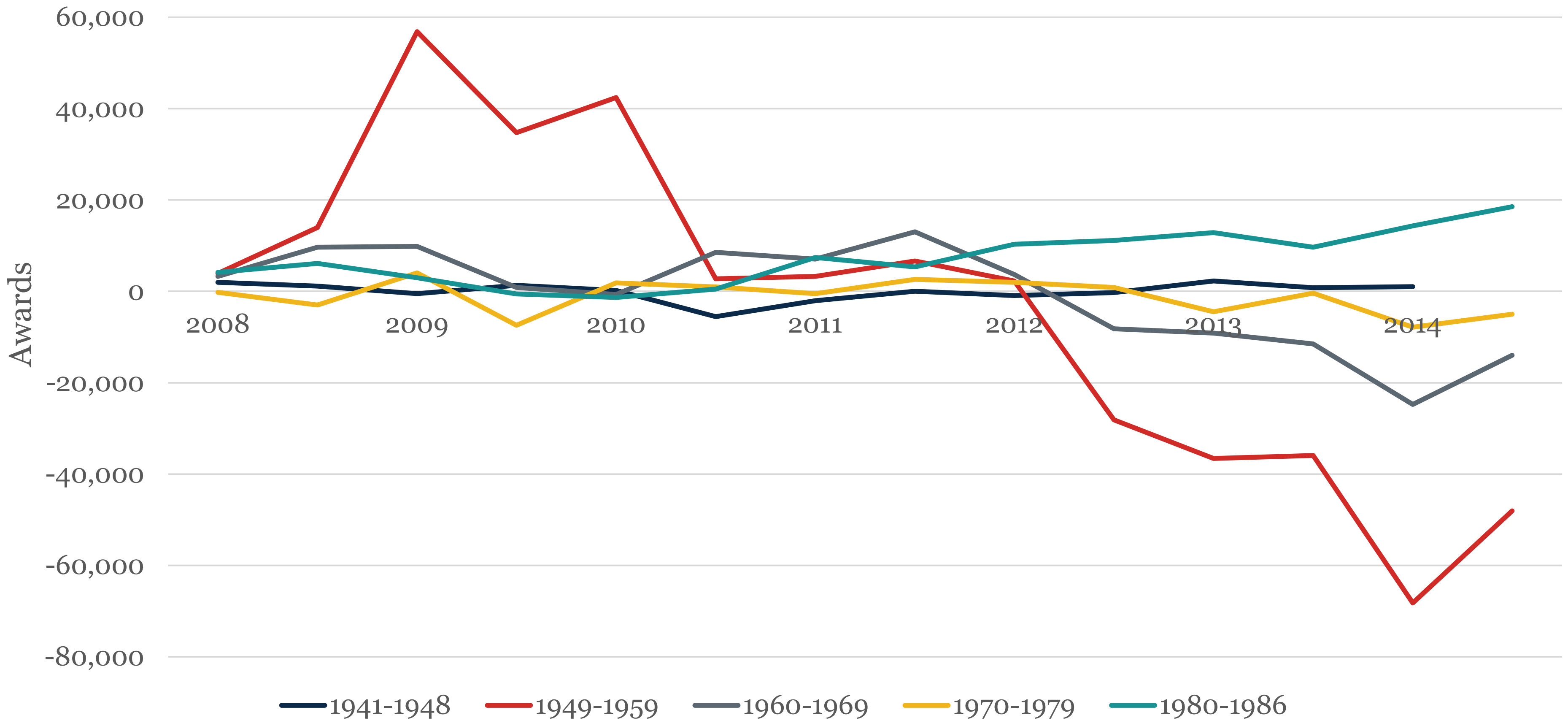
Business cycle component: awards predicted by the business cycle variables

The business cycle predicts a decline in awards starting in 2012



Note: Figure shows awards predicted by the business cycle for males born in 1941 through 1986.

Results are driven by males age 49 to 59 in 2008



Note: Figure shows males born in 1941 through 1986, by cohort group.

Conclusions

Acceleration is most evident for men who were age 49 to 59 at the beginning of the recession

A large share of the decline in awards since 2011 is due to the Great Recession

This effect is temporary

The contribution of other factors, including long-term factors, is smaller than we would otherwise think

Implications for projections of the SSDI Trust Fund depletion:

- Current projections may be too optimistic
- Previous projections too dire

Future work

Address issue with counterfactual for females

Characterization of the business cycle: Sex-specific employment rates
Time-varying

Thank you

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