Using an Overlapping Generations Model to Assess the Effects of Financing a Large Government Expenditure *

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Abstract

This paper ...

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JEL classifications: ??

IN PROGRESS

^{*}The views expressed in this paper are the authors' and should not be interpreted as those of the Congressional Budget Office.

1 Introduction

This paper serves two major purposes. First, it documents the effects of various financing methods for funding a major increase in government expenditures. Second, it details and documents a substantive revision to CBO's overlapping generations model.

1.1 Literature Review

Cite the following: Auerbach and Kotlikoff (1987), Nishiyama and Smetters (2007), Nishiyama and Reichling (2015), Nelson et al. (2019).

2 The Overlapping Generations Model

This section details CBO's revised overlapping generations model.

- 2.1 Firms' Problem
- 2.2 Households' Problem
- 2.3 Government
- 2.4 Calibration
- 2.5 Solution Method

3 Results from Financing Options

CBO paper examines three financing mechanisms:

- $\bullet\,$ Tax on labor income only
- Tax on combined labor and capital income
- Consumption tax

For this paper do we want to consider other mechanisms as well?

- Lump-sum tax
- Other?

4 Conclusion

References

- Auerbach, A. J. and L. J. Kotlikoff, *Dynamic Fiscal Policy*, Cambridge University Press, 1987.
- DeBacker, Jason, Richard W. Evans, and Kerk L. Phillips, "Integrating Microsimulation Models of Tax Policy into a DGE Macroeconomic Model, A Canonical Example,," Technical Report 2017.
- Evans, Richard W. and Kerk L. Phillips, "Forecasting the Social Security Trust Fund under Macroeconomic Uncertainty," Technical Report 2015.
- Gouveia, Miguel and Rober P. Strauss, "Effective Federal Income Tax Functions: An Exploratory Empirical Analysis," *National Tax Journal*, 1994, 47 (2), 317–339.
- Nelson, Jaeger, Kerk Phillips, Seth G. Benzell, Efraim Berkovich, Robert Carroll, Jason DeBacker, John Diamond, Richard Evans, Jagadeesh Gokhale, Laurence Kotlikoff, Guillermo LaGarda, James Mackie, Rachel Moore, Brandon Pecoraro, Brandon Pizzola, Victor Yifan Ye, and George Zodrow, "Macroeconomic Effects of Reducing OASI Benefits: A Comparison of Seven Overlapping-Generations Models," National Tax Journal, 2019, 72 (4), 671–692.
- Nishiyama, Shinichi and Felix Reichling, "The Costs to Different Generations of Policies That Close the Fiscal Gap," Working Paper 2015-10, US Congressional Budget Office 2015.
- and Kent Smetters, "Does social security privatization produce efficiency gains?," The Quarterly Journal of Economics, 2007, 22 (4), 1677—1719.