Online Appendix

1 Analytical results for the representative-agent model

The steady-state equilibrium is characterized by the following equations.

$$1 = \beta\left[1 + r(1 - \tau_k)\right] \tag{1}$$

$$\frac{(1 - \tau_l)w}{C} = \Gamma \tag{2}$$

$$w = (1 - \alpha)\left(\frac{K}{E}\right)^{\alpha} \tag{3}$$

$$r + \delta = \alpha\left(\frac{K}{E}\right)^{\alpha - 1} \tag{4}$$

$$C = (1 - \tau_l)wE + r(1 - \tau_k)K + T \tag{5}$$

$$G + T = \tau_l wE + \tau_k rK. \tag{6}$$

Proof of Lemma 1 Rearranging (1) gives

$$r = \left(\frac{1}{1 - \tau_k}\right)\left(\frac{1}{\beta} - 1\right).$$

This can be combined with (4) to yield

$$\frac{K}{E} = \left(\frac{\alpha}{\left(\frac{1}{1-\tau_k}\right)\left(\frac{1}{\beta} - 1\right) + \delta}\right)^{\frac{1}{1-\alpha}}$$

which shows that K/E does not depend on τ_l.

Proof of Proposition 2 Since $\frac{K}{H}$ does not depend on τ_l, (3) and (4) imply that w and r do not change with respect to changes in τ_l across steady states.

2 Micro-data on the cross-sectional distribution

Calibration uses statistics based on samples from the 2005 Panel Study of Income Dynamics (PSID) along with the Supplemental Wealth File. The original 2005 wave of the PSID covers about 8,000

representative U.S. households. I use both the PSID core families and the immigrant sample families that were added in 1997 and 1999, and thus use the weights provided by the PSID. I consider samples whose age is between 18 and 70. I exclude those whose main job is self-employment, given that the focus of this paper is on labor supply. The size of the final samples is 6,493. A household is defined as employed if the household head's annual hours worked is greater than 1,000 hours since this paper focuses on full-time employment. The shape of the employment rates by wealth quintiles is relatively stable with respect to changes in the threshold value. The data on wealth is taken from the Supplement Wealth File, which is linked to the main PSID file. Wealth is defined as the net worth of a household. Specifically, it is the sum of financial and non-financial assets (including housing) net of the value of debts.

The information on household-level government transfers related to income security is obtained from the Survey of Income and Program Participation (SIPP). The data set is the same as the one used in Yum (2018), including samples from the first to ninth waves of the SIPP in 2001. The age-restriction is the same as above (18-70). Transfers related to income security is computed as the sum of various means-tested, income-support programs such as the Supplemental Security Income, the Temporary Assistant for Needy Families, the Supplemental Nutrition Assistance Program, the Supplemental Nutrition for Women, Infants, and Children, childcare subsidy, and Medicaid.

The data on the employment rate across wealth distribution in European countries in Table 3 are constructed using samples from the second wave of the Eurosystem Household Finance and Consumption Survey (HFCS), conducted by the European Central Bank. I use the sample weights provided by the HFCS. The sample restrictions are imposed equivalently to the PSID data above. Specifically, I consider households in which the reference person's age is between 18 and 70 and the reference person's main job is not self-employment. The resulting number of observations are 8,737 for France, 3,153 for Germany, and 4,963 for Italy. A household is defined as employed if the reference person's weekly hours worked is greater than 1,000 hours divided by 52. Wealth is measured by the net worth, which is the value of total assets minus total liabilities.

Table A1: Open and Closed Economies

Country	*Closed*	*Open*
Australia	1970-1983	1984-2013
Canada	-	1970-2013
France	1970-1989	1990-2013
Germany	-	1970-2013
Italy	1970-1989	1990-2013
Japan	1970-1971	1972-2013
Netherlands	-	1970-2013
Spain	1970-1992	1993-2013
Sweden	-	1970-2013
United Kingdom	1970-1978	1979-2013
United States	-	1970-2013

Note: Values during the years 1975-1980 in the Netherlands are imputed. See text for details.

3   Cross-country panel data

Data on the extensive margin of labor supply are taken from the Conference Board database "International Comparisons of Annual Labor Force Statistics," which extends the discontinued International Labor Comparisons program by the Bureau of Labor Statistics. This data set covers the years 1970-2013.[1] An important feature of this data set is that their cross-country data are adjusted for harmonization, according to the U.S. Current Population Survey. The labor tax rate used in this paper is the average tax rate on labor income in the updated version of the McDaniel (2007)'s panel data. It is an unbalanced cross-country panel covering the years 1950-2013. Data on GDP are taken from the Conference Board "Total Economy Database."

As noted in the main text, a country in a certain year is defined as a small open economy if it is a small country and is open in that year. Therefore, there should be definitions of being open as well as being small. The openness of a country is based on the Chinn-Ito Index, which measures the financial openness of a country annually (Chinn and Ito, 2006). I use the updated Chinn-Ito Index, which can be linked to the extensive margin labor information for the entire sample period (1970-2013). The Chinn-Ito Index ranges from -1.90 to 2.37.[2] I define a country in each year to be

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[1]The results based on the data from the Bureau of Labor Statistics International Labor Comparisons program which covers shorter periods (1970-2012) are almost the same as the results reported herein.

[2]The previous version of the paper also considered the definition of being open based on the sum of exports

open if the Chinn-Ito Index is greater than 0. There are missing values in the Netherlands from 1975-1980. Since a country of the Netherlands is open before 1975 as well as after 1980, based on the above definition, I impute that it is open over the entire period.[3] Table A1 shows the list of countries and years categorized according to this definition.

Countries are categorized into the two groups–small or large, based on the long-run GDP. The long-run GDP is computed as the average of the GDP during the years 1950-2013. Then, the median country based on the long-run GDP is Italy, followed by Canada. The size difference between Italy and France, the next larger country, is substantially smaller than the difference between Italy and Canada. Hence, I group the largest six countries including the median (i.e., France, Germany, Italy, Japan, the United Kingdom, and the United States) as large economies, and the remaining five countries (i.e., Australia, Canada, the Netherlands, Spain and Sweden) as small economies.

References

[1] Chinn, Menzie D. and Hiro Ito. 2006. "What Matters for Financial Development? Capital Controls, Institutions, and Interactions." *Journal of Development Economics* 81 (1): 163-192

[2] Ilzetzki, Ethan, Enrique G. Mendoza, and Carlos A. Vegh. 2013. "How Big (Small?) are Fiscal Multipliers?" *Journal of Monetary Economics* 60 (2): 239-254.

[3] McDaniel, Cara. 2007. "Average Tax Rates on Consumption, Investment, Labor and Capital in the OECD 1950-2003." Manuscript, Arizona State University: 1960-2004.

[4] Yum, Minchul. 2018. "On the Distribution of Wealth and Employment." *Review of Economic Dynamics* 30: 86-105.

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and imports relative the GDP as in Ilzetzki, Mendoza, and Vegh (2013). The main results are quite robust to this definition as well. An advantage of using the Chinn-Ito index is that countries transit from a closed economy to an open economy just once (if they do), preventing short-run variations in openness.

[3]The main results change little when I simply drop the 1975-1980 years of the Netherlands.