Inputs to the Overlapping-Generations Model

Methods and Economic Interpretation

Penn Wharton Budget Model

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Abstract

This document provides a brief overview of the OLG interfaces that translate demographic simulations, survey estimates, tax calculations, fiscal accounts, and policy parameters into the inputs used by PWBM's overlapping-generations model. Some interfaces preserve upstream values; others construct household populations, estimate earnings and health processes, calculate total tax schedules, or generate fixed parameter paths. This document explains those transformations and the economic meaning of the quantities they deliver.

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1 Role in the model system

The interface layer prepares inputs for an overlapping-generations calculation. Its unit of observation varies by mechanism: aggregate year, household age and group, tax-income bracket, asset vintage, health state, or Treasury security. The input scenario selects the source data and policy identity. Each requested interface is produced independently from its designated inputs.

The layer contains three types of operation. First, it selects or copies upstream accounts and policy tables. Second, it reduces microdata to aggregate parameters, distributions, and effective tax schedules. Third, it supplies parameter tables whose values are fixed by the selected source configuration. These distinctions identify where an economic assumption enters the model system.

Interface family	Principal economic content
Demographics	Household counts, transitions, composition, and group mappings
Earnings	Age–health wage profiles and persistent productivity shocks
Health	Health transitions, medical spending, insurance targets, and policy parameters
Tax code	Effective household schedules, payroll parameters, business tax and depreciation inputs
Production	Production and labor-substitution parameters
Economic projections	Selected annual macroeconomic paths
Other budget projections	Selected fiscal accounts and a policy residual
OASI	Wage index and benefit-rule tables
Transfers	Transfer schedules and inheritance allocations
Historic interest	Security-level marketable Treasury debt characteristics
Openness	Foreign debt and capital take-up parameters
Out-of-model inputs	Productivity multipliers, lump-sum taxes, and infrastructure spending

1.1 Notation and measurement

Let t denote calendar year, a age, g demographic group, i a person or tax unit, and w_i a statistical weight where a calculation uses one. Demographic counts are counts of microsimulation records. Earnings and health estimation use the weights specified for their source surveys. Those two operations therefore require different interpretations of a reported population total.

Aggregate economic and fiscal files retain their upstream units. Household income thresholds retain tax-simulation dollar units. Survey health expenditures are adjusted to the configured health-model base-year dollars. Earnings levels include a separate normalization described below. Rates and shares are expressed as fractions unless a source table explicitly uses another scale.

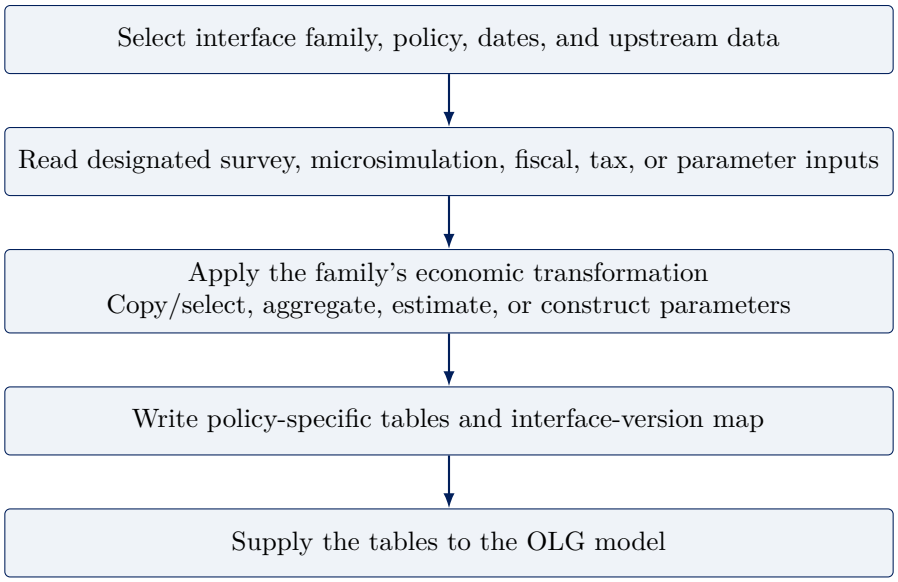


Figure 1: One interface request. Multiple requests repeat this sequence; the diagram does not imply equilibrium determination among interface families.

2 Households, population groups, and transitions

2.1 Constructing model households

The demographic input is the microsimulation's person-year population. Adult heads aged at least 21 define model households. Their spouses share the household identifier. Adult dependents are promoted to household heads, and spouses of adult dependents become spouses in those new households. Children younger than 21 are attached through a resident father when available, then through a resident mother. The model's head-age grid runs from 21 through 100.

Group definitions can use education, STEM occupation, legal or nativity status, and residence duration. For the household-ranked STEM/nativity grouping, the household receives the maximum adult education rank, maximum qualifying STEM rank, and maximum foreign-status rank. These produce six combinations: low education, high education outside STEM, or high education in STEM, each split into domestic and foreign households. The working-household restriction is an optional switch; it is inactive in the selected source configuration.

2.2 Record counts and household transitions

For a year-age-group cell, person and household counts are

$$N_{tag}^{person} = \sum_i \mathbf{1}\{t_i = t, a_i = a, g_i = g,\ a_i \geq 21\}, \tag{1}$$

$$N_{tag}^{HH} = \sum_i \mathbf{1}\{t_i = t, a_i = a, g_i = g,\ i \text{ is a head}\}. \tag{2}$$

These expressions count rows rather than summing the microsimulation weight column. The interface also links a head's group to that person's next observed year. An age-21 nonimmigrant head is classified as an entrant. Death and emigration of unmarried heads define household exits;

age 100 also maps to the death destination. Transitions into and out of an excluded population are represented as exits and entries. The last simulation year carries an end-of-simulation destination.

Transition tables contain counts by current year, current age, current group, and destination group. A count $C_{tag,g'}$ is

$$C_{tag,g'} = \sum_{i \in HH_{tag}} \mathbf{1}\{g_{i,\text{next}} = g'\}. \tag{3}$$

The exported table includes birth/entry, immigration, marriage, divorce, death, emigration, and group-transition counts. The table is an input to population accounting; the interface does not divide every transition count by the current population to make a probability matrix.

2.3 Family size and available time

Within each year, head age, and group, the calculation takes the unweighted mean number of adults and children in the constructed households. Empty adult cells are set to one. Missing child means are filled with the available mean across groups at the same year and age, then with zero if that mean is unavailable.

The age profile is smoothed separately within each year and group using the Hodrick–Prescott trend with penalty 100. If x_a is an adult or child profile, the trend solves

$$\min_{\{z_a\}} \sum_a (x_a - z_a)^2 + 100 \sum_a (z_{a+1} - 2z_a + z_{a-1})^2. \tag{4}$$

Adults are then bounded below by one and children by zero. Household size equals their sum. Available time is proportional to the smoothed adult count:

$$\ell^{max}_{tag} = 1.0406427773956537\, A_{tag}. \tag{5}$$

This is a model-time normalization, not a count of hours in the source survey. A state dictionary assigns nine productivity-shock states to each demographic group and connects those states to the household tax, transfer, and benefit-rule groups.

3 Earnings profiles and persistent productivity

3.1 Deterministic wage profiles

The deterministic component uses processed CPS ASEC observations, an occupation crosswalk, and a CPI adjustment table. The selected sample includes ages 21–100, the specified population category and worker classes, and positive wage income, weeks, and weekly hours. Missing-income codes are removed through the selection rules. Wage income and hours inputs are winsorized using survey-weighted cutoffs before constructing real hourly wages:

$$W_i = \frac{\text{wage income}_i \times \text{price adjustment}_i}{\text{weeks}_i \times \text{weekly hours}_i}. \tag{6}$$

For each requested demographic group, weighted least squares fits

$$\log W_i = \alpha_g + \delta_{t_i,g} + \eta_{h_i,g} + \sum_{k=1}^{4} (\beta_{kg} + \gamma_{kh_i,g})\, a_i^k + \varepsilon_i. \tag{7}$$

The formula includes year indicators, health indicators, and a fourth-degree age polynomial fully interacted with health. There are five health categories. The reference-category effects are absorbed into the intercept and un-interacted age terms.

3.2 Persistent shocks

The stochastic component uses processed PSID panel observations. It selects positive wage-and-salary income and hours, nonzero longitudinal weight, and non-self-employed heads or spouses in the selected family-unit roles. Each person's last observed longitudinal weight is used throughout their observed panel. The hourly wage is deflated, winsorized, and residualized using a weighted age–health polynomial and year effects.

Let z denote the residual log wage. The annual persistent process is represented as

$$z_{t+1} = \rho z_t + \epsilon_{t+1}, \qquad \epsilon_{t+1} \sim N(0, \sigma^2), \quad 0 \leq \rho < 1. \tag{8}$$

Estimation uses ages 21–64. Residual products at zero and one, two, and three prior panel observations are matched to the annual-process moments at lags $0, 2, 4, 6$:

$$m_k(\rho, \sigma) = \rho^k \frac{\sigma^2}{1 - \rho^2}, \qquad k \in \{0, 2, 4, 6\}. \tag{9}$$

The sample residual products are weighted by the final longitudinal person weights. A first GMM step uses the identity weighting matrix; a second step uses the inverse sample covariance matrix of the individual moment discrepancies. The fitted ρ and σ are rounded to four decimals.

The fitted process is discretized into nine states with the Tauchen routine, using a grid spanning four unconditional standard deviations. Write the state levels as $z_1, \ldots, z_9$, transition matrix as P, and stationary distribution as π, where $\pi P = \pi$.

3.3 Exported earnings process

For productivity state r, health state h, age a, and group g, the level supplied to the OLG model is

$$e_{aghr} = \exp\left[z_r + f_g(a, h; 2023) - 3.85\right], \tag{10}$$

where f_g is the deterministic fitted log wage evaluated using the 2023 year effect. The constant -3.85 supplies a common level normalization. At ages above 65 the output repeats the age-65 value for each group, health category, and shock state.

The earnings-profile table is labeled with the first requested output year. The stationary distributions and transition matrices are repeated for ages 21–100 and groups over the first five requested years. The stochastic parameters are pooled; group differences in the exported level arise from the deterministic regression.

4 Health transitions and medical expenditure risk

4.1 Survey combination and annualization

The health pipeline cleans MEPS, HRS, and CPS data before producing estimated objects and policy tables. Health has five living states. MEPS supplies younger-adult transition observations, with the

aggregate transition sample using ages 21–60. HRS supplies older-adult observations starting at 55. Insured and uninsured versions select different MEPS samples while using the common HRS input in the assembled estimation path.

HRS two-year transitions are converted to annual living-state transitions. For a normalized two-year matrix A, the numerical annualization finds

$$\widehat{P} = \arg\min_{P} \|P^2 - A\|_F^2, \qquad P_{hj} \in [0,1], \quad \sum_j P_{hj} = 1. \tag{11}$$

A fractional matrix power supplies the initial value for the constrained optimization. The living-state conversion and the separately estimated mortality series are distinct parts of the health calculation.

MEPS and annualized HRS observations are combined using their weights within each age and initial health state. If W_{ah}^M and W_{ah}^H are those weights, a destination probability is combined as

$$\bar{p}_{ahj} = \frac{W_{ah}^M p_{ahj}^M + W_{ah}^H p_{ahj}^H}{W_{ah}^M + W_{ah}^H}. \tag{12}$$

The combined counts define a weighted pseudo-sample with one row per age, initial state, and destination state. Its weight is $(W_{ah}^M + W_{ah}^H)\bar{p}_{ahj}$.

4.2 Smoothing and output representation

A weighted multinomial logistic model predicts the next living health state conditional on survival. A separate weighted logistic model predicts death. Both use initial-health indicators and a cubic age polynomial, with standardized predictors and the logistic estimator's regularization. The estimated paths are smoothed over age with a cubic Savitzky–Golay filter; negative smoothed values are set to zero.

The final living-destination entries are normalized within each initial health state. Mortality is stored in a separate death-destination column. Thus the five living columns describe relative living-state transitions, alongside a distinct mortality series. The death probability is set to one at age 100. The aggregate export also includes an absorbing death row.

4.3 Medical spending states

Within each age and health state, total MEPS expenditure is divided into weighted percentile groups $[0, .4]$, $[.4, .9]$, and $[.9, 1]$. Sort observations by expenditure x_i and define cumulative weight F and cumulative weighted spending C, both divided by total weight. For percentile boundaries q_0, q_1, the group mean is

$$\mu(q_0, q_1) = \frac{C(q_1) - C(q_0)}{q_1 - q_0}. \tag{13}$$

Linear interpolation of C at the boundaries allows an observation's weight to be split between adjacent groups. Ages 21–84 supply observed cell means. A linear fit to each complete age profile extrapolates ages 85–100, followed by cubic smoothing and nonnegativity truncation. The weighted mean expenditure of children is supplied separately as an initial child-spending parameter.

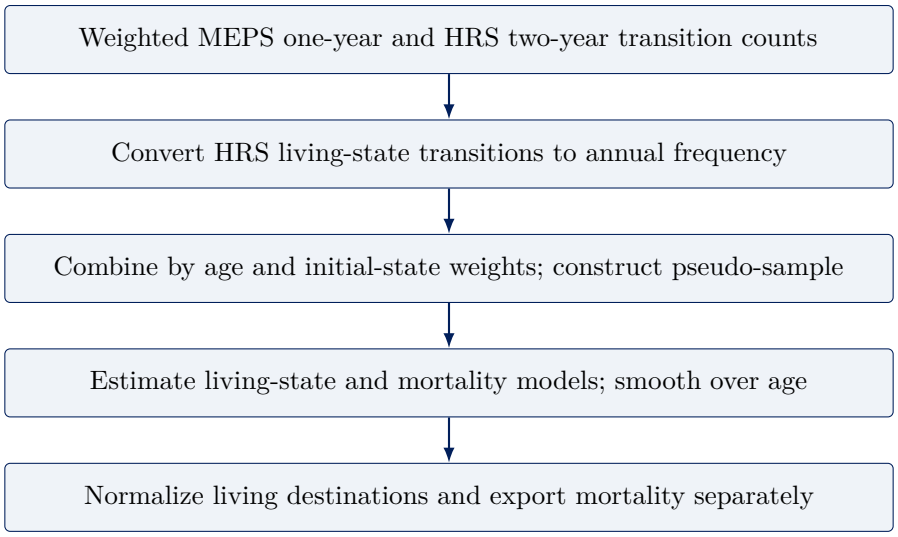


Figure 2: The active transition-estimation sequence. Probability columns and mortality have distinct normalization conventions.

5 Insurance, health targets, and policy parameters

5.1 Out-of-pocket payment functions

Separate Medicare, Medicaid, and private-insurance samples require positive total spending and restrict other payment sources so that the selected payer plus self-payment approximately accounts for total expenditure. The tolerance for that accounting comparison is three units of the cleaned dollar measure.

For each payer sample, ordinary least squares fits the self-payment share to a cubic function of transformed total spending:

$$q_i = \mathrm{SLF}_i / \mathrm{TOT}_i, \tag{14}$$

$$q_i = \alpha + \sum_{k=1}^{3} \beta_k \left[\log(\mathrm{TOT}_i/100 + 10^{-6})\right]^k + u_i. \tag{15}$$

This regression is unweighted. The coefficients are repeated across the supplied insurance-coefficient years, rather than estimated separately by output year.

5.2 Provider shares and survey targets

Medical spending is also split among inpatient, outpatient, emergency, office, dental, prescription, home-health, and other services. Within age, health, and spending groups, the calculation takes survey-weighted spending averages, extends older ages, and smooths the profiles. Spending components are reconciled to totals before normalization into shares. When total spending is zero, the exported provider allocation places its unit share in the residual category.

The initial health distribution uses survey-weighted age-21 health shares in the final selected MEPS year. The interface additionally computes insurance enrollment targets from MEPS and CPS, and

uninsured-to-insured expenditure ratios. These are empirical targets for the OLG health module, distinct from the estimated transition process and from policy eligibility parameters.

5.3 Policy tables

Health policy tables supply resource floors, insurer payout shares, employer contributions, Medicare ages and premiums, Medicaid criteria and financing shares, ACA contribution schedules, excess cost growth, and numerical wealth nodes. They combine fitted quantities with explicitly supplied constants.

The generated policy paths contain a 2026 regime change. For example, the minimum-resource amount changes from 11,600 to 8,120. For groups other than newly arrived foreign groups, the federal Medicaid financing share changes from 0.69 to 0.48. Newly arrived foreign groups have zero in that financing-share field and distinct insurance and ACA-availability flags. These are the selected parameter paths, expressed here as model inputs rather than statements of current law.

Private, Medicare, and Medicaid excess-cost-growth schedules converge to 0.01 in 2048 in the supplied table. The domestic and foreign group labels in health policy inputs determine which financing and eligibility parameters the OLG model receives.

6 Household tax schedules

6.1 Reducing tax-unit outputs

The tax interface reads annual household-tax records containing weights, ages, income components, marginal rates, deductions, and refunds. It forms age bands with lower bounds 19, 30, 40, 50, and 65 and upper bound 100. The resulting schedules are expanded to every model age 21–100, with age 100 assigned the oldest band.

Ordinary marginal rates use the Social Security benefit marginal rate for units aged at least 62 with positive gross Social Security benefits; other units use the wage marginal rate. Preferred-income rates use the qualified-dividend marginal rate. Nonfilers receive wage income as the ordinary-income base and zero direct marginal rates in this transformation.

Within each age band and year, weighted income percentiles define brackets. For a bracket B, rates are averaged using income times the tax-unit weight:

$$\bar{\tau}_B = \frac{\sum_{i \in B} w_i y_i \tau_i}{\sum_{i \in B} w_i y_i}. \tag{16}$$

Thus bracket formation uses population weights, while the reported rate uses income weights. Only positive income enters the corresponding schedule. Ordinary and preferred marginal-rate observations with absolute values at least 1.5 are excluded. The first exported bracket starts at zero; subsequent brackets use the smallest observed income in each selected percentile group.

Ordinary-rate and deduction-share percentiles include fine groups at the bottom and top, with the last lower boundary at the 99.9th percentile. Preferred-income schedules use lower boundaries at 0, 50, 90, 95, 99, and 99.9 percent. The tax-schedule demographic label is a single aggregate group.

6.2 Deductions and zero-income credits

Let d_i^{item} and d_i^{std} be itemized and standard deductions, d_i^{above} above-the-line deductions, e_i elective deferrals, and I_i the itemization indicator. The deduction numerator is

$$D_i = I_i d_i^{item} + (1 - I_i) d_i^{std} + d_i^{above} + 2e_i. \tag{17}$$

Its income denominator adds payroll income, twice elective deferrals, one-half payroll liability, gross Social Security benefits, and ordinary-rate corporate distributions. The deduction share is capped above at one and summarized using the same income-weighted bracket procedure.

For filers with zero ordinary income, the refundable-credit level is the tax-unit-weighted average refund within year and age band:

$$\bar{C}_{ta} = \frac{\sum_{i \in Z_{ta}} w_i \, \text{refund}_i}{\sum_{i \in Z_{ta}} w_i}, \qquad Z_{ta} = \{i : \text{filer},\ y_i^{ord} = 0,\ \text{age band } a\}. \tag{18}$$

An absent credit cell is exported as zero. This intercept-like amount is separate from the marginal-rate schedules.

6.3 Payroll and other household parameters

Social Security payroll brackets combine employee and employer rates. The first two bracket thresholds carry a wage-indexation label; later thresholds carry a nominal label. Unbounded thresholds are represented by a large terminal value and missing rates by zero.

Other generated tables supply consumption, wealth, estate, and Social Security benefit-exclusion parameters, together with taxable-income shares and payroll-base adjustments. For example, the estate table has zero and 3,000,000 as bracket starts and rates zero and 0.4; consumption and wealth schedules each contain a zero-rate bracket. These are generated model parameters. They are economically distinct from the detailed household-tax schedules summarized from microdata.

7 Business taxation and cost recovery

7.1 Corporate cost-recovery schedules

Corporate tax records and historical asset records supply deduction streams by vintage. Each current business record receives an adjustment based on the alternative-minimum-tax share and the fraction of deductions attributable to depreciation. If b_i is the book-tax adjustment and s_i^D the depreciation share, the adjusted deduction is

$$\widetilde{D}_{ivk} = \max\{0, D_{ivk}(1 - b_i s_i^D)\}. \tag{19}$$

The adjustment b_i is the alternative-minimum-tax-to-total-tax ratio minus one, clipped to $[0, 1]$, with zero used for the specified missing or zero-tax cases. Here v denotes vintage year and k the deduction position in the stream.

Corporate schedules divide return-weighted deductions by return-weighted basis:

$$d_{vk}^C = \frac{\sum_i n_i \widetilde{D}_{ivk}}{\sum_i n_i B_{iv}}, \tag{20}$$

where n_i is the number of returns and B_{iv} is basis. Historical records use weight one. Schedules before 2013 are normalized to sum to one; years 1980–1999 are supplied using the year-2000 schedule.

7.2 Pass-through asset composition

Pass-through cost-recovery schedules use corporate asset-type schedules with a different asset mix. For equipment, structures, and intellectual property, the corporate basis is multiplied by

$$a_j + b_j \log(v - 1980 + 1), \tag{21}$$

with coefficient pairs $(0.0474, 0.1457)$, $(0.646, 0.1121)$, and $(0.0855, 0.0240)$ respectively. These adjusted bases are normalized across nonresidential assets and scaled to projected pass-through nonresidential investment. Residential basis is set to projected residential investment. The pass-through deduction schedule is the asset-share-weighted mean of the resulting schedules.

7.3 Business tax-base parameters

The interface combines national-account production and income, tax-form aggregates, cost recovery, interest deductions, and foreign-affiliate parameters. The corporate output share is

$$s_t^C = \frac{Y_t^C}{Y_t^C + Y_t^{PT}}. \tag{22}$$

Interest deductibility is summarized as weighted deductible interest, adjusted for the book-tax factor, divided by weighted interest expense. The same deductible share is assigned to pass-through businesses. National-account net interest then supplies the aggregate interest-expense level used in the tax-base calculation.

Other corporate deductions are constructed as an accounting residual. For corporate output Y^C, wages W^C, supplements S^C, depreciation D^C, deductible share ϕ^C, net interest J^C, and adjusted taxable income TI^C,

$$d_t^{other,C} = \max\left\{0, \frac{Y_t^C - W_t^C - S_t^C - D_t^C - \phi_t^C J_t^C - TI_t^C}{Y_t^C}\right\}. \tag{23}$$

Adjusted corporate taxable income removes specified foreign-dividend, Subpart F, and foreign-tax gross-up components. Corporate credits are adjusted using the supplied foreign-tax-credit allocation formula before division by corporate output. Pass-through residual deductions use the corresponding output, labor compensation, depreciation input, net interest, and pass-through net income without the corporate nonnegativity truncation.

The statutory corporate rate is the final populated tax-rate bracket. Corporate distributions taxed at ordinary and preferred household rates are divided by domestic corporate profits less corporate income-tax revenue. The ordinary-taxable share of positive pass-through income equals one minus the income-weighted effective pass-through deduction rate. Foreign-affiliate rates and international tax parameters are supplied as additional inputs to the OLG business block.

8 Aggregate accounts and supplied parameter paths

8.1 Economic, budget, and benefit inputs

Economic projections and other-budget projections are selected by the requested years and retain their incoming economic values. The budget interface adds a policy-revenue-residual field initialized

to zero. The OASI interface copies the average wage index, benefit parameters, minimum-benefit parameters, PIA parameters, and retirement ages from the selected Social Security input. Cohort-indexed retirement ages therefore retain their birth-year dimension.

Transfers are copied from the supplied support tables. They include transfer outlay brackets and burdens, SNAP and SSI inputs, a transfer list, and inheritance allocations by age and income. A policy name identifies the exported package; the copy operation itself does not estimate transfer incidence.

8.2 Production and labor aggregation

Production parameters are repeated across the requested years. The domestic one-sector table supplies TFP 0.845, production parameters $\alpha_f = 0.45$ and $\zeta = 1$, and depreciation 0.056. The foreign table supplies TFP 0.775099144, the same share and depreciation parameters, and physical-capital share 0.55. Additional domestic parameters are $\nu_1 = 3.5$, $\nu_2 = 1.62$, $\eta_1 = 2.9$, and $\eta_2 = 0.1447$.

Labor-group tables depend on whether skill, nativity, and multiple experience levels are enabled. A single-group configuration uses one aggregate group. Skill configurations distinguish low, high non-STEM, and high STEM labor. Nativity-only configurations use low legal, low illegal, and high legal groups. Active substitution margins are assigned the very large value 10^{20}, representing a near-perfect-substitution setting. Inactive margins use a distinct negative marker for the consumer. These tables supply parameters and group mappings; the production function is evaluated in the downstream OLG model.

8.3 Openness and external adjustments

Foreign debt take-up and foreign capital take-up are both set to 0.3 in every requested year. These are exogenous openness parameters. The out-of-model adjustment table supplies a productivity multiplier of one, a lump-sum tax of zero, and infrastructure spending of zero. A neutral adjustment table therefore preserves the underlying productivity path and contributes no additional tax or infrastructure flow.

9 Treasury securities and delivery

9.1 Historical debt characteristics

The historical-interest interface reads monthly marketable-debt workbooks. It extracts Treasury bills, notes, bonds, inflation-protected securities, and floating-rate notes. The security records retain identifiers, coupon and yield information, issue and maturity dates, payment dates, and outstanding amounts on the workbook's scale.

The reference date is the first day of the month following the workbook month. Remaining maturity in months counts whole years and months and adds one when a positive residual number of days remains. Maturity from issue is calculated relative to the issue date. Repeated maturity cells in the workbook inherit the preceding maturity date within the parsing sequence.

The current-debt export selects records with a nonempty interest-payment-date field. A separate issue-date export retains issuance-related maturity measures. These are security characteristics for

the downstream debt calculation; the interface does not itself value a portfolio or project interest expense from the extracted debt.

9.2 Policy identity and interface versions

Each family writes a policy-specific package and a map entry with the family, policy identifier, and schema version. A schema version identifies a table contract rather than an economic base year. Configuration selects input locations and requested dates; those selections, alongside the source revision, define a reproducible interface request.

Requests run sequentially by default. An optional mode schedules up to five interface processes concurrently. Health performs its data preparation before the estimated and policy outputs that depend on those cleaned datasets. These execution choices organize computation; they do not change the economic conditioning sets described above.

A Source map

Source repository: `OLG_Interfaces`. Revision: `351d7498d2d1aac22cc9b7fbb88ff4ab097a352c`. Paths below are relative to this repository. The map identifies the active mechanisms and their family entry points.

Mechanism	Source anchor
Request assembly	`main.py`; `src/input_path_manager.py@InputPath`; `src/output_path_manager.py@BaseOutput`
Households and counts	`src/demographics/_interface.py`; `src/demographics/_process_demographics.py@Demographics`; `_HouseholdDataFrame`; `src/demographics/_demographic_groups.py`
Earnings profiles	`src/earnings/_earnings_deterministic.py@create_wage_profiles`; `src/earnings/earnings_process.py@initialize_earnings_process`
Earnings shocks	`src/earnings/_earnings_shocks.py@estimate_earnings_moments`; `_gmm_estimate`; `compute_transition_matrix`
Health assembly	`src/health/_interface.py`; `src/health/health.py@Health.dump_all_files`; `src/health/_config.py`
Health transitions	`src/health/estimate_health_transition_probabilities.py@_write_health_transitions`; `_count_based_one_year_transitions`; `_combine_count_based_transitions`
Medical expenditure	`src/health/estimate_health_expenditure_by_health_states.py`; `src/health/estimate_medical_spending_by_provider.py`
Insurance and targets	`src/health/estimate_out_of_pocket_shares.py`; `initial_health_distribution.py`; `insurance_enrollment_by_age_MEPS_target.py`; `insurance_enrollment_by_age_CPS_target.py`; `estimte_uninsured_vs_insured_payment_ratio.py`
Health policy	`src/health/health.py@save_health_policy_options`; `save_health_model_parameters`; `save_aca_parameters`; `save_excess_cost_growth_parameters`
Household taxation	`src/tax_code/_interface.py`; `src/tax_code/_household_tax/_ordinary_preferred_rates.py`; `_payroll_taxation.py`; `_household_tax.py`
Business taxation	`src/tax_code/_business_tax/_business_rates.py`; `src/tax_code/_business_tax/_depreciation.py`
Aggregate interfaces	`src/economic_projections.py`; `src/other_budget_projections.py`; `src/oasi.py`
Supplied parameters	`src/production.py`; `src/transfers.py`; `src/openness_path.py`; `src/out_of_model.py`; `SupportingFiles/`
Treasury securities	`src/historic_interest.py@load_raw_mspd`; `_clean_up`