

Structural National Savings & Fiscal Modelling

A Preventive Public Policy Fiscal Architecture Framework

Author: Christopher Frank Neame-Curtis

Framework Series: Preventive Public Policy (PPP)

Classification: Core Fiscal Architecture Paper

Executive Summary

Governments do not usually overspend because they lack intelligence. They overspend because they measure the wrong time horizon.

Modern fiscal policy is built around annual budgets, five-year forecasts, and electoral cycles. Structural risk compounds over decades. Healthcare deterioration, labour inactivity, infrastructure decay, unmanaged migration pressure, and educational under-optimisation generate long-tail liabilities that are invisible in short political windows.

This framework identifies compounding structural risk early, quantifies long-term avoided cost, integrates preventive investment into Treasury modelling, aligns fiscal discipline with early intervention, and reduces crisis expenditure volatility.

This is not an argument for higher spending. It is an argument for smarter capital allocation.

Part I – The Problem: Reactive Fiscal Architecture

Crisis Budgeting Bias

Most advanced economies allocate funds in response to visible strain: NHS backlog expansion, emergency prison capacity, asylum accommodation overflow, welfare cost spikes, and infrastructure emergency repairs.

Crisis spending often carries a 2–5x cost multiplier relative to early-stage intervention.

Political Discounting

Democratic systems structurally discount long-term benefits because benefits appear outside electoral cycles, prevention lacks visual drama, and success is invisible.

PPP terms this Institutional Short-Termism Distortion (ISTD).

Part II – The Structural Savings Model (SSM)

Layer 1: Baseline Compounding Cost Projection

Each policy domain is mapped against:

g = annual growth rate of untreated cost

p = probability of escalation

m = crisis cost multiplier

C_0 = current cost base

t = time horizon (years)

Projected Long-Term Liability Formula:

$$L_t = C_0 \times (1 + g)^t \times p \times m$$

This identifies the true fiscal exposure if no preventive action is taken.

Layer 2: Preventive Intervention Cost (PIC)

I = initial preventive investment

e = effectiveness rate of intervention

t_i = time to impact

Prevented Liability Formula:

$$PL = L_t \times e$$

Net Structural Saving Formula:

$$NS = PL - I$$

If $NS > 0$ over a 10–20 year horizon, the intervention is structurally fiscally efficient.

Layer 3: Political Discount Correction (PDC)

d = political discount rate

n = electoral cycle length (years)

Adjusted Political Value Formula:

$$\text{Adjusted Value} = \text{NS} / (1 + d)^n$$

PPP proposes reducing artificial political discounting in preventive categories.

Part III – Application Domains

Healthcare (Chronic Disease & Sleep Apnoea Model)

Early CPAP rollout reduces cardiovascular admissions, workplace accidents, productivity loss, and long-term disability claims, producing multi-department structural savings.

Labour Market Inactivity

Early intervention reduces long-term sickness benefit reliance and increases income tax and National Insurance revenue through higher workforce participation.

Immigration & Border Stabilisation

Upstream enforcement reduces asylum hotel expenditure, legal backlog costs, and volatility in Home Office budgets.

Education & Talent Optimisation

Early cognitive identification reduces remediation cost and increases lifetime tax contribution and national productivity.

Part IV – Structural National Savings Fund (SNSF)

A ring-fenced fiscal instrument investing in policies with measurable 10–25 year avoided cost returns.

Governance: Independent modelling board, Treasury oversight, OBR-style validation mechanism.

Part V – Institutional Reform

Multi-Year Budget Anchoring; Cross-Department Ledger Integration; Outcome-Based Treasury Reporting; Preventive Risk Index (PRI).

Part VI – Macroeconomic Stability Impact

Long-term preventive allocation lowers emergency borrowing, reduces gilt volatility, improves fiscal predictability, and stabilises debt-to-GDP ratios.

Part VII – Political Positioning

Pro-market, pro-worker, pro-Treasury discipline, pro-institutional resilience. Not expansionary spending but long-term liability reduction.

Conclusion

Nations weaken when compounding structural risks are ignored. Preventive Public Policy reframes fiscal discipline as early intelligent allocation rather than late emergency expansion.

The choice is between paying early and predictably, or paying late and exponentially.

Structural savings are the fiscal foundation of national stability.