



# iBIT

## Integrated Budget Intelligence Toolkit

Intelligence solutions and machine learning applications to budget for the Sustainable Development Goals

2024

# Research Questions and Policy Inferences/Applications

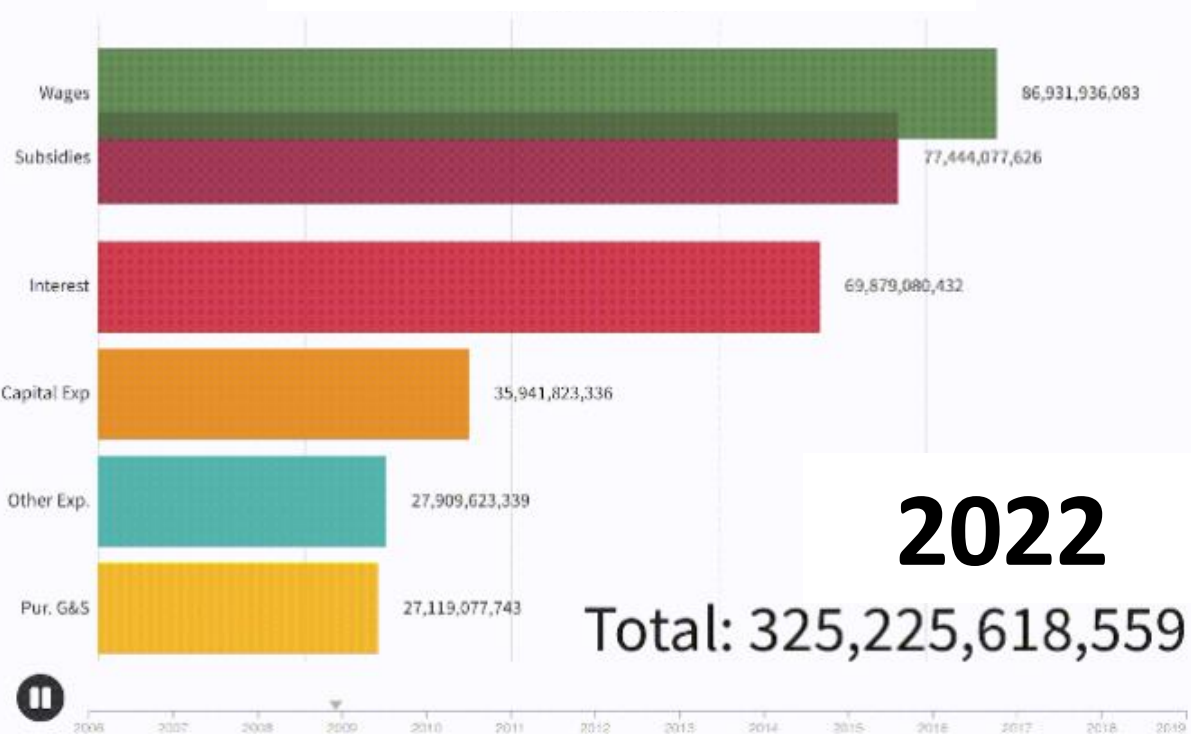
1. Which budget lines consistently advance/regress SDG progress? **(Catalytic Budget Lines)**
2. What is the scale of resources that are directly/indirectly improving SDG performance? **(Budget Execution)**
3. How impactful is the intertemporal budget spending on SDG progress? **(Budget Impact)**
4. To what extent is the current budget effectively advancing SDG performance? **(Budget Alignment)**
5. Is the budget optimally designed to advance the SDGs? **(Budget Enhancement)**
6. How to optimize existing public spending to maximize SDG outcomes? **(Budget Optimization)**
7. How to recalibrate the budget in times of austerity to advance the SDGs? **(Austere Budgeting)**
8. How much more could the SDGs progress if additional financing was optimized? **(Unlocking Potentials)**
9. How much more public spending is required to achieve national priorities? **(Charting Investment Paths)**

# What is the Data telling us?

## Letting the data speak..

finding a model that fits the data

All the 60 budget lines, disaggregated by economic nature and function of government are tested for each of the 90 national priority indicators along 13 FY



2022

Total: 325,225,618,559



SDG 8: 92%

SDG 11: 85%

SDG 6: 59%

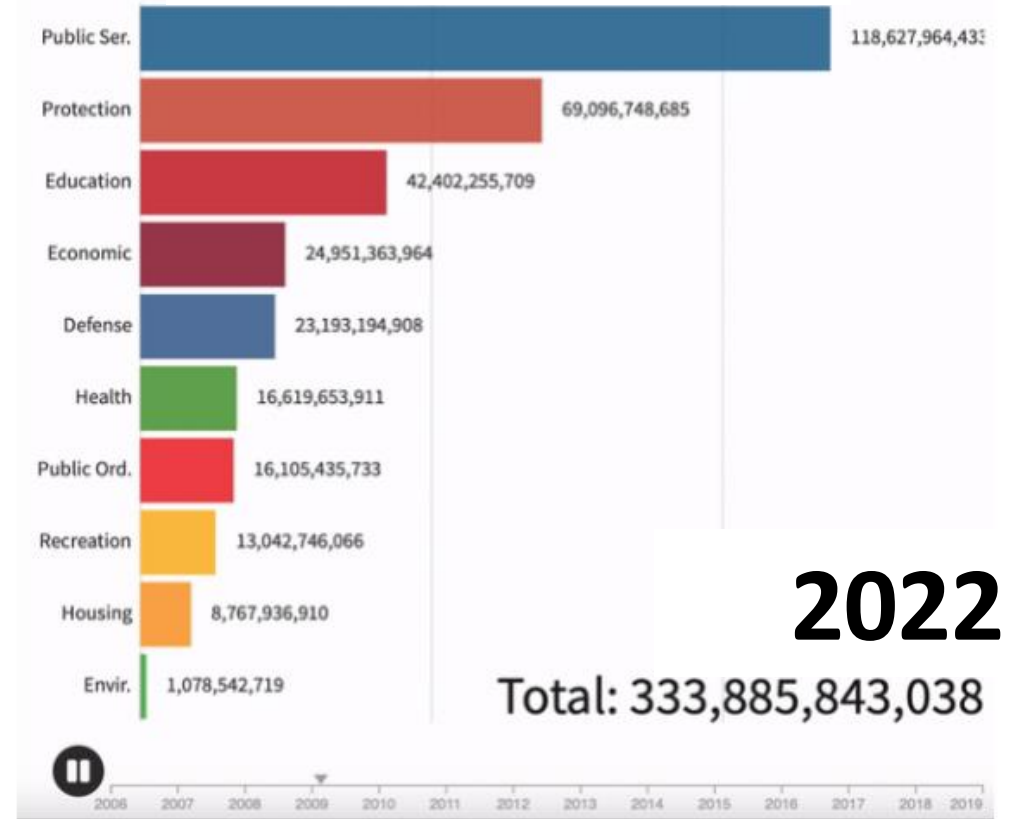
SDG 3: 51%

SDG 4: 32%

continued..

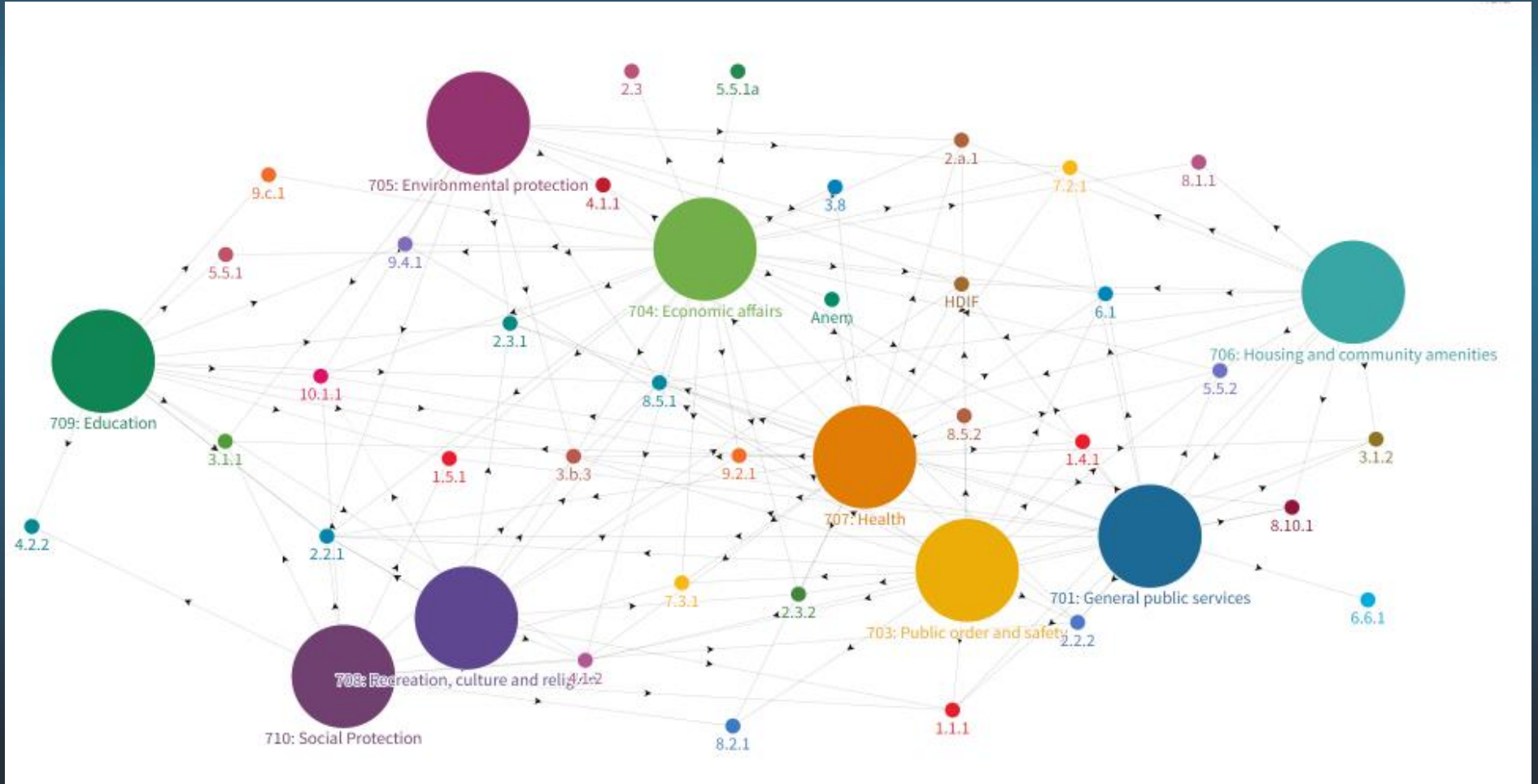
## Letting the data speak: finding a model that fits the data

For each available national priority **indicator** (*dependent variable*), the procedure selects the set of **budget lines** (*covariates*) that predicts its variation the best



# AI generated National-Budget Network Map

Number of  
links between  
budget lines  
&  
National  
indicators



# Integrated Budget Intelligence Toolkit (iBiT)

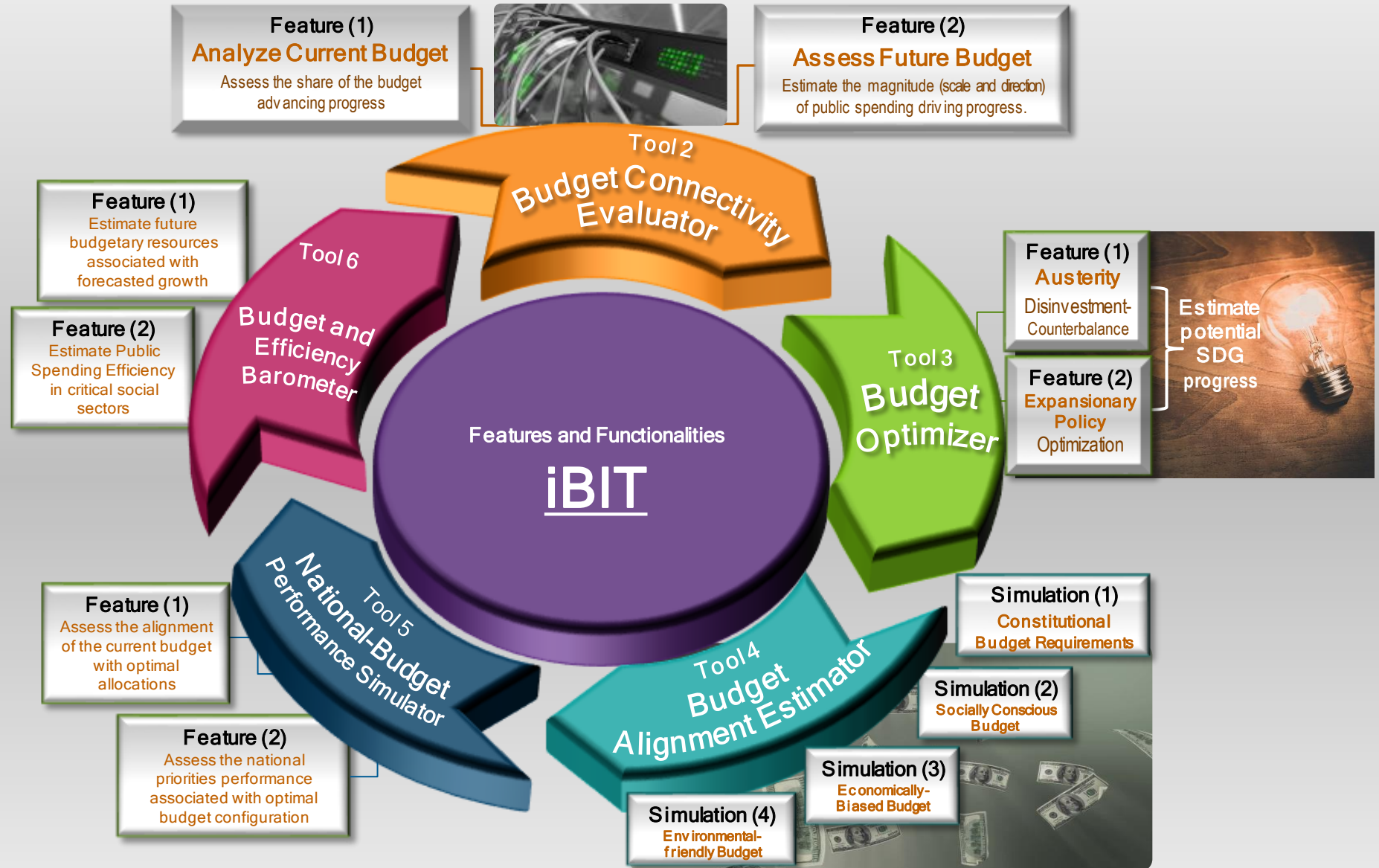
**IMPACT FINANCE**  
TOWARDS AN INTEROPERABLE IMPACT FINANCE ECOSYSTEM

**MACHINE LEARNING**

**BUDGET COMPASS**  
Tool 1



A- Identify budget lines advancing/regressing national priority performance.  
B- Analyze direct/indirect impacts of different budget expenditures on national performance.



2023  
2022

# Thank You

for your kind attention

2020