Logging off: Searching for new growth drivers for Solomon Islands

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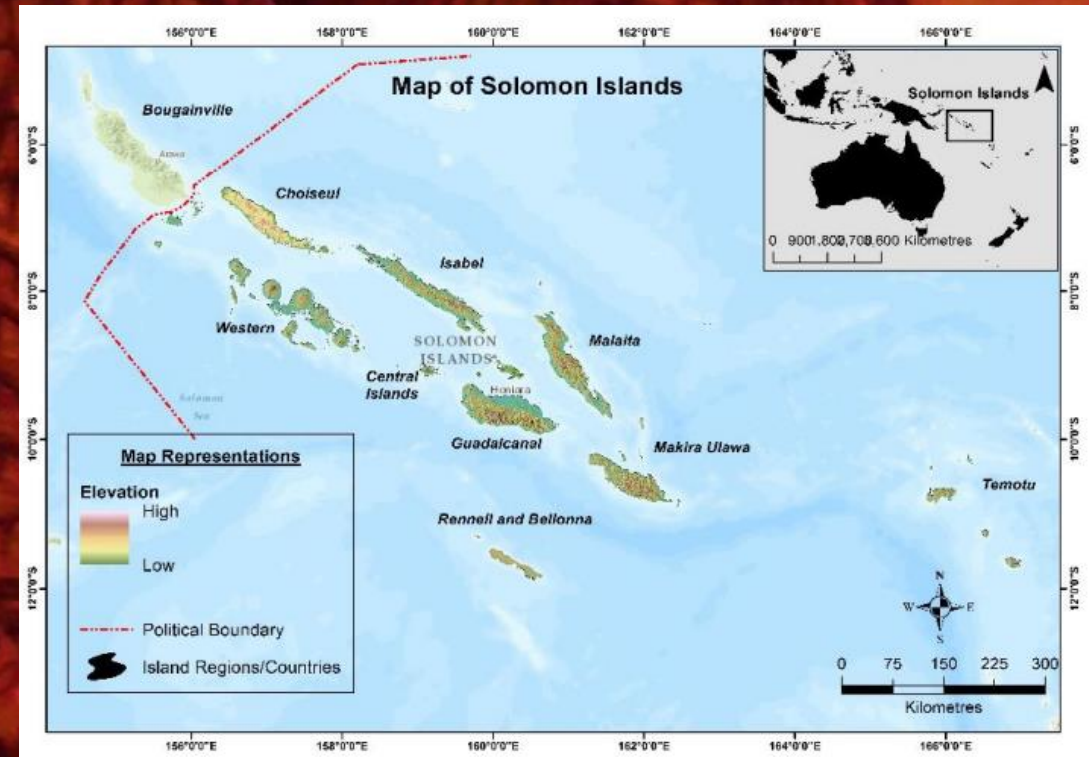
Research Questions

1. What is the impact of the decline in logging output on the economy of Solomon Islands?

2. What industry or sector can replace logging as a new engine of growth for Solomon Islands?
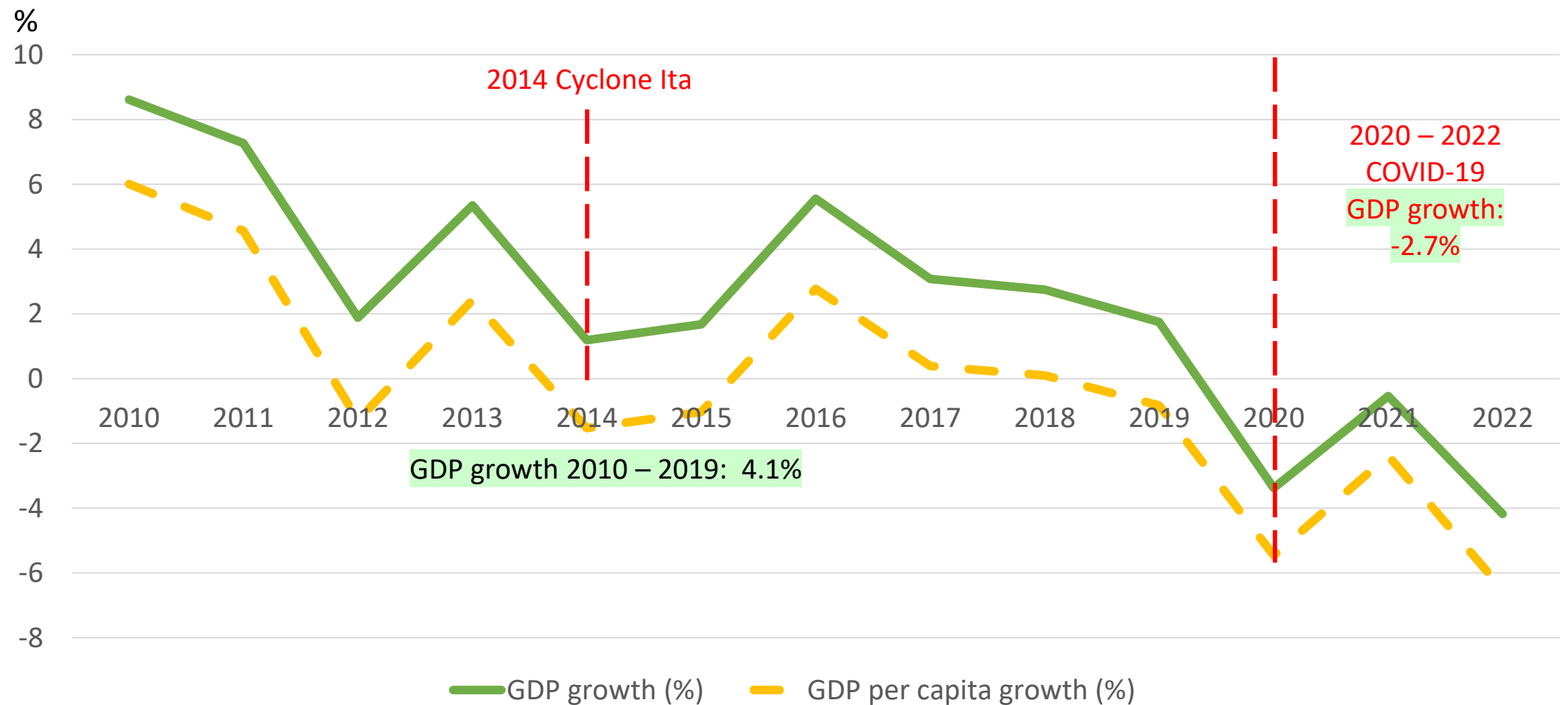
Outline

- Introduction to Solomon Islands

- Motivation and Research Background

- Methodology

- Initial Findings

- Future work

- Policy Recommendations

Introduction to Solomon Islands

- Melanesian country in the South Pacific
- Population: 721,455 in 2019
- 2.7% pop'n growth rate (2009 – 2019)
- 74.4% of population live in rural areas
- 10 provinces including Honiara, capital
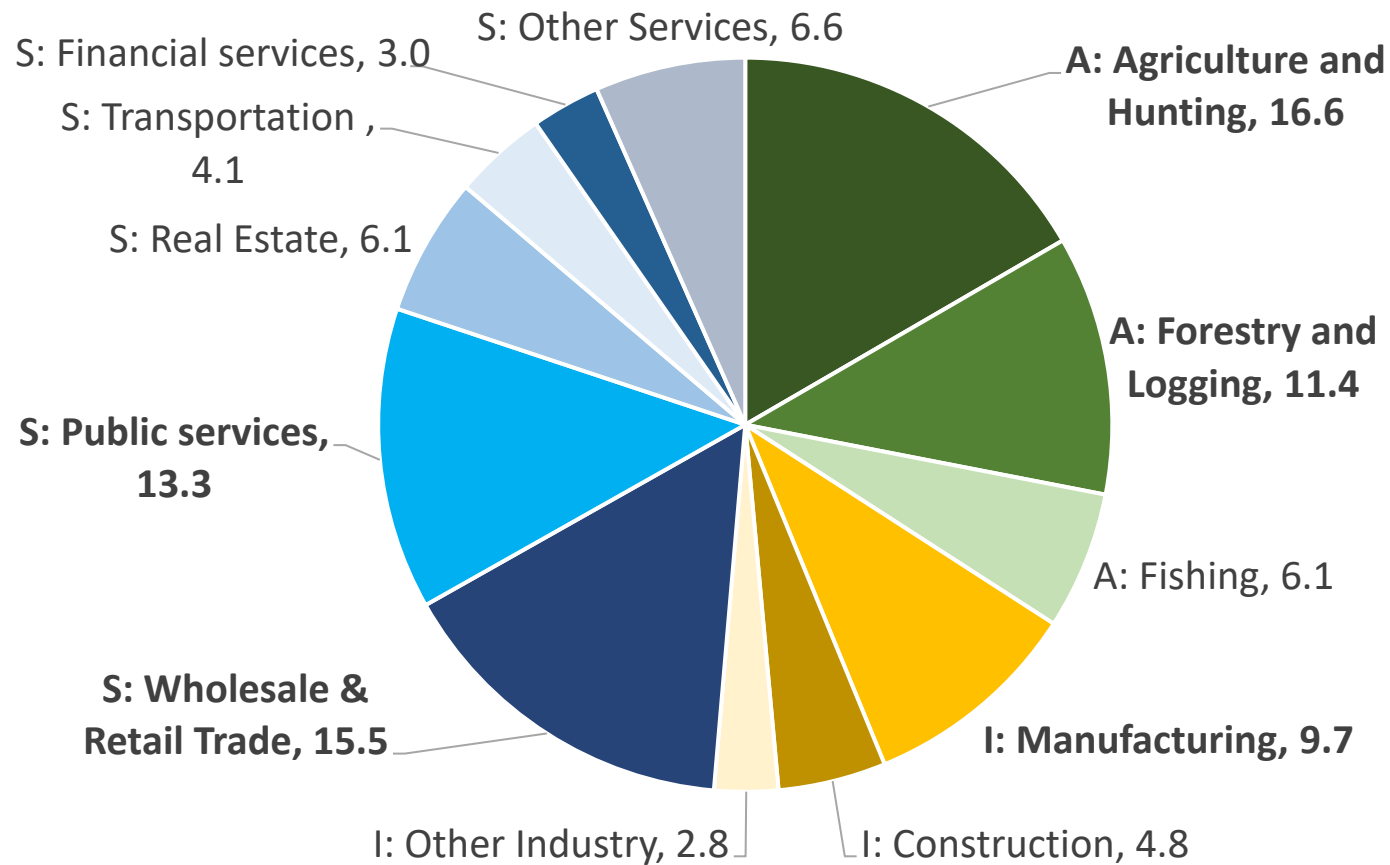- GDP per capita: $2,067 in 2022
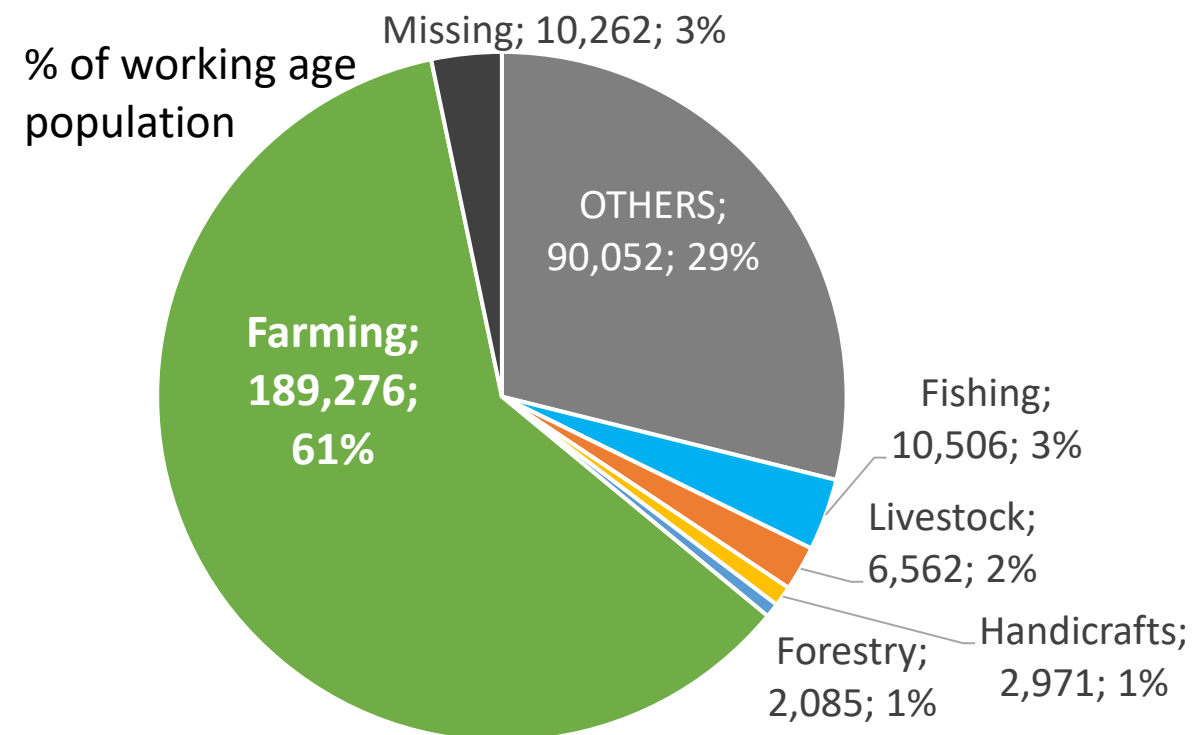- Low-income country (to graduate in 2024)

Map of Solomon Islands

GDP Growth

2014 Cyclone Ita

2020 – 2022
COVID-19
GDP growth:
-2.7%

GDP growth 2010 – 2019: 4.1%

— GDP growth (%)   — — GDP per capita growth (%)

Economic structure, 2020

S: Other Services, 6.6
S: Financial services, 3.0
S: Transportation , 4.1
S: Real Estate, 6.1
S: Public services, 13.3
S: Wholesale & Retail Trade, 15.5
I: Other Industry, 2.8
I: Construction, 4.8
I: Manufacturing, 9.7
A: Fishing, 6.1
A: Forestry and Logging, 11.4
A: Agriculture and Hunting, 16.6

Source: 2020 National Accounts, Solomon Islands National Statistics Office.

# Population and labor structure, 2017

% of population

- Employer; 3,167; 1%
- Employed: Public; 17,617; 3%
- Others; 54,249; 8%
- Employed: Private; 27,853; 4%
- Unpaid Worker; 42,712; 7%
- Students and children below 10; 327,612; 51%
- Own-account/ Subsistence; 166,117; 26%

% of working age population

- Missing; 10,262; 3%
- OTHERS; 90,052; 29%
- Farming; 189,276; 61%
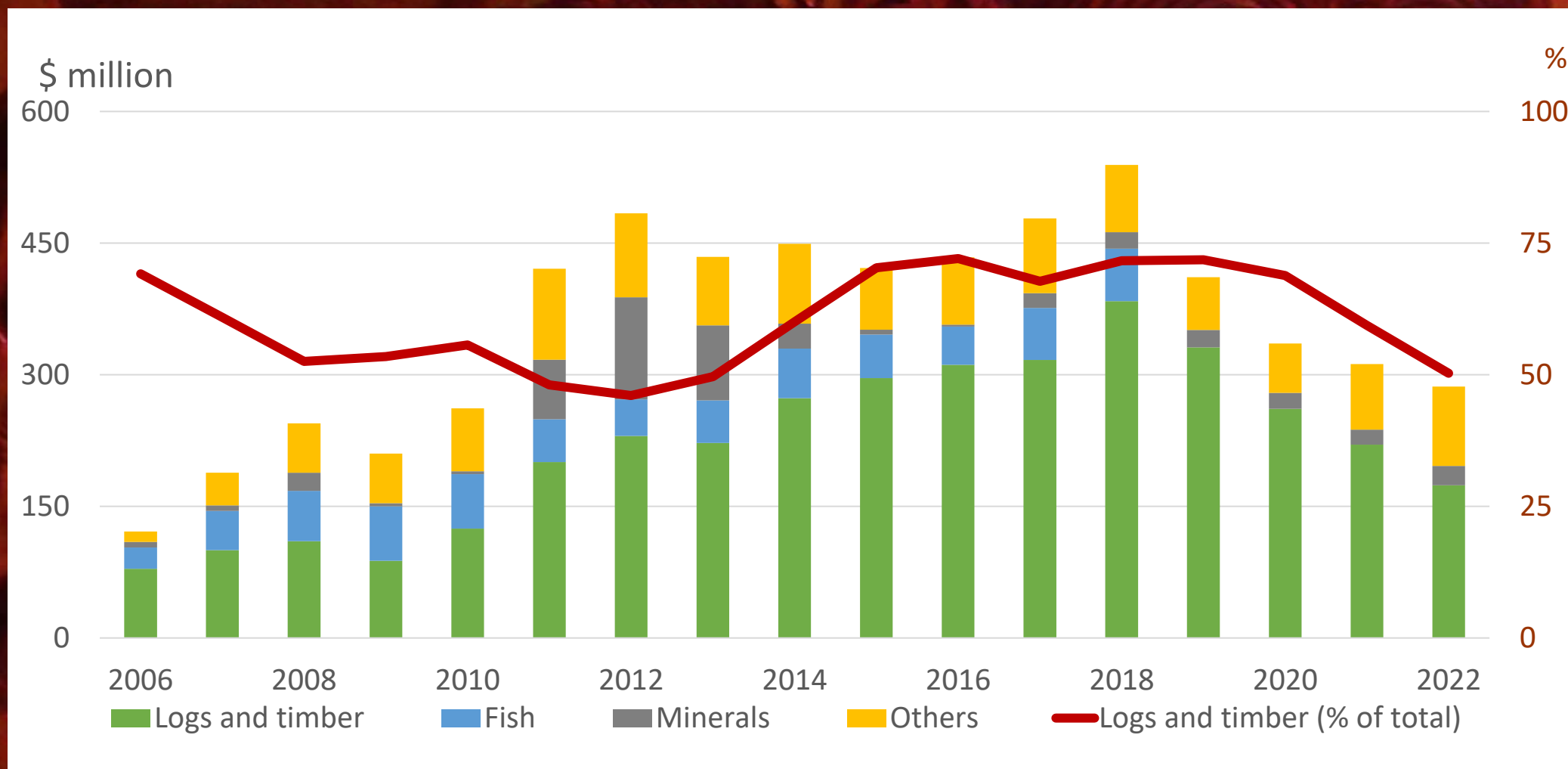- Fishing; 10,506; 3%
- Livestock; 6,562; 2%
- Handicrafts; 2,971; 1%
- Forestry; 2,085; 1%
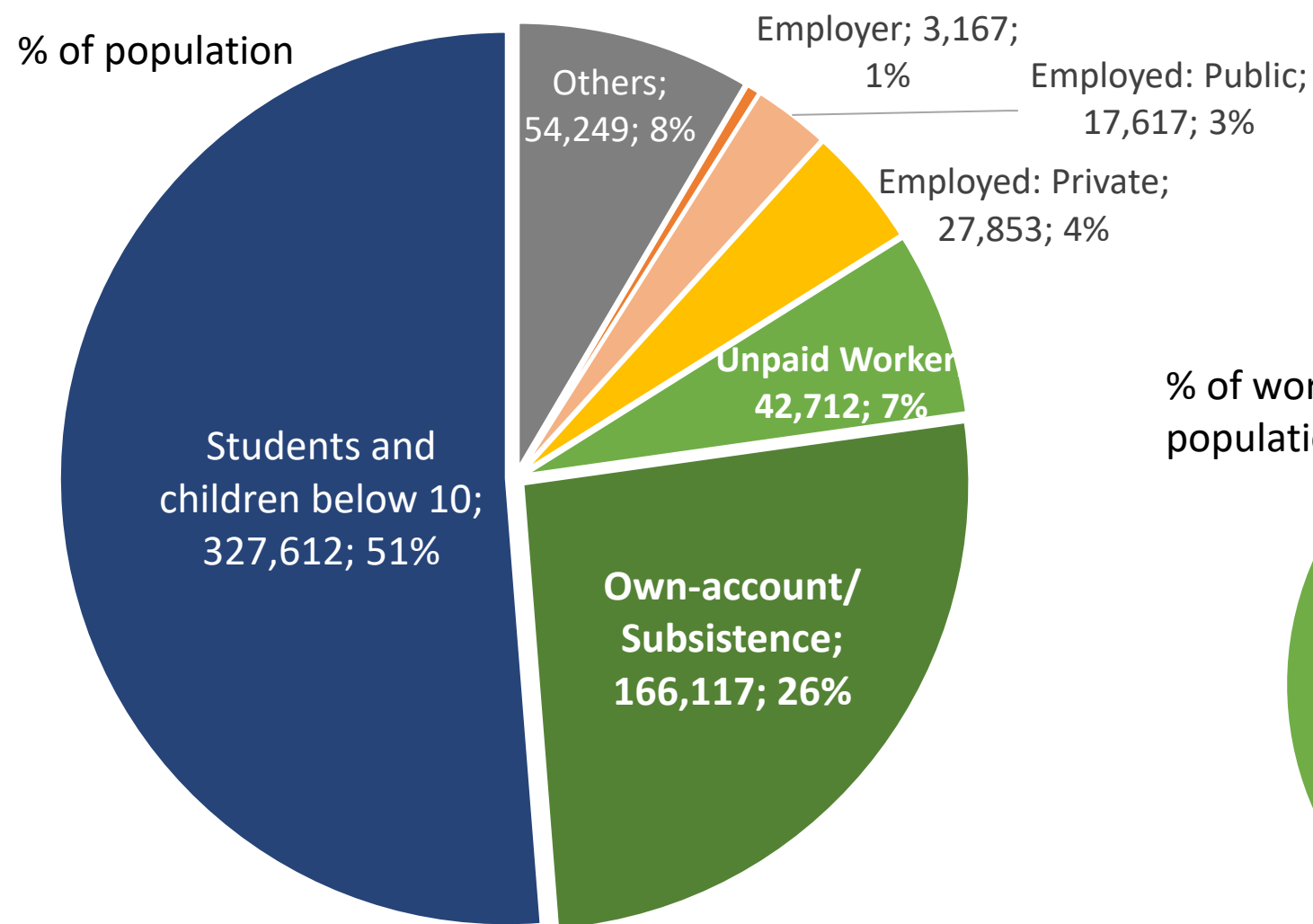
Source: 2017 National Agriculture Census, Solomon Islands National Statistics Office.

Logging output and exports

million cubic meters

Output   Exports

$ million

Source: Central Bank of Solomon Islands, Authors' estimates.
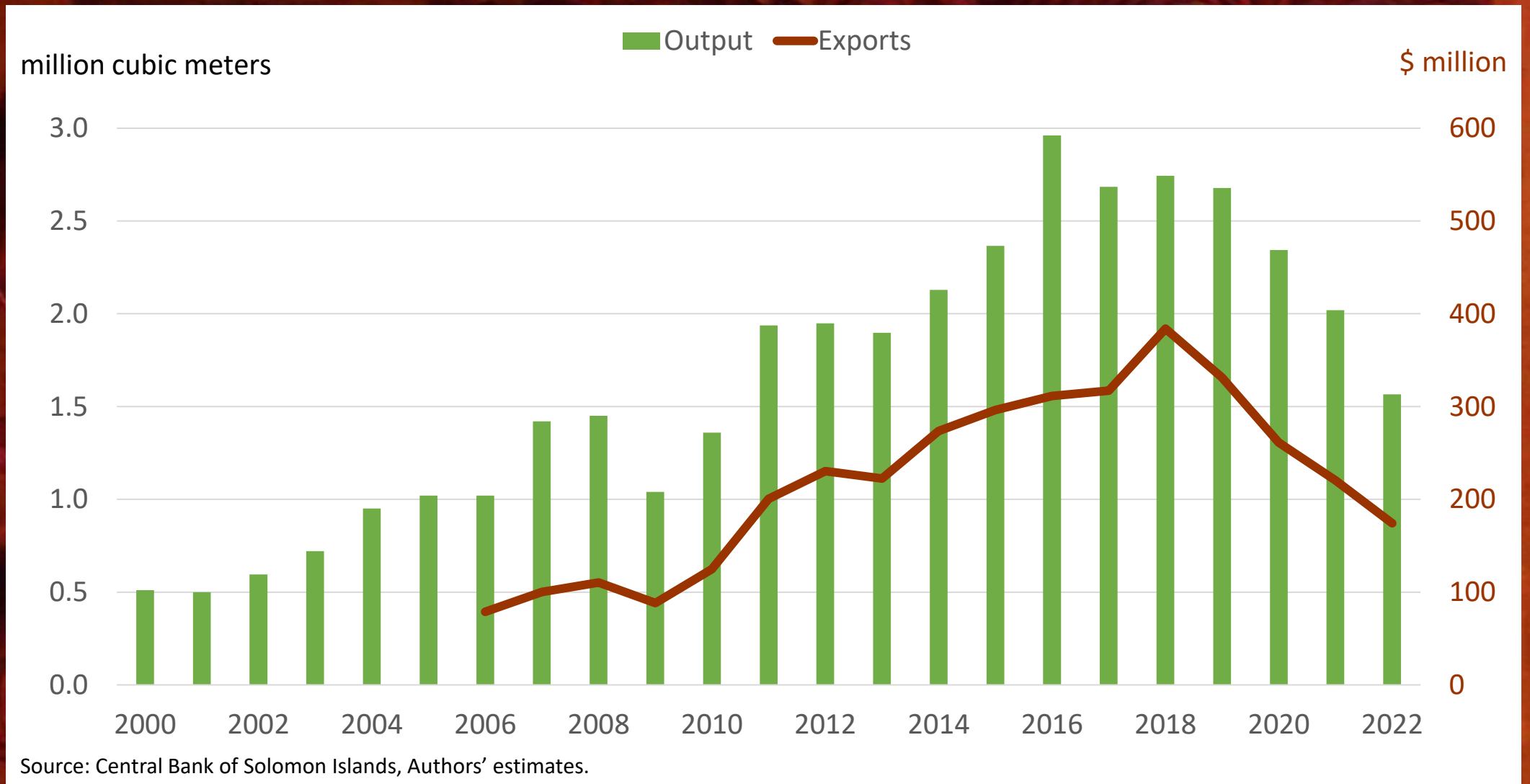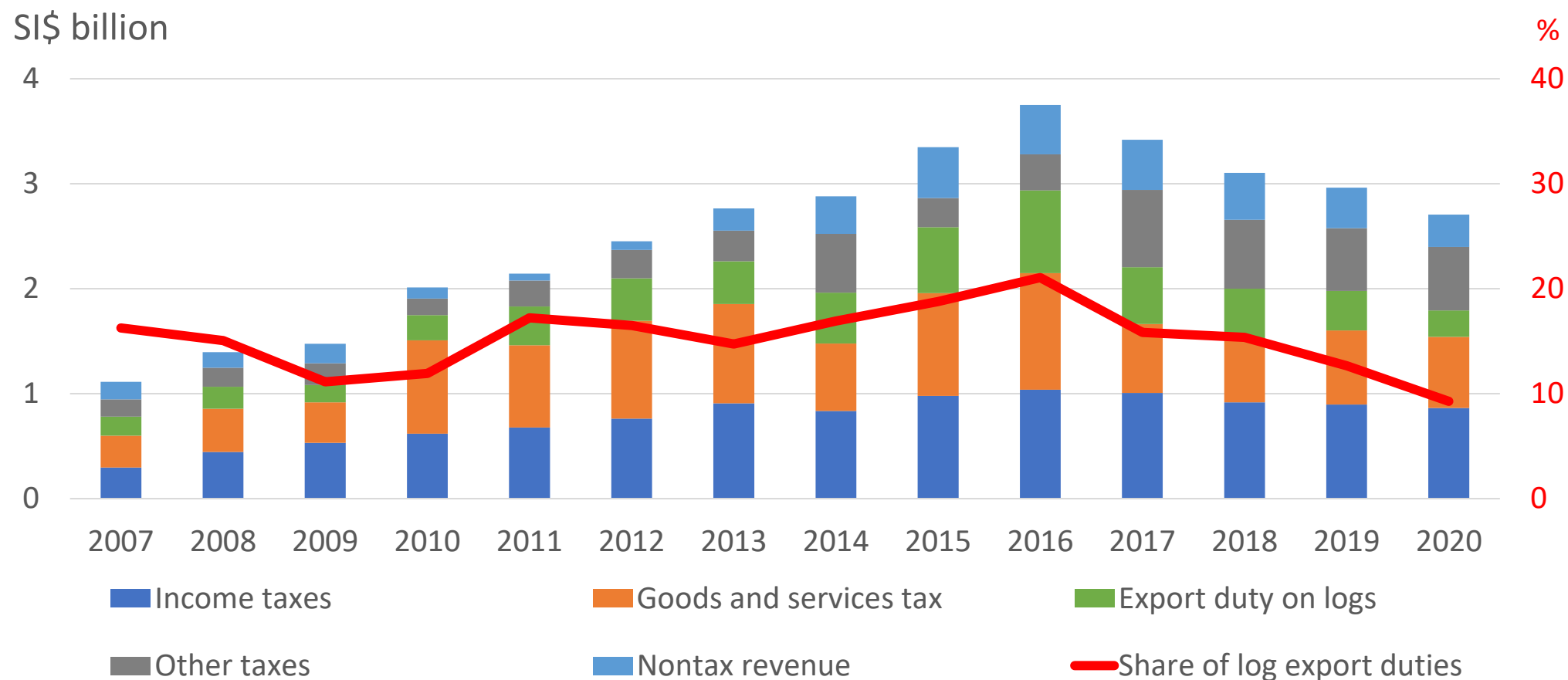
Exports

Source: Central Bank of Solomon Islands, Authors' estimates.

Domestic revenues

Source: Central Bank of Solomon Islands, Authors' estimates.

Methodology

- Macroeconomic Monitoring and Forecasting Model
  - Developed by ADB's Economic Research and Regional Cooperation Department
  - Simple, excel-based framework
  - Mainly for short-term forecasting and monitoring
  - Frameworks customized for each economy
  - Accommodates different approaches to forecasting
  - Mainly based on average growth rates of key variables
  - Provides consistency check across sectors (real, monetary, external)
- "Forecasts" are driven by story set by user
  - Need to identify key drivers of forecast
  - For Solomon Islands: logging output, government spending and investment

Methodology
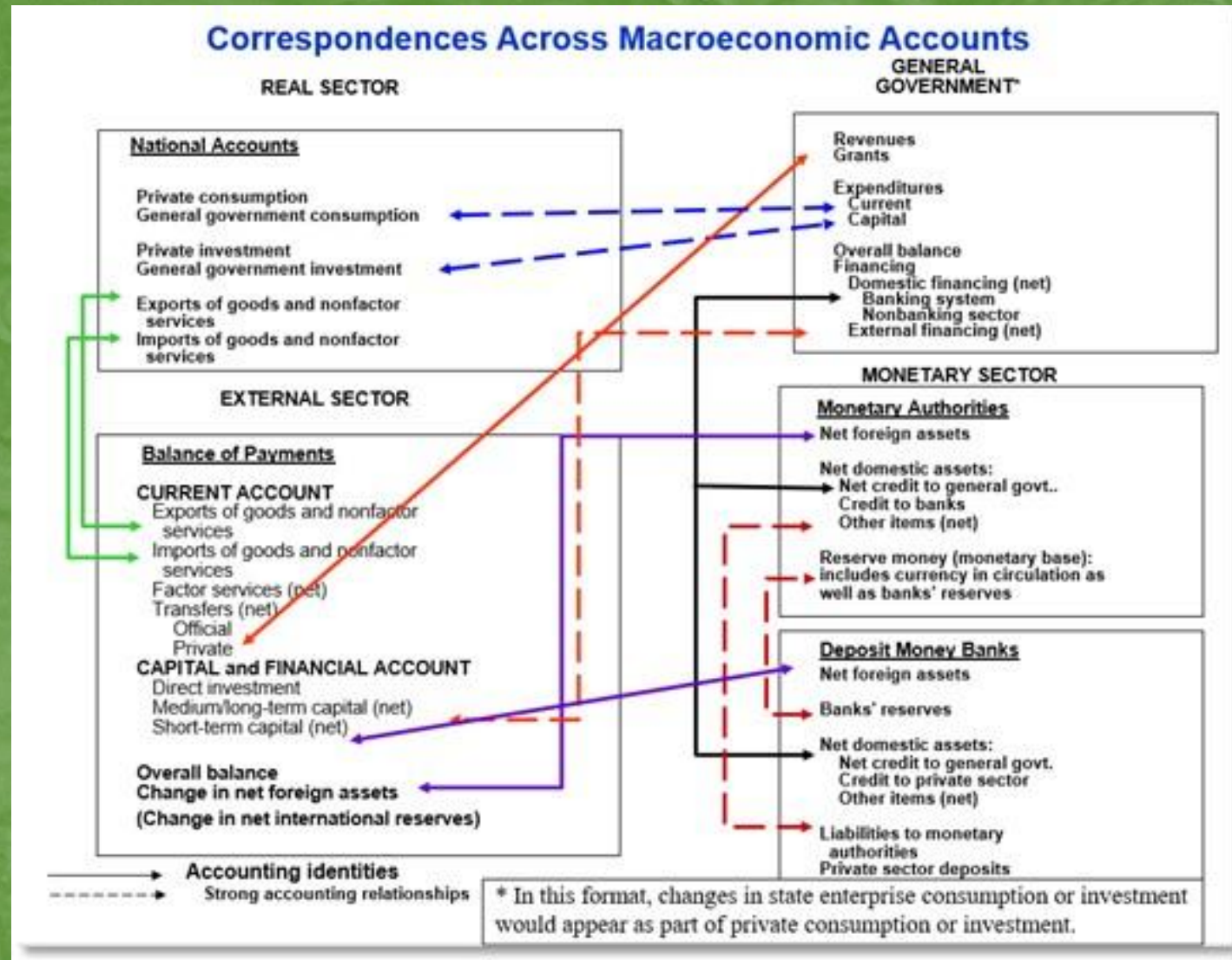
Methodology

1. Set-up the baseline
  - Log output growth: seasonally-adjusted forecast by MS Excel (forecast.est) based on quarterly data from 2006 to 2022
  - GDP growth: based on 3-year average growth of each subsector (2023 and 2024 mainly based on *Asian Development Outlook 2023*)

- Log output
  - GDP: Forestry, manufacturing, wholesale and retail trade, transportation
  - Fiscal: Log duty on exports
  - BOP/ Trade balance: Exports

- 2. Create different scenarios

- 3. Find alternative growth drivers

Methodology: Baseline

	Pre-COVID 19 (2010-2019)	COVID-19 (2020 – 2022)	Baseline (2023-2033)
Log output (thousand m3)	2,270	1,976	1,044
Change in log output (%, average)	11.0	-16.3	-9.4
Log exports ($ million, average)	269	219	130
% of exports	*59.4*	*56.6*	*30.3*
Real GDP growth rate (%, avg.)	4.1	-2.7	2.5
Nominal GDP growth rate (%, avg.)	7.4	-0.1	3.1
GDP (US$ million eop)	1,620	1,616	2,258
GDP per capita, current ($ eop)	2,245	2,067	2,155
GDP per capita, constant ($ eop)	1,821	1,551	1,516
Inflation (%, avg.)	3.0	2.8	2.5
Trade balance (% of GDP, avg.)	-1.4	-6.8	-7.8
Fiscal balance (% of GDP, avg.)	1.9	-3.2	-3.7

Source: Authors' estimates

Methodology

2. Create different scenarios
   - Different rates of log output decline
   - Sustainable level of 250,000 cubic meters
3. Find new industries as alternative growth drivers
   - Fishing (including aquaculture)
   - Crop production (kava, palm oil, copra, cocoa)
   - Tourism

Initial Findings

|	Pre-COVID 19 2010-2019	COVID-19 2020 – 2022	Baseline 2023-2033	Scenario 1	Scenario 2	Scenario 3	Counterfactual
Log output (thousand m3, avg.)	2,270	1,976	1,044	660	409	**250**	2,902
Change in log output (%, avg.)	11.0	-16.3	-9.4	**-15.4**	**-25.0**	-36.1	10.0
Log exports (USD million, avg.)	269	219	130	82	51	31	362
% of exports	*59.4*	*56.6*	*30.3*	21.7	14.8	9.9	53.3
Real GDP growth rate (%, avg.)	4.1	-2.7	2.5	2.1	1.7	1.4	**4.1**
Nominal GDP growth rate (%, avg.)	7.4	-0.1	3.1	2.6	2.1	1.7	5.3
GDP (USD billion eop)	1.62	1.62	2.26	2.15	2.04	1.95	2.85
GDP per capita, current (USD eop)	2,245	2,067	2,155	2,051	1,945	1,861	2,722
GDP per capita, constant (USD eop)	1,821	1,551	1,516	1,458	1,395	1,342	1,793
Inflation (%, avg.)	3.0	2.8	2.5	2.5	2.5	2.5	2.5
Trade balance (% of GDP, avg.)	-1.4	-6.8	-7.8	-10.7	-12.7	-14.3	2.5
Fiscal balance (% of GDP, avg.)	1.9	-3.2	-3.7	-4.3	-4.8	-5.1	-1.7
Public debt (% of GDP, eop)	7.9	15.0	46.0	52.7	58.6	63.2	20.4

avg = average, eop = end of period, m3 = cubic meters, USD = United States dollar.
Source: Authors' estimates.

Impacts of reducing log output to 250,000 m3

Level in 2033	From 2022	From Baseline
Log output (%)	-87.3	-76.0
Change in log output (pp)	122.0	284.7
Log exports (%)	-85.8	-76.2
Real GDP growth rate (pp)	4.1	-1.1
Nominal GDP growth rate (pp)	1.8	-1.4
GDP (%)	20.7	-13.6
GDP per capita, current (%)	-10.0	-13.6
GDP per capita, constant (%)	-13.5	-11.5
Inflation (pp)	0.0	0.0
Trade balance (pp)	-7.5	-6.5
Fiscal balance (pp)	-2.0	-1.4
Public debt (%)	48.3	17.2

pp = percentage points.
Source: Authors' estimates.

GDP per capita ($)
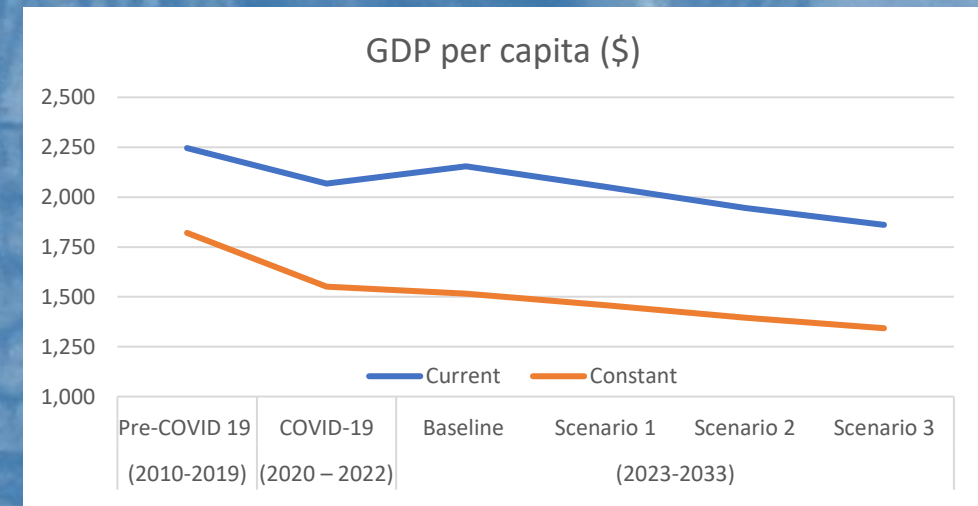
Initial Findings

- Numerous challenges and obstacles
- Economy must growth faster than the population
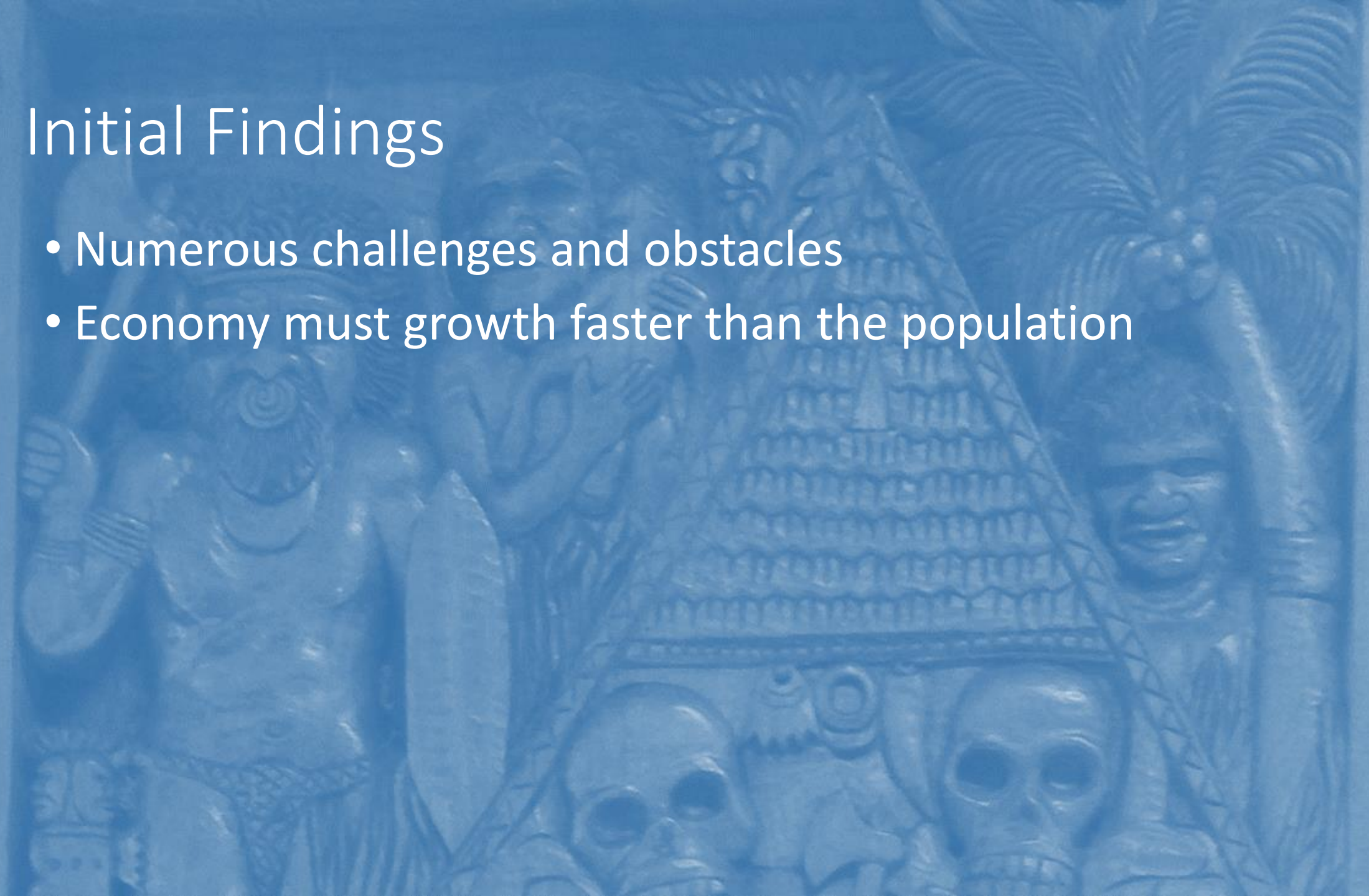
Future work

- Finding other growth drivers
  - How much should an industry grow to be able to reach an average real GDP growth rate of 4.0%?
  - Crop production
  - Fishing (including aquaculture)
  - Tourism

Policy recommendations

- Invest on integrated, sustainable, and multi-sectoral or multi-use developments;

- Involve local governments, communities, and the private sector in the development from conceptualization to implementation;

- Focus on long-term projects that can benefit multiple generations by ensuring developments and projects are climate-proofed; and

- Unleash the potentials of digital connectivity in searching for partners, investors, and customers.

Tagio Tumas!