

# OOKAMI PROJECT APPLICATION

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**Date:** 6/4/2021

**Project Title:** Fiscal Space with Defaultable Public Debt

Papers in progress:

- Deadly Debt Crises: COVID-19 in Emerging Markets
- Monetary Policy and Sovereign Risk in Emerging Economies (NK-Default)

**Usage:** Testbed

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**Names & Email of initial project users:**

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**Usage Description:**

Hybrid OpenMP + MPI Fortran 2008 code for computation and simulation of large models of sovereign debt crises and their interactions with epidemiological dynamics (“Deadly Debt Crises...” project) or monetary policy (“NK-Default...” project).

**Computational Resources:**

- Estimate for the total node hours per year:  $4 \times 8 \times 150 \approx 5000$
- Size (nodes) and duration (hours) for a typical batch job: 5-10 nodes for under 4-8 hours (on Seawulf)
- Disk space (home, project, scratch): under 10 GB on scratch, under 2 GB in home

**Personnel Resources:**

none

**Required software:**

recent Fortran compiler with MPI and OpenMP support

**If your research is supported by US federal agencies:**

- Agency: not at this time
- Grant number(s):

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**Production projects: not at this time**