Additional information

1. Data sets were obtained from data.uno.org and stats.oecd.org; they are freely available.

2. Fitting the data to Equation (1) was done using the Levenberg-Marquardt algorithm [1]. Unpack `levmar.tar.gz` and compile Fit with "make fit". This program expects a file named "gdp.dat".

3. `fit_subset.pl` Perl script cuts, rescales a GDP time series, and fits it to Equation (1) using Fit compiled above.

4. Computing out-samples predictions from an in-sample fit is done by additional scripts: using `sweepover.py` on `fit_gdp.pl` generates a file containing the fitting parameters for various time series lengths. Then `create_plot_pred.pl` outputs their corresponding prediction length, together with plots. The `.pm` files contain subroutines needed to run these scripts.

5. `enveloppeRun.pl` and `maxBeta.pl` generate time series of the theoretical model defined in Section 3; their outputs were used to produce Figures 9 to 11.

Bibliography

[1] Lourakis, M.I.A. (2009). Levenberg-Marquardt Nonlinear Least Squares Algorithms in C/C++. http://www.ics.forth.gr/~lourakis/levmar/. Accessed on 01/10/2009.