



Institute for
Fiscal Studies



An introduction to FORTAX

What FORTAX is

- UK tax and benefit microsimulation library for 1991/92-2006/07
- Differences to TAXBEN
 - Faster
 - Written in Fortran
 - Less comprehensive
 - Less of a front end
- Ways of using Fortax
 - Directly in Fortran code
 - From Stata
 - Over the web

What FORTAX doesn't do

- Individuals aged 60+
- Disability
- Non-dependants
- Non-take-up
- Conditionality
- Taxation of unearned income
- “Employer” and indirect taxes

Using FORTAX from Fortran: building FORTAX

1. In Visual Studio:

- Create a new static library project

2. In Windows Explorer:

- Navigate to the project folder
- SVN Checkout <http://fortax-library.googlecode.com/svn/trunk/fortax> into the project folder
- Copy across prices and systems folders

3. In Visual Studio:

- Add all the source files you just downloaded
- Project > Properties > Fortran > Preprocessor > Preprocess Source File
- Compile

Using FORTAX from Fortran: calling FORTAX

In Visual Studio:

1. Create new console application

2. Write code that uses FORTAX

3. Show compiler where to find FORTAX

- Project > Properties > Fortran > General > Additional Include Directories > C:\Users\jonathan_s\Documents\fortran\fortaxlib\fortaxlib\Debug
- Project > Properties > Linker > General > Additional Library Directories > C:\Users\jonathan_s\Documents\fortran\fortaxlib\fortaxlib\Debug
- Project > Properties > Linker > Input > Additional Dependencies > fortaxlib.lib

4. Build and run

Using FORTAX from Stata

- Extract www.princeton.edu/~ajshep/files/fortax/fortaxstata-win32.7z to C:\ado\personal
- Open Stata and type “help fortax”

Using FORTAX Online

- www.fortaxonline.com
- No further explanation necessary!

Where to get FORTAX

- Source code: <http://code.google.com/p/fortax-library/>
- Documentation:
 - www.princeton.edu/~ajshep/files/fortax/fortax-reference.pdf
(FORTAX reference manual)
 - www.ifs.org.uk/wps/wp1108.pdf (tax system documentation)
- FORTAX for Stata: www.princeton.edu/~ajshep/fortax.htm
- FORTAX online: www.fortaxonline.com