# Inforum Software

## Updates to G7, Compare, and the Inforum Website

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www.Inforum.umd.edu
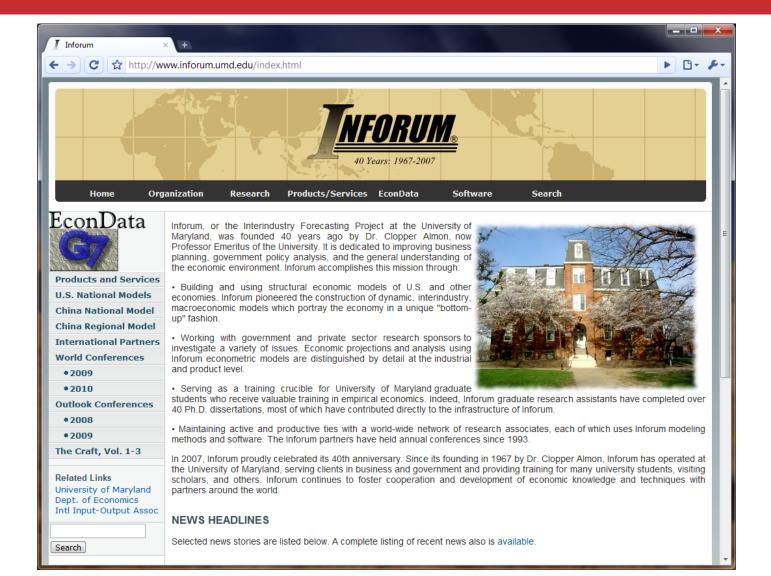
# Introduction

- ☐ Introduction
- ☐ The Inforum Website
  - ◘ Software, documentation, and demonstrations
  - ◘ Current economic data (EconData)
  - ◘ Inforum research and papers
  - ◘ International Partners and Conferences
- ☐ Updates to G7
  - ◘ Extensions Excel commands
  - ◘ String commands
  - ◘ Other G7 development
- ☐ Updates to Compare
  - ◘ Excel formatting within Compare
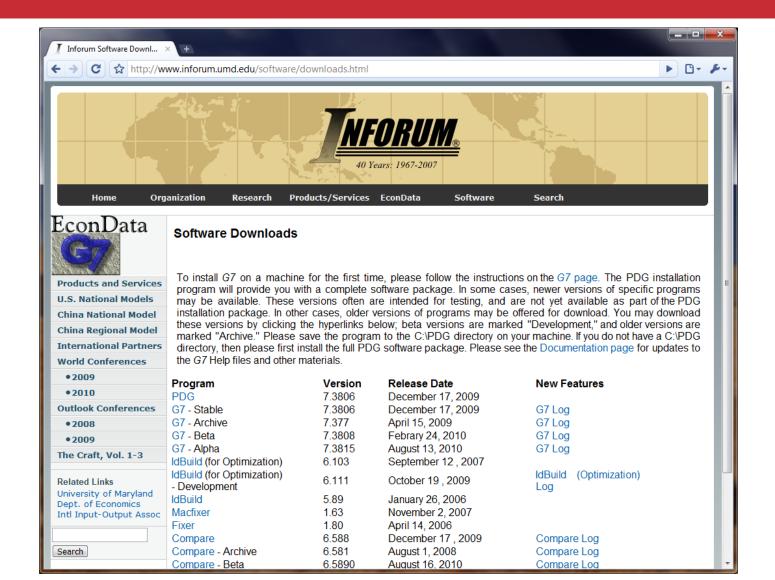  - ◘ Excel file types
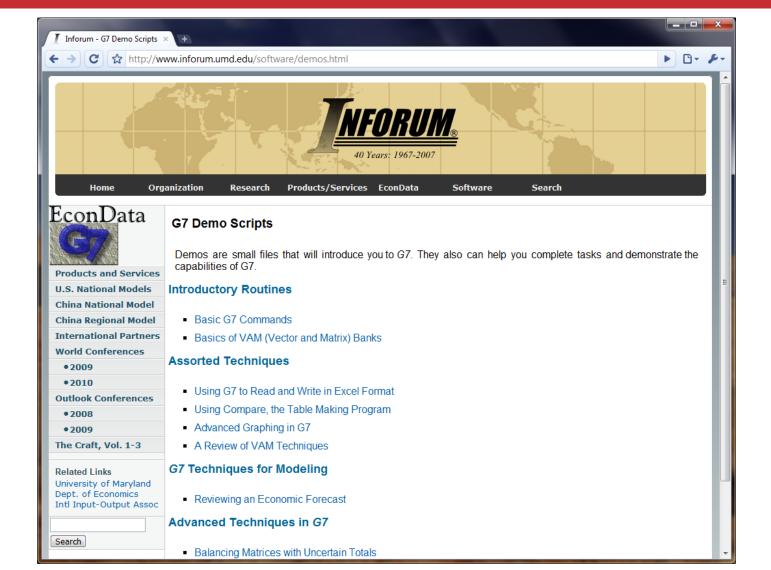- ☐ Conclusion

# www.Inforum.umd.edu

# Software & Documentation
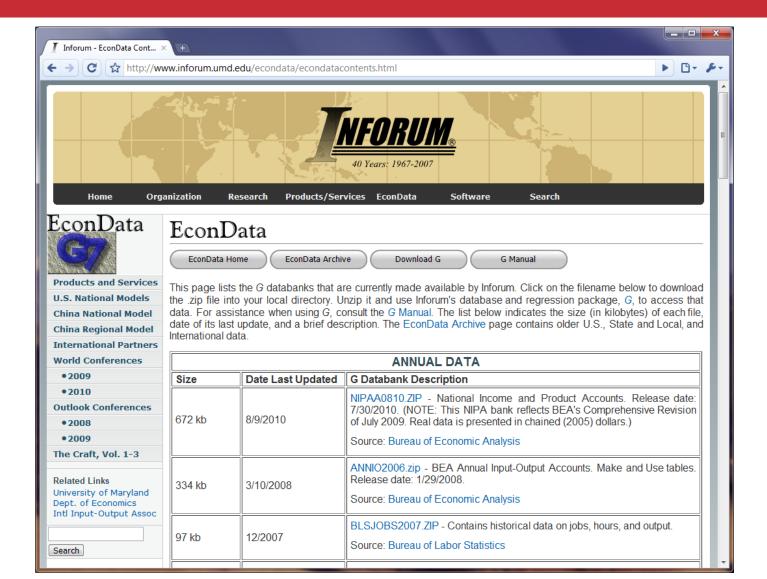
# G7 and Compare Demos

# EconData

# Research and Papers

# International Partners

# International Conferences

# What is G7?

☐ A program to...

- ◘ Build and manage data banks

- ◘ Estimate econometric equations

- ◘ Build and run economic models

- ◘ View data and economic forecasts with tables and graphs

# G7 Development

- G7 has added several capabilities:
  - Extensions to Excel commands
  - String manipulation
  - Variety of small functions
  - Various bug fixes

# G7 Development

□ **xl font  <c1>  <r1>  <c2>  <r2>  <setting>**

▫ G7 can format text and data within Excel spreadsheets.

▫ Create presentation-quality spreadsheets in fewer steps.

▫ Control font size, color, typeface, bold, italic, underline, and alignment settings.

▫ EX: xl font C 5 M 20 bold underline size14 blue "arial"

# G7 Development

- **xl formula   <row>   <column>   "<formula>"**
  - G7 has the capability to enter simple formulas into the Excel spreadsheet.
  - EX:      xl formula  A  5  "=sum(A1:A4)"

- **xl print missing "<value>"**
  - Provide a character or string to indicate a missing value when G7 writes data to a spreadsheet.
  - EX:      xl print missing  "N/A"

# G7 Development

- **xl vecwrite <vector> < v(index)> < c(cols) > < r(rows) > < direction > [< start > [ end ]]**
  - Print entire vectors of data to an Excel workbook using the XL VECWRITE command.
  - Alternative to using XL WRITE statement within a DO LOOP.
  - Must be used with a VAM bank.
  - EX:

    xl vecwrite a.output v(1-10) c(B) r(5-14) right 2008 2010

# G7 Development

- **%xlcol (<int>)**
  - Converts positive integers into corresponding letter.
  - EX: 	%xlcol ( 26 )	- Returns "z"

- **%eval ( <expression>, <date> )**
  - The value of *expression* in period *date* is retrieved.
  - Use any legal algebraic expression or stored variable.

# G7 Development

- **autocomplete [ <setting> ]**
  - In G7 command box, turn on/off auto-complete.
  - Setting will be restored each time G7 is run.

- **lv [-sr] [<bank_location> [<wildcard>]]**
  - List vectors and matrix names within a specified bank.
  - Sort alphabetically or reversed.
  - Use "lvc" instead of "lv" to print in column form.

# G7 Development

☐ **str <name> = <string>**

   ▫ Store and manipulate strings of characters.

   ▫ Strings should be surrounded by quotation marks.

      ■ str concept  = "Output"

      ■ str industry = "Coal Mining"

      ■ str display  = concept + "of the " + industry " industry."

   ▫ To print a stored string to the screen, use the %s() function.

      ■ text   %s(display)

      ■ ti    %s(industry)

# G7 Development

- **do {**

    **xl read A %1 string**

    **xl read E %1 right rev%xls 2000 2007**

    **}(6-158)**

  - Use strings to read data with non-consecutive numeric variable names.
  - EX: NAICS codes

# G7 Development

- **str SWITCH = " "     # switch on**
  **str SWITCH = ":"     # switch off**
  **%s(SWITCH)**
    **gr gdp**
  **%s(SWITCH)**

  - Use strings as a comment switch to turn on and off comments.
  - Use on large files that you run multiple times, but do not need to run the entire script each time.

# G7 Development

- **str STARTDATE = "2000"**
- **str ENDDATE = "2010"**
- **fdates %s(STARTDATE) %s(ENDDATE)**

  - Strings can be used similar to constants in C++.
  - Set dates at the top of an add file and refer to strings later for more efficient code.

# G7 Development

- **%strlen**(<string>)
  - Calculates the length of *string.*


- **%strcmp**(<string1>,<string2>)
  - Compares *string1* and *string2,* with case sensitivity.


- **%strncmp**(<string1>,<string2>,<N>)
  - Compares the first *N* characters of *string1* and *string2*, with case sensitivity

# What is Compare?

- □ Compare is Inforum's table-generating program.
- □ Create tables from one or more bank or model simulation.
  - ◘ When comparing two or more banks, display in levels, differences, or percent differences.
- □ Export G7 data to text files or Excel spreadsheets.

# Compare Development

- **\xls [ <filename> ]**
  - If *filename* is specified, then it will be used to name the document.
  - If *filename* is not given, then the name will be specified according to the *.IN configuration file.

- **\filetype <type>**
  - Specify a file type other than basic .XLS.
  - Other types include .CSV, .HTML, .TXT, and more.

# Compare Development

- Using commands found in the stub, format various components of a Compare generated Excel file.
  - \fonthead - font for \head output
  - \fonttitle - font for \title
  - \fontdate - font for specified dates
  - \fontbank - font for printing bank titles
  - \fontname - font for series names
  - \fontdata - font for numerical output
  - \font - default settings; will override all others

# Compare Development

- □ In each case, the \font... command is followed by one or more font settings
- □ The order of settings does not matter.
- □ Control font size, color, typeface, bold, italic, underline, and alignment settings.
  - ▫ \fonttitle size24
  - ▫ \fontdate center "arial"
  - ▫ \fonthead "green"
  - ▫ \fontdate "times new roman"

# Conclusion

- Future development
    - Additional string management capability
    - Greater Excel formatting support

- More information at www.Inforum.umd.edu
    - Documentation
    - Demonstrations
    - Research papers

# Conclusion

☐ To report any issues, email description and sample code to ronald.horst@gmail.com and twittek@gmail.com.

☐ Any questions?

☐ Thank you for your attention!