

Inforum Software

Updates to G7, Compare, and the Inforum Website

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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

The screenshot shows a web browser window with the URL <http://www.inforum.umd.edu/index.html>. The page features a large banner with the Inforum logo and the text "40 Years: 1967-2007" over a world map background. Below the banner is a navigation menu with links for Home, Organization, Research, Products/Services, EconData, Software, and Search.

The main content area is titled "EconData" and includes a sidebar with a "G7" logo and a list of links: Products and Services, U.S. National Models, China National Model, China Regional Model, International Partners, World Conferences (2009, 2010), Outlook Conferences (2008, 2009), and The Craft, Vol. 1-3. Below these are "Related Links" for the University of Maryland Dept. of Economics and Intl Input-Output Assoc, along with a search box.

The main text describes Inforum as the Interindustry Forecasting Project at the University of Maryland, founded 40 years ago by Dr. Clopper Almon. It lists three key activities:

- Building and using structural economic models of U.S. and other economies. Inforum pioneered the construction of dynamic, interindustry, macroeconomic models which portray the economy in a unique "bottom-up" fashion.
- Working with government and private sector research sponsors to investigate a variety of issues. Economic projections and analysis using Inforum econometric models are distinguished by detail at the industrial and product level.
- Serving as a training crucible for University of Maryland graduate students who receive valuable training in empirical economics. Indeed, Inforum graduate research assistants have completed over 40 Ph.D. dissertations, most of which have contributed directly to the infrastructure of Inforum.

A photograph of a brick building with cherry blossoms is shown to the right of the text.

Additional text states: "Maintaining active and productive ties with a world-wide network of research associates, each of which uses Inforum modeling methods and software. The Inforum partners have held annual conferences since 1993." and "In 2007, Inforum proudly celebrated its 40th anniversary. Since its founding in 1967 by Dr. Clopper Almon, Inforum has operated at the University of Maryland, serving clients in business and government and providing training for many university students, visiting scholars, and others. Inforum continues to foster cooperation and development of economic knowledge and techniques with partners around the world."

The page concludes with a "NEWS HEADLINES" section, stating: "Selected news stories are listed below. A complete listing of recent news also is [available](#)."

Software & Documentation

Software Downloads

To install G7 on a machine for the first time, please follow the instructions on the [G7 page](#). The PDG installation program will provide you with a complete software package. In some cases, newer versions of specific programs may be available. These versions often are intended for testing, and are not yet available as part of the PDG installation package. In other cases, older versions of programs may be offered for download. You may download these versions by clicking the hyperlinks below; beta versions are marked "Development," and older versions are marked "Archive." Please save the program to the C:\PDG directory on your machine. If you do not have a C:\PDG directory, then please first install the full PDG software package. Please see the [Documentation page](#) for updates to the G7 Help files and other materials.

Program	Version	Release Date	New Features
PDG	7.3806	December 17, 2009	
G7 - Stable	7.3806	December 17, 2009	G7 Log
G7 - Archive	7.377	April 15, 2009	G7 Log
G7 - Beta	7.3808	February 24, 2010	G7 Log
G7 - Alpha	7.3815	August 13, 2010	G7 Log
IdBuild (for Optimization)	6.103	September 12, 2007	
IdBuild (for Optimization) - Development	6.111	October 19, 2009	IdBuild (Optimization) Log
IdBuild	5.89	January 26, 2006	
Macfixer	1.63	November 2, 2007	
Fixer	1.80	April 14, 2006	
Compare	6.588	December 17, 2009	Compare Log
Compare - Archive	6.581	August 1, 2008	Compare Log
Compare - Beta	6.5890	August 16, 2010	Compare Log

G7 and Compare Demos



The screenshot shows a web browser window displaying the Inforum website. The browser's address bar shows the URL <http://www.inforum.umd.edu/software/demos.html>. The website header features the Inforum logo with the tagline "40 Years: 1967-2007" and a navigation menu with links for Home, Organization, Research, Products/Services, EconData, Software, and Search.

The main content area is titled "G7 Demo Scripts" and includes the following text: "Demos are small files that will introduce you to G7. They also can help you complete tasks and demonstrate the capabilities of G7." Below this text are several sections of links:

- Introductory Routines**
 - Basic G7 Commands
 - Basics of VAM (Vector and Matrix) Banks
- Assorted Techniques**
 - Using G7 to Read and Write in Excel Format
 - Using Compare, the Table Making Program
 - Advanced Graphing in G7
 - A Review of VAM Techniques
- G7 Techniques for Modeling**
 - Reviewing an Economic Forecast
- Advanced Techniques in G7**
 - Balancing Matrices with Uncertain Totals

The left sidebar contains a section for "EconData" with a G7 logo and a list of "Products and Services" including U.S. National Models, China National Model, China Regional Model, International Partners, World Conferences (2009, 2010), Outlook Conferences (2008, 2009), and The Craft, Vol. 1-3. It also includes "Related Links" to the University of Maryland Dept. of Economics and Intl Input-Output Assoc, and a search box.

EconData

The screenshot shows a web browser window displaying the Inforum EconData website. The page features a navigation menu with links for Home, Organization, Research, Products/Services, EconData, Software, and Search. The main content area is titled "EconData" and includes a sub-header "ANNUAL DATA". Below this, there is a table listing three data files with their sizes, last update dates, and descriptions. The table is as follows:

ANNUAL DATA		
Size	Date Last Updated	G Databank Description
672 kb	8/9/2010	NIPAA0810.ZIP - National Income and Product Accounts. Release date: 7/30/2010. (NOTE: This NIPA bank reflects BEA's Comprehensive Revision of July 2009. Real data is presented in chained (2005) dollars.) Source: Bureau of Economic Analysis
334 kb	3/10/2008	ANNIO2006.zip - BEA Annual Input-Output Accounts. Make and Use tables. Release date: 1/29/2008. Source: Bureau of Economic Analysis
97 kb	12/2007	BLSJOBS2007.ZIP - Contains historical data on jobs, hours, and output. Source: Bureau of Labor Statistics

On the left side of the page, there is a sidebar with a search box and a "Search" button. The sidebar also contains a list of "Products and Services" including U.S. National Models, China National Model, China Regional Model, International Partners, World Conferences (2009, 2010), Outlook Conferences (2008, 2009), and The Craft, Vol. 1-3. Related links include the University of Maryland Dept. of Economics and Intl Input-Output Assoc.

Research and Papers

The screenshot shows a web browser window with the URL <http://www.inforum.umd.edu/papers/research.html>. The page features the Inforum logo with the text "40 Years: 1967-2007" and a navigation menu with links for Home, Organization, Research, Products/Services, EconData, Software, and Search.

EconData

- Products and Services
- U.S. National Models
- China National Model
- China Regional Model
- International Partners
- World Conferences
 - 2009
 - 2010
- Outlook Conferences
 - 2008
 - 2009
- The Craft, Vol. 1-3

Related Links

- University of Maryland
- Dept. of Economics
- Intl Input-Output Assoc

Inforum Research

The list below contains research papers, presentations, dissertations, and books written by Inforum partners. Additional papers are posted for other Inforum-supported research and materials from several Input-Output conferences.

Where appropriate, the working paper number is listed at the left in the table below. In some cases, additional materials are available for download. The search box at the bottom left of this page may be used to search for details within the papers.

Papers are provided in PDF format. To obtain a free copy of Adobe Reader, click on the link below. If you are unable to download the paper or are unable to read the paper you downloaded, please contact the webmaster at the address listed below.

[Download Adobe Reader](#)

Select Types: | Sort By: | Sort Direction: | |

Use the CTRL key to select more than one.

Doc. ID	Type	Date	Title	Authors
	PDF	2010-02-02	The Craft of Economic Modeling: Part III	Clopper Almon
	PDF	2009-09-01	Productivity measurement in France and Italy	Rosella Bardazzi
	PDF	2009-	What Happened to the U.S. Economy in 2008?	Clopper Almon

International Partners

The screenshot shows a web browser window with the URL <http://www.inforum.umd.edu/organization/international/japan.html>. The page features a header with the Inforum logo and a navigation menu. The main content area is titled "JAPAN" and includes a "Select A Country" dropdown menu. Below this, there are sections for "Team Coordinators" (listing Mitsuhiro Ono), "Research Center" (providing contact information for the Institute for International Trade and Investment), and "Team Members" (listing Mitsuhiro Ono, Toshiaki Hasegawa, Takeshi Imagawa, Yasuhiko Sasai, and Jyo Inn). A sidebar on the left contains a "Products and Services" menu, "EconData G7" logo, and "Related Links" to the University of Maryland and an international input-output association.

INFORUM
40 Years: 1967-2007

Home Organization Research Products/Services EconData Software Search

EconData
G7

Products and Services
U.S. National Models
China National Model
China Regional Model
International Partners
World Conferences
• 2009
• 2010
Outlook Conferences
• 2008
• 2009
The Craft, Vol. 1-3
Related Links
University of Maryland
Dept. of Economics
Intl Input-Output Assoc

JAPAN
Select A Country

Team Coordinators

- Mitsuhiro Ono

Research Center

Name - Institute for International Trade and Investment
Address - 6th floor, Kowa No.9 Bldg, 1-8-10, Minato-ku, Tokyo, Japan 107-0052
Telephone - +81 3 5563 1251
Fax - +81 3 5561 7961
Website - www.iti.or.jp

Team Members

- Mitsuhiro Ono
- Toshiaki Hasegawa
- Takeshi Imagawa
- Yasuhiko Sasai
- Jyo Inn

Search

International Conferences

EconData

Products and Services

- U.S. National Models
- China National Model
- China Regional Model
- International Partners
- World Conferences
 - 2009
 - 2010
- Outlook Conferences
 - 2008
 - 2009
- The Craft, Vol. 1-3

Related Links

- University of Maryland
- Dept. of Economics
- Intl Input-Output Assoc

Search

Inforum World Conferences

Since 1993, Inforum has held an annual world conference. The aim of these conferences is to advance the work of empirical input-output modeling, analysis, and data development techniques through the presentation and publication of papers representing the work of Inforum activities worldwide. Although the agenda overlaps somewhat with that of the International Input-Output Conference, it more specifically is dedicated to empirical work, especially in the areas of model building and data development. For more information on individual countries, navigate to the [International Partners](#) page.

I.	Rennes , France	August 30 to September 3, 1993
II.	Osnabrueck , Germany	September 26 to September 30, 1994
III.	Łódź , Poland	September 4 to September 8, 1995
IV.	Shonan Village , Japan	September 16 to September 20, 1996
V.	Bertinoro , Italy	September 15 to September 19, 1997
VI.	El Escorial , Spain	September 17 to September 21, 1998
VII.	Beijing , China	August 23 to August 28, 1999
VIII.	Bertinoro , Italy	August 17 to August 19, 2000
IX.	Gerzensee , Switzerland	September 9 to September 15, 2001
X.	University of Maryland , USA	July 28 to August 3, 2002
XI.	Suzdal , Russia	September 8 to September 12, 2003
XII.	Ascea , Italy	September 5 to September 11, 2004
XIII.	Huangshan , China	July 2 to July 9, 2005
XIV.	Traunkirchen , Austria	September 11 to September 15, 2006
XV.	Trujillo , Spain	September 10 to September 16, 2007
XVI.	North Cyprus	August 31 to September 7, 2008

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!