Use IFs (Download): Economy

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Development Profile

The Development Profile display can be reached from the Display option of the Main Menu, Specialized Display sub-option and Development Profile sub-sub-option. It is also located under the Main Menu Map options.

The purpose of the Development Profile display feature is to track how Human Capital, Social Capital, Physical Capital and Knowledge contribute to the annual growth of a country/region or a group. For purposes of development, it is helpful to understand what aspects of a country/region or group are helping or harming the growth of a country/region or group.

The left column represents different variables calculated by IFs organized into categories. The Computed Value column represents the actual numbers calculated for the year your have selected (top right scroll-down list). These values are then used to calculate the Expected Value Predicted from GDP (Gross Domestic Product) Per Capita at PPP (Purchasing Power Parity). A Standard Error is then displayed, followed by a Standard Error of the Value from the Prediction. The final two values display how the categories Contributed to Annual Growth (displayed as a percentage) and how their contribution can be displayed as a parameter.

There are three scroll-down lists at the top of the Development Profile screen. You can choose between regions (if that has been chosen from the Main Menu) or global groups (if that has been chosen from the Main Menu). Scroll down to India in order to learn more about how to use this feature of IFs. To the right of the country/region or group scroll-down list, you can choose what year you would like display. You can then choose which Run-Result-File you would like to see displayed.

Development Profile

Continue Using Countries/Regions

Countries or Regions: India Select Year: 2005

Select File: 1 - IFsBase.run

	Computed Value	Expected Value Predicted from GDP per Capita at PPP	Standard Error (SE) of Estimate	Standard Errors of Value from Prediction	Contribution to Annual Growth (Percent)	Parameter Contribution of Factor
Human Capital					0.1031	
Years of Education	5.16	4.421	2.822	0.2617		0.1
Education Expenditure (Log)	4.161	3.923	2.03	0.117		0.3
Life Expentancy	63.83	59.64	9.861	0.4244		0.1
Health Expenditure (Log)	1.385	2.717	1.444	-0.9221		0.3
Social Capital					0.3526	
Freedom	11.38	8.445	4.624	0.634		0
Governance Effectiveness (Linear)	2.475	1.879	0.4855	1.228		0.5
Governance Effectiveness (Log)	2.475	2.003	0.4855	0.9722		0.5
Corruption Perception	2.566	2.677	1.349	0.2145		0.2
Economic Freedom (Log)	6.418	5.933	2.663	0.1819		0.1
Physical Capital					-0.1945	
Road Ntwk/Land Area	10.1	2.206	6.218	1.269		0.0001
Kilowatt-hours per capita	463.2	851.7	2466	-0.1576		0
Telephones per 1000	44.59	64.79	83.23	-0.2428		0.6
Internet Percent Use	9.612	2.588	9.746	0.7207		0.025
Knowledge					0.4759	
R&D Expenditures	0.1713	0.1811	0.1039	-0.0942		0.5
Economic Integration - Algorithm						

Example of a development profile

If you left-click on any of the variables displayed on the left, you will be presented with the option to graph the variable. Click on Graph and you will be presented with a graph that shows the Computed Value of that variable for the year you have selected, as well as a logarithmic graph of GDP at PPP compared to the variable you are interested in.

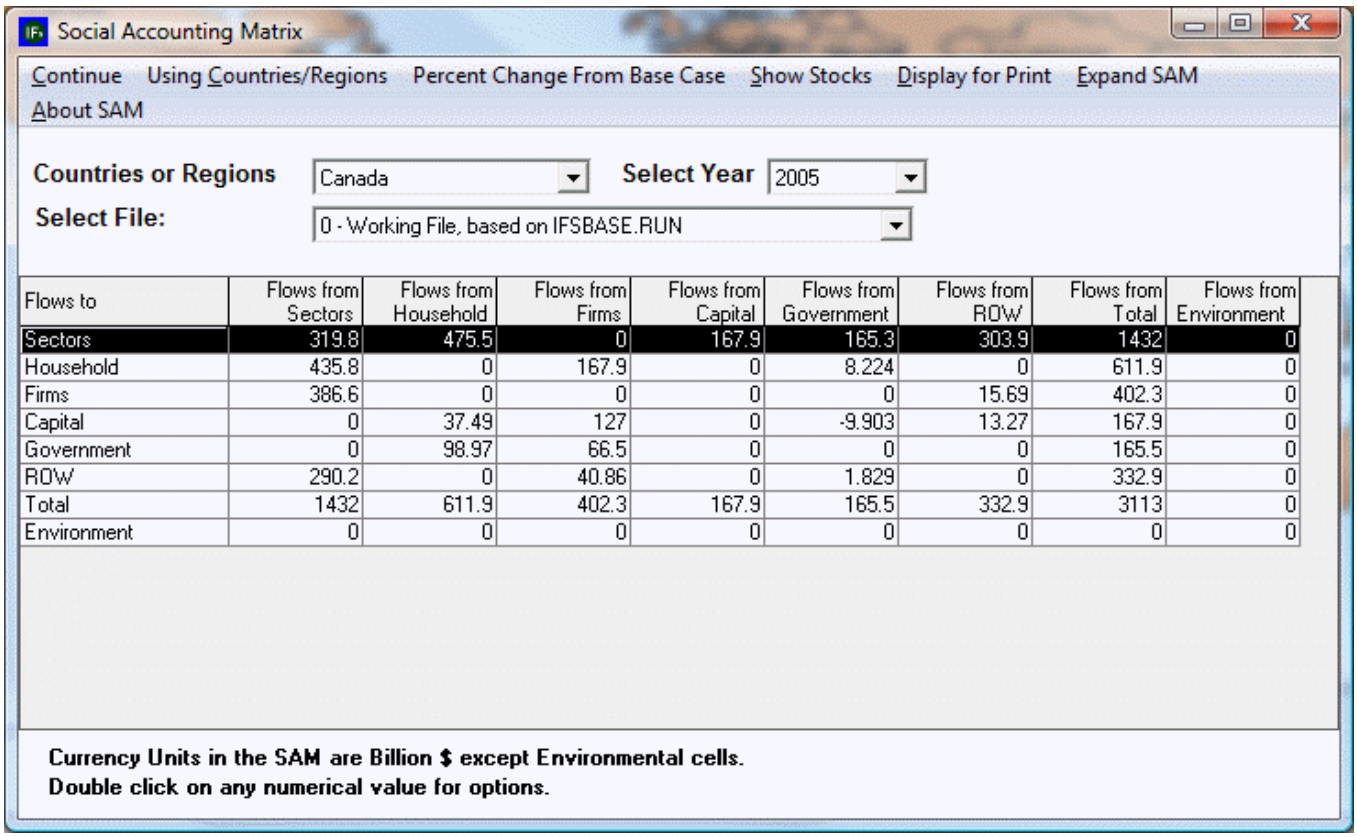
Select one variable that you would like to see forecast over time. Click on the number displayed in the Computed Value column. Choose Show Over Time and a chart will appear that displays this variable for each year computed in your version of IFs and for each Run-Result-File that you are using. At the top of this chart you have a number of options for displaying this information. You may visually represent this information through a line graph or a bar graph, save the information, toggle between whole number representation or representation as a percentage of the base year, toggle between displaying results as cumulative totals, turn the interval average on or off, add or design a filter or set the time horizon for your information.

Social Accounting Matrix

The Social Accounting Matrix sub-sub-option can be reached from the Display option on the Main Menu, the Specialized Display sub-option and then the Social Accounting Matrix sub-sub-option. It is also located under the Main Menu Map options.

A social accounting matrix (SAM) is an extension of an input-output table that economists use to show the inter-sectoral flows of goods and services within an economy (see the upper left-hand cell of the SAM). The SAM more generally displays flows among actor-classes in the socio-economic system. For instance, the cell in the government column and household

row shows flows from the government to households (such as pension payments). The cell in the firms' column and government row similarly shows flows from firms to the government (such as tax payments). You can double-click on certain numbers on the SAM table and this will bring up a small window. From this window you can expand the numbers, show them over time—thus presenting them in a table—or expand the cell's contents.



Flows to	Flows from Sectors	Flows from Household	Flows from Firms	Flows from Capital	Flows from Government	Flows from ROW	Flows from Total	Flows from Environment
Sectors	319.8	475.5	0	167.9	165.3	303.9	1432	0
Household	435.8	0	167.9	0	8.224	0	611.9	0
Firms	386.6	0	0	0	0	15.69	402.3	0
Capital	0	37.49	127	0	-9.903	13.27	167.9	0
Government	0	98.97	66.5	0	0	0	165.5	0
ROW	290.2	0	40.86	0	1.829	0	332.9	0
Total	1432	611.9	402.3	167.9	165.5	332.9	3113	0
Environment	0	0	0	0	0	0	0	0

Example of a social accounting matrix

You can move across countries/regions or groupings and across years with the drop-down boxes. Clicking in cells of the SAM will, when appropriate, provide options for (1) expanding the cell to show sub-elements of it, (2) showing values across time, and (3) providing some explanation of the cell's contents.

Note: When toggling between stocks and flows, users may note that some of the stocks are not present. This is because this feature of IFs is currently under development.

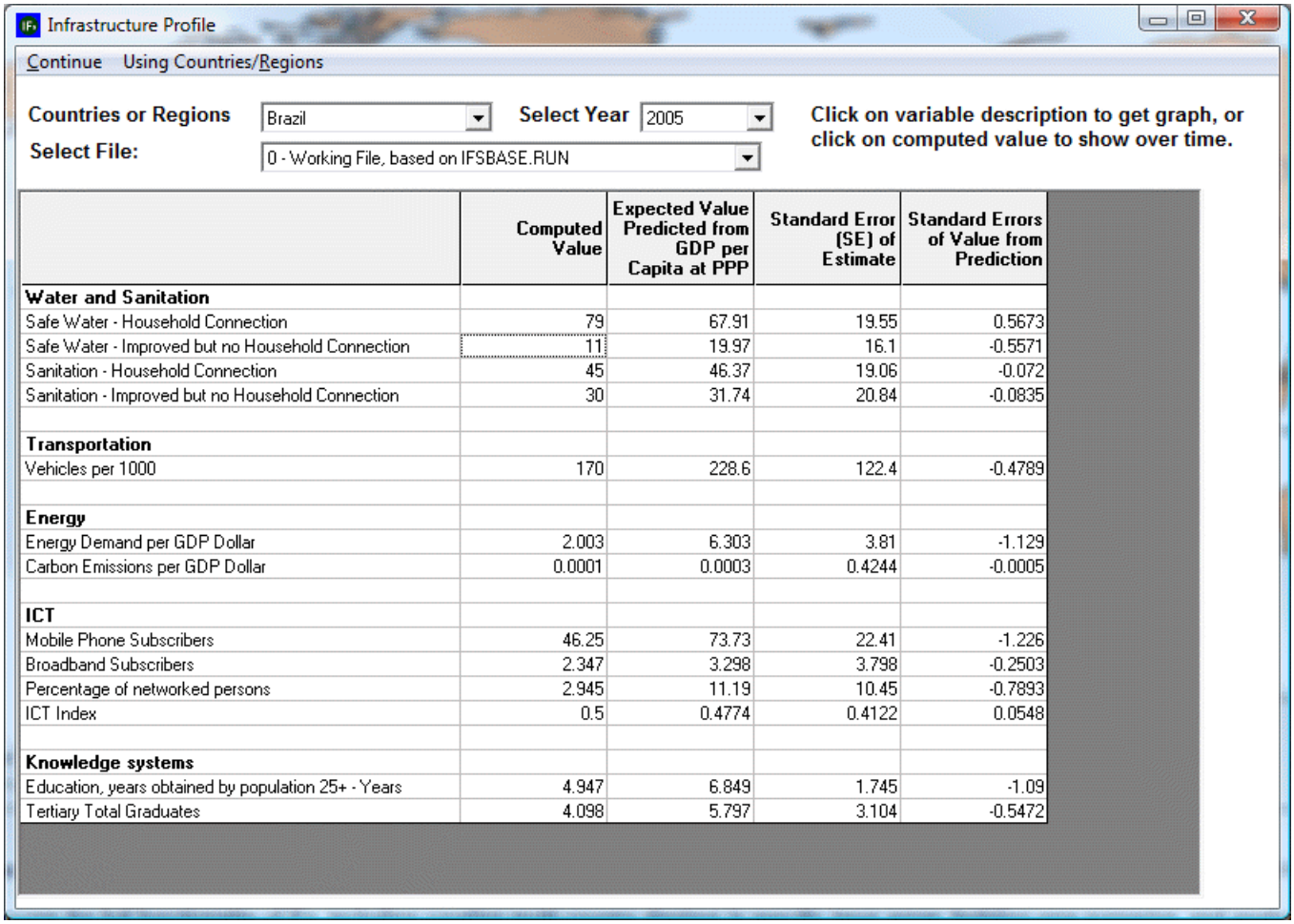
Infrastructure Profile

Infrastructure Profile is a sub-sub option, located under Specialized Display, which in turn is a sub-option of the Display option on the main menu of IFs. Infrastructure Profile is also located under the Main Menu Map options.

Clicking on Infrastructure Profile allows the user to view multiple components of the infrastructure for a country/region or group, including: Water and Sanitation, Transportation, Energy, Information-Communications Technology (ICT), and Knowledge Systems. Most of these components are a composite of different variables. The value of each of these variables is displayed in four ways: Computed Value, Expected Value Predicted from GDP per Capita at Purchasing Power Parity (PPP), Standard Error of Estimate, and Standard Errors of Value from Prediction. The user can change the year displayed in the

Infrastructure Profile up to 2100 by clicking on the ‘Select Year’ dropdown box at the top-center of the screen

The user can display the computed values for the variables over time in a table by clicking on a desired value. The table that appears displays the computed values over time according to several different scenarios. The user can also view a variable displayed in a graph by clicking on a given variable. After viewing the graph, the user can return to the Infrastructure Profile by clicking on continue.



	Computed Value	Expected Value Predicted from GDP per Capita at PPP	Standard Error (SE) of Estimate	Standard Errors of Value from Prediction
Water and Sanitation				
Safe Water - Household Connection	79	67.91	19.55	0.5673
Safe Water - Improved but no Household Connection	11	19.97	16.1	-0.5571
Sanitation - Household Connection	45	46.37	19.06	-0.072
Sanitation - Improved but no Household Connection	30	31.74	20.84	-0.0835
Transportation				
Vehicles per 1000	170	228.6	122.4	-0.4789
Energy				
Energy Demand per GDP Dollar	2.003	6.303	3.81	-1.129
Carbon Emissions per GDP Dollar	0.0001	0.0003	0.4244	-0.0005
ICT				
Mobile Phone Subscribers	46.25	73.73	22.41	-1.226
Broadband Subscribers	2.347	3.298	3.798	-0.2503
Percentage of networked persons	2.945	11.19	10.45	-0.7893
ICT Index	0.5	0.4774	0.4122	0.0548
Knowledge systems				
Education, years obtained by population 25+ - Years	4.947	6.849	1.745	-1.09
Tertiary Total Graduates	4.098	5.797	3.104	-0.5472

Example of an infrastructure profile

Financial Profile

The Financial Profile sub-sub-option can be reached from the Display option on the Main Menu, the Specialized Display sub-option and the Financial Profile sub-sub-option. It is also located under the Main Menu Map options.

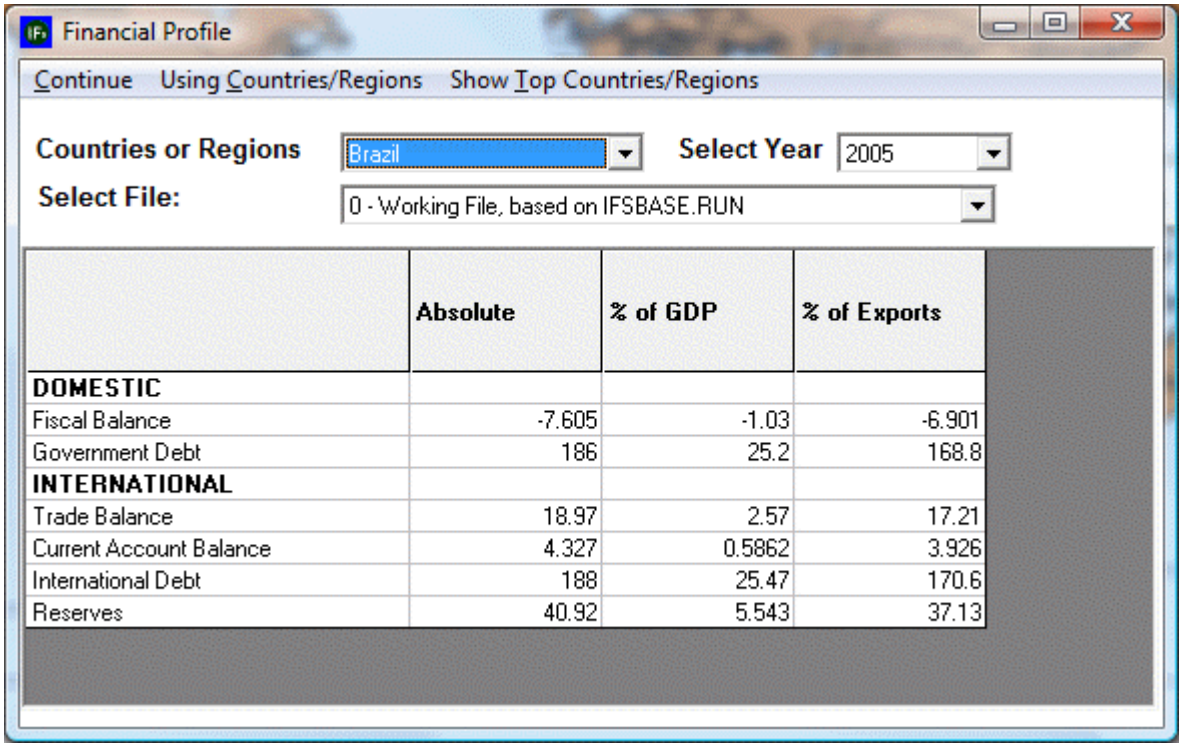
When you select the Financial Profile from the Specialized Display menu, you are presented with a chart that divides financial information for any given country/region or group into Domestic and International data. The chart then organizes this data into absolute numbers, percentages of GDP and percentages of exports.

Experiment with the Financial Profile. Assume you would like to know what trends you can see in global reserves held by all countries except for the United States. From the top of the Financial Profile menu first click on the Using Countries/Regions - Using Groups toggle.

Scroll down the groups until you find the option for World Except USA.

Choose a cell that you would like to explore more fully. If you would like to look at the total global reserves held by all countries except for the USA, click no the table where the Reserves row intersects with the Absolute column. This will bring up a prompt called Show Over Time. If you select this option, a table will open showing this value forecast using different Run-Result-Files.

Another Financial Profile option is the Show Top Countries/Regions. Selecting this will bring up a new screen called the Financial Profile Filter. This feature of IFs allows users to quickly access countries who have the highest levels of certain financial data filtered as absolute numbers, percentages of GDP or percentages of exports. Selecting any one of the filters located at the top of the Financial Profile Filter page will organize the table into the 5 countries with the highest value for the selected filter. Click Continue to return to the Financial Profile menu.



	Absolute	% of GDP	% of Exports
DOMESTIC			
Fiscal Balance	-7.605	-1.03	-6.901
Government Debt	186	25.2	168.8
INTERNATIONAL			
Trade Balance	18.97	2.57	17.21
Current Account Balance	4.327	0.5862	3.926
International Debt	188	25.47	170.6
Reserves	40.92	5.543	37.13

Example of financial profile

World Bank Financial Flows

The World Bank Financial Flows sub-sub-option can be reached from the Display option on the Main Menu, the Specialized Display sub-option and then the World Bank Financial Flows sub-sub-option. It is also located under the Main Menu Map options.

A double-click on any variable name/data point will call up a table of data for that variable. The menu options of the table provide for the creation of a graph and also for printing of the result.

World Bank Financial Flows

Continue View Using Countries/Regions

Countries or Regions **Select File:** *Double Click on name for table - Right Click for full name.*

Canada | 0 - Working File, based on IFSBASE.RUN

DEF	2005	2020	2040	2060	2080	2100
ANNUAL FLOWS						
From Bank (loans)	0	0	0	0	0	0
To Bank (repayment)	-0.1625	-0.1625	-0.1625	-0.1625	-0.1625	-0.1625
To Bank (subscriptions)	0.0504	0.0786	0.1087	0.155	0.28	0.5058
CUMULATIVE POSITION						
Loans or Subscriptions	-1.681	-0.21	0.052	-0.013	-1.055	-5.555
SECTOR OF FLOWS						
Education	0	0	0	0	0	0
Health	0	0	0	0	0	0
Other/General	0	0	0	0	0	0
Skilled Households	0	0	0	0	0	0
Unskilled Households	0	0	0	0	0	0

Example of World Bank financial flows

Use the drop-down boxes to change country/regions or the file. The Use Groups option toggles to a list of groups of countries/regions and becomes Use Countries/Regions so as to allow a toggle back.

See if you can create a graph that will forecast Mexico's payment to the World Bank over a number of years in the future. Your results will depend heavily on what version of IFs you are using. Click on whatever variable you choose and then click on Show Over Time. This will present you with a table that will allow you to display the information in a number of different ways.
