



Why do we need forecasts?

We need forecasts to make better decisions.

Dr. Edward Raupp

*Chancellor and Professor of Economics, The University of Georgia
President, THE GEORGIA FORECAST™*

When we make decisions, we deal in the realm of uncertainty. The purpose of a forecast, then, is to reduce the amount of that uncertainty. The implicit assumption is that we make better decisions when we know more about the future. In short, **Everyone who makes decisions needs forecasts.**

THE GEORGIA FORECAST™ (TGF) is an organization and a service. It has three objectives:

1. Predict the values of important macroeconomic variables.
2. Assist organizations in forecasting market conditions.
3. Provide real-world experience for students.

Initially, we will be forecasting Georgia's real GDP growth rate, unemployment rate, and inflation rate. When we have demonstrated accuracy in forecasting these variables, we will move on to other economic variables.

continued on page 2

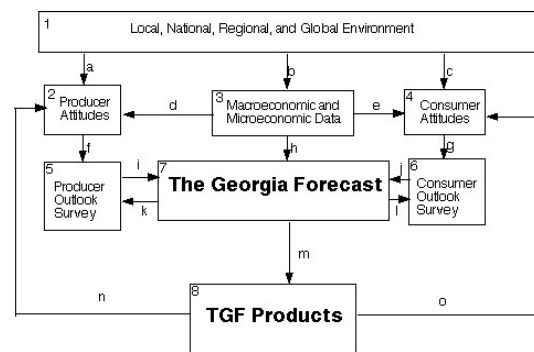
What model do we use?

Everyone who makes decisions needs forecasts.

Tamta Khalvashi

Executive Vice President, THE GEORGIA FORECAST™

In order to forecast the economic variables for Georgia, we have developed a new model:



The model begins (1) with a scan of the environment using both primary and secondary data sources. We assess the attitudes of producers (2, 5) and consumers (4, 6) by surveys in Tbilisi and Gori. We evaluate macro and microeconomic data from the environmental scan and from other sources (3). The data flow to a dynamic, stochastic, general equilibrium mathematical model (7), which also provides feedback to producers and consumers and generates two products (8), the forecast itself and consulting services. The products also provide feedback to the general population.

TGF Products include:

- Periodic news releases, free to the public.
- Paid subscriptions (see page 4).
- Consulting services.

Our reason for being is to help all those who need better information to make those decisions that will help Georgia during its transition period and beyond.

INSIDE THIS ISSUE

- | | | |
|---|---|-----------------------------|
| 1 | Why do we need forecasts? | What model do we use? |
| 2 | Featured staff member | Our staff of 150 volunteers |
| 3 | Ups and Downs | Sopo's "Big 10" |
| | Consensus Economics Sees a Global Slump | |
| | Our Forecast | |
| 4 | Subscriptions | Your Comments |
| | TGF and The University of Georgia | |

Why do we need forecasts?

Anyone can forecast, and we all do. The principal test of a *good* forecast is its *accuracy*. One of the earliest predictions from TGF was the 2007 real GDP growth rate. When other forecasts were forecasting rates on the order of 7-9%, we predicted 13% using the model described by Tamta Khalvashi on page 1, which turned out to be very close, with official reports at about 12.5%.

One difference between TGF and other forecasters is that we use first-hand data, primary sources of the kind used by the University of Michigan’s Index of Consumer Sentiment (www.umich.edu/~umsurvey).

Every month in Tbilisi we survey 200 consumers and 40 producers and in Gori 100 consumers and 20 producers. In the future, we plan to extend the survey to other regions.

The model calculates the *TGF Index of Expectations*. In general, we conclude that if people think things are going to get better, they will get better; businesses hire workers, take loans, and expand operations, and individuals are more likely to make purchases. If people think things are going to get worse, they will get worse; businesses and individuals tighten their belts, and the economy slumps.

Here is what the Index shows for the past few months:

Table 1

<i>TGF Index of Expectations, September 2007-February 2008</i>						
	Sep	Oct	Nov	Dec	Jan	Feb
Gori C	1.4	1.5	3.4	1.7	4.2	1.9
Gori P	2.2	1.3	1.7	3.3	7.0	1.8
Tbilisi C		1.6	1.6	3.0	4.2	1.2
Tbilisi P		1.5	2.1	15.0*	4.8	2.3

C=Consumer Outlook Survey *Outlier
P= Producer Outlook Survey

An index of 1 means that the same proportion of the population thinks things will be better a year from now as those who think things will be worse. An index greater than 1 means a higher proportion think things will be better. An index less than 1 means a higher proportion think things will be worse.

TGF combines *judgmental forecasting* of the kind shown in the surveys with *quantitative methods*, such as exponential smoothing, autoregressive, moving averages, and regression. Spyros Makridakis, Emeritus Professor of Decision Sciences at INSEAD, a “guru of quantitative forecasting” believes that judgmental forecasting is superior to mathematical models. TGF believes both have a role in forecasting.

Featured Staff Member: Nestan Kvitsinadze

A distinguishing characteristic of the TGF model is its use of primary data, consumer and producer expectations, in preparing our forecasts. Without our valued survey staff, that key part of the model wouldn’t be possible.

Nestan Kvitsinadze is our Gori Area Manager responsible for leading the survey effort in that city of some 70,000. She has had experience with surveys, as her father is an expert in statistics and has managed surveys in Georgia for years.

Nestan earned a diploma (MA equivalent) with honors in English Language and Literature from Gori State University. She is a fan of the Beatles! Married to Temuri Manvelishvili, an attorney, she makes her home in Gori.

Our Staff of 150 Volunteers

TGF as an organization is composed of some 150 students and professors who have volunteered to work with this key project. Here are just some of those people:

- President..... Dr. Edward Raupp
- Executive VP..... Tamta Khalvashi
- VP, Administration Johnny Mtsariashvili
- VP, Marketing Leli Bibliashvili
- Marketing Manager Ia Ebralidze
- Public Relations Manager Sophie Ebralidze
- Sales Manager Nick Nikolaishvili
- VP, Operations Bawerjan Bakr
- Senior Liaison Manager.....
- Senior Survey Manager..... Tamuna Abashidze
- Senior Sector Manager Ekaterina Fedorova
- Technical Consultants:
- Dr. Gia Avalishvili Koka Topuria
- Dr. Sergo Tsiramua David Japaridze
- Dr. Mariam Avalishvili Sulxan Sulxanishvili
- EDITOR..... Saba Gvetadze



UPS AND DOWNS ↑ ↓ →

TGF is sensitive to news events. Here is our judgment as to the effect on real GDP growth:

- Georgia and Turkey sign Free Trade Agreement.... ↑
- Baku-Tbilisi-Akhalkalaki-Kars: 100 km rails laid.... ↑
- PM: 100,000 scholarships for training..... ↑
- Teacher salaries to be increased by 40 GEL..... ↑
- Pensions to be raised to at least 55 GEL..... ↑
- Taxes to be cut in 2008-2009..... ↑
- President declares war on unemployment..... ↑
- Employment through SME initiated..... ↑
- World Bank: Georgia good for business..... ↑
- Fitch assigns BB sovereign rating to Georgia..... ↑
- Georgian journalist set free in Abkhazia..... ↑
- Bertelsmann: Georgia successful market economy. ↑
- US economy slides into recession..... →
- Government pledges to curb inflation..... ↓
- Opposition demonstrates in street..... ↓
- Germany opposes Georgia's NATO membership..... ↓

Most signs are up, indicating continued strong economic growth, but a few key indicators point downward. Most notably, the government has committed to curbing the inflation rate. Expansionary fiscal policy vs contractionary monetary policy lead to an uncertain outcome.

Sopo's "Big 10"

Most TGF forecasts are based on fairly rigorous mathematical models. These models are useful for short-term forecasts but not for those in the long term, e.g., 20-30 years. But someone needs to look into the future.

TGF's Futurist is Sopo Barbakadze. Her "Big 10" are the areas in which TGF staff will be doing scenarios. They are:

<ol style="list-style-type: none"> 1. Education 2. Health 3. Technology 4. Climate change 5. Environment 6. China 7. India 8. Russia 9. Black Sea Region 10. Politics 	<p>How do we do forecasts for 20-30 years?</p> <p>Long-term forecasts are done by using "Alternative Scenario Analysis." We see multiple possibilities in each of the "Big 10." We analyze the effect on the Georgian economy of each of these possibilities.</p> <p>Next issue: <i>Black Swans in Georgia!</i></p>
---	--

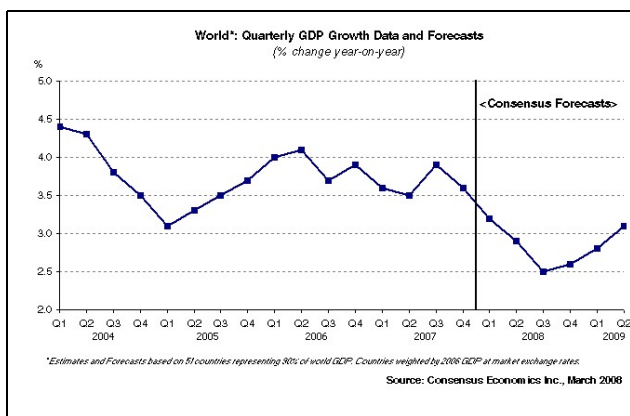
Alternative scenario analyses use terms such as "optimistic," "pessimistic," and "realistic," or "high," "low," and "medium." TGF uses expert judgment systems such as Delphi method to determine appropriate scenarios.

Delphi, a city in the center of Greece, was the home of the Oracle, whose forecasts were never wrong. TGF makes no such claim! We will, however, use the Delphi method to collect the judgments of experts for these long-term forecasts.



Consensus Economics Sees a Global Slump

London-based Consensus Economics (CE) bills itself as the "World's leading macroeconomic survey firm." CE projects a decline in global GDP growth rate from about 4% in 2007 to about 2.5% by mid-2008, then recovering to 3% in 2009. The CE chart below illustrates the quarterly weighted world aggregate forecasts, consisting of 51 countries representing 90% of world GDP.



The chart shows a definite downward trend over the past 16 quarters, but the forecast is considerably steeper, possibly a result of the decline in the U.S. economy.

While TGF does not forecast the global economy, our model uses global data as part of its environmental scan.

The question we examine is the impact of the global slump on the Georgian economy. This question is one that TGF is studying at this time. Based on the theory that much of the global slump is caused by the decline in the U.S. economy, our preliminary finding is that Georgia's trade with the U.S. is fairly small, but Georgia does trade with other nations that do trade with the U.S.

When the U.S. sneezes, the rest of the world catches cold. When the U.S. catches cold, the rest of the world gets pneumonia!

OUR FORECAST:

TGF expects Georgia's GDP to grow at an annual rate of 8-10% for the full year of 2008; inflation will be about 8-10% for the year. Because of the "dueling policies" – contractionary monetary policy vs. expansionary fiscal policy – we are holding off on forecasting the net effect on the rate of unemployment.

SUBSCRIPTIONS

THE GEORGIA FORECAST™ is published four times a year. Subscriptions are available for \$100 a year, payable in advance to:

Subscriptions

THE GEORGIA FORECAST™

77 Kostava Street, V Building

Tbilisi 0175, Georgia

For further information, contact:

Dr. Edward Raupp, edraupp@gmail.com

Copyright © 2008 by THE GEORGIA FORECAST™

Tbilisi 0175, Georgia (Republic).

NOTICE: This publication is owned and copyrighted by THE GEORGIA FORECAST™ (TGF) and may not be reproduced in any form for any purpose without the express prior written permission of TGF. Requests for citation may be sent to Legal Department, TGF, 77 Kostava Street, V Building, Tbilisi 0175, Georgia, or by email to edraupp@gmail.com.

THE GEORGIA FORECAST™
77 Kostava Street, V Building
Tbilisi 0175, Georgia (Republic)

DELIVERED BY
HAND

Your Comments

TGF wants to hear from you!

Everyone is an economist. Everyone makes decisions about how to allocate scarce resources. So everyone has opinions about the economy. We want to hear yours.

Every month, TGF staff surveyors go out to the people in Tbilisi and Gori. We ask their opinions in a structured way. Now you have an opportunity to give us your comments in free form. Send your comments to edraupp@gmail.com.

TGF and The University of Georgia

A mutually beneficial partnership

THE GEORGIA FORECAST™ (TGF) grew out of the Forecasting Project of The Center for Advanced Research (CAR) of The University of Georgia (formerly known as Georgian University of Social Sciences). The CAR mission is to support the work of the University's doctoral candidates and others engaged in the process of creating new knowledge.

TGF was created as an Ltd. with its own mission, to conduct and publish research that will assist decision makers in the economic development of Georgia.



Subscriber
Mailing Address
Street Number and Name
City, Postal Code

ADDRESS CORRECTION REQUESTED