

## Effects of National Economic Scenarios on the Chicago Region

How will the Chicago economy be affected by forecasted changes in the US economy as a whole? In this brief report, an analysis is provided of recently published forecasts for the US economy issued by the Federal Reserve Board. These national forecasts are used by REAL in generating forecasts for the Chicago regional economy; hence, changes in national scenarios will have impacts on Chicago forecasts.

Table 1 highlights the national scenarios; IHS Global Insight's national forecasts are the ones used by REAL to drive the Chicago model; their initial and revised forecasts are shown as well as those for the Federal Reserve Board and subsequent modifications for 2009 and 2010. Both alternative forecasts suggest a decline in GDP in 2009 with recovery anticipated in 2010. However, the recovery in GDP growth is expected to be accompanied by an increase in the unemployment rate.

**Table 1: National Scenarios**

National Scenario	2009		2010	
	GDP growth (%)	Unemployment Rate (%)	GDP growth (%)	Unemployment Rate (%)
Global Insight: Original version	1.0	6.1	2.9	5.9
Global Insight: Updated version <sup>1</sup>	-1.0	7.7	1.7	8.2
Federal Reserve: Baseline	-2.0	8.4	2.1	8.8
Federal Reserve: Alternative	-3.3	8.9	0.5	10.3

Since the Fed's announced projections are only for GDP growth rate and unemployment rate in 2009 and 2010; the forecasts for other macro-variables are not available to the public. Therefore, we computed the averages of elasticity<sup>2</sup> of each key macro-variable with regard to the growth of GDP for the previous 20 years. Then we estimated the path of national consumption, income and production in 2009 and 2010 by using these average elasticity values. However, the paths of population, price level and financial indicators are assumed to be same as those of HIS Global Insight's updated projection.

The impacts on the Chicago economy are shown in Table 2 for Gross regional Product (CGRP), total production (CXTOT), total income (CYTOT) and total employment (CNTOT). Table 3 shows the impacts on Chicago's growth rates for GRP and unemployment. Using the revised Fed forecasts, when entered in the Chicago model, the region's GRP would decline by almost 3% in 2009 and grow at just over one third of the rate forecast with the original Fed estimate. Unemployment rates would rise to >10% in 2009 and over 11.6% in 2010. Job losses over the original forecasts would exceed 100,000 in both years.

None of these forecasts provides for any mitigating effects due to the stimulus package

<sup>1</sup> Updated in November 2008.

<sup>2</sup> Elasticity = (% growth of corresponding variable) / (% growth of GDP).

**Table 2: Impacts on the Chicago Economy**

National Scenario	2009				2010			
	CGRP	CXTOT	CYTOT	CNTOT	CGRP	CXTOT	CYTOT	CNTOT
Global Insight: Original version	302,971	701,981	217,135	4,944	306,887	709,994	218,118	4,957
Global Insight: Updated version	299,699	670,529	213,345	4,884	302,766	680,913	215,009	4,913
Federal Reserve: Baseline	296,885	666,428	212,764	4,867	301,337	679,608	215,013	4,907
Federal Reserve: Alternative	294,483	658,890	211,281	4,839	296,177	663,474	211,900	4,850

**Table 3: Impacts on GRP Growth Rate and Unemployment Rate in Chicago**

National Scenario	2009			2010		
	GRP growth (%)	Unemployment Rate (%)	Change in Employment	GRP growth (%)	Unemployment Rate (%)	Change in Employment
Global Insight: Original version	-0.39	6.9	-	1.29	6.6	
Global Insight: Updated version	-1.22	8.8	-60,000	1.02	9.1	-44,000
Federal Reserve: Baseline	-2.15	9.7	-77,000	1.50	9.8	-50,000
Federal Reserve: Alternative	-2.94	10.3	-105,000	0.58	11.6	-107,000

*Tae-Jeong Kim is a Ph.D. candidate in economics and a Research Assistant in the Regional Economics Applications Laboratory, University of Illinois.*

[tkim35@illinois.edu](mailto:tkim35@illinois.edu)