

VII. USE OF GEM/MULTIMOD IN BILATERAL SURVEILLANCE, 2000–05

Country	Topic	Date	Model
United States	Impact of a 100 basis points increase in U.S. interest rates on developing countries.	June 2000	MULTIMOD
Ireland	Impact of a stronger world upturn in 2000 and slower growth in 2001 on Irish output growth, inflation, the real exchange rate and the current account.	July 2000	MULTIMOD
Japan	Simulations of the economic impact of population aging/a rising dependency ratio on GDP, interest rates, inflation, the real exchange rate and the current account balance. Repeated for alternative fiscal policy responses.	July 2000	MULTIMOD
Euro Area	Impact of a 1 percent increase in world demand and a 10 percent effective depreciation of the euro on GDP growth.	September 2000	MULTIMOD
Germany	(i) Impact of a 30 percent euro appreciation in 2001 on real GDP in Germany; (ii) Impact of an equity price correction-induced economic slowdown in the United States on German exports; (iii) Impact on output of persistently high oil prices at \$34 through 2001.	October 2000	MULTIMOD
Brazil	(i) Impact of higher public borrowing on the interest rate, investment, private savings, the exchange rate and the current account; (ii) Impact of a 150 basis point rise in U.S. interest rates on real GDP, the exchange rate and current account.	November 2000	MULTIMOD (modified version)
Greece	Impact of a 1 percent decline in the risk premium, phased in over three years, on saving, investment, trade and the exchange rate.	March 2001	MULTIMOD
United States	Effect of a temporary increase in total factor productivity (TFP) growth and a temporary increase in the market value of capital on GDP growth, investment, consumption, the U.S. dollar and the current account.	July 2001	MULTIMOD
Japan	Stochastic simulations using the Japan block of MULTIMOD to investigate implications of the zero bound on nominal interest rates for the design of monetary policy in Japan. Further simulation of an increase in government spending, a credible commitment to future inflation, and a permanent increase in the target rate of inflation after persistent negative shocks have driven interest rates down to the zero floor.	August 2001	MULTIMOD (1-country version)
United States	Simulation to show the strength of the U.S. dollar, the widening current account deficit, and the robust GDP growth is explained by an increase in total factor productivity growth, coupled with a smaller risk premium on U.S. assets. Alternative scenarios explore how current account adjustment may take place via a pickup in productivity growth in other industrial countries; a realization that expectations of future U.S. productivity growth were overly optimistic; and an increase in household savings.	July 2002	MULTIMOD
Euro area	Stochastic simulations run with the euro-area block of MULTIMOD assessed the likelihood of the zero interest rate constraint becoming binding, that is, the euro area economy falls into a deflationary trap.	October 2002	MULTIMOD (1-country version)
Australia	Simulations of impact of Intergenerational Report estimates of aging population-related fiscal pressures on debt, fiscal adjustment and GDP growth paths 2002–42.	February 2003	MULTIMOD
United States	Impact of a 50 percent increase in the price of oil and gas on U.S. GDP growth and inflation, the current account deficit, consumption and investment.	July 2003	GEM (2-country version)
Denmark	The long-run and medium-term impact of reducing goods and labor market markups in Denmark and the euro area on Danish real GDP, inflation, hours worked and the capital stock.	July 2004	GEM (3-country version)

VII. USE OF GEM/MULTIMOD IN BILATERAL SURVEILLANCE, 2000–05 (CONCLUDED)

Country	Topic	Date	Model
Euro Area	Effects of a 10 percent increase in U.S. multifactor productivity, a persistent 1 percentage point decline in the risk premium on dollar assets, and a 1 percentage point (of GDP) increase in U.S. fiscal spending on euro exchange rates and the euro area's GDP, interest rates and current account position.	July 2004	GEM (3-country version)
Estonia	(i) Impact of increase in Estonian labor and output price markups on GDP, consumption, investment, trade and prices. (ii) Impact of a 100 percent permanent increase in tradables productivity, 25 percent increase in nontradables productivity on inflation, real GDP, consumption and the current account deficit.	September 2004	GEM (3-country version)
Finland	The impact of labor and product market reforms on output, employment and the price level. A three-block version of GEM is used in this paper, the blocks being Finland, the euro area, and the rest of the world (ROW), comprising the United States, Russia, Sweden, and Norway.	January 2005	GEM (3-country version)
Canada	(i) The effects of a sustained 25 percent increase in oil prices on output, domestic spending, demand for exports and the exchange rate; (ii) The impact of delaying corporate income and wage tax reductions 10 years on domestic output, consumption and the capital stock, as well as the impact of fiscal reforms overseas on Canada.	February 2005	GFM 1/
United Kingdom	The impact of a 10-30 percent decline in house prices on real activity, via declines in residential investment, consumption and business investment. Simulation of associated decline in interest rates on output, inflation and the real exchange rate.	February 2005	MULTIMOD
Czech Republic	(i) The effects of population aging on GDP growth and the budget burden of old-age pensions and health care, taking into account the impact of labor market reforms and technological progress. (ii) Impact of a change in the volatility and mix of FDI and portfolio capital inflows on optimally calibrated monetary policy rules.	July 2005	MULTIMOD, GEM (2-region version)
Japan	Impact of fiscal adjustment and productivity-enhancing reforms on Japan's debt, external surplus and associated spillovers to the rest of the world.	July 2005	GEM (5-region version)
Latvia	The macroeconomic effects of increasing the number of households with access to bank credit on overall consumption and GDP growth, inflation, the real exchange rate, the current account and on net foreign liabilities.	July 2005	GFM 1/
United States	(i) Macroeconomic effects on GDP, national saving, federal deficits and debt of introducing Personal Retirement Accounts. (ii) Effects of near-term fiscal consolidation on short-run and long-run GDP growth. (iii) Effects on GDP, national saving and the interest rate of reducing personal income taxation of capital income.	July 2005	GFM 1/
Iceland	How current and planned future tax cuts in Iceland could be adding to overheating in the economy, inflation, required tightening in monetary policy, appreciation of the currency and the current account deficit.	August 2005	MULTIMOD (1-country version)
Thailand	The effect of an interest rate shock from the United States on output, consumption, and investment; associated monetary policy implications for greater exchange rate flexibility.	August 2005	GEM (3 countries, financial accelerator)
France	Simulations of the effects in France and the euro area of increasing competition in product and labor markets showing large gains in GDP, employment, and consumption. The dynamic adjustment paths following reforms in labor, services and goods markets illustrate the advantages of exploiting complementarities across markets.	November 2005	GEM (4-country version)

1/ Global Fiscal Model (GFM) is a parallel version of GEM that is capable of analyzing fiscal policy.