



Three Model Examples:

Inputs, Outputs,
Platforms



Example #1: CGE Model

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Example: Simple CGE Model

Question:

What is the effect of Reduced Energy Exports
(5-10%)

Compute the following:

- New Production Levels
- Change in Wages & Return to Capital
- Change in Welfare



Description: Computable General Equilibrium (CGE) Model

Inputs:

- Output levels for subsectors
 - Agriculture, Auto, Services, Government
- Production structure for subsectors
 - Labor, machines, materials
- Consumption Structure:
 - Private demand by sub-sector, public-demand by subsector, exports, imports by subsector
- Government Policies:
 - Tax rates, production rules, regulations

Generally: A “*picture*” of the economy for a specific year (e.g., 2005)



Description: CGE Model

Outputs:

- New Levels of Production
 - Rise / decline for sub-sectors
- New Prices
 - goods and services price
 - wage rate changes
 - return to capital changes
- New Consumption Pattern:
 - New demand for consumers, imports, exports. New tax-revenues for government
- Welfare
 - Change in household consumption (based upon consumer prices vs. new incomes)



Description: CGE Model

Platform

- System of Equations / Relationships
 - Solved for an “Equilibrium”
- Software: GAMS
- Economic Methodology
 - Neo-classical Optimization (i.e., Behavioral)



INPUTS

The Social Accounting Matrix

Production Sectors

Consumer

Markets		X1	X2	E1	M2	W		CONS
P1		150		-50		-100		
P2			50		50	-100		
PL		-100	-20					120
PK		-50	-30					80
PW						200		-200
PFX				50	-50			



Description: CGE Model

Proceed to DEMO