

Unveiling Texas-STAMP

TPPF Policy Orientation

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David G. Tuerck
Executive Director
Beacon Hill Institute



State
Tax
Analysis
Modeling
Program

Simulates Effects of Changes
in Tax Policy including:

- ✓ Employment
- ✓ Wage Rates
- ✓ Investment
- ✓ Tax Revenue
- ✓ Personal Income
- ✓ Migration



Overview of STAMP

- STAMP is specified in terms of supply and demand for each factor of production and each commodity included in the model.
- STAMP is a CGE (computable general equilibrium) model -- a computerized method of accounting for the economic effects of tax policy changes.
- Tax policy changes are shown to affect economic activity through their effects on the prices of outputs and on the factors of production.



What is a Computable General Equilibrium (CGE) tax model ?

- A formal description of the economic relationships among producers, households and government in a particular state and the rest of the world.
- General: takes all the important markets and flows into account.
- Equilibrium: demand equals supply in every market.
- Computable: generates numeric solutions to concrete policy and tax changes, with the help of a computer.



STAMP's Basic Principles

FIRMS

DEMAND

Capital and Labor

SUPPLY

Goods and Services

MAXIMIZE

Profits

HOUSEHOLDS

DEMAND

Goods and Services

SUPPLY

Capital and Labor

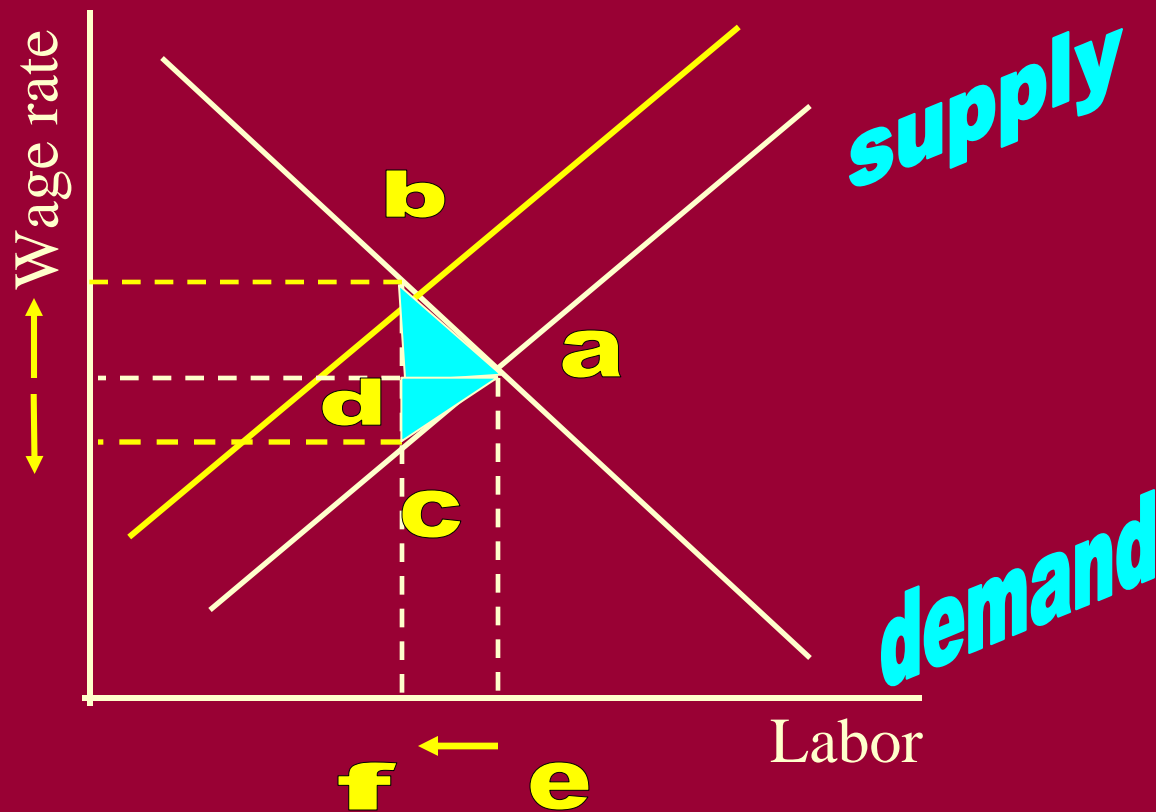
MAXIMIZE

Utility

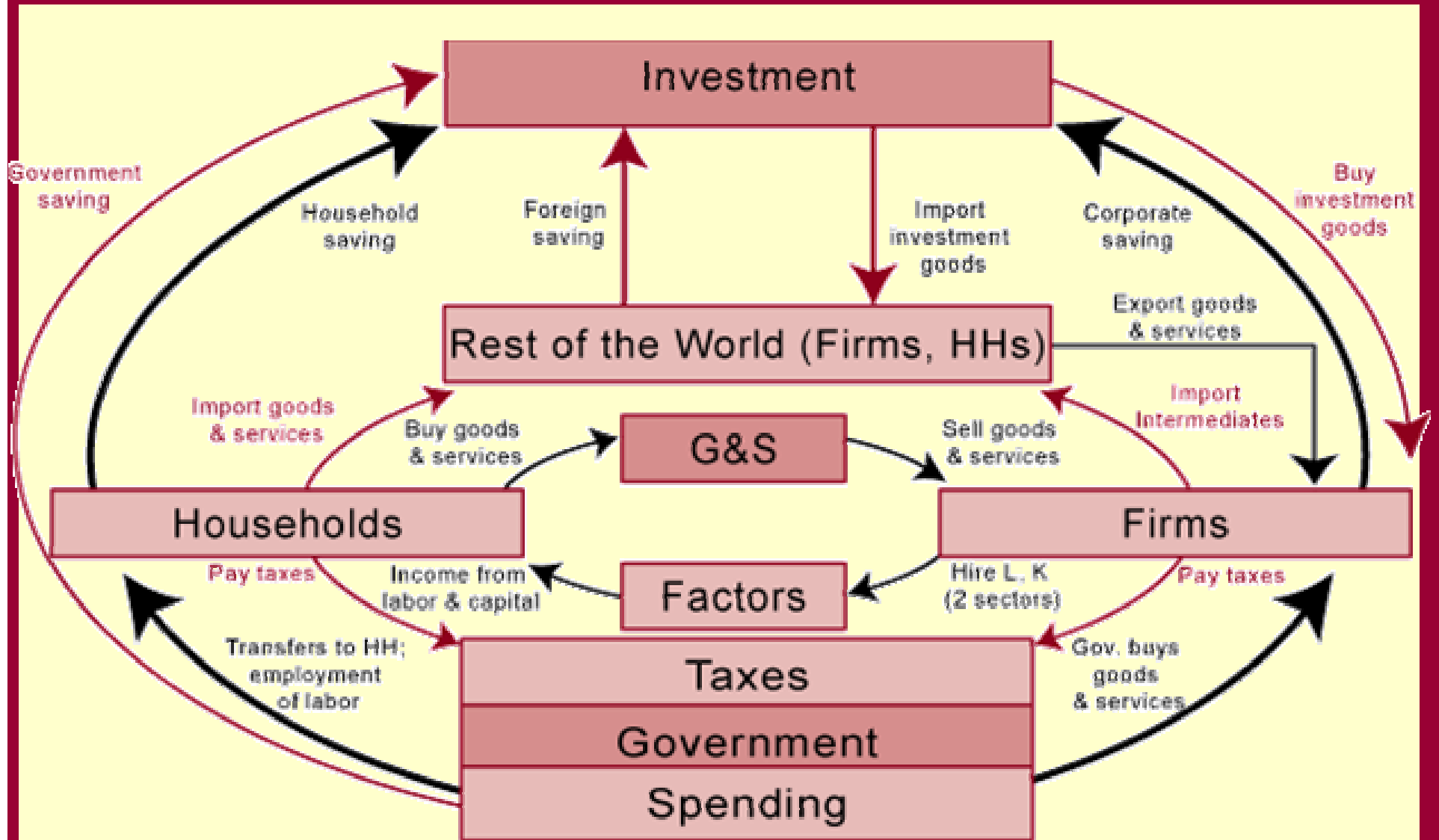


Impose Personal Income Tax

supply decreases



How STAMP Works



STAMPS Are in Use in These States

Alabama Georgia Massachusetts New Mexico Pennsylvania

Arizona Illinois Michigan New York Texas

California Kansas Minnesota Ohio Virginia

Florida Maryland New Jersey Oklahoma Washington

Wisconsin



Imposing an Income Tax

- Employees see work as less attractive. Labor supply shrinks and pre-tax wage rate rises.
- Labor becomes relatively more expensive, so employers cut payrolls.
- Per-capita real disposable income falls due to the increased cost of living from the income tax.



Increasing the Sales Tax

- Cost of goods increases, demand decreases.
- Employment and investment decrease and production decreases to meet decrease in demand.
- Per-capita real disposable income falls.



Cutting the Property Tax

- Cost of capital falls as tax rate on commercial property falls.
- Investment rises.
- Employment falls owing to substitution of capital for labor.



Raise Motor Fuels Tax

- Cost of motor fuels increases, demand decreases.
- Employment and investment in affected sectors decrease and production decreases to meet decrease in demand.
- Per-capita real disposable income falls, due to the increase in the cost of living.



Four Revenue-Neutral Simulations

- Impose state income tax, reduce state sales tax rate.
- Reduce state sales tax rate, expand state sales tax base.
- Reduce property tax rate, expand state sales tax base, reduce local sales tax rate.
- Reduce property tax, increase motor fuels tax.



Conclusion

- An income tax would create job losses.
- Raising the sales tax rate or broadening the sales tax base would create job losses.
- Cutting the property tax would create investment gains but (modest) job losses.
- A combination of sales or motor fuels tax hikes and a property tax cut would be revenue – and economically – neutral.



The Beacon Hill Institute

8 Ashburton Place

Boston, MA 02108

Phone: 617-573-8750

Fax: 617-720-4272

E-Mail: dtuerck@beaconhill.org

Web: www.beaconhill.org

