NABE Webinar
The BAT and the US Energy Sector

Kenneth B Medlock III, PhD

James A Baker III and Susan G Baker Fellow in Energy and Resource Economics, and Senior Director, Center for Energy Studies, James A Baker III Institute for Public Policy Rice University

Ted Temzelides, PhD

Professor of Economics and Rice Scholar, James A Baker III Institute for Public Policy Rice University

the center for ENERGY STUDIES
Rice University's Baker Institute

I. Introduction

- Proposal to replace part of profit tax and introduce BAT
- Under a BAT:
    - Tax applied to income from goods produced and sold in the US and from goods (including inputs) produced overseas and sold in the US
    - No tax applied to income from exports
- As US running trade (CA) deficit of about $500B/year, revenue from taxing imports would exceed revenue lost from exempting exports

- *BAT would generate a currency adjustment*
  - How fast?
- Burden of BAT mainly on US businesses holding foreign assets
  - If dollar stronger, more expensive to convert foreign profits into dollars
- *Energy sector: Need to consider effect of elasticities of supply/demand for crude*

II. Effects on Current Account

- Faced with higher import prices, US demand for imports would decline
  - Reduced supply of dollars in FX markets, leading to a dollar appreciation
- This would reduce effect of tax and would make US exports more expensive
- How likely to improve CA balance?
  - Not very

- Like interstate trade, international trade is not a zero-sum game
  - Comparative advantages and specialization
- Barriers on imports create risk of retaliation
- No persuasive evidence that they improve CA
- What can help: reduce fiscal deficit

III. Energy

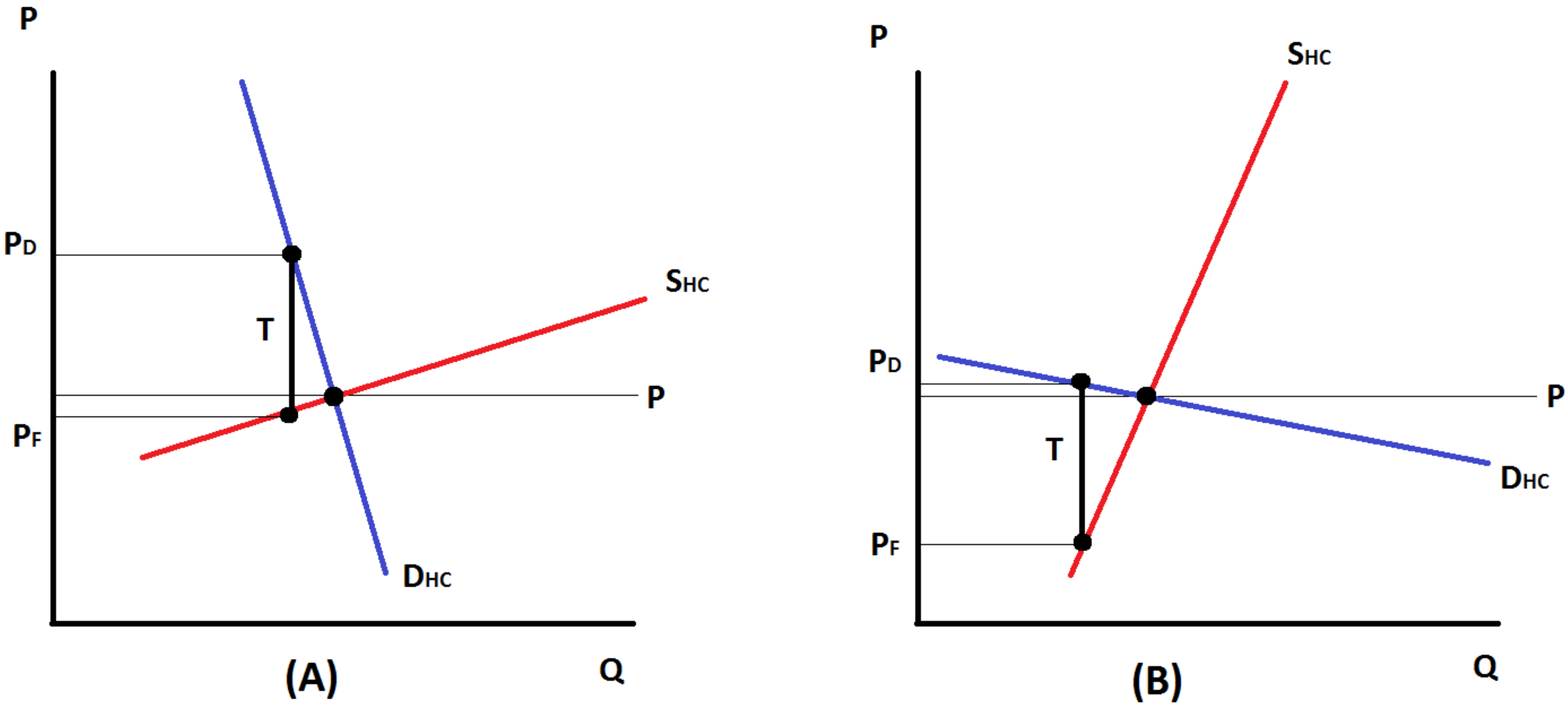
- BAT impacts on US energy industry complex, especially given increases in US production, shale
- If BAT raises effective international price for US oil producers, more profitable to sell abroad
  - Especially true for light oil, since few domestic refineries
  - This would reduce domestic supply
- Final division of burden from BAT:
  - Crude not a homogenous commodity
  - Crudes can be substituted

- If NAFTA remains, and if enough heavy Canadian/Mexican crude to displace imported crude, expect switch to NAFTA supplies
- BAT would lead to reshuffle of heavy oil trade around the world
  - If US refineries substitute from imported heavy to domestic light, global demand for heavy crude will decline
    - Corresponding decline in international price of heavy crude would temper US substitution towards domestic light

- Common belief: BAT will lead to large price increase passed to consumer at the pump
    - Some analysts predict gasoline price increases of 30-40 cents/gallon
- Substitutions in supply make large increases at the pump less likely
- Might observe few overall changes in the US
    - Other countries (e.g., Venezuela) might see lower price

- Implicit assumptions on elasticities:
  - Foreign supply of heavy crude is elastic
    - Adequate substitution opportunities for processing
  - Domestic demand of foreign heavy crude is inelastic
    - No switching to domestic light (blending)
- The more inelastic the foreign S_{HC}, and the more elastic the domestic D_{HC}, the greater incidence of the tax on foreign suppliers
  - To remain competitive with domestic light, foreign crude will be discounted

- Many analysts implicitly assume case (A)
- Reality somewhere in between (A) and (B)



IV. Conclusions

- If exchange rate adjustment sufficiently fast, it would likely cancel many effects from a BAT
- To the extent that exchange rate adjustment is slow, the prices consumers pay for gas and imported goods would increase
  - Various substitutions make likely effect of the increase relatively small
- Legality and political feasibility
  - Unlike VAT, BAT would be implemented as a direct tax
  - Unclear whether WTO would approve