

# Corporate Income Tax Burdens at Home and Abroad

Kevin Markle and Douglas A. Shackelford University of  
North Carolina

American Corporate Tax Exceptionalism  
February 20, 2009

### **McCain:**

“Right now, **American business pays the second-highest business taxes in the world, 35 percent. Ireland pays 11 percent.**

“Now, if you're a business person, and you can locate any place in the world, then, obviously, if you go to the country where it's 11 percent tax versus 35 percent, you're going to be able to create jobs, increase your business, make more investment, et cetera.

“I want to cut that business tax. I want to cut it so that businesses will remain in the United States of America and create jobs.”

**OBAMA:**

“Now, John mentioned the fact that business taxes on paper are high in this country, and he's absolutely right. Here's the problem: There are so many loopholes that have been written into the tax code, oftentimes with support of Senator McCain, that we actually see **our businesses pay effectively one of the lowest tax rates in the world.**”

# What Do We Do?

---

- ▶ Estimate average effective tax rates (AETRs) using financial statement information
- ▶ Compare AETRs for domestics and multinationals
- ▶ Compare AETRs across countries
- ▶ Compare AETRs across years
- ▶ Measure the impact of foreign subsidiaries on AETRs

# What Do We Find?

---

- ▶ Multinationals and domestic firms face similar AETRs.
- ▶ Average AETR decline from 1988-2007 was 6 percentage points (18%), much of which occurred from 1992-1994.
- ▶ Country AETR order remains constant over time.
- ▶ Japan has the highest AETRs
- ▶ U.S. and European countries have above-average AETRs.
- ▶ Middle East, Tax Havens and Asian (ignoring Japan) countries have below-average AETRs.

# Regression Equations

Three specifications:

$$\begin{aligned} AETR_{it} = & \sum \beta_{0j} COUNTRY_{it}^j + \sum \beta_{1j} (COUNTRY_{it}^j * MN_{it}) \\ & + \sum \beta_{2k} INDUSTRY_{it}^k + \sum \beta_{3m} YEAR_{it}^m + \sum \beta_{4n} SIZE_{it}^n + \varepsilon_{it} \end{aligned} \quad (1)$$

$$\begin{aligned} AETR_{it} = & \sum \beta_{0j} COUNTRY_{it}^j + \sum \beta_{1k} SUB_{it}^k \\ & + \sum \beta_{2m} INDUSTRY_{it}^m + \sum \beta_{3n} YEAR_{it}^n + \sum \beta_{4p} SIZE_{it}^p + \varepsilon_{it} \end{aligned} \quad (2)$$

$$\begin{aligned} AETR_{it} = & \sum \beta_{0j} COUNTRY_{it}^j + \sum \beta_{1k} SUB_{it}^k + \sum \beta_{2l} COUNTRY_{it}^j * SUB_{it}^k \\ & + \sum \beta_{3m} INDUSTRY_{it}^m + \sum \beta_{4n} YEAR_{it}^n + \sum \beta_{5p} SIZE_{it}^p + \varepsilon_{it} \end{aligned}$$

# Variables

- ▶ Coefficients of Interest

$$AETR_{it} = \sum \beta_{0j} COUNTRY_{it}^j + \sum \beta_{1j} (COUNTRY_{it}^j * MN_{it})$$

- ▶  $\beta_0$  = domestic AETR

- ▶  $(\beta_0 + \beta_1)$  = multinational AETR

- ▶ AETR = book ETR (from the financial statements)

- ▶ Numerator is total tax expense ( $\geq 0$ )

- ▶ Same conclusions using current income tax expense

- ▶ Denominator is NIBT ( $> 0$ ), robust to other income measures

- ▶ Controls

- ▶ Industry (two-digit NAICS)

- ▶ Year

- ▶ Size – percentile rank of sales, assets, equity

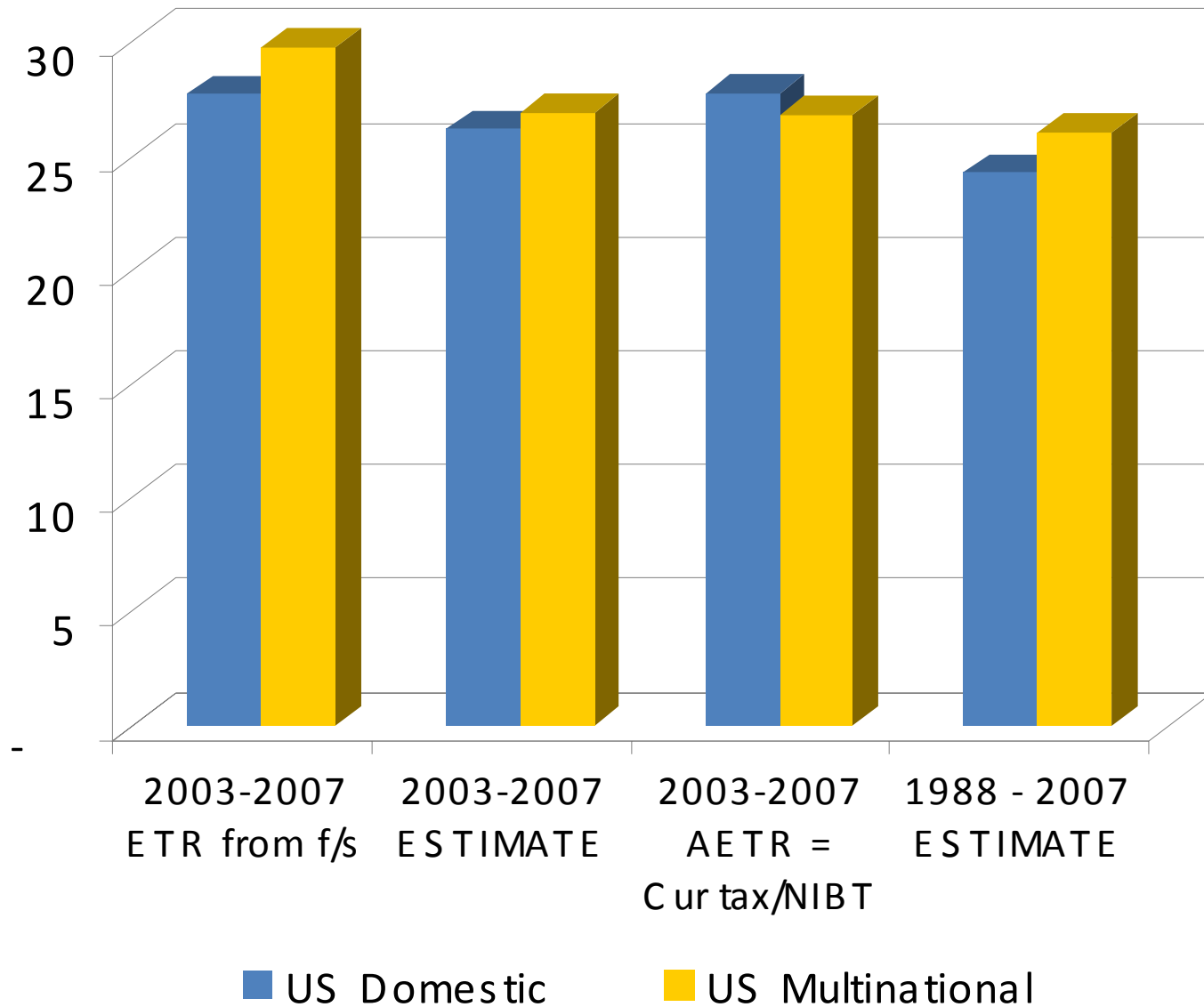
# Countries

Sample: parents in 85 countries  
subs in 195 countries  
BUT only know sub locations in 2008

Countries	Groups
<ul style="list-style-type: none"><li>• Australia</li><li>• Canada</li><li>• China</li><li>• France</li><li>• Germany</li><li>• India</li><li>• UK</li><li>• US</li></ul>	<ul style="list-style-type: none"><li>• Asian Tigers</li><li>• Tax Havens</li><li>• Africa</li><li>• Asia</li><li>• Europe</li><li>• Latin America</li><li>• Middle East</li></ul>

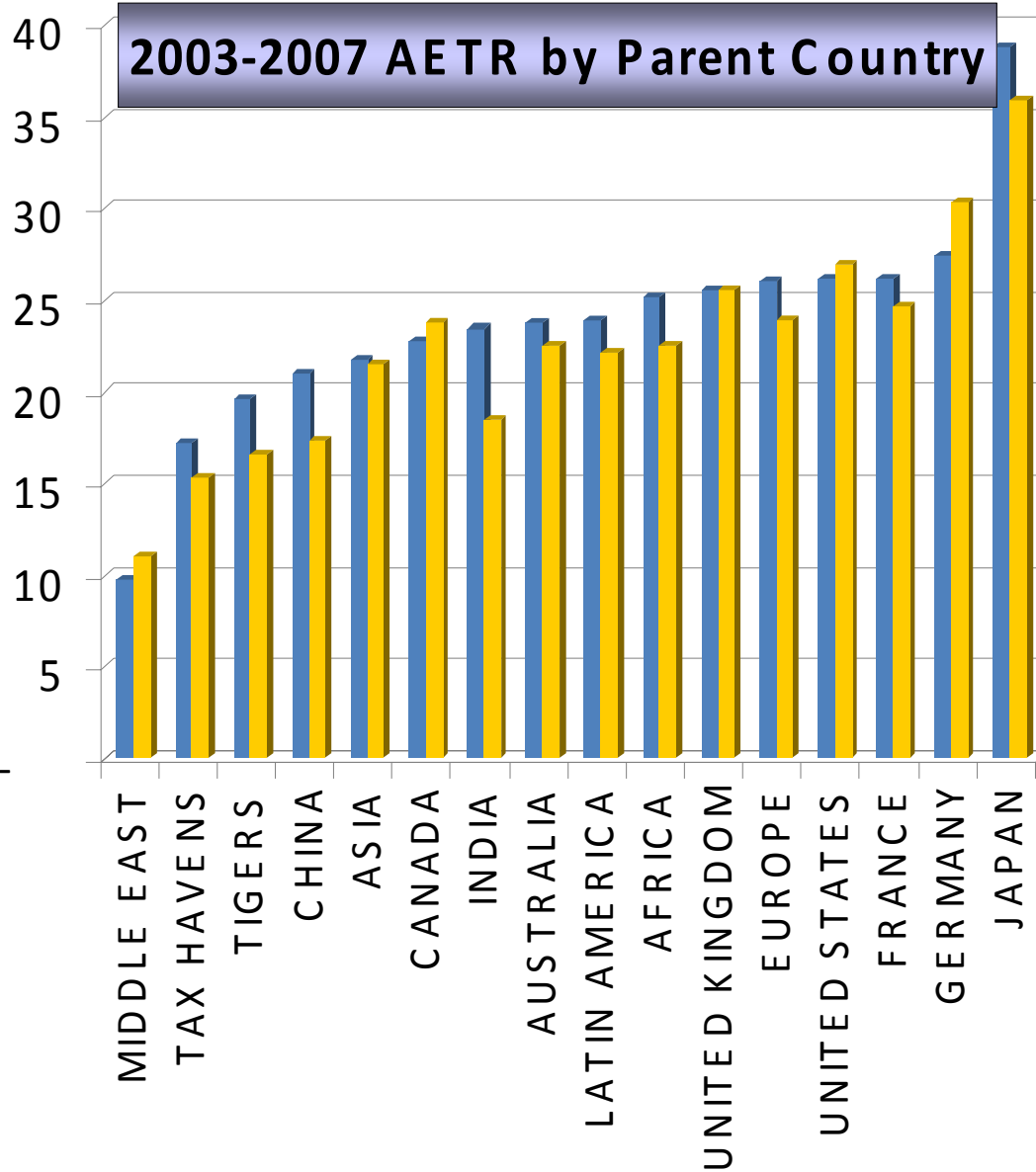


# U.S. Tax Rates



$$AETR_{it} = \beta_0 COUNTRY_{it}^j + \beta_1 (COUNTRY_{it}^j * MN_{it})$$

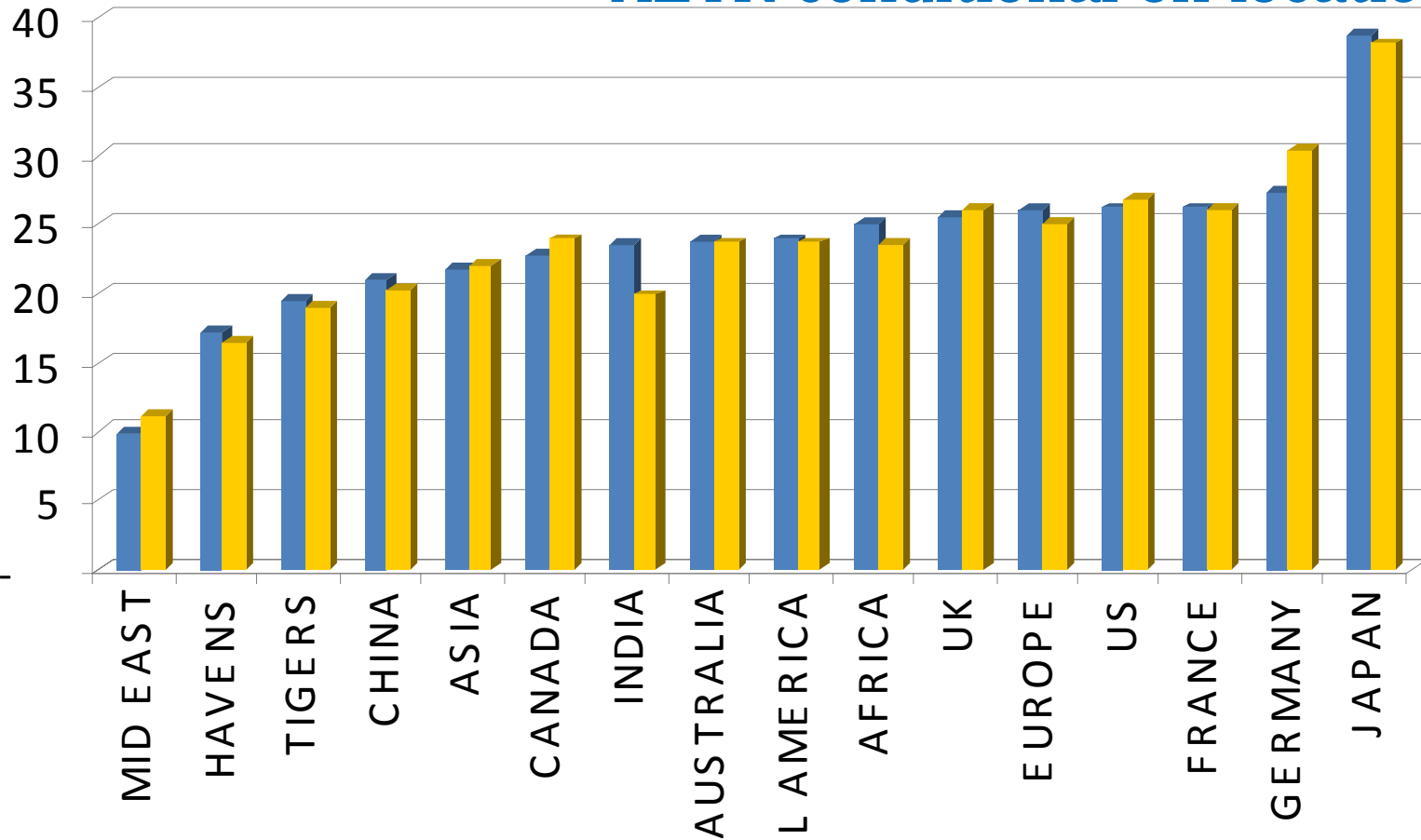
# 2003-2007 AETR by Parent Country



■ Domestic ■ Multinational

$$AETR_{it} = \beta_0_j \text{COUNTRY}_{it}^j + \beta_1_j (\text{COUNTRY}_{it}^j * MN_{it})$$

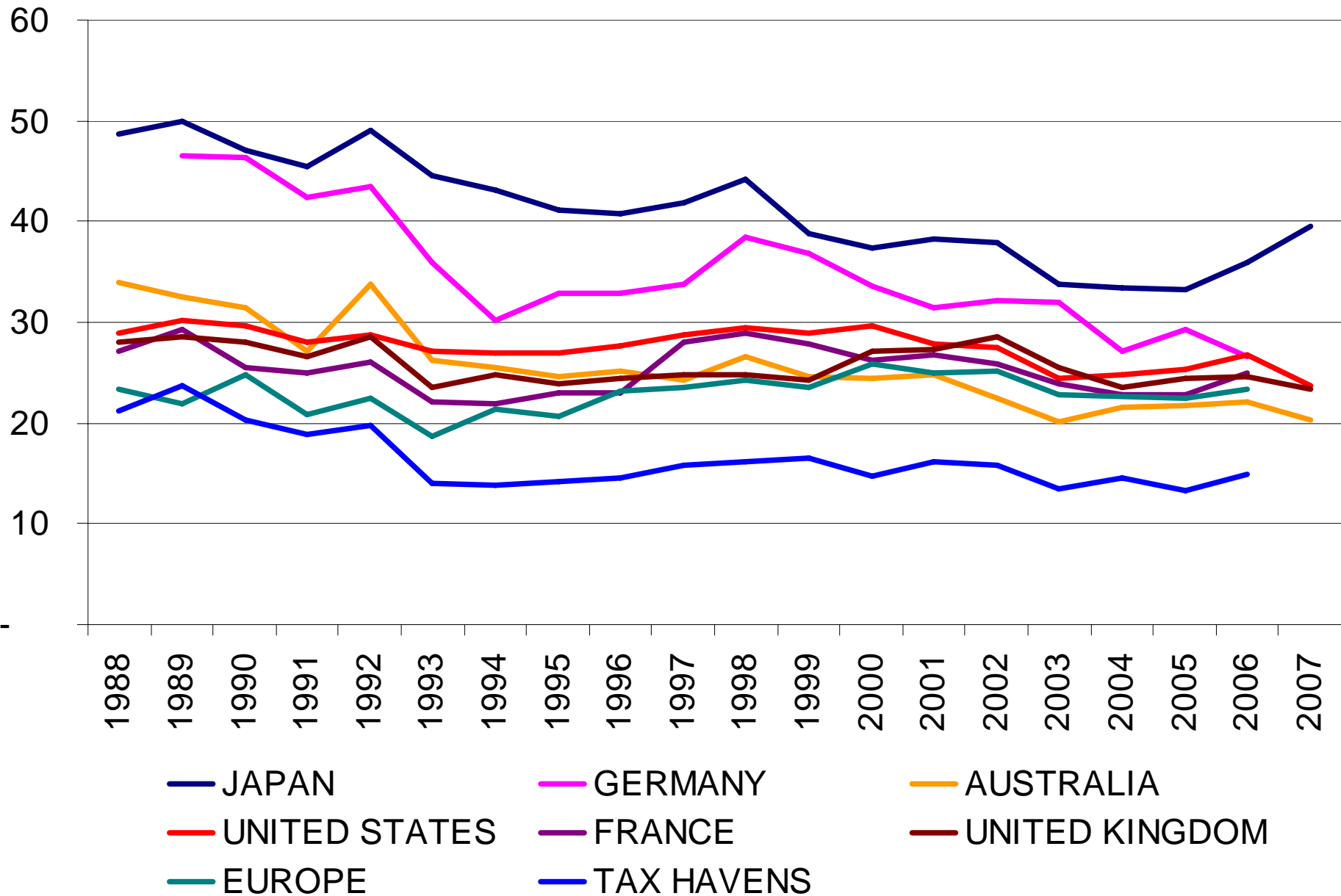
## AETR conditional on location of subs



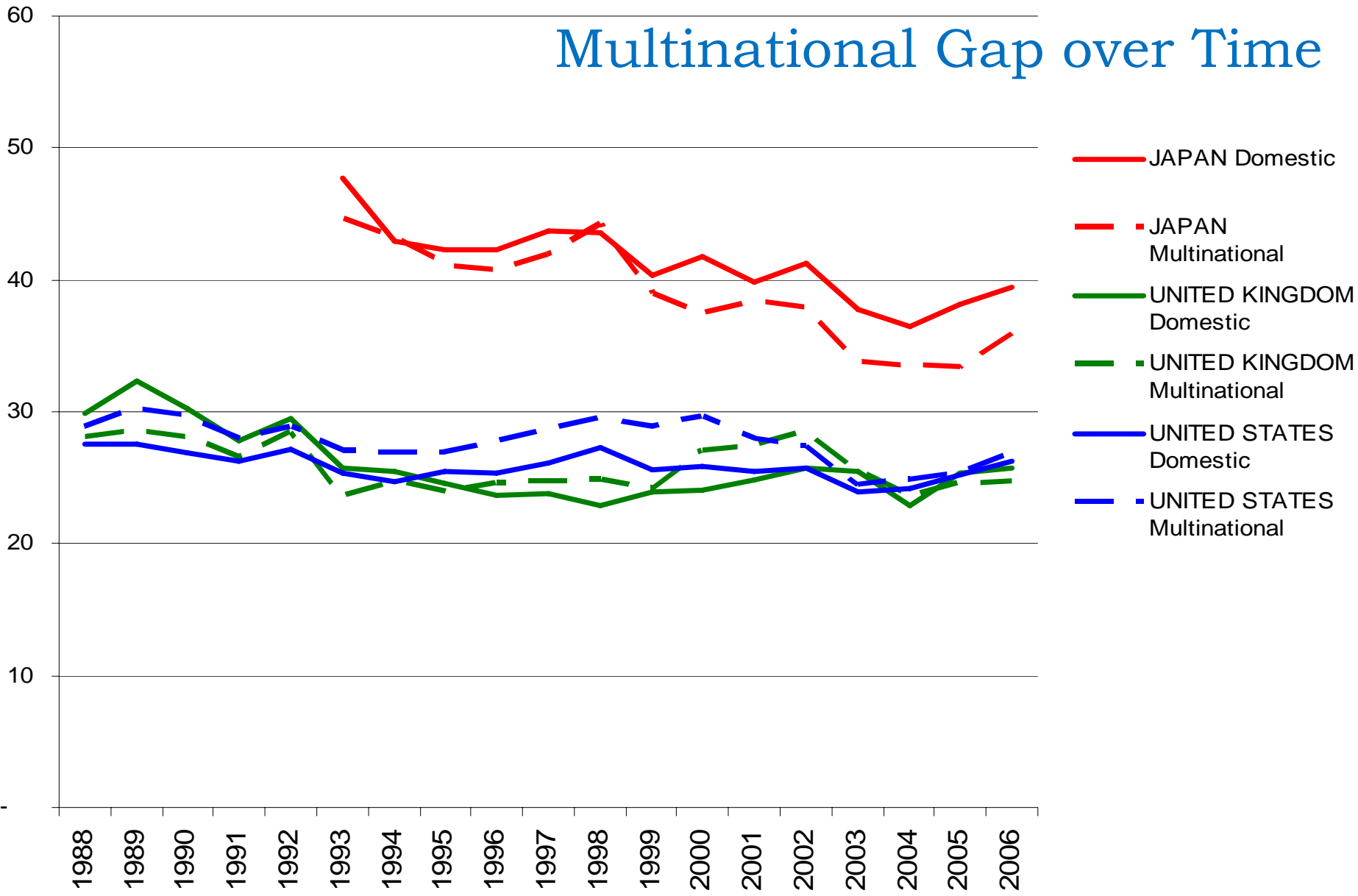
$$AETR_{it} = \sum \beta_{0j} COUNTRY_{it}^j + \sum \beta_{1j} (COUNTRY_{it}^j * MN_{it})$$

$$AETR_{it} = \sum \beta_{0j} COUNTRY_{it}^j + \sum \beta_{1k} SUB_{it}^k$$

# Multinational Tax rates over Time

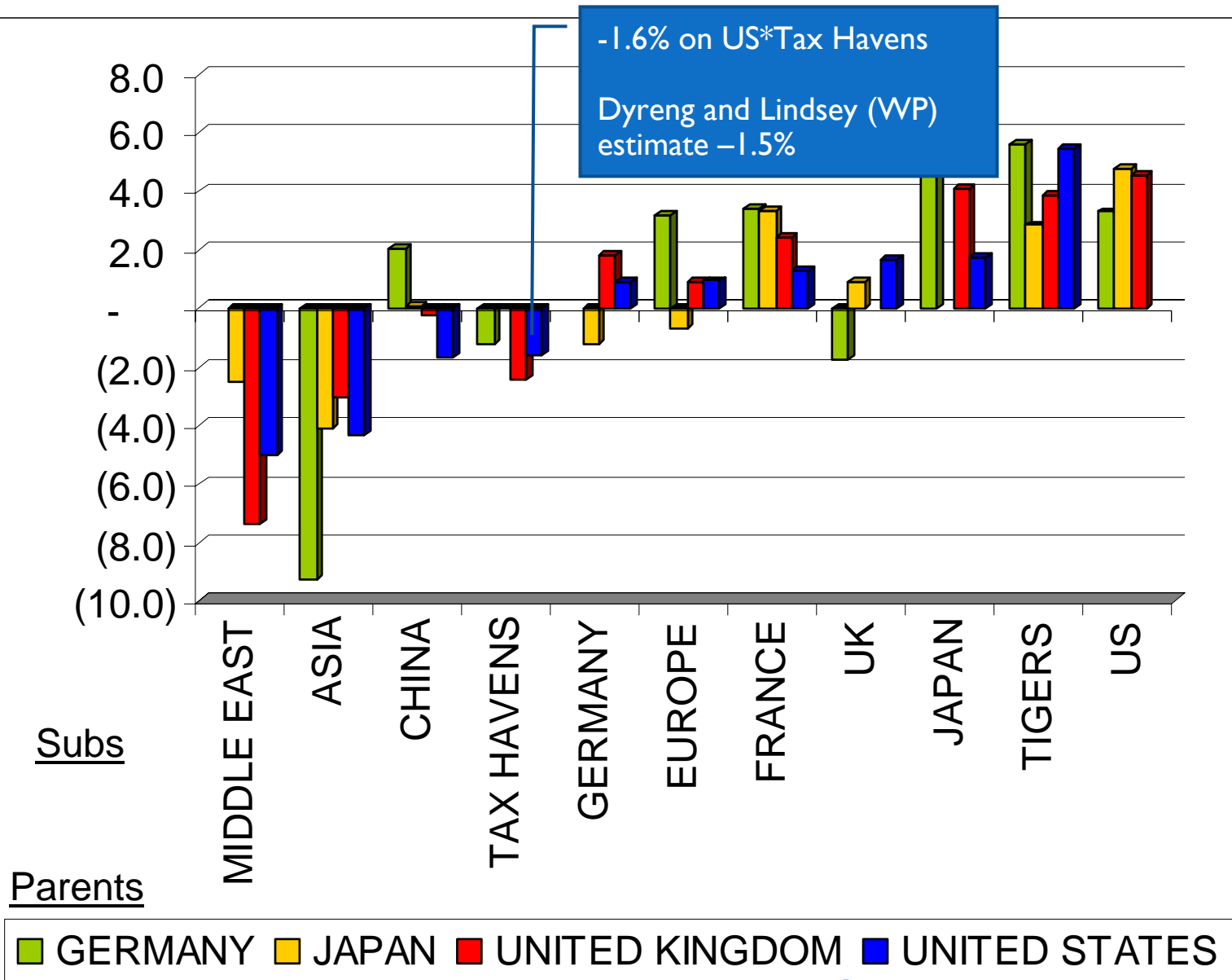


# Multinational Gap over Time



$$AETR_{it} = \sum_j \beta_{0j} COUNTRY_{it}^j + \sum_j \beta_{1j} (COUNTRY_{it}^j * MN_{it})$$

# Impact of Sub Location by Parent Country



$$AETR_{it} = \sum \beta_{0j} COUNTRY_{it}^j + \sum \beta_{1k} SUB_{it}^k + \sum \beta_{2l} COUNTRY_{it}^l * SUB_{it}^k$$

# What Do We Find?

---

- ▶ Multinationals and domestic firms face similar AETRs.
- ▶ Average AETR decline from 1988-2007 was 6 percentage points (18%), much of which occurred from 1992-1994.
- ▶ Country AETR order remains constant over time.
- ▶ Japan has the highest AETRs
- ▶ U.S. and European countries have above-average AETRs.
- ▶ Middle East, Tax Havens and Asian (ignoring Japan) countries have below-average AETRs.

# Future Work--Clusters

---

- ▶ Companies appear to cluster among countries
  - ▶ e.g., If anywhere in Europe, then in Ireland, the Netherlands, and Switzerland?
- ▶ Future work:  
How does this clustering affect our understanding of the taxes on multinationals?