



World News Coverage of Biofuels

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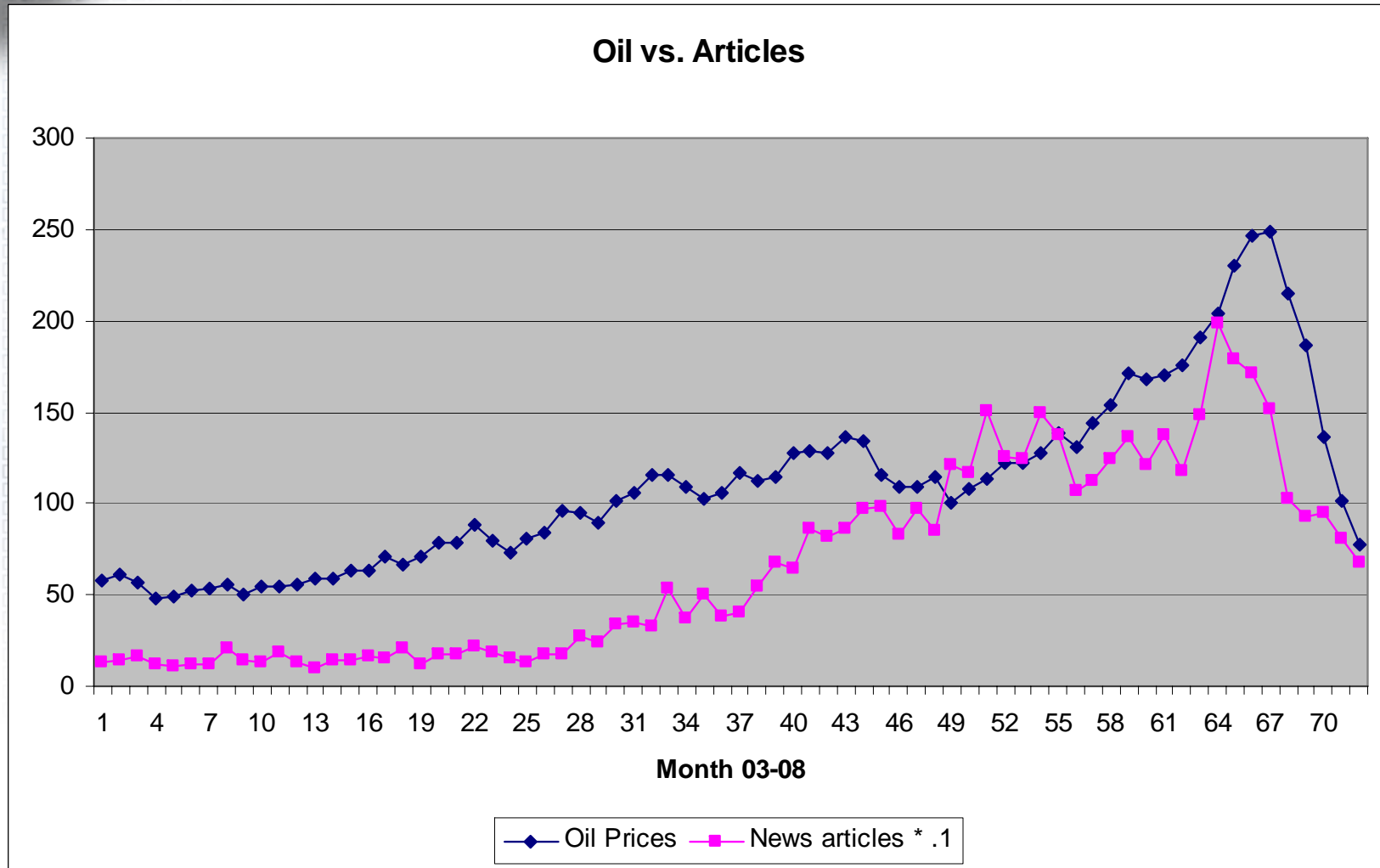


Problem: in theory and practice

- We are studying global learning processes
 - Directed to solving a world-level problem
 - Knowledge accumulates across national boundaries
 - Global innovation systems develop, test, diffuse solutions
- What is the role of controversy and conflict in those processes?
 - Greater levels of attention increase the pace of learning.
 - Competition generates variants to be tested.
 - Controversy leads to consensus on adoption criteria.



A research opportunity



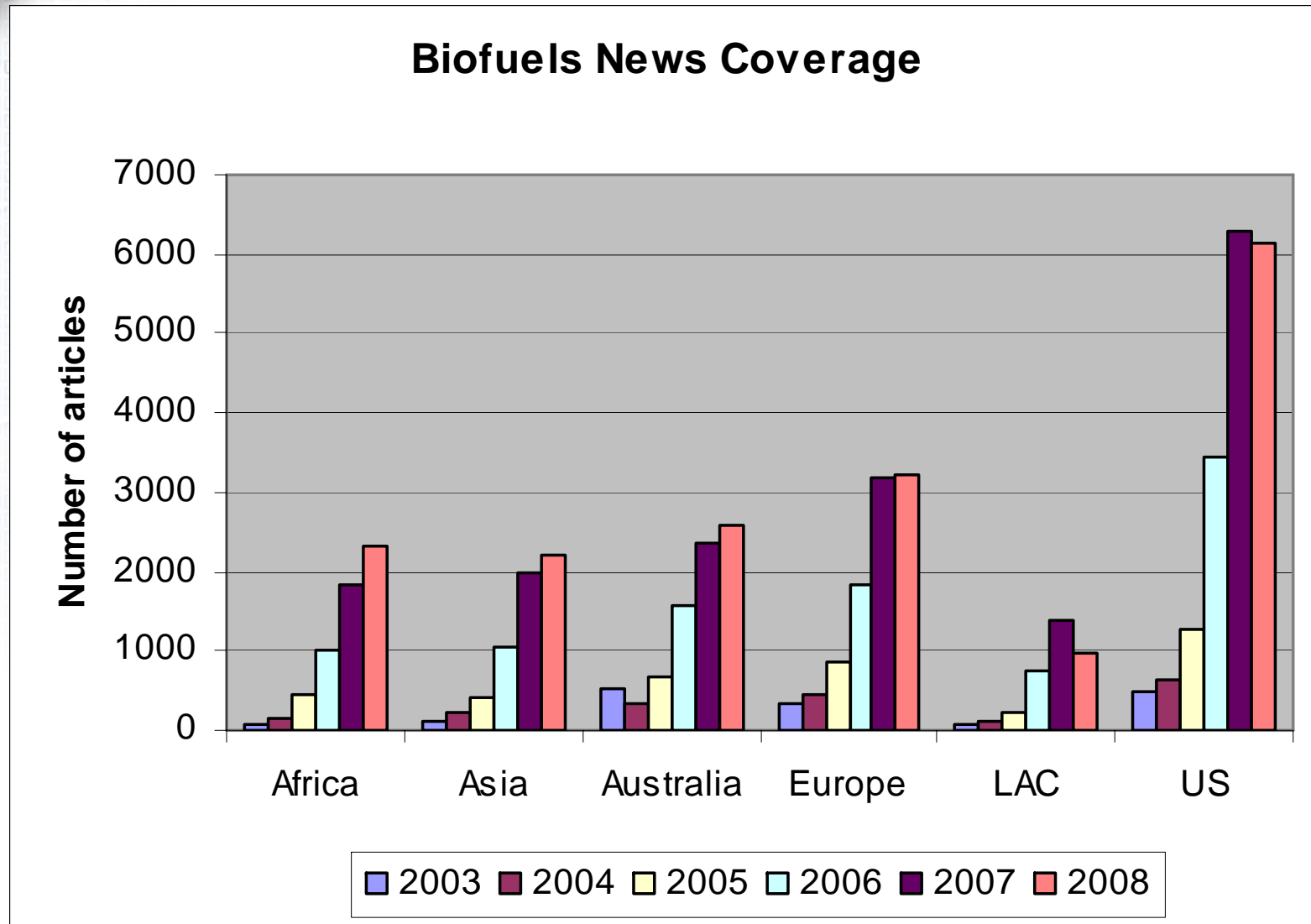


Methods

- Source: Pilot data from LexisNexis Major World Publications
- Years: 2003-2008
- Six world regions
 - Africa
 - Asia
 - Australia
 - Europe
 - Latin America/ Caribbean
 - United States
- Biofuel* AND [geographic term]
 - Rank by relevance
 - First ten from that region each year
- Big limitation: English language press



Geographic spread





Main themes, 2003-2005

- Oil price range, \$25 - \$61
- Africa
 - Interest emerges during this period
 - Nigeria and South Africa active, but many countries take note
 - Rural livelihoods for small farmers are the hope in South Africa, but not as much elsewhere
- Asia
 - Commercial opportunities very attractive
 - Oil palm and other biodiesel feedstocks are prominent



Main themes, 2003-05 (2)

- Australia
 - Sugar industry very interested; wheat later
 - Not much consensus on policy actions
 - CSIRO issued skeptical report, accused of bias
- Europe
 - 10% target already set before this period
 - Eastern Europe sees opportunities
 - EU chides countries that are not moving fast enough



Main themes, 2003-05 (3)

- Latin America/ Caribbean
 - Sugar industry conversion is the main theme
 - Brazilian influence is pervasive; lots of international interest
 - Cuba and Venezuela very critical of U.S.
- United States
 - MBTE substitution driving early market.
 - Many states have enabling legislation.
 - Feedstock prices rising even in this early period.
- Summary at the end of the period: Europe and U.S. going full speed ahead. Asia and Africa were getting into the game.



Main themes 2006-2008

- Oil price was fluctuating widely.
 - \$55 in January 2006; reached \$71 mid-year; back to \$55 at start of 2007
 - 2008: the year of the spike
 - Jan 08: \$93
 - July 08: \$137
 - Jan 09: \$35



Main Themes, 2006-2008(1)

- AFRICA:
 - Biofuels gain attraction as crude oil prices fluctuate amid concerns about hike in staple food prices
 - Pro-biotech groups support biofuels while pro-green groups say regulatory framework inadequate
 - New investments occur simultaneously as food prices raise inflation rates
- AUSTRALIA:
 - Biofuels emerge as future fuel for green vehicles
 - Biodiesel plants built in Malaysia and Singapore
 - By 2008, ethanol threatens wheat production



Main Themes, 2006-2008(2)

- ASIA:
 - Malaysia, Singapore, Indonesia and China push for biofuels (2006)
 - Questions emerge about hidden costs in terms of investment climate (2007)
 - Further investment amid food security questions (2008)
- UNITED STATES
 - Government and private investment throughout
 - Partnership forged with Brazil (2007)
 - Environmental and food security questions arise (2008)



Main Themes, 2006-2008(3)

- **EUROPE**
 - EU promotes biofuels, automakers turn to them, favorable investment climate and agricultural industry benefits
 - Doubts emerge due to high feedstock costs, Brazilian threat to EU industry and questions about sustainability
 - EU targets under pressure, OECD critical, harsh criticism
- **LATIN AMERICA AND CARIBBEAN**
 - Countries like Jamaica, Cuba and Barbados initiate plans to convert some of their sugar into ethanol in collaboration with Brazil (2006)
 - Brazil, U.S. and IADB increase assistance to Caribbean countries (2007)
 - Food security emerges as an issue in CARICOM nations



Food versus Fuel Controversy

- Lexis-Nexis Survey from May 2007 – May 2008
- News Services included:
 - NY Times
 - Washington Post
 - Washington Times
 - AP (International Coverage), Africa News
- Coding:
 - Energy Emphasis = +1,
 - Food Emphasis = -1
 - Balanced = 0
- Highlight main arguments explaining food crisis and for or against biofuels.



Preliminary Results

- Associated Press
 - equal distribution of articles emphasizing food and fuel (+1)
- Africa News
 - many more articles concerned with food (-12)
- NY Times and Washington Post
 - emphasized energy problem
- Washington Times
 - emphasized food in apparent attempt to discredit biofuels in favor of gasoline consumption



Discussion

- Very different perspectives from different parts of the world
 - Based on local crops (e.g., coconut in Philippines, Chinese pistachios, sugar in Caribbean)
 - Lobby groups (sugar, palm oil, etc.)
 - Policy actions (EU target, U.S. MBTE replacement)
- Multinational firms are major actors, investing in more countries across the world as prices rise.
 - Often working with top-down government actions
- Community-based, bottom up developments are present, but very different in scale.



Discussion

- Both scientists and NGOs have lined up as skeptics in many places.
 - Provided stories for the press.
 - Environment
- Food prices hit hardest and earliest in Africa and other tropical countries.
 - Some local policy response.
 - But did this stop the activity in the oil palm industry?
- Europe responded with a change in the policy relatively quickly.
- The United States took a long time to take account of the controversy.
 - Drop in oil prices made action moot.



Conclusions

- Global learning does take place, even in an environment of competition and controversy.
 - Sustainability guidelines discussed in this section are examples.
- Global governance is a lot harder.
- Media content analysis allows for the capture of spatio-temporal trends in the salience of the issue
- Provides several possible scenarios for further policy analysis.