

# What does 'public opinion' really say about climate change? Evidence from contributions to Australian newspapers

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# Opinions on climate change

- In 2007, IPCC concluded
  - Most of the observed increase in global average temperature since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations
- 97% of active climate scientists agree with these statements (Doran and Zimmerman, EOS, 2009)
- 50% of US public “believe increases in the Earth's temperature over the last century are due more to the effects of human activities” (Gallup Poll 2010), ([www.pollingreport.com/enviro.htm](http://www.pollingreport.com/enviro.htm) )
- 67% of Australians agree “that climate change is occurring and is due to human activity” (USSC, USyd, 09)
- Only 24% of US TV weather forecasters agree with this IPCC statement (Wilson, BAMS, 2009)

# Newspaper coverage of climate change



- Substantial coverage since 2006
- “Balanced” journalism leads to covering both sides of any issue, suggesting a scientific debate
- Editorial policy can influence coverage and content
- Content analysis of US and UK articles in papers
- No analysis of public opinions expressed through

# Analysis of opinions on climate change expressed in contributions to newspapers

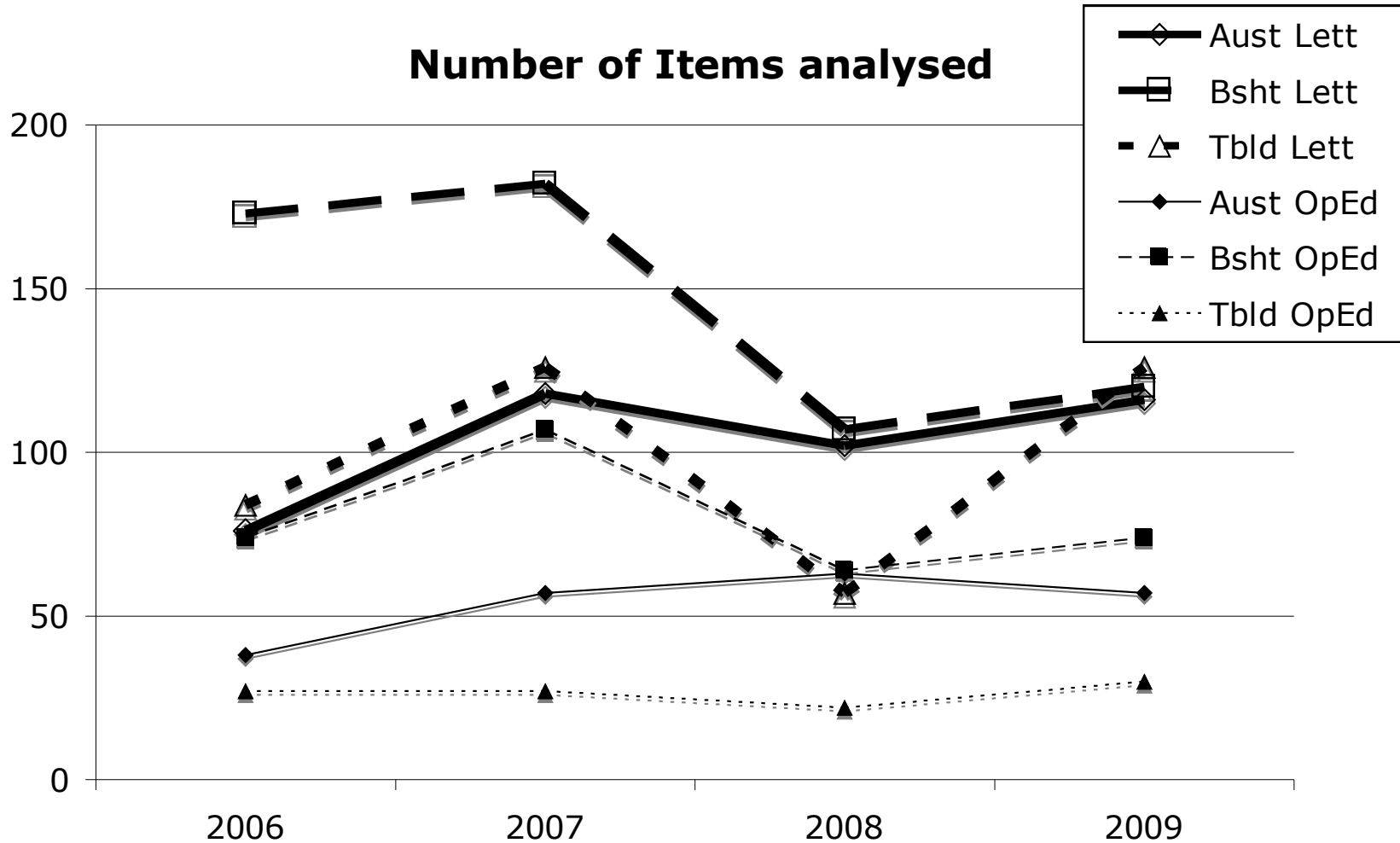
- Letters to the Editor and contributed OpEds, excluding columns from regular journalists
- 2006 - 2009
- Major newspapers: *The Australian* (national, NL),  
Broadsheet: *Sydney Morning Herald* (Syd), *The Age* (Melb), Fairfax;  
    Tabloid: *Daily Telegraph* (Syd), *Herald-Sun* (Melb), News Ltd.
- Key word search using Lexis Nexis:  
“climate change”, “global warming”, “greenhouse”
- Content analysis based on level of agreement with key conclusions of IPCC Fourth Assessment Report on climate change in 2007

# Statements analysed

1. Warming of the climate system is unequivocal; there has been a significant increase in global mean temperature over the 20th century
2. Increasing greenhouse gases due to human activity are the main cause of increasing global temperatures
3. Continued greenhouse gas emissions at or above current rates will cause substantial future warming
4. Warming will have some adverse impacts on water, ecosystems, food supply, coasts and health
5. The costs of immediate action will be less than future costs

# Examples of items on causes of warming

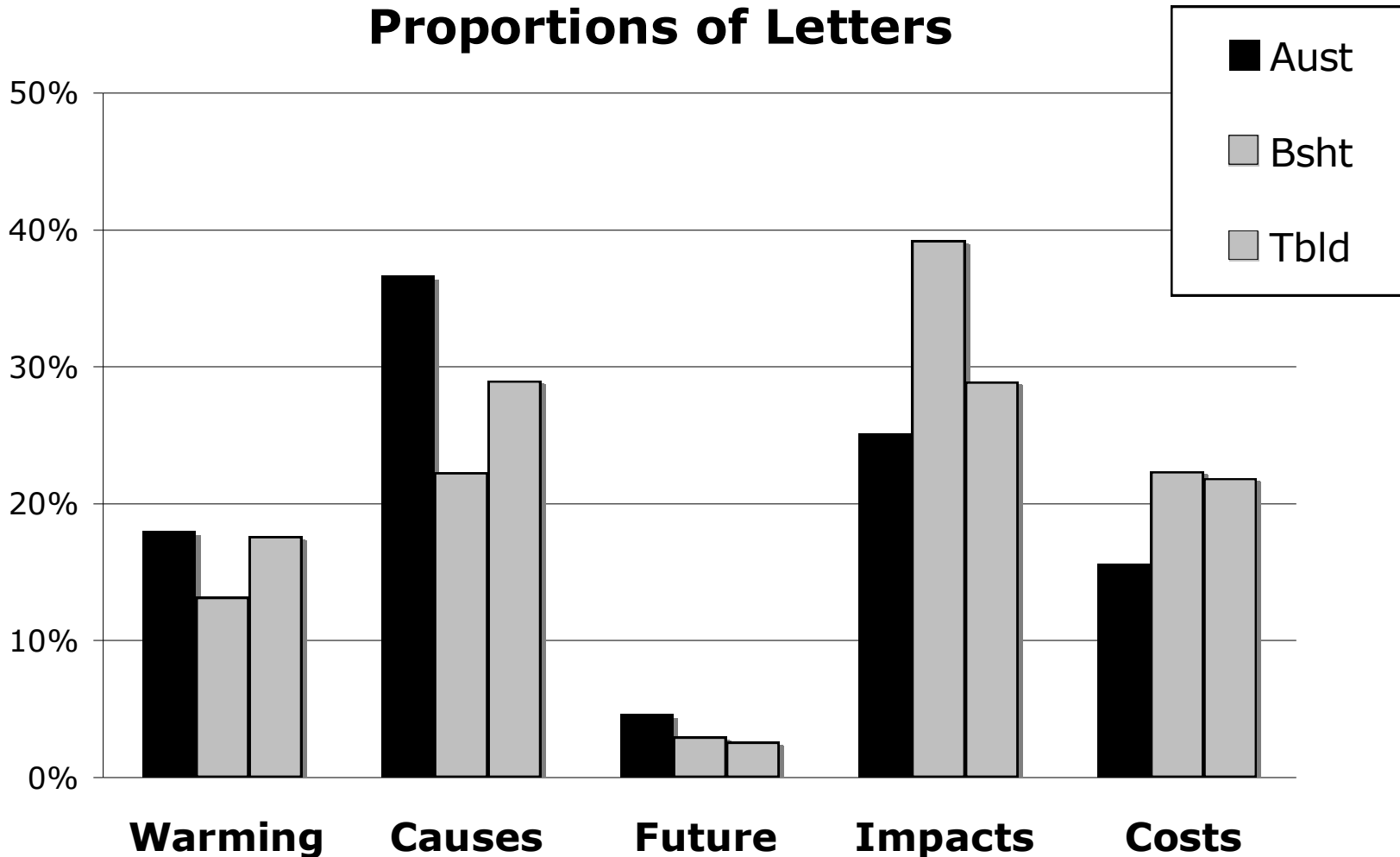
<p>Strongly Agree (SA)</p>	<p>‘At higher levels in the atmosphere, climate change is very different - for example the upper atmosphere (the stratosphere) is cooling rapidly because of ozone depletion and greenhouse climate change, exactly as expected. The layers between the surface and upper atmosphere show mixed rates of warming or cooling. These variations are well understood by climate scientists and broadly in line with predictions. This pattern is one of the strongest pointers we have that global warming at the surface is caused by man.’ Letter, The Age, 17 July, 2008</p>
<p>Disagree (D)</p>	<p>‘I do not see any positive proof that climate change is caused by humans.’ Letter, Herald Sun, 28 December, 2007</p>
<p>Strongly Disagree (SD)</p>	<p>‘In December last year, 103 professional persons, including two of the world's greatest living physicists, wrote to advise the secretary-general of the UN that in stark contrast to the often repeated assertion that the science of climate change is “settled”, significant new peer-reviewed research has cast even more doubt on the hypothesis of dangerous human-caused global warming. For good measure, they added that it is not established that it is possible to significantly alter global climate through cuts in human greenhouse gas emissions.’ Letter, The Australian, 18 March, 2008</p>



Only about 25% of items published could be scored against the statements.

Similar number of items analysed each year, but about twice as many letters as contributed OpEds.

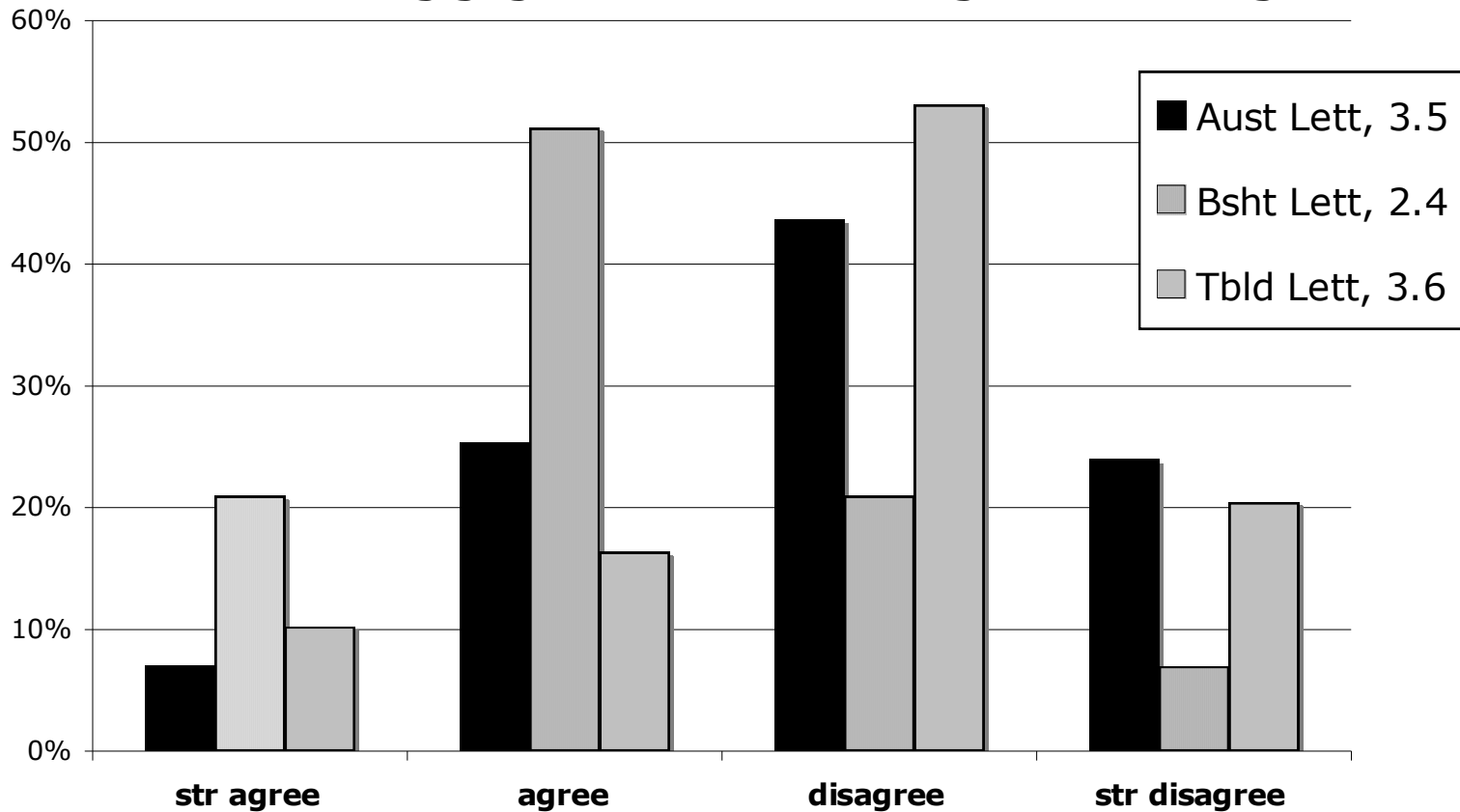
## Proportions of Letters



Small proportion of items expressed opinions on future warming, so analysis of that statement is not presented.



## "Increasing ghgs the main cause of global warming"



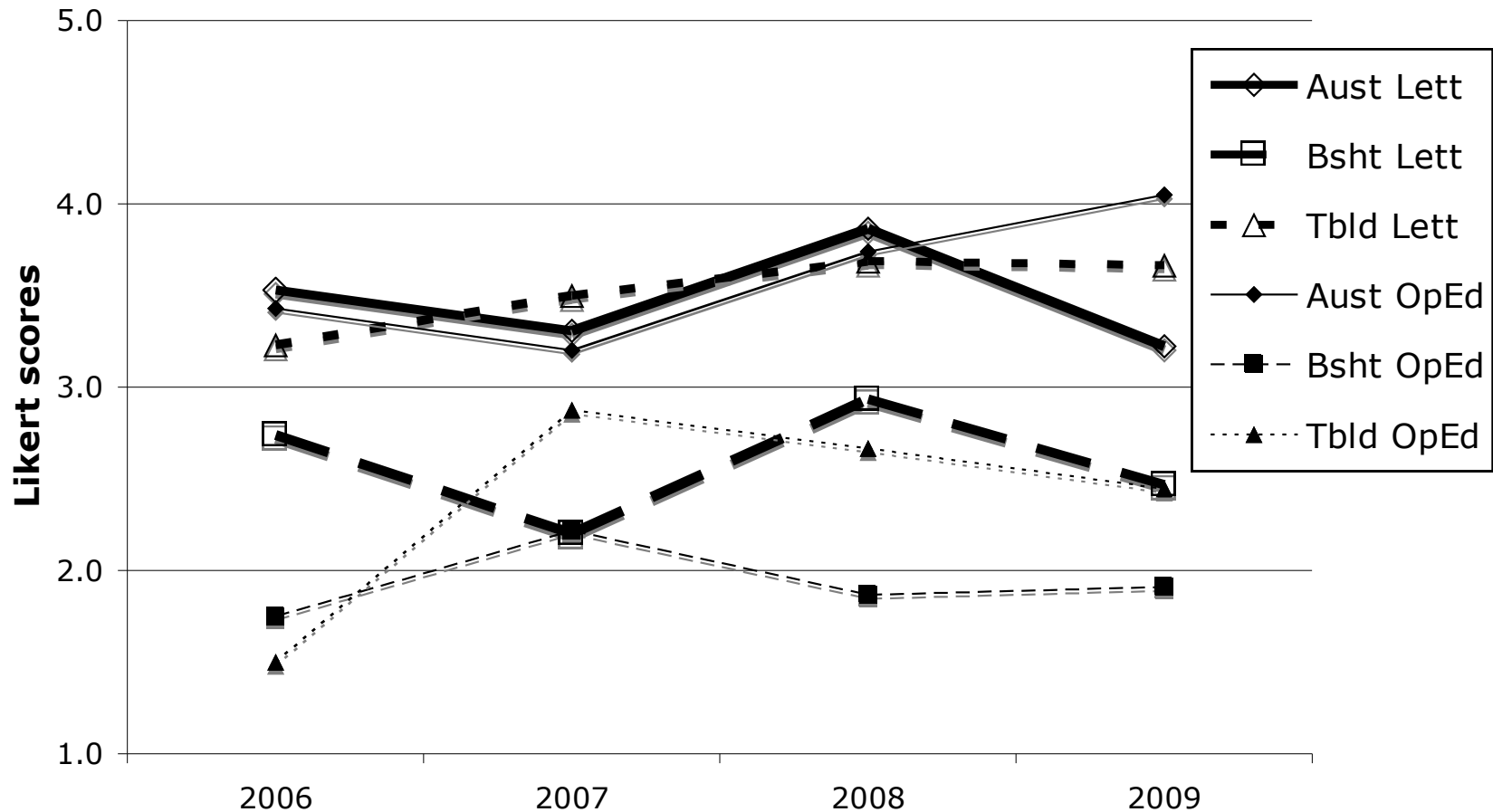
Likert score gives level of agreement with each statement:

1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree.

Compute scores for each statement from all items in each newspaper for each year.

For statement on cause of global warming, similar agreement for broadsheets, similar disagreement for *Australian* and tabloids.

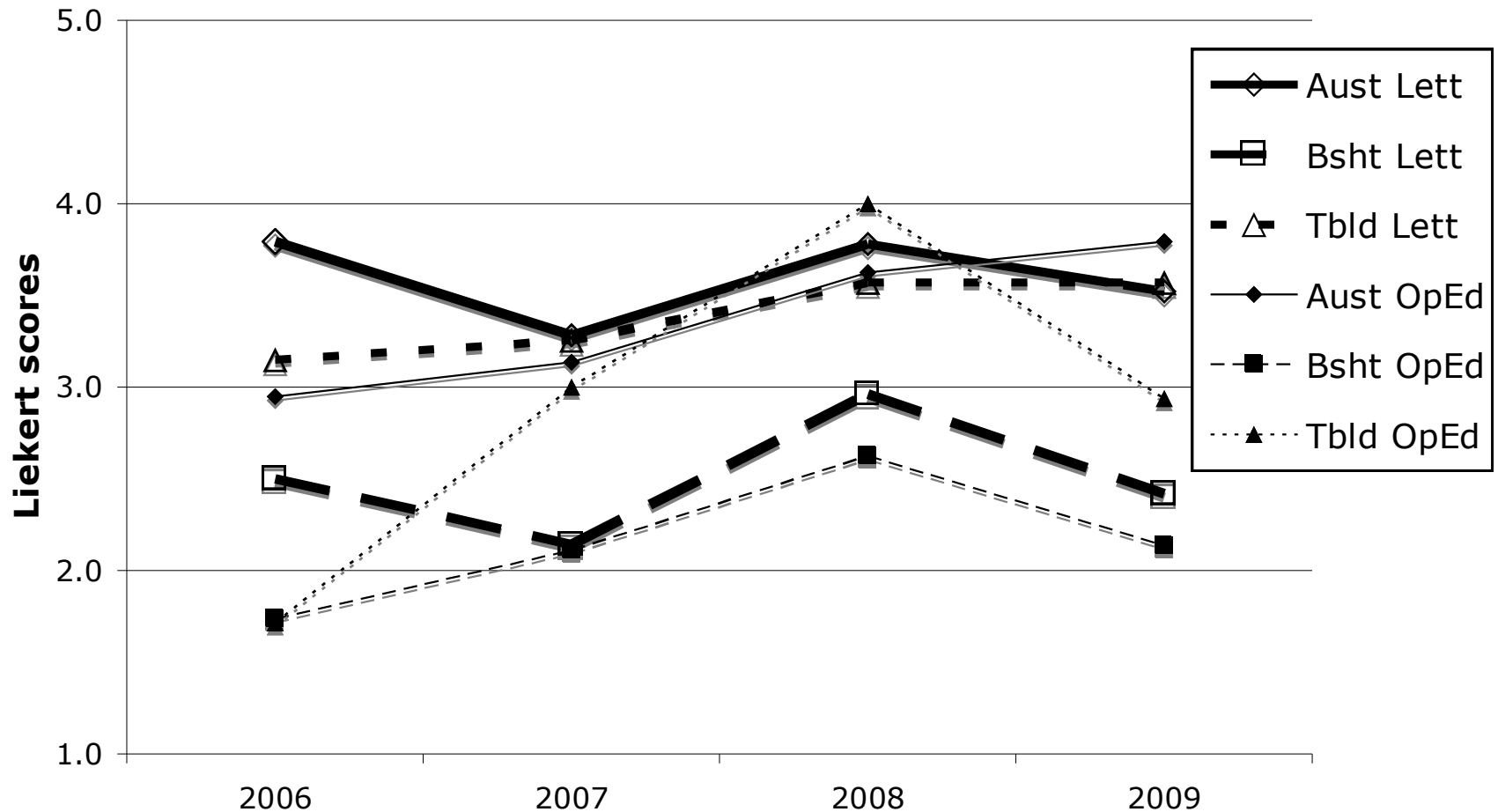
## "Warming of the climate system is unequivocal"



General agreement with statement on observed warming in letters and OpEds in broadsheets and OpEds in tabloids, with similar agreement over time.

Disagreement in Australian and letters in tabloids, increasing over time for OpEds in Aust and letters in tabloids.

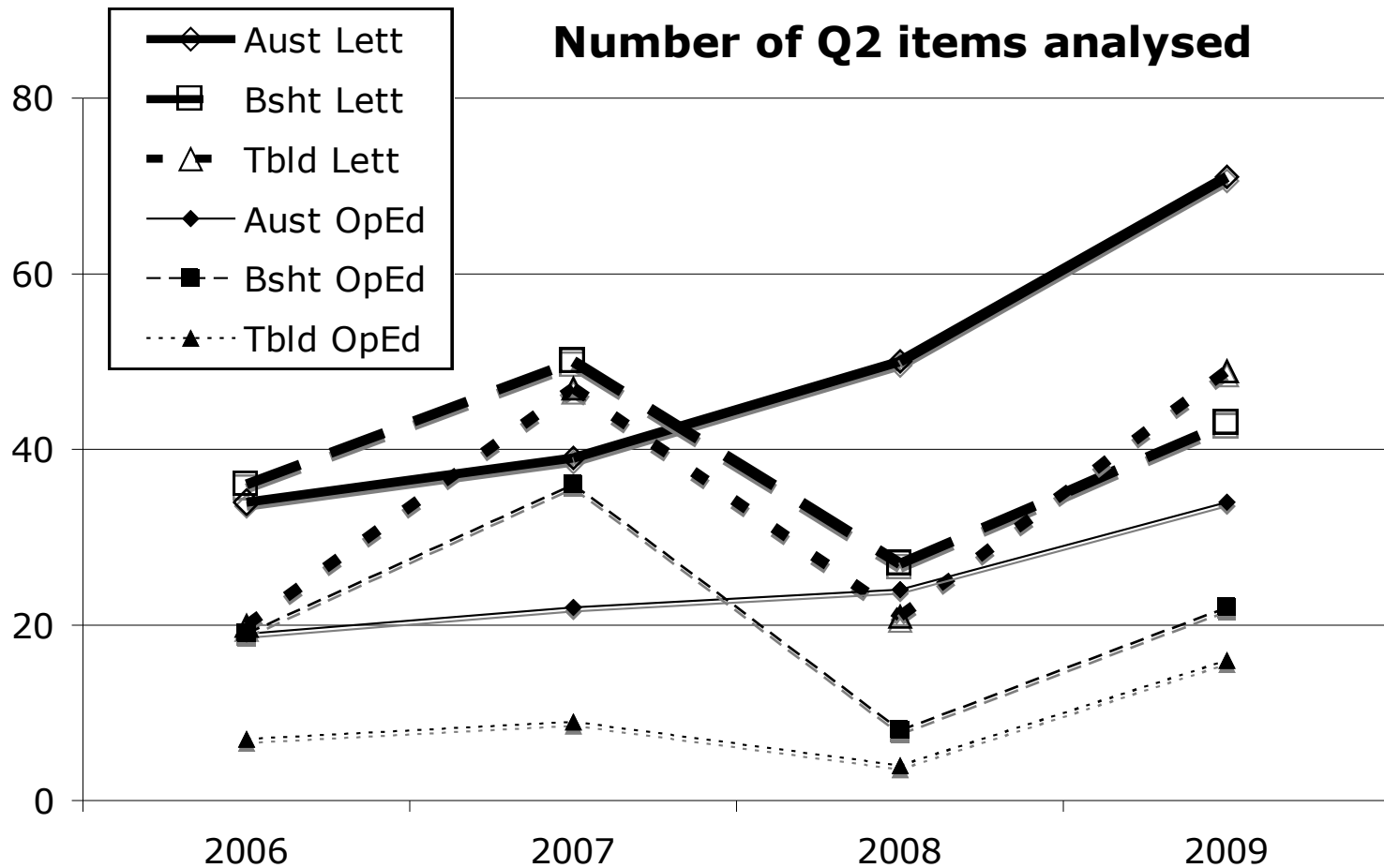
## "Increasing ghgs the main cause of global warming"



General agreement with statement on causes of warming in broadsheets, disagreement in *The Australian* and tabloids.

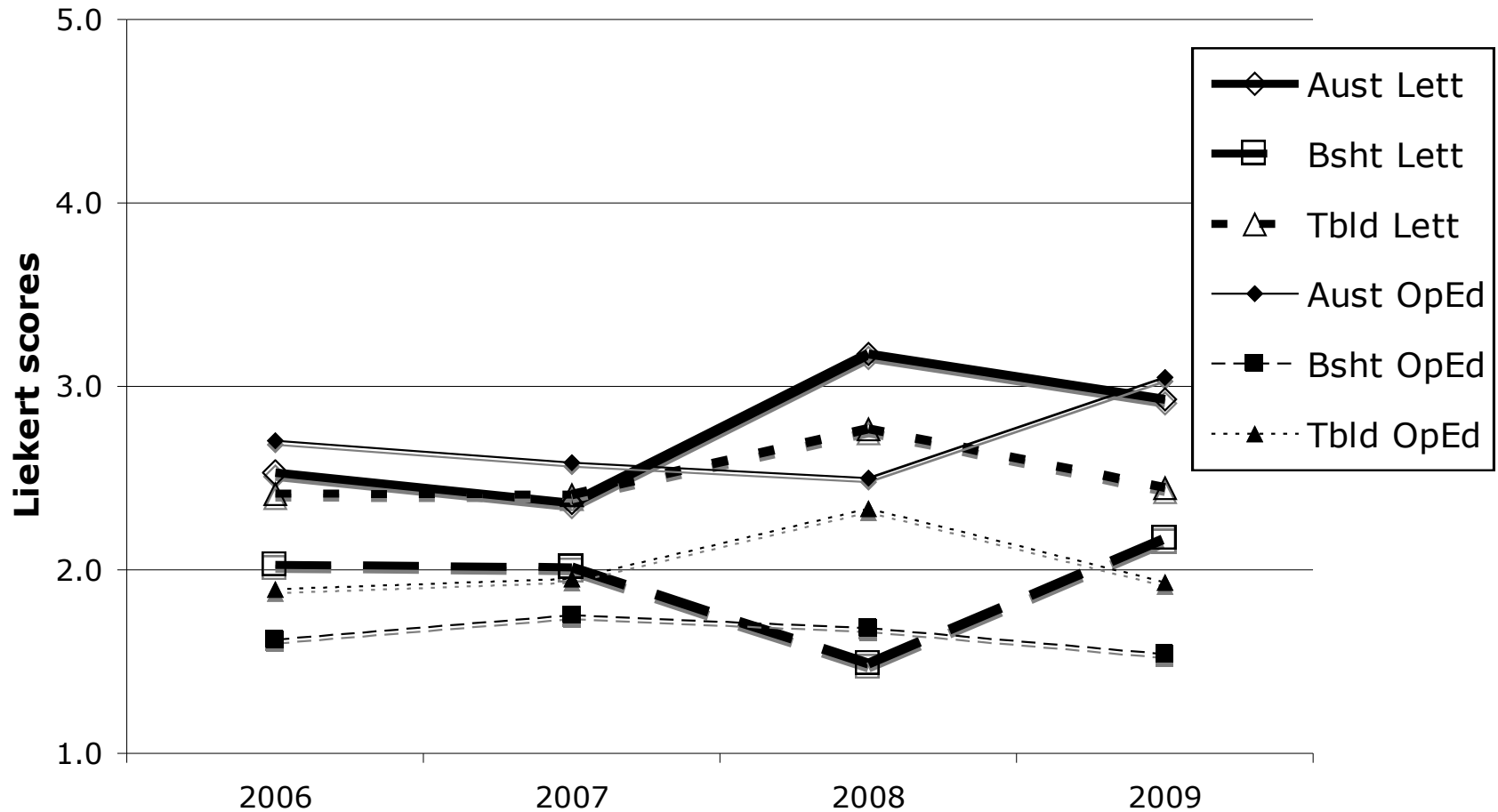
Increasing disagreement over time in OpEds in Aust and tabloids.

From 2008 to 2009, increasing agreement or reducing disagreement, except for OpEds in *The Australian*



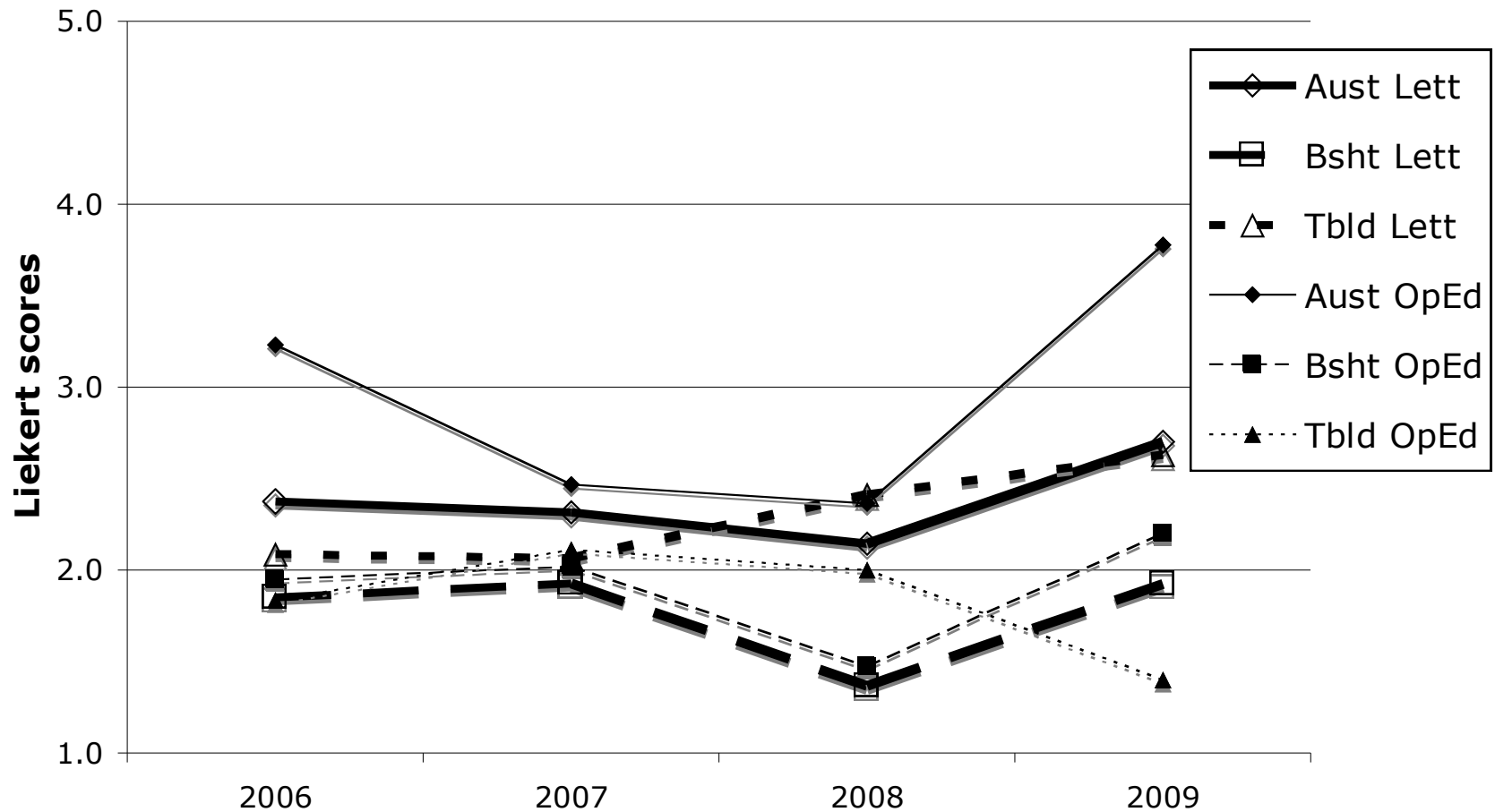
Marked increase in number of items addressing causes of climate change in 2009, particularly in *Australian*, both in letters and OpEds.

## "Warming will have adverse impacts"



General agreement with statement on adverse impacts in all newspapers, weakest in Australian (both letters and OpEds) and getting weaker over time.

## "Costs of immediate action less than future costs"



General agreement with statement on future costs in all newspapers, with marked change to disagreement in OpEds in *Australian* in 2009, .

# Summary

- Content analysis of opinions on climate change expressed in Letters to the Editor and contributed Op-Eds in five major newspapers over 2006-2009
- Overall, similar broad spectrum of opinions
- Results support expectations; broadsheet items generally agree more with statements on climate change than items in *The Australian* or tabloids.
- For statements on observed changes and causes, little overall change, with increasing agreement from 2008 to 2009, except for *The Australian* OpEds and tabloid Letters
- Similar agreement with statements on impacts and future costs in all newspapers, until *The Australian* in 2009
- Limitations: Polarised opinions likely in contributions; Influence of Editor, particularly in *The Australian*