

Gasoline Prices Jump Up on Mondays: an Outcome of Aggressive Competition?

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BACKGROUND

- Price cycles, where sharp increases are followed by a gradual reduction of retail prices, are found in markets in the United States, Canada and Australia, among other countries.
- The majority of studies find empirical support for the notion that these cycles are the outcome of aggressive competition. Firms have an incentive to undercut each other in order to achieve an immediate and large increase in market share. They then successively undercut each other in a price war phase, until further undercutting becomes too costly. There is then a war of attrition phase until one firm assumes the burden and raises prices. Other firms will immediately follow suit and increase their prices, but not to the same level as the firm that initiated the price increase. The next cycle will then begin.
- Price reductions in Norwegian daily pump prices are consistent with the idea of an undercutting phase in the price cycle. But the price cycle has distinguishing features: it is the day of the week rather than the level of prices that initiates new cycles, and companies appear to harmonize Monday as the high-price day.

METHODOLOGY

- The authors explore the driving force behind price cycles in Norwegian pump prices. They question whether the price jumps taking place every Monday are the result of a coordinated process or of fierce competition.
- The analysis is centred on 28,000 daily station-specific observations of Norwegian gasoline pump prices from March 2003 to March 2006.

KEY FINDINGS

- Norwegian gasoline prices follow a fixed weekly pattern, with prices increasing significantly every Monday at noon; prices then gradually decline over the week (with a few exceptions), and are at their lowest level at the weekend and on Monday morning.
- The headquarters of each brand of gasoline decide on the recommended retail price. There is a fixed link between the retail price and the recommended price after the prices jump on Mondays, with companies appearing to use the recommended price as a coordination device.
- The weekly pattern changed in April 2004: whereas Thursday had been the high-price day, Monday changed from being the low-price day to the high-price day almost 'overnight'.

- After the weekly pattern changed in April 2004, the price-cost margin also increased significantly.

POLICY ISSUES

- Communication about prices, which provides commitment value and more information to consumers about retail price differences, may well be welfare enhancing. But in the case of Norwegian gasoline pump prices, there is no benefit to consumers, and recommended prices are made primarily to increase transparency among competitors and facilitate potential price coordination.
- Even if the company headquarters are not allowed to post recommended prices on public websites, they may still give information about recommended prices to their own outlets. However, a ban on the public announcement of recommended prices may make it significantly more difficult/costly to coordinate a focal day and level for price increases across companies.
- Policy makers should be cautious when drawing the conclusion that price cycles are indicative of a market with aggressive price competition. The evidence from the Norwegian gasoline market points to a form of price coordination that encompasses both strong local competition and centrally coordinated prices.

THE CCP

The ESRC Centre for Competition Policy (CCP), at the University of East Anglia, undertakes competition policy research, incorporating economic, legal, management and political science perspectives, that has real-world policy relevance without compromising academic rigour.

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The full working paper (CCP Working Paper 08-20) and more information about CCP and its research is available from our website: www.ccp.uea.ac.uk

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