

Third Quarter 2022 July - September

Consumers Found Some Relief in the Third Quarter as Retail Prices Fell; However, Prices Remained Above Levels From Previous Years.

Declining crude prices, coupled with contracting refining margins, led retail gasoline prices to fall nearly fifty cents per litre in the third quarter, while retail diesel prices experienced a lesser decline as diesel refining margins remained elevated.

North American retail prices declined in the third guarter as crude prices weakened and refining margins contracted. Crude prices began declining in July, mostly attributable to increased recession fears that could reduce crude oil demand and increased crude inventories, raised by increased production and additional crude oil releases from the U.S. Strategic Oil Reserves. High inflation rates have led many countries' central banks to raise prime lending rates, further contributing to fears of a global recession. By September, Canadian crude prices reached a seven-month low. Record high refined product margins have spurred refineries in both the U.S. and Canada to run at utilization rates above 90 percent for the entire third quarter to fill low refined product inventories. However, refining capacity constraints and strong diesel export demand have hindered refiners from building product inventories, which remained unseasonably low.

Despite strong refining activity and a tepid summer driving season, gasoline inventories in North America were 4.3 percent lower than in the same quarter last year (EIA). North American gasoline demand averaged 6.6 percent lower in the third quarter than the previous year and was 7.8 percent lower than before the pandemic in 2019 (EIA). However, this past quarter, inventories remained low as refiners favoured diesel production over gasoline. Although gasoline refining margins declined in the third quarter, falling nearly 20 cents per litre, lower inventories have kept gasoline refining margins elevated, averaging 11.4 cents per litre higher than the previous five-year average for the quarter. Consequently, Canadians experienced the highest retail gasoline prices on record for the summer driving season.

Similarly, refiners were challenged to fill North American distillate inventories despite lower demand as trucking wained, home construction fell, and manufacturing slowed. Diesel demand was 5.5 percent lower this past quarter than the previous year. Yet, refinery capacity challenges and



strong demand from abroad limited inventory builds and diesel stocks were 17.3 percent lower in the third year-over-year (EIA). As a result, Canadian diesel refining margins were 33.2 cents per litre above the previous five-year average for the quarter, and retail diesel prices remain high, averaging near the \$2 mark for the quarter. **Figures 1 & 2** show the historical movement of retail gasoline and diesel prices in Canada, along with their component prices.

Although volatility in crude prices was common in the third quarter as recession fears weighed against supply concerns, overall crude prices declined throughout the third quarter. The price of Brent crude (a global benchmark) began the quarter at 111.63 \$US/BBL before falling

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and ending the quarter at 87.96 \$US/BBL, a decline of 23.4 percent. Similarly, the WTI benchmark began the quarter at 108.43 \$US/BBL before declining, ending the quarter at 79.49 \$US/BBL, a decline of 24.8 percent. Brent's premium to WTI averaged at 6.14 \$US/BBL, up 2.76 \$US/BBL higher than the previous quarter, reaching as high as 12.72 \$US/BBL in early August. A strong U.S. dollar has made oil priced in U.S. dollars more expensive, and Russian sanctions on crude oil have shifted trade patterns in Europe, increasing the demand for Brent crude. The heavy-light crude oil price spread between WTI and Western Canadian Select (WCS) expanded in the third quarter, reaching as high as 19.42 \$US/BBL in late September. Strategic Petroleum Reserve releases by the U.S. Government have created increased competition for crude in the Gulf of Mexico, weakening Canadian crude prices.

Gasoline and Diesel Market Overview

Canadians found some relief at the pumps this past quarter as gasoline prices declined upon lower crude prices. By September, crude had fallen 21.2 cents per litre lower than the end of the last quarter. Also, refining margins declined, down 18.5 cents per litre lower, upon a slower seasonal summer driving season. Overall, retail gasoline prices were 48.4 cents per litre lower at the end of the quarter from

Figure 3: Canadian Average Gasoline and Diesel Price Components for 3rd Quarter 2022



the previous quarter, yet were still nearly twenty cents per litre higher in September from a year earlier.

Regional retail gasoline prices varied substantially in the third quarter, particularly along the West Coast of Canada, as wholesale rack prices expanded to nearly forty cents per litre above the rest of Canada in September. Unplanned refinery interruptions along the North American West Coast and logistical limitations for re-supply to the area led to a steep expansion in price disparity to the rest of Canada.

Although crude prices declined in Canada in the third quarter, diesel refining margins remained elevated. Lower product inventories in North America and abroad have created an urgency to build product inventories for the upcoming home heating and agricultural fall harvest. Consequently, after initially declining early in the quarter, diesel refining margins expanded in September, keeping retail prices high in the third quarter.

Unplanned refinery issues in the U.S. Midwest in August and September have contributed to higher diesel wholesale prices in central regions of the country and along the East Coast. Lower refinery capacity along the North American East Coast from the 2019 Philadelphia and 2020 North Atlantic refinery closures have left the region more dependent on imports from the Gulf Coast and the Midwest. Refinery issues in the Midwest in the third quarter and logistical constraints to move products from the U.S. Gulf Coast have limited inventory builds along the East Coast, contributing to higher refining margins. (**Figure 3**)

Next Quarter Market Outlook

Crude price volatility will likely continue into the fourth quarter as recent oil output cuts by the Organization of Petroleum

Exporting Countries, and its allies (OPEC+), push up against opposing downward price pressures from recession fears.

As we head into the fourth quarter, seasonal gasoline demand typically declines, leading to lower refining margins. In addition, increased refinery activity to boost diesel production will ultimately result in increased gasoline production and possibly lower prices. The switch to winter-blend gasoline, which is cheaper to produce, will also result in lower gasoline prices. In contrast, diesel inventories are well below seasonal norms heading into the winter heating season and fall harvest. With additional demand for diesel from abroad, particularly in Europe as high natural gas prices prompt gas-to-oil switching from industry and power generators, we will likely continue to see elevated diesel refining margins and high retail diesel prices.



Trends in the Retail Marketing Margin in Canada

The retail marketing margin is loosely defined as the difference between the pump price charged (before taxes) and the wholesale price paid by fuel retailers to purchase the fuel. In Canada, the retail marketing margin makes up the smallest portion of the retail pump price. In 2021, the average retail gasoline margin was 8.0 cents per litre or roughly six percent of the retail gasoline price. With higher retail prices during the first three quarters of 2022, the retail margin rose to 9.9 cents per litre yet still averaged just shy of six percent of the total pump price. The retail portion of the pump price covers costs such as rent or lease payments, utilities to run the facility, insurance costs, wages, credit card fees, maintenance, and several other possible items. As expenses can vary from facility to facility, the margin need to cover these costs can vary from site to site. In this portion of the newsletter, we'll examine trends in retail margins in Canada and explain variations experienced between and within markets.

Figure 4 shows retail gasoline margins from the beginning of 2021 to the present in select Canadian cities in provinces from coast to coast. Most cities have shown little variation in retail margins during this timeframe. Despite extreme volatility in retail prices during the same period, retail margins have varied little in most regions.

There are several reasons for this. One is that some provinces regulate pump prices to provide stability and accountability to fluctuations in pump prices for consumers and in some cases, to protect retailers from predatory fuel marketers. Crude prices are determined mainly through global supply and demand conditions, and wholesale prices are similarly determined from more localized North American supply and demand conditions; thus, the only portions of the pump price available for governments to regulate are retail marketing margins and taxes. Several provinces have instituted regulations on retail marketing margins in the form of a price ceiling or in some instances, a price floor.

Figure 4: 2021 to Present Retail Gasoline Marketing Margin Select Canadian Cities



Source: Kalibrate Canada, Inc.

Price regulations are present in all of the Atlantic provinces, and consequently, these provinces see little fluctuation in retail marketing margins as changes generally require a lengthy review process.



Another reason that retail margins generally have varied little since the beginning of 2021 is that the expenses that retail margins cover

likely have not drastically increased. Yes, wages have increased over this time, as have other associated costs, but these costs do not climb drastically overnight; instead, they rise over a longer timeframe. **Figure 5** shows the average Canadian retail marketing margin from 1991 to 2021 in nominal terms and adjusted for inflation. After reaching a low of 3.6 cents per litre in 1996, retail margins, when adjusted for inflation, have changed little since, averaging at 4.7 cents per litre in 2021, just 1.1 cents per litre higher. Even in nominal prices, the retail margin was just 1.0 cents per litre higher in 2021 compared to thirty years earlier.

It is likely that over this same timeframe, many fixed and variable costs would have increased. The increase in retail margins in Canada over the last three decades likely does not cover the increased associated costs with fuel retailing. Many fuel retailers would probably have invested in additional revenue streams to supplement fuel margins. Data from Kalibrate's National Retail Petroleum Site Census shows during last seventeen years, the number of gasoline stations with a mid-to large-sized c-store size increased from 37 percent to 67

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percent of stations. Similarly, the number of sites with carwashes and quick-serve restaurants expanded, up 6.7 and 5.5 percent each, respectively.

Yet, as Figure 4 shows, some regions of Canada have experienced a great deal of volatility in retail margins, particularly in the most recent guarter in the Prairie Provinces. Although the exact reason for the variation is unknown, average site throughput could be a factor affecting retail margin need. Figure 6 illustrates that as the average site throughput of a market (that is, the average annual amount of fuel pumped) increases, the average fuel margin in a market is generally lower. This is because the more volume sold at a gasoline station, the less the margin needed to cover the same expenses, which for the most part, remain constant with the amount of fuel sold. As well, often, wholesalers of fuel will offer discounts for larger supply contracts. North American gasoline demand in the third quarter of 2022 was 6.6 percent lower than in 2021 (EIA, product supplied) and could be a contributing factor in some markets experiencing higher than normal retail margins.

Figure 6: Retail Margin Versus Annual Gasoline Throughput of 73 Canadian Municipalities in 2021



Figure 6 also shows that it is not a one-for-one relationship

between site throughput and retail margin need as there can be significant variation in different markets. Despite higher annual site throughputs, some markets experience higher margins, and the reverse is true. We also see this within a market and between neighbouring markets as retail prices vary.

So who is setting the pump price in Canada? Contrary to what is commonly thought, big oil companies do not set the pump price at most stations. **Figure 7** shows that in 2021, roughly one in five stations had pump prices set by an oil refining company which, in turn, determined the retail margin at the gasoline station. It is increasingly more common for non-oil refining companies or independent dealers



Source: Kalibrate Canada, Inc. - 2021 National Retail Petroleum Site Census

to set the pump price and determine the retail margin of the site (nearly 80 percent of gas stations, up from two-thirds of sites nearly twenty years earlier). It has become more common for oil companies to distance or divest control over retail stations as oil companies instead focus on more profitable revenue streams such as refining.

Although retail pump prices often get hammered in the media as often being too high as oil companies gouge consumers, our analysis has shown this to be false. Individual dealers or fuel marketing companies set most pump prices in Canada with no connection to oil refining. And in fact, the retail fuel margin, a consequence of the difference between the retail and wholesale prices, has changed little over the last several decades, leaving little room to lower. Without little increase in fuel margins over the years, many gasoline stations have had to rely on supplemental revenue streams, usually in the form of additional c-store offerings, quick-serve restaurants and carwashes to remain profitable. As we look to the next decade with increased projections of the use of alternative fuels or electric vehicle use, average site throughputs will likely fall, leading to increased fuel margin need. Without increased margins, many fuel retailers will have to rely further on ancillary site offerings to stay pumping.



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About Kalibrate

Kalibrate's decision-making software empowers fuel and convenience retailers across the globe with the market intelligence, micro-local data, and precision pricing and planning tools they need to gain real competitive advantage. For over 25 years, Kalibrate has been the chosen decision-making partner of 300+ fuel and convenience retailers in over 70 countries. The firm is headquartered in Manchester UK, with local offices in the USA, Canada, India, China, Australia, and Japan.

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