Used Vehicle Supply: Future Outlook and the Impact on Used Vehicle Prices

AT A GLANCE

- When to expect an increase in used supply
- Recent trends in new vehicle sales
- Changes in used supply by vehicle segment
- A large SUV used price study
- A used vehicle price forecast for 2012
The Recession’s Impact on Used Vehicle Supply and Prices

Although the Great Recession ended more than two years ago, the economic repercussions live on—especially in the automotive sector.

From 2000 to 2007—the eight years leading up to the recession—new vehicle sales averaged nearly 17 million units per year. Since the recovery began its slow climb in 2009, new sales have averaged just 12 million units per year. That’s 29 percent lower than the pre-recession level.

This backslide in new vehicle sales has impacted used vehicle supply, since the number of late-model used vehicles on the market depends on new vehicle sales. In fact, NADA estimates that the supply of used vehicles ranging up to five years in age has dropped every year since 2009—and that supply through 2011 was about 17 percent lower than it was in 2008.

Supply of late-model units will reach the turning point in Q3 2013.
Supply levels across vehicle segments changed because rising gasoline prices and government-imposed increases in average fuel economy required manufacturers to produce fewer sport utility vehicles and more compact cars and car-based crossover utilities.

As shown, compact cars and their utility counterparts were the only two vehicle segments to see positive supply growth over the past three years. The large SUV segment experienced the largest drop—a staggering 42 percent decrease.

In times of economic instability, used vehicles become more attractive than new—so this negative shift in used supply coincided with strong demand growth. These trends have helped boost used vehicle prices over the past few years. NADA estimates that, relative to January 2008, used retail prices grew approximately 15 percent by the end of 2011.

The Used Vehicle Supply Forecast

New vehicle sales hit their low point in 2009 at 10.4M units and have been on the rise ever since. Therefore, it’s reasonable to assume that we’re closer to the used vehicle supply trough than we are to the peak. However, consumer vehicles (i.e. non-commercial) don’t enter the used vehicle market in large quantities until three or four years after initial purchase, which means we must wait a bit longer before used supply reverses course and begins to grow. NADA forecasts that the supply of late-model units will decline for about another year and a half, and that we will finally reach the turning point in the third quarter of 2013.
That said, due to the structured nature of lease contracts, combined with shorter holding periods, off-lease volume will start to trend upward toward the end of 2012. In fact, we’ve already reached the turning point for off-lease units three years old or younger. This trend will provide some relief for dealers searching for clean, certifiable late-model units.

Used volume by segment will stay true to recent trends. The loss rate for large SUVs, mid-size pickups and vans will exceed the market average, while losses for compact cars, utilities and mid-size cars will be less severe.

So, what can we expect for the remainder of 2012? NADA forecasts that the supply of vehicles ranging up to five years in age will fall by 11 percent for the year, even with the assumption that trade-in volume will increase with new vehicle sales growth. That’s on top of the 7 percent loss experienced in 2011. Retail and lease returns will dive by 12 percent and 22 percent, respectively.
**Used Price Study: Large SUVs**

As mentioned earlier, the decline in used vehicle supply has led to a rise in used vehicle prices over the past few years.

We can illustrate this trend using outcomes from NADA's used price forecast model, which includes assumptions for new vehicle prices, used vehicle supply, gasoline prices and other economic factors.

The chart above shows two scenarios pertaining to NADA's 2012 forecast for large SUVs. In the first scenario, we see that the negative effect of $4-per-gallon gasoline will drive down the price of large SUVs by 5.3 percent at the lowest point in the year (November). Results are dramatically different when we factor in the estimated 23 percent annual decline in used large SUV supply. Scenario two then, shows prices falling by a mild 1.5 percent at the lowest point in the year. Moreover, the supply lift improves as the year progresses because used volume for the segment will continue to wane well into 2013. **In short, the limited supply of large SUVs will keep prices firm despite higher gasoline prices.**
Market Expectations

Accurate forecasts require market expertise, analytical acumen and reliable data. Yet certain price drivers, such as the cost of gasoline, depend on unpredictable situations, such as current tensions in Iran.

This is not the case for used supply. We can say with a much greater degree of confidence that late-model supply will continue to decrease deep into next year because the catalyst for the change—the retraction in new vehicle sales—has already occurred.

This fact, combined with the intensified pace of consumer demand, translates into yet another year of used price appreciation. NADA forecasts that prices for vehicles up to five years in age will increase by 1.5 percent through December, relative to February, and the biggest gains in price will come in the second half of the year due to ongoing improvements in the economy.

While NADA’s used price outlook for the year is a positive one, downward pressure from the unexpected can never be ruled out; the events of 2011 are a vivid reminder of this. That said, the ongoing degradation in used supply will continue to support used vehicle prices—and as we’ve seen, no used price forecast would be complete without factoring in this critical component.
NADA's Demand Indices

NADA's demand indices measure shifts in demand across time by reflecting the number of units consumers were willing and able to purchase, had the price remained constant over time and through different economic environments. The demand index is based on an estimate of the shape of the demand curve—the price elasticity of demand—and an estimate of the position of that curve based on the equilibrium price. A constant price is then utilized to solve the demand equation. NADA calculates demand indices for both the new and used vehicle market, down to the model level.

NADA's Used Price Forecast

NADA's used vehicle price forecast is based on expectations for changes to key market drivers, combined with coefficients that estimate how each of these impacts used vehicle prices. Expectations for changes to macroeconomic drivers are based on a consensus view from professional forecasting organizations with adjustments made by NADA economists. Endogenous depreciation, seasonal patterns and expectations for new vehicle prices and incentives are estimated by NADA economists and the editorial team. Relationship coefficients are estimated by NADA's proprietary statistical model.

NADA's Used Supply Forecast

NADA's used supply forecast is an estimate of the number of vehicles expected to be offered for sale in the future. NADA calculates used supply volume as the pool of potential vehicles which could return to the market—as represented by all new vehicle sales—and the probability that a vehicle will return from a particular source (i.e., rental, consumer lease, consumer purchase, etc.) after a predicted use period. For example, vehicles sold to rental car companies and consumers each have a specific probability curve associated with the historical likelihood to return to the used market after a given use period. The product of the vehicle pool and the return probability is the expected value of the volume of returned vehicles, which is aggregated to create the used supply volume. NADA calculates used vehicle supply down to the vehicle level.