Valerie Ramey began by responding to Jordi Galí’s comments. She stated her belief that the response of the economy during the 2000s to the conventional measures of oil shocks is the true response, while the response during the 1970s is overstated because conventional measures underestimate the true cost of oil in the 1970s. Then, she commented on the point that the new measure of oil shocks could have bigger errors, and this can explain the results that they got. She argued that they think the new measure is estimated more precisely since the standard error bands are narrower when the new measure is used. She also addressed the point on the decline in the effect of oil prices in many European countries despite the absence of rationing. She argued that this difference may be due to the increase in gas taxes in Europe. She said that a given change in crude oil prices has a smaller percentage change effect on gas prices there. She added that in the United States, gas taxes have not gone up very much, and, thus, this is not a part of the effect. In response to the question about the effect of rationing on firms, Ramey said that they could not find a lot of evidence that firms outside of transportation were affected by rationing. As to the possibility of different responses in the relative prices of different models of cars to oil shocks, Ramey agreed that their model would have implications on this. However, they did not have a good time series with detailed prices. Finally, she agreed with Galí that the evidence they provide points to an improved inflation-output trade-off.

Next, Ramey addressed comments by Ariel Pakes. She agreed that they provide a simple statistical explanation of the observed decline in the effect of oil shocks. They pointed out that the standard measures of the costs of oil or gasoline had errors because rationing is not accounted for. Once they account for the error, they get interesting results. She noted that the inclusion of 12 months of lags instead of 6 months
only increased the standard error bands. She added that with multivariable vector autoregressions (VARs), one gets dynamics continuing for longer than 6 months. She commented on why the miles driven in the 2000s are 50% higher than in the 1980s. She argued that two factors might account for that. First, the increase in housing prices led people to move farther from work. Second, the increase in female labor force participation led to longer commutes since spouses often work in different locations. Next, she agreed that it would be good to look at anxiety and how it affects other variables, acknowledging that they can do more with their consumer sentiment variable. As to the comparison of Great Britain and the United States, she noted that Bruno and Sachs (1982) documented that Great Britain had oil price controls in the 1970s; thus, the country is similar to the United States in this respect. Finally, she responded to the issue about the asymmetric response of the variance of domestic days’ supply to changes in oil prices. She said that they do not know how permanent people regarded the change in oil prices. Vehicle purchases are likely to change if consumers expect oil price increases to be permanent. She added that in 2007–8, people thought that Chinese and Indian demand was going to keep increasing; hence, they expected the oil price to be permanently high. Thus, there is an increase in the variance of domestic days’ supply during this period.

Next, Daniel Vine offered his response to the discussants’ points. He noted that in an earlier version of the paper, they looked at the margins that the motor vehicle industry used to adjust output. In 1972–74, the industry used temporary measures to adjust output such as the reduction of overtime hours and temporary closure of plants. In 1979–80, the industry used a lot of permanent margins such as complete closure of plants. After the 2000 recession, temporary margins were used. However, in the beginning of 2006–7, a lot of plants were closed. This corroborates the view that perceptions regarding the persistence of the gas price changes are really important for determining how agents respond. He also mentioned that it is indeed surprising to many people that the auto industry is the same size relative to the goods-producing sector now as in the 1970s.

Daron Acemoglu raised the issue of distinguishing oil price changes from the costs of the oil price changes borne by consumers. The costs to consumers are the product of the average miles driven, car efficiency (miles per gallon), and the gasoline price. Consumers may change the miles they drive and the efficiency of the cars they buy in response to gasoline price changes. It can have offsetting effects on the costs to consumers. He wondered whether there is a way to distinguish this in a
system with two driving variables: gasoline price and gasoline price corrected for rationing, miles driven, and efficiency. Ramey noted that much of the effect on motor vehicles is not the direct effect of oil but whatever oil does to the rest of the economy. She said that one of their counterfactuals shuts down all other channels such as disposable income, interest rates, and so on. They found that half of the effect is the direct effect of oil during the first year. However, it is less than a half after that.

Robert Hall worried that the authors overstated the extent to which rationing increased gasoline prices, both as to duration and as to amount. His personal recollection points to the weak enforcement of retail price controls. He argued that one could find a no-name gas station without a line that charged only 20–30 cents more compared to a brand-name gas station with a big line of cars.

Christopher House had two comments. He first raised the question of how to deal with the total number of observations the authors have. He worried that there were not many big observations in the sentiment data and in the oil data. He wondered whether the authors were concerned about whether they have sufficient variability. Next, he made a comment about the difference in the assembly and the output of the auto industry. While it is true that output as a share of goods gross domestic product (GDP) has not shown a big decline, it seems that as a share of the goods GDP, the value added in motor vehicles has gone from something above two to something less than one (fig. 5 in the paper). He insisted that the interpretation that the auto industry today is just as it was before should be presented with care. Vine noted that gross motor vehicle output does not double count shipments of the industry to itself. It values all vehicles at retail, and it values all the vehicles put into the inventory at wholesale, adjusting for net exports of motor vehicles. Thus, the measure captures the value added from the production and from the distribution to final consumers. The disadvantage of this measure is that it would include the imported intermediate goods, so, if the auto industry bought rubber and steel from abroad, that goes into gross motor vehicle output. Ideally, one would want to take out imported intermediates. One can do this, but it is very time consuming and may require many assumptions. Thus, they decided to present only two plots in figure 5: one is the value of the motor vehicles industry net of imported incomplete vehicles and another is the value added of motor vehicle assembly as a share of goods GDP. They argue that both measures look pretty stable.