Frederic Mishkin started the discussion by following Chris Sims’ comment about credibility at the start of the Volcker regime. He agreed that it took some time to gain credibility and inflation expectations came down slowly. There were questions about fiscal sustainability and whether Volcker was going to continue with a strong monetary policy. He recalled that there was an initial rise in interest rates in October 1979, but when the following recession appeared, the Fed lowered the nominal rate substantially. Because of this, there was no certainty that it was a regime shift. Then, after a second increase in the Federal Funds Rate by 20 percent, the regime shift became more credible. He cautioned the authors on how to interpret that time, because there were many shocks occurring. Francesco Bianchi agreed with Mishkin and explained that he could have a model in which one policy starts shifting and the other does not immediately follow. For example, it could have been that when Volcker changed his behavior, agents did not change expectations and actually expected to go back to the 1970s. That would cause a situation in which interest rates are high and inflation still does not decrease. Additionally, he explained that in their simulations the regime shift does not exactly coincide with the appointment of Volcker. If a transition period were to be included, 1979 to 1982 would probably be one. About the fiscal sustainability concerns of that time, the author argued that when Reagan took office, debt was already largely washed out by inflation in the 1970s, so given that what matters is long-term sustainability, they were not in such a bad state.

Giorgio Primiceri mentioned that the authors’ model only allows for exogenous regime changes, even though he thinks that an important component of big policy changes is endogenous. For instance, he does
not think that the appointment of Volcker at the end of the 1970s was an exogenous event. Bianchi agreed and explained that the dual dependence of the probability of a regime change and endogenous variables is the holy grail of the regime-switching literature. He further commented that endogenizing regime shifts is a promising direction to follow and explained that what they can currently do is to make policy changes nonorthogonal to other events, like shocks or big recessions.

Robert Gordon continued the discussion by pointing out the importance of additional factors that affected the US economy during the 1970s and 1980s. He recalled that between 1980 and 1985 there was a considerable appreciation of the dollar, which was the counterpart of very high domestic interest rates that pulled capital into the country. He further explained that in the early 1980s approximately half of the decline in output can be explained by a decline in net exports. He also remarked that there have been other regime shifts that are not being addressed by the authors. One example is a speech by Richard Nixon in August 1971, when the United States left Bretton Woods and introduced price controls. Price controls were in effect from 1971 to 1974 and when they were suddenly lifted, there was a spike in inflation that had nothing to do with fiscal policy. Bianchi agreed with the comments and explained that they know about the existence of other shocks and they neither attempt to explain the increase in inflation around 1974 nor include the open economy aspects.

Gordon continued the argument and explained that for him two monetary policy regimes were seen in the 1970s and 1980s. The first was an accommodating regime after the oil shocks in 1974 and 1975, which together with the lifting of price controls led to inflation doubling from 1975 to 1980 from 5 to 10 percent. The second regime was the Volcker period after the second oil shock in 1980 when inflation fell from 10 to 4 percent in the following five years. Leonardo Melosi explained that the idea of the exercise they did was to show low frequency movements of inflation with two fiscal shocks. He explained that they know that other shocks were present and they could enrich the model with more features. He finally highlighted that their model can be taken to the data and the solution is relatively simple, so it can be potentially estimated.

Robert Hall agreed with Bruce Preston regarding the absence of the political economy side of the story, but acknowledged that it is already a complicated and interesting paper without that. Francesco Bianchi agreed and explained that they could include a political economy aspect as a change in the transition probability after some dramatic event.
What he finds interesting is that in these kinds of models, the idea of virtuous/nonvirtuous becomes less transparent, since there can be opposite volatility changes in the short and long run of the same regime shift.

Ramon Marimon remarked that it is a very good methodological paper, explaining that it is difficult to include learning without anticipated utility. He then asked about the differences between the authors’ model and the adaptive learning model presented by Preston. Bianchi explained that compared to adaptive learning there are pros and cons. On the one hand their model actually includes regime changes, whereas Preston’s model does not. In adaptive learning, agents guard against the possibility of parameter instability, but there are actually no instabilities. In their model, they can have parameter instability and can also have agents fully aware of the trade-offs of the model. On the other hand adaptive learning is more flexible, allowing for multiple forms of learning, while in the authors’ method additional structure needs to be imposed on the learning problem. Leonardo Melosi added to the discussion by pointing out that they have a technical paper that has fewer restrictions than the one presented in order to model a more general learning process.

Varadarajan Chari then asked how to reconcile their model with the fact that inflation of the 1970s and disinflation of the 1980s was a phenomenon common to other developed countries. He questioned whether the authors think that fiscal policy changes were coordinated across the industrialized world. Bianchi agreed with the observation and explained that even though it is not obvious that countries were subject to the same fiscal shocks, the United States is very influential around the world, so similarities can arise. He also claimed that the dynamics of inflation across different countries were not identical. He agreed that on the one hand the run-up in the 1970s was similar, except for the case of Germany. But on the other hand, he stated that the speed at which each country reversed the run-up in inflation was varied, explaining that the United States was the only country that succeeded in cutting inflation in the early 1980s. They interpreted these differences with monetary policy, which can also be similar across countries. They could also tell a story on how different countries dealt with the expansion of the welfare state, because there were changes in long-run fiscal expansion in other Western economies.

Michael Woodford concluded the discussion by asking what their model had to say about current policy choices. He explained that in
the press there is speculation that the stimulative monetary and fiscal policies have built up high inflation that has not appeared yet, but will inevitably come. On the one hand the authors’ model can be interpreted as supporting this view, since it is possible for inflation to build up without signs for a period. On the other hand, the paper does not support that analysis in the sense that there is nothing in the model implying that continuing the expansionary policy makes high inflation more likely. Their model implies that when changing to the virtuous regime, the economy gets inflation immediately under control and that does not depend on the amount of time that has passed. Additionally, there is no change in the difficulty of moving to the virtuous regime depending on the time you spend in the other regime. He finally pointed out that there is no reputational loss in the model. Bianchi explained that different people read the model in different ways. He could think of a person that realizes that given that central bankers and US policymakers have some reputation, they can use it during recessions and deviate from standard policy, but it is true that in the current model reputation is immediately regained. The authors explained that they have an extended version that has learning in both directions and in that model you can get situations in which losing your reputation may not be such a bad idea.