This PDF is a selection from a published volume from the National Bureau of Economic Research

Volume Title: The Great Inflation: The Rebirth of Modern Central Banking

Volume Author/Editor: Michael D. Bordo and Athanasios Orphanides, editors

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-006695-9, 978-0-226-06695-0 (cloth)

Volume URL: http://www.nber.org/books/bord08-1

Conference Date: September 25-27, 2008

Publication Date: June 2013

Chapter Title: Discussion of "The Supply-Shock Explanation of the Great Stagflation Revisited"

Chapter Author(s): Michael D. Bordo, Athanasios Orphanides

Chapter URL: http://www.nber.org/chapters/c11167

Chapter pages in book: (p. 175 - 178)

- Ireland, Peter N. 1999. "Does the Time-Consistency Problem Explain the Behavior of Inflation in the United States?" *Journal of Monetary Economics* 44:279–91.
- Kilian, Lutz. 2007a. "The Economic Effects of Energy Price Shocks." Unpublished Manuscript. University of Michigan, October.
- ———. 2007b. "Not All Oil Shocks Are Alike: Disentangling Demand and Supply Shocks in the Crude Oil Market." Unpublished Manuscript. University of Michigan, November.
- Leduc, Sylvain, and Keith Sill. 2004. "A Quantitative Analysis of Oil-Price Shocks, Systematic Monetary Policy, and Economic Downturns." *Journal of Monetary Economics* 51:781–808.
- Meyer, Laurence H. 2004. A Term at the Fed: An Insider's View. New York: Harper-Collins.
- Nixon, Richard M. 1962. Six Crises. Garden City, NJ: Doubleday and Company.
- Nordhaus, William D. 2007. "Who's Afraid of a Big Bad Oil Shock?" *Brookings Papers on Economic Activity* 2:219–40. Washington, DC: Brookings Institution.
- Orphanides, Athanasios. 2003. "The Quest for Prosperity without Inflation." *Journal of Monetary Economics* 50:633–63.
- Perry, George L. 1975. "The United States." In *Higher Oil Prices and the World Economy: The Adjustment Problem,* edited by Edward R. Fried and Charles L. Schultze, 71–104. Washington, DC: Brookings Institution.
- Phelps, Edmund S. 1978. "Commodity-Supply Shock and Full-Employment Monetary Policy." *Journal of Money, Credit, and Banking* 10:206–21.
- Pierce, James L., and Jared J. Enzler. 1974. "The Effects of External Inflationary Shocks." *Brookings Papers on Economic Activity* 1:13–54. Washington, DC: Brookings Institution.
- Rotemberg, Julio J., and Michael Woodford. 1996. "Imperfect Competition and the Effects of Energy Price Increases on Economic Activity." *Journal of Money, Credit, and Banking* 28:549–77.
- Sims, Christopher. 1981. In: "General Discussion." *Brookings Papers on Economic Activity* 1:64. Washington, DC: Brookings Institution.
- Staiger, Douglas, James H. Stock, and Mark W. Watson. 2001. "Prices, Wages, and the US NAIRU in the 1990s." In *The Roaring Nineties: Can Full Employment Be Sustained?*, edited by Alan Krueger and Robert Solow, 3–60. New York: Russell Sage Foundation and Century Foundation Press.
- Taylor, John B. 1981. "On the Relation between the Variability of Inflation and the Average Inflation Rate." *Carnegie-Rochester Conference Series on Public Policy* 15:57–85.
- US National Commission on Supplies and Shortages. 1976. *Government and the Nation's Resources*. Washington, DC: US Government Printing Office, December.
- Weinhagen, Jonathan C. 2006. "Price Transmission: From Crude Petroleum to Plastics Products." *Monthly Labor Review* (December):34–43.
- Yergin, Daniel. 1993. The Prize: The Epic Quest for Oil, Money, and Power. New York: Touchstone.

Discussion

Vitor Gaspar began by stressing the importance of downward inflexibility of prices, citing the empirical evidence using micro price data. Relative price adjustment happens through price declines all of the time. His second

remark was in reference to the authors using the term "exogenous disturbance" to describe movements in economic variables. In economic models, equilibrium price changes happen because of technology, preference, institutions, and so forth. One must remember that price- and wage-setting are endogenous.

Martin Feldstein posed the question of what policy should have been in 1980 to 1981 under the Blinder and Rudd view of the world.

Matthew Shapiro compared this chapter to previous work by Robert Barsky and Lutz Kilian. In their work, it was a sticky price story, and you see incipient inflation coming from monetary, and possibly fiscal, expansion. This goes back to the guns and butter problems of the 1960s, culminating with the clash of Bretton Woods. These are all indicator variables, and move in well in advance of OPEC. With reference to another Kilian paper, he further goes on to point out that aggregate demand pressure is largely coming from money, but also from fiscal policy pushing up commodity prices quite broadly. Shapiro believed it has something to do with the combination of the President Lyndon Johnson administration and the collapse of Bretton Woods. What really puzzled him, however, is how the authors refer to the demise of price controls as a supply shock. Christina Romer continued, stressing that the end of price controls is just a lagged demand shock. She pointed out that there were big positive, monetary policy shocks before both oil price run-ups in the 1970s. The closest thing that the economy came to in terms of an exogenous monetary expansion is Chairman Arthur Burns in the 1970s.

William Poole looked back at the long history of significant changes in the inflation rate, and clearly there are large changes in relative prices that occur. The prices that move the most are for those goods with inelastic supply. Therefore, the leading edge of a breakout in inflation is from the goods that are inelastically supplied, like food and energy. Regulated prices, like electricity, do not move. We should resort to the microeconomic viewpoint to see how inflation is created in the economy.

Edward Nelson challenged the authors to create a graph of M2 along with inflation two years later to get a perspective of the relationship between monetary policy and inflation and the role of money growth. While he agreed that the Federal Reserve did not accommodate these oil shocks, he felt it preaccommodated the oil shocks because if you have large enough nominal spending or momentum for nominal spending and expansionary policy, then you do not have the downward price pressure during a relative price shock because you expect the aggregate price level to rise. The political pressure story for actions of the Federal Reserve in 1972 tends to look past the enthusiasm for monetary expansion on economic grounds that were present. One should look at the work of Athanasios Orphanides and the role of the output gap. Chairman Arthur Burns had the unorthodox view that when you imposed price controls, that lowered inflation expectations.

Andrew Levin felt like the chapter said that the story was bad luck and that there was not much that monetary policy could do. One reason Levin is not comfortable with this is the cross-country evidence, particularly in Germany and Japan. The effects of the 1979 oil shock were much smaller and more transitory for these other countries relative to the United States, much like what we have seen over the past few years. This made him think that the monetary policy regime is critical. Lars Svensson agreed with Levin, noting the response to inflation was very different in other countries.

Robert King suggested that the authors supplement their work with measures of inflation expectations. Looking at long-term nominal interest rates gives guides on what agents are thinking about. Supply shocks being followed by high inflation in the 1970s had to be associated with the underlying monetary regime and expectations. This could be explained by differences in credibility.

Blinder began the rebuttal by stressing that he and Rudd are not pushing the idea that monetary policy was completely irrelevant, and referenced the two humps in inflation in the 1970s as the reason that the Great Inflation is called the Great Inflation. Was policy loose? In reference to Feldstein's question, Blinder had no answer because it depends on how urgent you think it is to bring inflation down. Was inflation going to fall anyway? How fast, and to what level? Where did they want it to go? All the answers to these questions lead to different policy prescriptions. In reference to price controls as supply shocks, the authors are aware it is not a supply shock, but they also find no evidence that it is a lagged aggregate demand shock. There are many episodes when inflation went up and no one put on price controls during peacetime. Finally, was it all bad luck? Blinder thought it could partially be bad luck. The two humps in inflation were largely bad luck, but better monetary policy might have made them less steep. The United States could have enacted centralized wage bargaining like Germany, but this was not an option given the atomistic labor market in the United States. There was a lot of literature in the 1970s and 1980s about the differential responses across countries to the oil-price shocks. While they had broad similarities, the details were different and some can be explained by wage setting.

Rudd concluded the discussion. First, he felt that monetary policy was not the story to be told. If you look at the history, the commodity price shocks were a big deal. There were lots of government studies done that identified a couple of things. In 1972 to 1973, there was a surge in world demand that might have led to some increase in the commodity prices, but that was exacerbated by a lot of supply-side elements. Price controls led to chronic underinvestment, and return to capital were too low. There was a shortage mentality, and third world countries took advantage of these shortage mentalities with other materials, which all led to panic hoarding. In reference to the Kilian vector autoregressions that Shapiro referred to, Rudd felt they underscored something really important and nuanced that

was going on in the oil market. It was an exogenous shock, not necessarily a supply disruption, that was oil-market specific. It led to panic that bid up prices. None of this has anything to do with monetary policy as much. Nelson made a valid point, but some work by Blinder was unable to find an econometric link between monetary aggregates and inflation. Lastly, was the Federal Reserve too accommodating? Real money balances fell during the first big shock. There was a deep recession, but perhaps it was not deep enough? The United States came close to a depression in the early 1980s. Institutions just began working better during and after Chairman Volcker, but some of it came at a cost that was large for the economy.