at large. Maybe it is time for the first world economists to take structure seriously in their research so their policy advice can be more pertinent to resolving the problems faced by their countries today.

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Good Green Jobs in a Global Economy: Making and Keeping New Industries in the United States. By David J. Hess. Urban and Industrial Environments. Cambridge and London: MIT Press, 2012. Pp. x, 293. \$30.00. ISBN 978-0-262-01822-7. JEL 2013-0290

When it went to count the number of "green jobs" in the United States, the Bureau of Labor Statistics came up with a few surprises. BLS asked a sample of businesses to estimate the percentage of their revenues "that benefit the environment or conserve natural resources," and requested nonprofit and governmental organizations to estimate the percentage of their workers associated with "green" goods and services. After compiling the responses and performing its usual statistical magic, BLS determined that the greenest industries in America are transportation and warehousing and utilities. The largest single "green" occupation, BLS reported, is school bus driver (Warren 2013).

In Good Green Jobs in a Global Economy, David J. Hess acknowledges the difficulties of defining what it means to be "green." He focuses on one specific aspect of greenness, governmental efforts to capture manufacturing jobs associated with what he terms the "green energy transition" (22). Hess, a sociologist, examines state support for "green jobs" in the context of "developmentalism," which he describes as "an ideology, connected with research fields in the social sciences, that attempts to nail global capital in place to obtain local benefit" (9).

In other words, this book has less to do with energy or the environment than with industrial policy. The bulk of the text describes various federal, state, and local efforts to foster clusters of "green" manufacturing. A bit of political science is mixed in, finding a correlation between states' support for the Democratic Party and their support for green policies, as measured by the author's own index. Hess makes no attempt to analyze the efficacy of the policies he describes. "I conceived this as a work of historical social science rather than of normative policy evaluation" (213), he writes.

Hess starts out with a cursory examination of the various interests—the blue-green alliance of labor and environmental groups, utilities, manufacturers, venture capitalists-that have sought to influence energy policy. He follows with a chapter on the 111th Congress, which gave a boost to greenness through the American Recovery and Reinvestment Act, an economic stimulus package that provided substantial support for clean-energy efforts and related worker training. Perhaps the most interesting section of the book examines state energy policies as attempts at import substitution: individual states, Hess claims, have chosen which sources of energy to support in order to capture revenues that might otherwise leave the state and to foster energyrelated manufacturing within their borders.

The shortcomings of Hess's approach are most evident in a chapter on "green energy" manufacturing clusters. He points out, correctly, that many states are eager to become home to a prospering cluster of green-energy businesses, and have embraced the cluster concept by supporting business incubators, worker training programs, research efforts, and financial assistance. "By making the region a world center for one or more clean tech industries, state and local governments can help to nail firms to a place and entice other firms in the footloose global economy to locate in the region" (145), he contends. But how many world centers does the world need? Hess offers no serious examination of why clusters survive or prosper, or whether efforts to promote them are money down the drain. It may well be that in an industry's early stages many firms battle for market share and populate many clusters, but that most of these clusters will die out as the industry matures and consolidates. This already seems to be happening in solar photovoltaic manufacturing, where a number of heavily subsidized factories have been abandoned, and in electric vehicles, where many of the thirty or so companies that were around five years ago have failed.

Hess is obviously a fan of activist policies to support the green energy transition he believes to be necessary, but he provides scant evidence in support of the policies he favors. For example, he repeats the familiar assertion that "[w]hen manufacturing leaves, the designers and engineers follow, and behind them the world-class researchers may leave as well" (216). It is not at all clear that this claim is factually correct; on the contrary, many firms in many industries undertake research and product development far from the plants where their goods are made. Hess also has a very limited understanding of how the green energy transition is progressing. Windmills and solar cells are arguably far less important in reducing dependence on fossil fuels than marginal improvements in the efficiency of electric motors and the insulating capacity of windows, but such advances receive no attention in his book.

Good Green Jobs in a Global Economy is already rather dated, as the rapid development of low-cost natural gas from shale formations over the past few years has dramatically altered the economic attractiveness of renewable energy. The book also suffers from a poor index; terms such as "solar," "turbine," and "ethanol" do not appear. Unfortunately, these factors, along with the constraints of Hess's approach to the subject, severely limit the usefulness of this book to economists or students of economics.

References

Warren. Zach. 2013. "The Green Goods and Services Occupational Survey: Initial Results." Monthly Labor Review January: 26–35.

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