REACH

The EU's Chemical Policy

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Regulations enacted in the European Union (EU) increasingly are having worldwide effects, warranting greater attention among policymakers in the United States and around the world. Not only do EU directives affect the 27 EU member nations, but EU regulations also can become trade barriers and affect thousands of businesses around the globe that are directly or indirectly linked to the EU's substantial share in the world market through international trade. The EU's new chemicals policy—called REACH (Registration, Evaluation, and Authorization of Chemicals)—should be of special concern, as it will have serious worldwide impacts. REACH officially took effect in June 2007.

REACH uses the so-called precautionary principle by requiring companies to prove that their products are safe before their introduction into commerce. Currently, government officials must bear the burden of proving that a product is unsafe before removing it from the market. REACH would reverse that burden, demanding that firms conduct extensive tests to demonstrate product safety. Because manufacturers cannot prove that anything is 100 percent safe, that policy would likely produce arbitrary bans on many relatively safe substances and would discourage innovation.

As the name implies, there are several regulatory components of REACH. The registration phase mandates that firms register products with the government when they produce or import them at levels of one metric ton or more per year. The second stage—evaluation—involves consideration of whether the government will demand further study of chemicals.

Chemicals deemed as substances of "special concern" during evaluation must undergo the next stage—authorization. After demanding further study and review of chemicals during authorization, regulators then decide which substances to ban or regulate and which to give final approval.

The REACH proposal includes some exemptions for things that are obviously safe, such as water, as well as some products regulated under other directives, such as medical products, food additives, cosmetics, and pesticides. In addition, REACH exempts most polymers, but the commission likely will try to include those in the program at a future date. Existing regulations currently cover only firms that manufacture chemicals. REACH covers anyone who produces, imports, or uses a regulated substance. REACH also covers downstream users, which include formulators (such as paint manufacturers) and firms that use chemicals in their production processes or as ingredients.

Economic Scope

The cost estimates of the REACH program could be as high as €5.2 billion, according a European Commission–funded study.[1] However, nearly all the estimates likely understate the costs of the program, because they consider only a fraction of REACH costs—the registration costs. The study does not consider the costs of the latter, potentially more expensive, stages of the program: the evaluation and authorization of chemicals. Nor does the study consider indirect impacts associated with the cancellation of chemicals under REACH. The European Chemical Industry Association, known as Cefic, has indicated that it expects that firms could stop producing as much as 30 percent of substances currently produced at relatively low levels (1 to 100 metric tons per year), because the costs of regulations may make such products unprofitable. In addition, REACH will reduce innovation significantly, because lower profits and the costs of registration will leave fewer resources for new product research and development. In addition, there may be fewer kinds and reduced amounts of raw materials available as importing costs grow substantially higher.

All studies acknowledge that REACH will lead manufacturers to stop producing some products rather than go through registration bureaucracy. The impacts associated with the elimination of just a few substances during the registration phase—not to mention the loss of products during the evaluation and authorization stages—could be substantial. According to a study by KPMG, "Formulators typically use a particular critical substance in many of their formulations. So the loss of only a few critical substances would affect a large part of their portfolio, resulting in large-scale reformulation."[2]

In addition, cost studies have found that REACH will reduce innovation and harm businesses in the EU nations that need development the most—the newer EU members in Eastern

1. Joan Canton and Ch. Allen, *A Microeconomic Model to Assess the Economic Impacts of the EU's New Chemicals Policy*, (Brussels: European Commission/DG Enterprise, November 2003), http://europa.eu.int/comm/enterprise/reach/docs/reach/effects_new_chem_policy-2003_11_17.pdf.

2. KPMG Business Advisory Services, *REACH—Further Work on Impact Assessment: A Case Study Approach* (Amstelveen, Netherlands: KPMG Business Advisory Services, April 2005), http://europa.eu.int/comm/enterprise/reach/docs/reach/kpmg_summary.pdf, p. 21.

Europe.[3] Small businesses throughout Europe also will have a particularly hard time, according to nearly all studies. One study notes, "The heaviest burden will be on SMEs [small and medium-sized enterprises] which cannot consistently fulfill the REACH requirements and so it is predicted that most of them may face financial troubles, may be taken over by bigger ones, or even shut down."[4]

REACH's impact isn't going to fall only on Europe, because the United States and other nations are inextricably linked to the EU economy through trade. The United States exports more than $20 billion in chemical products and invests more than $4 billion in the EU chemical and related industry sectors annually. In addition, U.S. firms export more than $400 billion in products containing chemicals, some of which may fall under the scope of REACH regulations. The United States also imports more than $40 billion of chemicals from Europe each year.[5]

The U.S. government mission to the EU has pointed out that REACH is expected to adversely affect tens of billions of dollars of trade in chemicals and products. Affected sectors will probably include textiles, pharmaceuticals, electronics, automobiles, and advanced materials. According to the European Commission's own study, users of specialty chemicals likely will suffer serious repercussions.[6]

Trade Implications

REACH also promises to have protectionist effects that likely will trigger World Trade Organization (WTO) disputes. In a presentation to the EU Parliament in January 2005, Marco Bronckers, chair of the WTO and international trade law professor at the Law University of Lieden, detailed many of REACH's trade-related problems. For example, he noted that under international trade agreements, regulations must be "not more trade restrictive than necessary to fulfill a legitimate objective, taking account of the risks non-fulfillment would create."[7] REACH's volume-focused requirements are likely to violate this WTO requirement. Because low-risk substances will be regulated under REACH simply because of their high volume, the regulations may be deemed arbitrary.

Questionable Benefits

Most of the claims made about REACH's benefits involve speculative comments sprinkled throughout various studies. Those speculations have taken on the character of gossip; they gain credibility simply by being repeated, and some are embellished in subsequent reiterations. A review of underlying data finds either that references are lacking or that the

3. Institute for Prospective Technological Studies (IPTS), Implementation of REACH in the New Member States (Brussels: European Commission, 2005), http://europa.eu.int/comm/enterprise/reach/docs/reach/ipts_summary.pdf.

4. Ibid., 91.

5. Gary Litman, "Comments on the EU Commission Consultation Document Concerning the Registration, Evaluation, Authorization, and Restrictions of Chemicals (REACH)," U.S. Chamber of Commerce, Washington, DC, July 9, 2003.

6. Ibid.

7. Marco Bronckers, paper presented before the European Parliament, Joint Public Hearing, *A WTO Perspective: Imported Products,* January 19, 2004, http://www.europarl.eu.int/meetdocs/2004_2009/documents/DV/Bronckers/bronckersen.pdf.

claims greatly mischaracterize the research they cite.

For example, The European Commission's 2003 Extended Impact Assessment of REACH claims that REACH might save 4,500 lives, according to data provided in a World Bank study on environmental health risks around the world.[8] That claim is repeated in a study produced by Tufts University for the Nordic Council.[9] Similarly, that World Bank figure is used by the World Wildlife Fund's analysis,[10] which relies on that claim to arrive at a net benefit estimate for REACH.

Yet the World Bank report[11] relates to problems associated with high-level exposures to agrochemicals, most of which are related to improper use of chemicals. Acute poisoning is "the most often cited health consequence of pesticides use." It notes that health problems usually "arise from improper application or container disposal."[12] REACH is not designed to address acute poisoning or misuse of chemicals whose properties are well known. In fact, many of the substances involved in the World Bank study are likely pesticides that will be exempted from REACH regulations. Hence, that statistic is completely irrelevant to REACH's benefits calculations—yet somehow REACH advocates have been able to use it to justify their program.

Another questionable set of benefits claims stems from a more formal benefits study produced for the European Commission by Risk Policy Analysts Limited (RPA), which purports to have produced hard numbers documenting REACH benefits in terms of occupational safety.[13] The report does one thing right: it acknowledges that REACH benefits will not result from better management of chemicals risks that governments manage today. Accordingly, the RPA study attempts to quantify work-related illnesses that are caused by unknown chemical sources. But if the causes are unknown, how can anyone deem them to be caused by chemicals used in the workplace?

Such ambiguity leads to some really slippery "science." The study's design is the first and most obvious problem. A good study collects data in a systematic and consistent way, using a clear set of scientific standards. In addition, the study's data should be made available to the public so that the study can

8. "Regulation of the European Parliament and the Council Concerning the Registration, Evaluation, Authorization, and Restrictions of Chemicals, Establishing a European Chemicals Agency and Amending Directive 1999/45/EC and Regulation (EC) {on Persistent Organic Pollutants}," Commission Staff Working Paper COM (2003) 644, Commission of the European Communities, Brussels, October 29, 2003), 30, http://europa.eu.int/comm/enterprise/reach/docs/reach/eia-sec-2003_1171.pdf.

9. Frank Ackerman and Rachel Massey, *The True Costs of REACH* (Medford, MA: Global Development and Environmental Institute, Tufts University, 2004), 51, http://www.euractiv.com/29/images/TuftsStudyonREACH_tcm29-130918.pdf.

10. David Pearce and Phoebe Koundouri, *The Social Costs of REACH: The Cost and Benefits of Future Chemicals Policy in the European Union* (Weyside Park, U.K.: World Wildlife Fund, May 2003), 28, http://www.wwf.org.uk/filelibrary/pdf/socialcostofchemicals.pdf.

11. Kseniya Lvovksy, *Health and Environment*, Environment Strategy Papers, Number 1, (Washington, D.C.: World Bank, November 2001), p. 35, http://lnweb18.worldbank.org/ESSD/envext.nsf/41ByDocName/EnvironmentStrategyPaperNo1HealthandEnvironment2001361KBPDF/$FILE/ESP1Health&Environment2001.pdf.

12. Ibid., p. 38.

13. *Assessment of the Business Impacts of New Regulations in the Chemicals Sector, Prepared for the European Commission Enterprise Directorate-General* (Norfolk, UK: Risk and Policy Analysts Limited, 2002), produced in association with Statistics Sweden, http://www.chemicalspolicy.org/downloads/RPAreport.pdf.

be reproduced, and the study should pass a peer review. None of those standards applies to RPA's REACH benefits study. RPA collected data from government agencies in various EU nations, and each of those nations used different data collection methods—some good, some not so good. In addition, rather than using one year as a sample year, RPA used different sample years for different nations based on what data each nation had available. The data also are not publicly available; hence, the study is difficult—if not impossible—to reproduce. The study then takes all the murky data for a limited set of countries and extrapolates risks for the entire European Union. When a study makes such extrapolations, it should at least have a reasonably representative sample. But the haphazard nature of RPA's data collection effort makes such extrapolations nothing more than a desperate attempt to generate something from nothing.

Recent and Upcoming Issues

Between June and November in 2008 companies are required to pre-register their chemicals with the European Chemicals Agency, yet at least half are unprepared according to one survey.[14] Firms that preregister will then follow REACH's long-term registration schedule, which sets separate dates for various industry segments and that allows small businesses a longer time to comply. However, firms that fail to preregister by December 2008 will be required to register immediately. But REACH's bureaucratic mandates are so complicated that many firms and small businesses cannot determine if they must file and what they must report, and many are likely to miss the deadline, creating serious compliance problems for many. Such realities are likely to harm small firms the most, many of which may have to abandon business with Europe.[15]

In the United States, legislators are considering revisions to the Toxic Substances Control Act to reshape it into a REACH-styled program. Currently, the law allows the Environmental Protection Agency to regulate chemicals when it determines the substances pose unreasonable risks. A REACH-styled revision might apply the precautionary principle, shifting the burden by requiring industry to demonstrate safety. Senator Frank Lautenberg (D-NJ) commissioned the Government Accountability Office to study the issue and outline the differences between REACH and TSCA.[16] However, the Bush Administration has taken the issue in another direction, negotiating a voluntary agreement—under the Security and Prosperity Partnership (SPP)—with the governments of Canada and Mexico to increase research on chemicals. "In some ways, SPP is an unofficial response to REACH, by trying to do a better job of collecting risk assessment data on high priority chemicals," according to Bill Allmond of the Synthetic Organic Chemical Manufacturers Association.[17] Unfortunately, such volun-

14. "50 Percent of Firms 'Not Prepared' for REACH," *Chemical Week* 169, no. 37 (November 14, 2007), 5.

15. "Many Small Companies May be Unaware of REACH Requirements," *Chemical Week* 169, no. 39 (November 28, 2007): 7.

16. *CHEMICAL REGULATION: Comparison of U.S. and Recently Enacted European Union Approaches to Protect against the Risks of Toxic Chemicals* (Washington, D.C.: USGAO, August 2007), http://www.gao.gov/new.items/d07825.pdf

17. Kara Sissell, "Global Regulations: The Burden Intensifies," *Chemical Week* 169, no. 36 (November 7, 2007): 1.

tary programs are often simply a forerunner to government regulation.

Conclusion

Any serious analysis of the EU's REACH policy reveals that its economic effects are not good for Europe and its trade partners. REACH's effects could be particularly dire for new EU member nations, developing nations, and small businesses. Meanwhile, documented benefits of the program are nonexistent.

Key Contact

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Recommended Readings

Logomasini, Angela. 2005. "Europe's Global REACH: Costly for the World, Suicidal for Europe." Institut Hayek, Louvain-la-Neuve, Belgium. http://www.fahayek.org/gazette/imagesup/Reach_EN.pdf.

Logomasini, Angela. 2005. "EU Trade Union's OverREACHing Benefits Analysis." Institut Hayek, Louvain-la-Neuve, Belgium. http://www.fahayek.org/index.php?option=com_content&task=view&id=345&Itemid=40.

Logomasini, Angela. 2006. "Still OverREACHing: The European Union's Proposed Chemicals Policy Has Not Been Fixed." Institut Hayek, Louvain-la-Neuve, Belgium. http://www.fahayek.org/index.php?option=com_content&task=view&id=1090&Itemid=1.

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