

“It’s the Politics, Stupid.” Or is Reality more Complex?

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Introduction

Reality is complex, and often does not lend itself to generalization or simplifying explanations. Yet at the same time, explaining reality often requires the shaping of notions and concepts of it through generalization and the reduction of complexity. This tension between complexity and particularity on the one hand and generalization and the search for abstracting explanatory patterns on the other is beautifully illustrated by two recently released publications on precaution and risk regulation in the United States and Europe, namely “The Politics of Precaution” by David Vogel¹ and “The Reality of Precaution” edited by Jonathan Wiener, Michael Rogers, James Hammitt, and Peter Sand.

Both books together can be seen as the latest significant contribution to the ongoing debate on the role of the precautionary principle in risk regulation in a comparative EU-US perspective. Both contributions are significant in that they consolidate the trend towards an empirically informed analysis of the actual practice of the application of precaution in risk regulation. Precaution is a polarizing issue, and much of the debate on both sides of the Atlantic so far had focused on the exchange of normative arguments either in favor or against precaution as a general principle. Against the background of precautionary *rhetoric* both in policy-making and academic work, the turn towards more *empiricism*, i.e. the analysis of regulatory practice based on a large number of case-studies, is urgently needed to rationalize the discussion, and

to make it more constructive. In fact, the validity of precaution either as legal principle or policy approach is no longer controversial. It is recognized as part of many national legal systems, international legal regimes, and EU law. From a legal-regulatory perspective the crucial questions today are: under which circumstances, and how should precaution be applied?; and what are the social, economic, and political consequences of precautionary regulation? Taking a comparative EU-US perspective, both books provide an important step on the way to answering these questions, because they engage in a systematic empirical analysis of the practice of risk regulation on a case-by-case basis, and over a range of policy fields. Essentially, the central questions addressed by both publications are: who is more precautionary, the United States or Europe?; and, how can the differences in relative precaution on both sides of the Atlantic be explained? Yet despite of a similar methodological approach of comparative analysis based on qualitative case studies, both books produce very different answers to these questions. This essay aims to first review both books in isolation, and then to juxtapose them, and to discuss their relation, relative merits and achievements. To be clear, it cannot do justice to the richness and empirical complexity of both contributions. Instead, taking a European legal perspective it focuses on the main argument, methodological approach, and findings respectively.

I. David Vogel’s “The Politics of Precaution”

Vogel’s book contains a comparative analysis of health, safety and environmental regulations in the United States and Europe since 1960 thus focusing on the regulation of consumer and environmental risks posed by business. This book is a continuation of a considerable body of previous research by the author in the area of consumer and environmental regulation on both sides of the Atlantic. It aims to describe and explain why during the last half-cen-

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1 David Vogel, *The Politics of Precaution, Regulating Health, Safety, and Environmental Risks in Europe and the United States* (Princeton, Oxford: Princeton University Press, 2012) and Jonathan B. Wiener, Michael D. Rogers, James K. Hammitt, and Peter H. Sand (eds) *The Reality of Precaution, Comparing Risk Regulation in the United States and Europe* (Washington DC, London: RFF Press, 2011).

ture citizens in Europe and the United States have frequently perceived and policy makers have often responded differently to many similar consumer and environmental risks.

The main claim Vogel advances with regard to the question of who is more precautionary, the United States or Europe, is the so-called “flip-flop” account of a transatlantic shift of regulatory stringency, which occurred around 1990. According to Vogel, if a new risk regulation was enacted on either side of the Atlantic during the three decades prior to 1990, then it is more likely that the American standard was initially and in some cases has remained more risk averse. However, if it was adopted on either side of the Atlantic after 1990 then it is more likely that the regulation adopted by the EU was initially and has often remained more risk averse. This claim is substantiated by way of several case studies in four policy areas, namely food safety and agricultural production, air pollution, chemicals and hazardous substances, and consumer safety risks other than food (chapters 3–6).

The ambition of the book, however, goes beyond the empirical demonstration of the transatlantic shift in regulatory stringency around 1990. Its deeper rationale is to offer an explanation of why this shift has occurred. More generally, Vogel develops an explanatory framework, which addresses the following broader questions: What affects changes in the public’s demand for protective regulations and the willingness of policy makers to respond to them? What happened to disrupt the previous pattern of policy-making on both sides of the Atlantic? And finally, what explains significant shifts in policy-linked issue life cycles?

The book is structured in nine chapters. Chapter 1 introduces the main argument of the book describing what Vogel perceives as the transatlantic shift in regulatory stringency. According to his argument, for approximately three decades before 1990 the US was a global leader in environmental and consumer policy. Several American consumer safety and environmental regulations in areas such as approval of new drugs; pesticide, food safety, and chemical standards; controls on automobile emissions, including lead in gasoline/petrol; and restrictions on ozone-depleting chemicals were among the most-risk averse in the world. Yet, according to Vogel, around 1990, the locus of transatlantic regulatory policy innovation and global regulatory leadership began to shift. Europe has begun taking over the role of world leader by adopting a more proactive approach to both

identifying new risks and attempting to ameliorate existing ones. Especially for those health, safety, and environmental risks that have emerged or become more salient since around 1990, such as global climate change, genetically modified food and agriculture, antibiotics in animal feed, hazardous materials in e-waste, and chemicals in cosmetics, European regulations have been more stringent and often more precautionary than those of the United States. Vogel’s account is differentiated. He acknowledges that not every European and American consumer or environmental risk regulation is consistent with a transatlantic shift in regulatory stringency since 1990. For example, during the 1970s and 1980s some European countries adopted restrictions on chemicals that were either compatible to or more risk-averse than those of the United States. On the other hand, American mobile source or vehicular emission standards for health-related (criteria) pollutants have been steadily strengthened and remain stricter than those of the EU. Vogel’s main claim, however, is that a *disproportionate* number of the consumer and environmental regulations adopted, or not adopted, on either side of the Atlantic during the last five decades do fit the pattern of a transatlantic shift.

At the same time, Vogel distances himself from other empirical comparative studies on the subject, in which a wider range of risks, including crime and violence, speed limits, consumption of drugs and alcohol, war and terrorism etc., are being compared. In particular, he distances himself from the work of Jonathan Wiener, who already in his work before “The Reality of Precaution” has challenged the “flip-flop” account of relative precaution on both sides of the Atlantic. Vogel justifies his limited focus with the argument that public policies toward health, safety, and environmental risks caused by business follow similar political dynamics that do not necessarily hold for public policies towards other kinds of risks. Thus, as opposed to Wiener and other broader empirical studies, Vogel does not aim to explain risk regulations in general comparing policy responses to very different kinds of risks. This is a conscious choice to limit the empirical basis underlying this book to the particular area of consumer and environmental risk regulation in order to be able to both analyse and explain the political and regulatory dynamics in that area.

As a result, Vogel’s differentiated claim is not that the EU has become more risk-averse than the US in general – the US approach to fighting terrorism, especially in the case of the Iraq war, is an instructive

example of a precautionary policy based on the acceptance of false positives. Rather, the claim is that the EU has become more risk-averse toward a range of health, safety and environmental risks caused by business activities.

Chapter 2 continues by developing Vogel's explanatory framework for transatlantic regulatory policy divergence. It pursues to answer the question of why transatlantic regulatory polarization increased in so many important policy areas? Vogel begins by reviewing different state-of-the-art explanatory frameworks for the post-1990 policy divergence in risk regulation between Europe and the United States. Such alternative explanations include differences in the actual risks faced by EU and US citizens; the process of the EU "catching up" with the US; variations in rates of economic performance and growth rates; role of different economic interests; different attitudes towards the role of government; different political systems; and different cultural values or "risk cultures" on both sides of the Atlantic. While engaging in a thorough consideration and discussion of all these different explanatory aspects, Vogel ultimately rejects the idea that either of these factors alone can explain the transatlantic regulatory shift. At the same time he admits that many of these explanations offer important insights. Most notably, different attitudes towards government, the difference in political systems, and divergent cultural values do to some extent play a role in shaping public health and environmental policies across the Atlantic. For example, risk cultures and risk predispositions are to some extent seen as affecting both public perceptions and public policies. However, Vogel ultimately argues that none of these insights provides an adequate explanation for the significant discontinuity in risk regulation that occurred on both sides of the Atlantic after around 1990.

Against this background Vogel develops his own "big picture" explanatory framework. The latter focuses on the role and interaction of three critical factors: the extent and intensity of public pressures for more stringent or protective regulations, the policy preferences of influential government officials, and the criteria by which policy makers assess and manage risks. Applied to risk regulation in the United States and Europe this framework helps explaining why the transatlantic shift in regulatory stringency has occurred around 1990. In a nutshell, firstly, the breadth and intensity of public demands for more stringent risk regulations has declined in the US and increased in Europe since 1990. While Ameri-

cans around that time had become broadly satisfied with the regulatory status quo triggering a decline in public support of *additional* regulations, Europeans have perceived more health, safety, and environmental risks caused by business to be both credible and politically unacceptable. Secondly, partisan polarization has increased in the US since then entailing that Republican leaders, such as George W. Bush, have opposed stringent risk regulations more than other republican leaders in previous decades characterized by a wide bi-partisan support for stringent regulation. At the same time in Europe, Member States with strong "green" preferences, notably Sweden, Austria, and Finland, have joined the EU in 1995. In addition, Green parties have become more represented in both national parliaments and in the EU parliament in the late nineties. Even though since 2004 this shift to the left in EU politics has been countered by new centre-right majorities in most of the EU Member States as well as at EU level, expansions of risk regulations could rely on a broad bi-partisan support of both centre-left and centre-right politicians. According to Vogel, the politics of European risk regulation has been less polarized along ideological and partisan lines than in the United States. Thirdly, since 1990 formal risk assessments have become more important in the US raising the threshold of scientific evidence necessary to justify new risk regulations. In the EU however the precautionary principle became codified in the Maastricht Treaty, which strengthened the ability and willingness of European regulatory officials to enact more stringent regulations in the face of scientific uncertainty. Moreover, while in the United States federal courts have increasingly subjected the rules issued by regulatory agencies to close and careful scrutiny, European Courts have been more willing to defer to the decisions, directives, and rules of the European Commission and the Council of Ministers.

The following chapters three to six constitute the core body of empirical evidence supporting Vogel's explanatory framework. This is a highly informative and insightful part of the book rich of detailed analysis of the regulatory practice on both sides of the Atlantic since the 1960s. This comparative analysis includes past as well as more recent regulatory responses to many safety incidents and risks, public and media reactions, and relevant case law in the four areas of food safety and agriculture, air pollution, chemicals and hazardous substances, and consumer safety.

Overall, the cases studies both provide empirical evidence of Vogel's claim of a transatlantic shift in regulatory stringency and confirm the validity of his explanatory framework in the areas analysed. Vogel's analysis is appealing, especially because while generalizing the author still pays sufficient attention to detail providing a differentiated and complex picture of the regulatory practice on both sides of the Atlantic. In particular, he also discusses and explains cases, which do not confirm the overall pattern of a transatlantic shift. For example, in chapter four the book shows that American standards for automotive emissions and ozone depleting chemicals remain stricter than those of Europe. With regard to the explanation offered, Vogel stresses the *relative* importance of each of the three factors contained his framework in explaining any particular policy decision or non-decision, and that it varies from domain to domain. It becomes evident that in some cases other factors, such as economic interests and risk cultures (e.g. with regard to the acceptance by many Europeans of the food safety risks of unpasteurized milk products; or the higher preoccupation of Americans with cancer risks), have also played a role in shaping the regulatory response.

The book concludes with two cross-sectorial chapters and an outlook on the book's broader implications for risk regulation. Chapters seven and eight both develop further the explanatory framework. Chapter seven contains a more general comparative analysis of public risk perceptions and the preferences of policy makers in the United States and Europe in a historical perspective. Its main outcome is the identification of "two causal factors that affect the likelihood that a government will adopt a wide array of more stringent risk regulations, namely the extent and intensity of public's "demand" for regulation, and the interest of policy makers in "supplying" that demand." Accordingly, regulatory stringency in the US in the three decades before 1990 is seen as a result of a wide range of risk availability cascades – a situation in which a negative event (eg accident) triggers a change in the way in which other risks are perceived – together with the electoral strength of Democrats, along with the support of Republicans. The decline in the expansion of risk regulation after 1990 is seen as the result of greater public satisfaction with the regulatory status quo and the electoral strength of conservative Republicans together with increased partisan polarization. In Europe, Vogel argues, the expansion of risk regulation after 1990 was due to a

substantially more risk-averse public and the stronger support for more stringent regulatory standards by policy makers in influential member states, the European Commission, and the European Parliament.

From a European perspective, Vogel mainly focuses on the argument that a series of environmental disasters in Europe in the 1980s (e.g. the Seveso chemical spill and the Chernobyl accident) together with a number of highly salient risk regulatory failures in the 1990s (e.g. BSE and dioxins in Belgium) have created a sense of public urgency about the need for more stringent regulation of health safety and environmental risks. Moreover, Vogel also aptly analyses the political and legal dynamics of the Europeanisation of risk regulation following the adoption of the European Commission's White Paper on Completing the Internal Market in 1985. He concludes that "if the EU did not exist, it is much less likely that a significant transatlantic shift in regulatory stringency would have occurred."

Unfortunately however, this insight is not being considered as a stand-alone factor within Vogel's explanatory framework. The reason for that is that Vogel sees this institutional shift to the EU as a consequence of the increased public pressure for more regulatory stringency in Europe. Therefore, Europeanisation and the specifics of European governance since the 1990s are being subsumed under the factor "intensity of public's demand for regulation." It could, however, also be argued that EU's expansion of more stringent risk regulation since around 1990, which made it "the driving force behind environmental policy across the majority of the continent," had also, and perhaps more to do with a unique integrationist logic of EU internal market regulation, which was more responsive towards the pressure of economic interests within the EU than public pressures.

Harmonization of national standards at EU level favours business. While business lobbies are not in favour of more stringent regulation *per se*, in the EU context they generally tend to accept or even prefer stringent, but unified EU rules to diverse regulations among the member states, because it lowers the costs of regulatory adaptation. Having said this, the "trading up" effect of harmonized EU regulation is a consequence of the complexity of the EU's *sui generis* political constellation. As Vogel describes, the high level of protection in public health and environmental policy adopted in the process of re-regulation (or positive regulation) at EU level since about the 1990s was the "price" to pay to gain the political support of

the member states and their citizens for the “Completion of the Internal Market” market project. In addition, high health and environmental standards have been an important source of so-called output legitimacy² for the European “regulatory state.”³ The weak democratic representation of EU citizens – and thus weak input legitimacy⁴ – has created a stronger need to seek legitimacy and political acceptance through the provision of benefits and “good results.” The nature of the EU as an elitist project has since the inception of the Community entailed that integration was pursued without popular support by way of a “fait accompli.”⁵ It has based its legitimacy and acceptability on a permissive consensus among EU citizens that European integrations mainly brings benefits to everyone, and does not pursue re-distributive politics.⁶ Although this compromise started to crumble especially since the introduction of the Euro through the Maastricht Treaty, the emphasis on a high standard of health and environmental protection in European risk regulation since the 1990s was certainly a continuation of this approach.

Overall, “trading up” and the increase in stringent risk regulation in the EU since about 1990 was not only a result of public pressures, but also the result of economic pressures to harmonise the internal market, the integration “drag” of Europe’s “economic constitution”⁷ together with the need to secure the output legitimacy of supranational regulation. While

Vogel does not oversee these aspects, he does not view the *sui generis* nature of EU’s (risk) “regulatory state” and its disconnection from popular politics as a stand-alone explanatory factor for the increase in stringent risk regulation in the EU since 1990.

Chapter eight of the book takes issue with the third element of Vogel’s explanatory framework, namely the respective evolution and role of regulatory standards for risk assessment and risk management on both sides of the Atlantic. This is the most legal element in the otherwise mainly politics-oriented explanation of regulatory differences offered by Vogel. This part of the book to a certain extent, although not explicitly, confirms the role of law not just as an instrument of politics, but also as an independent value system⁸ with its own dynamics able to shape social and regulatory realities. For example, the different legal evolution of the precautionary principle and its judicial application within the US and EU legal systems has played an important role in shaping different regulatory responses to similar risks. The astute insight that there is nothing distinctively “European” about a precautionary approach to risk regulation only stresses the importance of differences in legal interpretation. Vogel writes, and other scholarly contributions also confirm,⁹ that “the role of precaution in shaping American consumer and environmental risk regulation is best understood as a preference or an approach, rather than, as it became in the EU, a legal doctrine or principle. This means that from time to time, precautionary logic is persuasive to legislators, judges and administrators. It is then applied on a case-by-case basis, with little concern for consistency in comparable cases and no systematic effort to justify it.” European Courts, however, have played a decisive role in strengthening precaution as a general legal principle of EU law extending its application to areas beyond environmental policy as was originally foreseen in the Maastricht Treaty. And it is precisely this legal evolution, which has favored efforts to systematize the use of the principle, and to accord it a stronger role in EU regulatory law and policy. For Vogel, however, the *politics*, not the *law* of precaution remains the decisive factor explaining changes in regulatory approaches. He attributes the influence of the precautionary principle in Europe to increased public pressures for more stringent risk regulations, and the greater willingness of policy makers to respond to them, while the increased reliance on regulatory risk assessments in the United States is seen as being linked to a decline in public and political

2 See on this term Fritz Scharpf, “Problem-solving Effectiveness and Democratic Accountability in the EU” Max-Planck-Institute for the Study of Societies Working Paper 03/1, February 2003 available at <http://www.mpifg.de/pu/workpap/wp03-1/wp03-1.html>.

3 See Giandomenico Majone, “The rise of Statutory Regulation in Europe” in *idem* (ed) *Regulating Europe* (New York: Routledge, 1996).

4 This remains largely unchanged until today, see Joseph H.H. Weiler, “Democracy Without the People: the Extinction of European Legitimacy,” paper presented at the Dahrendorf Workshop on “How to Democratize the European Union?” at Hertie School of Governance, Berlin, November 2012 (on file with author).

5 See Giandomenico Majone, *Europe as the Would-be World Power, The EU at Fifty*, (Cambridge, Cambridge University Press, 2009), 22 ff..

6 See *ibid.*.

7 See Armin Haltje, ‘The Economic Constitution within the Internal Market’, and Josef Drexl ‘Competition Law as Part of the European Constitution’, both in Armin von Bogdandy and Jürgen Bast (eds), *Principles of European Constitutional Law* (Oxford, Hart Publishing, 2010) 589–629 and 659–679 respectively.

8 See Andreas Grimm, ‘Integration in the Context of law: Why the European Court of Justice is not a political actor’, *Les Cahiers Europeens des Sciences Po*. N. 03/2011, 10.

9 E.g. Joakim Zander, *The Application of the Precautionary Principle* (Cambridge University Press, 2010).

support for further expansion of risk regulation. This is not a surprising outcome for a political scientist, but is not entirely satisfactory from the point of view of the legal discipline. One could, of course, invoke disciplinary self-interests as an explanation for divergent perceptions of the relative importance of either law or politics in shaping reality. The truth, perhaps, lies somewhere in between. It seems likely that there is a relationship of mutual influence between the legal and the political systems. Thus, courts in both the United States and the EU have certainly to some extent responded to the respective political situations, namely to the increased awareness of the costs of more stringent regulation in the US on the one hand, and to increased public pressures for it in the EU on the other hand. Yet the distinct legal context of the respective legal systems, in the case of the EU the inclusion of precaution as a Treaty principle as well as the historically pro-active role of the EU Courts in fleshing out the EU legal system, have also played an important role in shaping the policy responses to health and environmental risks.

II. Jonathan Wiener's et al. "The Reality of Precaution"

This edited volume is the result of an enormous interdisciplinary undertaking bringing together an impressive group of experts from both academia and practice on both sides of the Atlantic. Its main objective is to challenge the often-polarizing accounts concerning the relative role of precaution in US and European risk regulation, especially the claim that Europe has become more precautionary than the US. While pointing out that the debate over precaution has been framed by many as a transatlantic contest for leadership, this book aims to answer the question of who is more precautionary, the US or Europe? At the same time it aims at unpacking, and critiquing this question. Fundamentally, it seeks "to respond to the rhetoric of precaution with the reality of precaution."

This volume pursues a dual analytical interest similar to the one pursued by Vogel. It aims to test empirically the descriptive pattern of precaution in the US and Europe from the 1970s to the present while also exploring the causes of the observed pattern. The book is highly ambitious in that it aims to move beyond claims based on just a few celebrated examples, and it does so by undertaking an enormous empirical

effort combining in-depth case study research with quantitative analysis. The overall methodology is the combination of qualitative case studies, quantitative data analysis, and crosscutting explanatory chapters. The case studies collected in this volume cover a wide range of risks and policy areas: food safety (GMOs, beef hormones, and mad cow disease), air pollution, climate change, nuclear power, tobacco, chemicals, marine and terrestrial biodiversity, medical safety, and terrorism, as well as precaution embodied in risk information disclosure and risk assessment systems. In addition to the case-studies, a broad quantitative analysis of relative precaution in the US and Europe is conducted in a sample of 100 risks drawn from a dataset of nearly 3000 risks over the period 1970 to the present. The ambition of this edited volume is certainly to advance the existent state-of-the-art of the precaution debate by offering a more thorough and representative picture of the real pattern of precaution than the one captured by prior studies that focused more narrowly on selected risks. Beyond the empirical part, this book also aims at investigating the causes of the observed pattern and consequence of precaution, as well as at offering recommendations for methods of comparing regulatory systems, for desirable regulatory policies, and for transatlantic relations and the exchange of ideas. "The Reality of Precaution" neither defends nor attacks precaution *per se*, but rather aims to move beyond the acrimony over precaution as an abstract principle to see what can be learned from studying precaution as applied in real regulations.

The book is structured in six parts. Following the introduction in Part I, Part II contains thirteen in-depth case studies of precaution applied to specific risks and information systems (Chapters 2–14). The same questions are being asked in all case studies: Over the period 1970 to the present, what has been the real pattern of relative precaution regarding this risk, in the United States and Europe? What explains this pattern? What have been the consequences of the observed policies? Part IV contains a quantitative analysis of relative precaution in a sample of 100 risks drawn from a dataset of nearly 3000 risks over the period 1970 to present (Chapter 15). The study focuses on the terms of enacted and adopted regulatory standards without looking into their implementation in practice as the case studies do. This approach is chosen in order to complement both methods as neither of them is seen to be able to be fully informative on their own.

The main findings of this empirical part of the book are that over the broad array of risks analysed neither the US nor Europe can claim to be more precautionary across the board. Chapters 2 to 14 offer an impressively rich source of detailed information about the way public authorities have addressed specific risks; how they have or have not used a precautionary approach; what were the consequences of the particular policy choices; and what can be done to improve public risk regulation. All the chapters are, in one way or another, able to challenge existing stereotypes concerning relative precaution of the US or Europe with regard to specific risks. In Chapter 2 on genetically modified organisms Cantley and Lex show that Europe and the US have engaged in a continuing dialog and exchange of experience over years with various degrees of convergence and divergence. In Chapter 3 on Beef, Hormones and Mad Cows Gray, Rogers, and Wiener confirm that the EU approach to beef hormones was more precautionary than the US approach. Yet with regard to BSE they also show that the US was quicker and more precautionary in establishing an import ban on British beef during the BSE crisis. With regard to tobacco control in Chapter 4 Blanke shows that neither the US nor Europe has been consistently more precautionary in comparison to one another. "The case of tobacco thus refutes the theory that clear differences in the level of precaution divide the United States and Europe." In Chapter 5 on nuclear power Ahearne and Birkhofer offer a similarly differentiated account when finding that the degree of regulatory precaution is broadly similar in both the United States and Europe. They also point out the heterogeneity of approaches to the regulation of nuclear power within the United States, especially between the different United States agencies. Walsh in Chapter 6 on automobile emissions demonstrates that while there was a similar degree of precaution, Europe and the United States have been dealing with conflicting risks: the latter has been more precautionary with regard to local public health risks from pollutants such as lead and others, while Europe has been more precautionary regarding the global climate risks of greenhouse gases such as CO₂. Walsh also shows that the flip-flop account of relative precaution is oversimplifying, because it does not leave room for differentiation and nuances with regard to specific risks and regulatory actors. In Chapter 7 Hammitt confirms that Europe has adopted a much more precautionary path with regard to the fight of global climate change. He also indicates some factors,

which might account for the difference in approaches between the United States in Europe pointing to significant differences in energy use, geography, and other factors. The following Chapter 8 by Freestone stresses that both the EU and United States have contributed to the establishment of precaution as a principle of international marine environmental law. He, however, also points to another type of heterogeneity on both sides of the Atlantic. When examining the evolution and use of precaution in relation to the marine environment it becomes clear that "just as there is dissonance between the rhetoric and the reality in the positions of both the United States and the EU, there is also dissonance between the official views of the U.S. federal authorities, the EU, and the practice of their respective Member States." Chapter 9 on biodiversity conservation by Saterson concludes that while between 1970 and 1985 the United States were equally precautionary to the EU or more precautionary than the EU with regard to regulation of biodiversity conservation, from 1986 to 2000 both have addressed this topic with precautionary regulations. However they have addressed different aspects and scales of conservation. Subsequently in Chapter 10 on chemicals regulation Renn and Elliott successfully show that the issue of who is more precautionary, Europe or the United States, is ultimately less important than "how regulatory decision makers in both systems can strike the most appropriate balance ... between the components of facts (risk) and values (precaution)." They also demonstrate that "a simplistic opposition between the precautionary principle in Europe and quantitative risk assessment in the United States is actually a 'false dichotomy,'" because also the EU regulatory regime REACH does not substitute risk assessments with a pure "better safe than sorry" attitude. Chapter 11 by Miller on new drugs approval and patient safety differentiates between a similar degree of regulatory stringency with regard to patient safety and medical errors on the one hand and more regulatory stringency in the United States with regard to new drugs approval on the other. With regard to terrorism and weapons of mass destruction Stern and Wiener in Chapter 12 develop a "flip-flop" account or reversal in relative precaution, but in the opposite direction of Vogel's hypothesis regarding consumer and environmental risks. They observe that while the EU was more precautionary in the 1970s, the United States have become more precautionary since the 1990s and especially since 2001. In the area of information disclosure the United States

have been more precautionary than Europe as shown by Sand in Chapter 13. The last case study on risk assessment frameworks by Charnley and Rogers in Chapter 14 concludes that there are many similarities between the approaches to risk regulation in the EU and the United States. “While differences appear, these are not due to conflicting philosophies but to case-by-case differences in emphasis.” Finally, the extensive quantitative study in Chapter 15 shows that a similar degree of precaution can be found in both the United States and Europe.

To summarize this empirical part, it shows that the reality of precaution has not been principle, but parity and particularity. In the aggregate, little overall transatlantic difference over the past several decades is being found. While Europe has been more precautionary than the US about some risks, the US has been more precautionary about other risks. The empirical analysis emphasizes the great diversity across risks and across policy domains on both sides of the Atlantic, which is found to have existed in both recent and older times. The book also identifies considerable variation within each polity, both among the states of the US and among the MS of the EU. As a consequence, hybridization is found to be a more accurate depiction of the reality of precaution than the hypotheses of convergence, divergence, or “flip-flop.” The findings indicate a substantial exchange or borrowing of ideas across the Atlantic and among Member States and US states, in a process of hybridization that produces a complex and dynamic pattern of regulation. Examples of such exchange are precaution itself, market based incentives for allowance trading, and better regulation programmes using impact assessment and executive oversight.

Seeing the richness of the empirical evidence provided, this volume constitutes an important move to more empiricism based on large case studies analysis. It can be seen as a significant step towards more empirically informed theory building in the field of risk regulation and governance. At the same time, it is also evidence of increasing interdisciplinary collaboration in this area, and of its fruitfulness. Wiener *et al* try to overcome limitations in the methods used by prior research to select cases and draw overall comparative assessments. Herein lies the novelty of this book, which aims at more general comparative insights about risk regulation overall. In addition, the large quantitative study in Chapter 15 really sets this book apart from previous studies in this area. While there have been many comparative US/EU studies in

the field of risk regulation over the last decade, this book attempts to go beyond them in both methodology and empirical breadth. Most importantly, the empirical evidence gathered shows that the “flip-flop” account of relative precaution (as sustained by Vogel for health and environmental risks) does not hold true when a broader range of risks is being considered.

Part V is dedicated to identifying possible explanations for the observed pattern of precaution. The main added value of this part is to challenge mainly four existing dichotomous accounts of relative precaution in the US and Europe. Majone’s chapter (Chapter 16) examines the role of political institutions behind the operation of precaution; Bergkamp and Smith (Chapter 17) continue by analyzing the role of the legal and administrative systems; Both Weber and Ancker (Chapter 18) and Sunstein (Chapter 19) analyze the role of cultural attitudes and risk perception. The individual chapters are highly recommendable. Together they show that new explanations are needed, which must be more nuanced, attending to each specific risk, context, and institution, including factors such as the availability heuristic, trade protectionism, and transnational networks sharing regulatory ideas. However, the outcome of Part V does not go beyond a de-construction or *critique* of the state-of-the-art. In other words, it does not as such contain new explanations of causes of the complex real pattern of precaution identified in Parts III and IV. The book, therefore, does not live up to its ambition “to explain why a complex and varied pattern occurs.” This is not surprising given that the main outcome of the book overall is to emphasize both complexity and diversity in the way different risks are being addressed across and within different polities. This, however, does not diminish the overall accomplishment of this volume, namely to significantly re-orient the debate on precaution across the Atlantic, and to provide a new empirically solid basis for the future search of more general explanatory frameworks for the occurrence of policy shifts in risk regulation broadly speaking.

III. “The Politics of Precaution” versus “The Reality of Precaution”

On a preliminary note, it should be noted that both books are the continuation of a debate, which has been ongoing between the scholars involved, most notably between David Vogel and Jonathan Wiener,

for several years.¹⁰ The novelty of both contributions, therefore, lies not so much in the arguments, but in the nature and scope of the empirical evidence supporting them.

One relatively simple (but not very engaging) way to compare both contributions is to delineate the scope of their analysis. While Vogel compares policy shifts with regard to consumer and environmental risks created by business, Wiener and his co-contributors analyze a broader range of empirical evidence pertaining to risks from food safety, climate change, to terrorism. Thus, the two books do different things. It should not be surprising that analyzing different empirical evidence leads to different outcomes. A more complex and perhaps interesting way to compare, however, is to recognize that there is a more fundamental disagreement that underlies both contributions. They seem to stand for two different philosophies of analytical work with regard to comparative studies of risk regulation across the Atlantic, namely *generalization* on the one hand and *differentiation* on the other.

Vogel pursues the approach of limiting the empirical breadth of analysis to a certain category of risks for the sake of providing a more coherent explanatory framework. For him the ability to explain seems to be more important than the empirical validity of the explanation with regard to risk regulation more generally. While his analysis of the empirical evidence is detailed and differentiated, in the end he needs to reduce complexity, and to generalize in order to deduce the most pertinent three factors for explaining what he observes to be the transatlantic shift in regulatory stringency, namely public pressure, preferences of influential political actors, and standards for risk assessment and risk management.

Wiener *et al.*, in contrast, stress the need to evaluate as broad a range of evidence as possible, in order to provide a theory of risk regulation in general. While they do not necessarily reject Vogel's "flip-flop" thesis with regard to some consumer and environmental

risks caused by business, they argue that such limitation of analysis is unsatisfactory. Their edited volume seems to aim at explaining regulatory approaches to risk on a much broader scale. Quoting William Blake – "To generalize is to be an idiot. To particularize is the alone distinction of merit" – , while at the same time pointing out the irony of this in itself hasty generalizing statement, Wiener seems to caution us against the temptation to overstate things in order to reduce complexity. However, one could say that the price to pay for such differentiated view on the reality of precaution is that general explanations are not readily available, or at least more difficult to achieve.

There are further instructive differences between "The politics of precaution" and "The reality of precaution," which are worth mentioning. Firstly, both contributions differ in the extent to which they undertake a normative evaluation of the use of precaution in risk regulation. Vogel keeps his analysis purely descriptive and analytical, distancing himself from normative evaluations of which risk regulations are "better," American or European ones. Wiener *et al.* also claim to restrain themselves from normative pronouncements either in favour or against precaution. However, based on their analysis of the consequences of precautionary regulation they make recommendations for future policy and research. The main normative outcome in this regard is the suggestion that better regulation needs to rely on impact analysis, and to aim at optimal or prudent precaution rather than maximal precaution. The volume pleads for a melding of precaution into systems of impact assessment and executive oversight. In this respect, "The Reality of Precaution" seems to stand in the skeptical tradition of US scholarly research on risk regulation in the last two decades, which has emphasized the regulatory costs of too much precaution, and warned against a regulatory policy of false positives.¹¹

Secondly, as already indicated there is a difference in the scope of empirical evidence, which both books provide. "The Reality of Precaution" certainly stands out in the scope and richness of its empirical examination across policy fields. The main achievement of this book is to caution a more reasonable, and less polarized debate about precaution in both the EU and the US. It is also able to show that Vogel's "flip-flop" account is valid only for certain policy fields, and for certain risks. Wiener *et al.* acknowledge that Vogel's work goes one large step further than cultural accounts or those relying on legal system differences by recognizing the ebbs and flows of modern politics.

10 See David Vogel, *Ships Passing in the Night: The Changing Politics of Risk Regulation in Europe and the United States*. European University Institute, Robert Schuman Centre for Advanced Studies, Working Paper 16/2001; and Jonathan B. Wiener, *Whose Precaution After All? A Comment on the Comparison and Evolution of Risk Regulatory Systems*, 13 (2003) *Duke Journal of Comparative and International Law*, pp. 207–262.

11 See e.g. Cass R. Sunstein, *Laws of Fear: Beyond the Precautionary Principle* (Cambridge University Press, 2005).

Yet, they successfully challenge the view that the body of risk regulation on both sides of the Atlantic is a coherent entity moving roughly in sync within a bloc on each side of the Atlantic. The reality of precaution seems indeed much more complex and diverse.

To conclude, these two recent transatlantic comparative analyses of the role of precaution in risk regulation are certainly not the end, but just the beginning of a new empirically oriented research agenda. Both books have made an important first step in thoroughly examining the regulatory practice of precaution including the problems and consequences of different types of policy approaches. By challenging existing explanatory accounts, they have identified what new explanatory theories need

to accomplish in the future. Due to his focus on consumer and environmental risks, Vogel's attempt to explain why policy shifts occur in risk regulation seems more successful. Yet, considering the evidence provided by Wiener *et al* the question arises in how far this framework can be used more generally for the regulation of other types of risks? If one would want to take this type of research further, one would need to continue the cross-policy comparison trying to explain why in certain policy areas precautionary regulation increased while it decreased in others. Here, "The Reality of Precaution" offers an important basis by indicating the elements, which will need to be considered when developing such broader theory of risk regulation. For all those working on this development reading both books is an absolute must.