

Risk, Globalisation and the State: A Critical Appraisal of Ulrich Beck and the World Risk Society Thesis

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Ulrich Beck has been one of the foremost sociologists of the last few decades, single-handedly promoting the concept of risk and risk research in contemporary sociology and social theory. Indeed, his world risk society thesis has become widely popular, capturing current concerns about the consequences of modernity, fears about risk and security as a result of globalisation and its implications for the state and social organisation. Much of the discussion generated, however, has been of an abstract conceptual nature and has not always travelled well into fields such as political science, political theory and International Relations. This article introduces Beck to a wider audience while analysing his work and assessing it against recent empirical evidence in relation to the effects of globalisation on individual risk and systemic risk to the state.

Introduction

According to David Garland, the eminent sociologist Anthony Giddens likes to begin public lectures by posing the following question to his audience: “What do the following have in common? Mad cow disease, the troubles of Lloyds Insurance, the Nick Leeson affair [at Barings Bank], genetically modified crops, global warming, the notion that red wine is good for you and anxieties about declining sperm counts?”¹ The answer, of course, is that they are all about risk and how risk in multifarious settings now dominates social, political and economic discourse—if not the cultural mindset of late modern society itself. More specifically, the common thread in Giddens’ list relates to how technology and science are shaping our lives, creating risks and unintended consequences for the environment, our health and well-being.

Giddens, of course, was not alone in his observations. Ulrich Beck was one of the first sociologists to recognise this strange paradox in late modern society; that risk might in fact be increasing due to technology, science and industrialism rather than being abated by scientific and technological progress. Rather than a world less prone to risk, late modernity might actually be creating what Beck famously described as a “world risk society”.² But how was this possible? How

1. Anthony Giddens, as quoted in David Garland, “The Rise of Risk”, in Richard V. Ericson and Aaron Doyle (eds.), *Risk and Morality* (Toronto: University of Toronto Press, 2003), p. 48.

2. Ulrich Beck, *World Risk Society* (Cambridge: Polity Press, 1999). Other contributions to risk discourse and theory have been made by Anthony Giddens, *The Consequences of Modernity* (Cambridge:

could the forces responsible for such remarkable progress and betterment in the human condition, science and technology now be the culprits responsible for increased danger and harm? How could the forces responsible for producing the greatest levels of material wealth yet seen in human history now be the major engines of risk production in society? How could progress on virtually all fronts of human endeavour also be accompanied by a society prone to more risk, more danger and more harm than ever before?

The paradoxical coexistence of progress and risk comprise the principal themes of the work of Ulrich Beck, whose contribution to the field has generated a small industry into risk research. His work has tapped the cultural psyche of contemporary society and the elevated fears shared across national borders about risks as far ranging as degradation to the global ecology, global health pandemics such as AIDS and SARS, international terrorism, or the health consequences feared as a result of exposure to a myriad of technologies, genetically modified food, electromagnetic radiation, chemicals, industrial toxins and pollutants—to name but a few. The wave of recidivist movements championing organic foods, natural herbal medicines, environmental protection and a return to nature, and who broadly reject the progressivist thesis of science and technology as benign benefactors, is now evident in most advanced industrial societies. Risk, fear, an increasing distrust of science and technology and its profit-driven outcomes, a common perception that there are now limits to scientific progress and further economic growth and industrialisation, have become salient features of late modern culture.

Beck's work is an attempt to understand this remarkable transformation in social attitudes and fears, and an attempt to examine the forces at play between technology, science, political and social institutions, including an assessment of their consequences for individuals and societies. Unlike previous social theorists such as Marx, Weber or Durkheim, all of whom attempted to understand the broader forces at work in society by examining its internal contradictions and thus the junctures for its potential collapse, radical transformation or political capture, Beck is far more sanguine. Indeed, it is not contradictions, violent confrontations, class struggles, or systemic institutional failure that capture Beck's imagination, but rather the fact of industrial society's absolute success. Indeed, Beck celebrates the achievements of modernity, the advances of science, and how each has transformed all manner of things from the goods we consume to the modes of communication we now enjoy. Understanding Beck's thesis thus begins with understanding the spread of industrial modernity and its mastery over nature.

Beck, Enlightenment and Modernity

Beck is a celebrant of the Enlightenment, which he sees as a potent combination of secular ideals and rationalist epistemologies that came to be articulated through

Polity Press, 1990); Anthony Giddens, *Modernity and Self-identity* (Cambridge: Polity Press, 1991); Mary Douglas and Aaron B. Wildavsky, *Risk and Culture: An Essay in the Selection of Technical and Environmental Dangers* (Berkeley: University of California Press, 1982); Mary Douglas, *Risk and Blame: Essays in Cultural Theory* (London: Routledge, 1992); Niklas Luhmann, *Risk: A Sociological Theory* (New York: Aldine De Gruyter, 1993); Barbara Adam, *Timescapes of Modernity: The Environment and Invisible Hazards* (London: Routledge, 1998).

scientific inquiry and technological development. Collectively, these enabled revolutions in thinking and social, political and economic organisation, and in so doing laid the foundations of the modernist project—the quest to conquer nature, rid humanity of the pernicious edge of scarcity whether in food, shelter or basic needs, and to fight disease. Consequently, the project has delivered unsurpassed progress, betterment, technological breakthroughs, and material improvements that, while not equally distributed, are now enjoyed by increasing numbers of humanity.³

For Beck, much of the modernist project is now complete. No longer is humankind concerned “exclusively with making nature useful, or with releasing mankind from traditional constraints”. Genuine material need, he notes, has “been objectively reduced and socially isolated through the development of human and technological productivity, as well as through legal and welfare-state protections and regulations”.⁴ Ironically, however, it is at this point where Beck believes industrial modernity has reached its limits and is undergoing a period of transformation, moving irreversibly to a new historical epoch that Beck labels “reflexive modernity”.⁵ This transformation is propelled by industrial modernity and represents a natural outgrowth of its success rather than any systemic crisis or contradiction.⁶ Rather, for Beck, the fact of industrial modernity’s success and the near ubiquitous spread of industrial capitalism produce global outcomes that are undermining their own material benefits. “[B]y virtue of its inherent dynamism, modern society is undercutting its formations of class, stratum, occupation, sex roles, nuclear family, plant, business sectors and of course also the prerequisites and continuing forms of natural techno-economic progress.”⁷ What are the elements that undermine modernisation and modernity? According to Beck they are inconsequential considered in isolation, but collectively significant. They comprise five interrelated processes:

- (1) globalisation;
- (2) individualisation;
- (3) gender revolution;
- (4) underemployment;
- (5) global risks (e.g. ecological crisis and the crash of global financial markets).⁸

Each process challenges the spatio-political “simple, linear, industrial modernization based on the nation state”.⁹ Each detracts from the traditional socio-political institutions on which industrial society relies for its reproduction, and each sets in motion consequences that increase the exposure of individuals and

3. See Darryl S.L. Jarvis, “Postmodernism: A Critical Typology”, *Politics and Society*, Vol. 26, No. 1 (1998), pp. 95–142.

4. Ulrich Beck, *Risk Society: Towards a New Modernity* (London: Sage, 2000), p. 19.

5. For a comprehensive elaboration of this concept, see Ulrich Beck, Wolfgang Bonss and Christoph Lau, “The Theory of Reflexive Modernization”, *Theory, Culture and Society*, Vol. 20, No. 2 (2003), pp. 1–33.

6. Beck variously calls “reflexive modernity” the “second modernity” and modernity or industrial modernity he labels as the “first modernity”. See Beck, *World Risk Society*, *op. cit.*, pp. 1–2.

7. Ulrich Beck, Anthony Giddens and Scott Lash, *Reflexive Modernization: Politics, Tradition and Aesthetics in the Modern Social Order* (Cambridge: Polity Press, 1994), p. 2.

8. Beck, *World Risk Society*, *op. cit.*, p. 2.

9. *Ibid.*

society as a whole to risk. Through a diverse collection of writings, Beck explores these processes and constructs his thesis of the risk society.

Globalisation and Risk

For Beck, an obvious outcome of the success of industrial modernity has been its wide spatial distribution and its ability to cross borders and infiltrate cultures. At the same time, however, globalisation is not a benign process. For Beck, the advent of globalisation challenges the territoriality and sovereignty of the state, reduces the authority of the state and its citizens to act unilaterally or independently, and compromises economic autonomy by forcing states to act in ways and adopt policies broadly commensurate with the whims of highly mobile capital. Further, it de-nationalises markets, creates international patterns of competition for foreign investment and forces the state to respond to an international rather than purely domestic constituency. The state's source of legitimacy is primarily internal, yet much of its material needs can be realised only through external economic interaction. The democratic authenticity of citizenship is thus eroded under conditions of reflexive modernity, and the mechanisms of accountability and probity that underpinned modernity and industrial society are compromised by the increasingly influential role of transnational actors and processes.

Globalisation thus results in "a power-play between territorially fixed political actors (government, parliament, unions) and non-territorial economic actors (representatives of capital, finance, trade)" and results in the "political economics of uncertainty and risk" where capital flight, capital strikes, relocation, offshore production and outsourcing can challenge the economic security of the state and its citizens.¹⁰ For Beck, the effects include rolling back the welfare state as a result of budget constraints caused by a diminishing corporate tax base (itself the outcome of policies enacted by the state in its attempt to compete for foreign investment and capital) that, in turn, erode the state's ability to support idle labour, the destitute, the physically disabled, or the provision of extensive and costly public goods like education and health. A "domino effect" follows as the state retreats from its traditional responsibilities and downloads them on to its citizens, in the process increasing the risk individuals face by making their welfare the preserve of individual responsibility through self-provision (such as private disability, unemployment and life insurance).

Individualisation, the Gender Revolution, Underemployment and Risk

Commensurate with the processes observed above under globalisation, Beck also observes the historically dynamic role of the welfare state and the way in which it has changed social relations, in part providing individuals with greater choice and freedoms, in part insulating them from the vestiges of personal risk. The provision of public goods like education, social support services and economic subsidies, for example, have, for Beck, increased what he terms "individualisation" and, in the process, helped to break down the modernist-industrial clans of family, the traditional social institutions of marriage and the familiar support mechanisms on

10. *Ibid.*, p. 11.

which modernity relied for its social and economic reproduction. Freed from these constraints by greater choice, social mobility through public education, travel and relocation through globalised work practices and migration, modernist-industrial institutions like the nuclear family are now threatened. While many sociologists have traditionally seen this process as emancipatory (liberating individuals from the constraints of clanship, tribalism, or religious feudalism), for Beck liberation from the constraining and social ordering techniques of industrial society only frees individuals into “the turbulence of the risk society”.¹¹ The support networks of family, for example, Beck sees as being replaced by reliance on one’s own ingenuity to develop a personal support network, while the economic security provided by the nuclear family is replaced by individual responsibility and is subject to the vagaries of employment prospects, underwritten by the individual procurement of employment insurance entitlements.

Greater individualisation is thus accompanied by greater individual risk. Indeed, this is what Beck means by individualisation, “the disintegration of the certainties of industrial society as well as the compulsion to find and invent new certainties for oneself”.¹² While modernity structured social orders in terms of class, gender roles and employment patterns, and controlled the relationship between capital, class and the welfare state, under reflexive modernity these structures and controls break down. The corporatist relationship between capital, labour and the state, which secured full employment, low inflation and reduced individual risk through welfare entitlements in return for labour stability and productivity growth, has evaporated. Individuals are now exposed to fickle labour markets, flexible labour practices and casual employment practices with the onus on the individual continually to retrain to meet the changing needs of capital and the workplace.¹³ Most disturbingly, many individuals are now essentially disenfranchised by the process of individualisation and unable to take responsibility for their economic security. In the post-corporatist era with the retreat of the welfare state, structural unemployment has returned to many of the world’s developed societies (particularly in Europe), with economic growth and corporate profitability coexisting alongside high levels of structural unemployment and or underemployment.¹⁴ Without access to stable or sufficient employment, many individuals experience greater vulnerability, and are unable to gain access to education that is increasingly provided through user fee-paying delivery models, or medical services based on private insurance systems.

Collectively, processes of individualisation generate winners and losers. The former consist of individuals able to provide for themselves, form social networks, achieve educational attainments, procure wealth and ensure their personal security. The latter are exposed to increased risk, diminished long-term economic security, restricted access to educational opportunities and the labour market. According to Beck, this emerging cleavage affects the broader collectivity through socially undesirable consequences, increases in nefarious social activities and criminally deviant behaviour, the breakdown of civil society, the creation of

11. Beck, Giddens and Lash, *op. cit.*, p. 7.

12. *Ibid.*, p. 14.

13. See the discussion in Deborah Lupton, *Risk* (London: Routledge, 1999), pp. 69–72. See also discussion in Ulrich Beck, “The Cosmopolitan Perspective: Sociology of the Second Age of Modernity”, *British Journal of Sociology*, Vol. 51, No. 1 (2000), p. 89.

14. Beck, *World Risk Society*, *op. cit.*, pp. 10–12.

socially dysfunctional classes and increasing levels of aggregate risk in terms of rising crime rates or risks to personal security.

Individualisation is reinforced by the gender revolution under modernity. While this revolution broadens opportunities for women, destabilises patriarchy and allows women greater access to educational and employment opportunities, it can also increase the risks for women. The “decentering” of the nuclear family can relieve men of their paternal obligations and divest responsibility for child rearing exclusively on to women. This process creates a stratum of economically disadvantaged single-parent families and increases the emotional and financial stress on single-parent women to juggle individual responsibility for their careers with their responsibilities to their children.¹⁵

In all, Beck sees reflexive modernity as a systemic transformation of great magnitude, a mechanism that “detraditionalises” industrial social ordering systems while, on the other hand, producing a “social surge of individualisation”. The contention, of course, is that “we do not *yet* live in a risk society, but we also no longer live *only* within the distribution conflicts of scarcity societies”.¹⁶ Rather, we are “eye witnesses to a social transformation within modernity, in the course of which people will be set free from the social forms of industrial society—class stratification, family, gender status of men and women”.¹⁷ The outcomes of this transformation remain opaque in terms of the specific ways in which radicalised modernisation and individualisation might be articulated and the various socio-political structures they might evolve. The structural consequences of radicalised modernisation, however, are all too apparent for Beck and involve the construction of new forms of social risk, the outcomes of which make social security and individual well-being more problematic than they have been hitherto.

Global Risks and Radical Modernity: The Consequences of Reflexivity

While Beck’s thesis about the emergence of societal risks resonates with those concerned with the “desocialisation” of public goods and the future of the welfare state, Beck’s risk thesis is primarily celebrated in terms of its observations about the impact of radicalised modernisation on technology and the production of global risks. For Beck, this is the fifth of his “interrelated processes” and relates to the consequences of technological progress and innovation. Technologies can be globally devastating or generate consequences in their application whose implications are unforeseen, unintended and indeed unknowable. This is the *global risk society*, a concept, notes Beck, “which describes a phase of development of modern society in which the social, political, ecological and individual risks created by the momentum of innovation increasingly elude the control and protective institutions of industrial society”.¹⁸ For Beck, this represents a truly unique period of history, one that is capable of its own technological annihilation.

15. Beck, Giddens and Lash, *op. cit.*, pp. 14–16.

16. Beck, *Risk Society: Towards a New Modernity*, *op. cit.*, p. 20.

17. *Ibid.*, p. 87.

18. Beck, *World Risk Society*, *op. cit.*, p. 72. Beck, of course, also allows for the fact that “risk society” is not just the amalgam of unintended consequences produced by technology. It also represents the outcome of political decisions to pursue the development and application of technologies for nefarious ends, as with the development of nuclear and chemical weapons, for example.

Since the middle [of the 20th century] the social institutions of industrial society have been confronted with the historically unprecedented possibility of the destruction through decision-making of life on this planet. This distinguishes our epoch not only from the early phase of the industrial revolution, but also from all other cultures and social forms, no matter how diverse and contradictory. If a fire breaks out, the fire brigade comes; if a traffic accident occurs, the insurance pays. This interplay between before and after, between the future and security in the here-and-now, because precautions have been taken even for the worst imaginable case, has been revoked in the age of nuclear, chemical and genetic technology. In their brilliant perfection, nuclear power plants have suspended the principle of insurance not only in the economic but in the medical, psychological, cultural, and religious sense. *The residual risk society has become an uninsured society, with protection paradoxically diminishing as the danger grows.*¹⁹

Unnervingly, we have little control over these developments, no room for political discourse to reject their emergence or political space to turn back the clock. Rather, “the transition from the industrial to risk epoch of modernity occurs *unintentionally* ... in the course of a dynamic of modernisation”.²⁰ Ecological crises, for example, emerge from the success of industrialisation and the ubiquitous spread of the city as a primary gathering point for commerce, work, and living space. The distribution systems, reliance on automotive transportation, resource and energy demands, destruction of natural habitat and the pollution that ensues are all unintended consequences that cumulatively have an impact on the local and global ecology—perhaps to a point of threatening irreversible destruction, as with global warming. Likewise, the spread of genetic technologies and their increasing application in various mediums of medicine, food technology and animal breeding potentially produce unintended longer term inter-generational risks. Technological developments have thus increased “our capacity to act upon the world in such an intensive and extensive way that the consequences of our actions have escaped our capacity to foresee them.”²¹ The meltdown and explosion of the Chernobyl nuclear generating facility, for example, had consequences far beyond any emergency scenarios imagined by the engineers who designed and built the plant, having an impact upon not just local citizens but on entire populations across national borders and inter-generationally, with the incalculable cost of deformities and birth defects.

Unfortunately, for Beck, under reflexive modernity we see a floodgate of such risks emerging or having the potential to emerge, changing dramatically the relationship between society and risk that existed under industrial modernity. Indeed, for Beck, it is not just the observation that technology produces risks

19. Ulrich Beck, “From Industrial Society to the Risk Society: Questions of Survival, Social Structure and Ecological Enlightenment”, *Theory, Culture and Society*, Vol. 9, No. 2 (1992), p. 101. See also Ulrich Beck, *Ecological Enlightenment: Essays on the Politics of the Risk Society* (Amherst, NY: Prometheus Books, 1991); Anthony Elliott, “Beck’s Sociology of Risk: A Critical Assessment”, *Sociology*, Vol. 36, No. 2 (2002), p. 295.

20. Beck, *World Risk Society*, *op. cit.*, p. 73.

21. Shlomo Griner, “Living in a World Risk Society: A Reply to Mikkel V. Rasmussen”, *Millennium: Journal of International Studies*, Vol. 31, No. 1 (2002), p. 149.

that is important, nor is it simply the observation that the risks of reflexive modernity are of much greater magnitudes. Equally important for Beck is what this does to the social compact erected under industrial modernity and the regime of control over risk that enabled the estimation, management, control and compensation for risk exposure. With magnitudes of risk so great, with technological hazards and mishaps so extensive that they transcend both place and time by becoming international or global in scope and inter-generational in space, the prospects for the orderly control and distribution of risk across and within populations becomes both impossible and meaningless.

This is the crux of Beck's thesis and underscores the gravity of his concerns about the consequences of reflexive modernity. While the emergence of threats and risks of larger magnitudes is historically contiguous with the deepening of technology and industrial society and thus historically normal, it is the involuntary devolution of control over these risks in terms of their social management that potentially poses the greatest social harm—indeed threatens our very social order. It is on this basis that Beck can simultaneously observe the apparent paradox of deepening scientific progress on the one hand, but greater risk on the other. Each is coterminous under reflexive modernity, with advances in science and technology simultaneously increasing the technical means of control-management over certain hazards while, at the same time, these same advances presage the emergence of “mega-risks” with corresponding reductions in risk control.

Risk, Harm and Hazard

Beck's thesis and the insights it offers about society's apparent movement towards a regime of diminishing control over risk rest on his understanding of risk and its causes. He makes an important distinction between hazards—which are naturally occurring events that can produce harm—and risks, which evolve from deliberative calculations made in the use of science and technology to produce wealth. The relationship between hazards and risks correlates with specific historical epochs, each of which evolves systems of social management in an attempt to deal with the manifestations of harm, hazard and risk.

Pre-modernity: Hazard versus Risk

For Beck, hazards are endemic to the human condition. Since the dawn of time, various plights have afflicted the human condition and many, Beck acknowledges, have been rolled back if not ameliorated entirely by industrial society. Food security for great swaths of humanity, for example, has been increased; death through privations virtually eradicated in Western welfare states. None of this is at issue for Beck. Rather, his point is a simple one: *risk* and *hazard* are different phenomena. Hazard refers to those naturally occurring events that are not the product of human activities, such as earthquakes. The history of human society has been the history of attempting to overcome, or, at the very least, minimise the impact of hazards. In this respect, Beck portrays modernity as a march of progress. Industrial modernity, of course, has not eradicated natural disasters but has developed systems and responses (i.e. early warning and evacuation systems, construction

technologies and legal building codes, disaster preparedness and emergency response systems) that minimise the impact of hazards on advanced industrial societies. Naturally existing hazards, in other words, have been increasingly subjected to a regime of control, emergency management, harm reduction, and disaster relief measures.

In contrast, for Beck, risks arise from the actions and activities of individuals and society through conscious decision making. Specifically, Beck sees the generation of risk as indelibly connected with the rise of industrial society. Risks, he claims, “presume industrial, that is, techno-economic decisions and considerations of utility”.²² Risks are made, hazards occur. Industrial society in large measure is thus responsible for the manufacture or construction of risks (the problems of urbanisation, of illness through industrial pollutants, of accident or injury through travel by car, of accidental toxic chemical emissions, of electromagnetic radiation through electricity transmission, of toxicity and the side-effects of drug therapy). Accordingly, industrial society throws up a functional need for a form of social risk contract; “the problem of social accountability and responsibility irrevocably arises” and requires political accommodation where the rules of risk in terms of accountability, responsibility, and compensation can be institutionalised and managed.²³ More importantly, the imperative of wealth creation through industrialisation under capitalist exchange relations creates a form of risk socialisation where the consequences of industrial risk are managed by institutions and insurance markets and underwritten by the state. Individuals are liberated from the consequences of risk in as much as risk can now be transferred through legal instruments to state and commercial institutions. As Beck notes, “Modernity, which brings uncertainty to every niche of existence, finds its counter-principle in a *social compact against industrially produced hazards and damages*, stitched together out of public and private insurance agreements.”²⁴ The quintessential essence of industrial risk is thus the quest to control and institutionalise it.

This “social compact” or “risk contract” is central in appreciating the different institutional embodiments of risk under industrial society compared to the global risk society. For Beck, it reflected the highpoint of Enlightenment optimism and pragmatism: the application of rational knowledge systems to risk externalities thrown up by the process of industrialisation. For Beck, the very fabric of industrial society was thus inscribed by the matrix of risk management, where decisions about utility and wealth production were coterminous with risk calculation. For Beck, this also explains the growth of the risk industry and of risk science, representing a kind of professional embodiment of industrial society’s social compact and the requirements for professional risk administration and management.²⁵

An increasing number of areas and concerns in society are subjected to the regime of control and the application of risk calculation. The individual choice of profession in terms of future personal income security, choice about family size, the chosen mode of child rearing, the choice about the food we consume, all become the subject of risk calculus and are viewed as risk choices

22. *Ibid.*, p. 98.

23. *Ibid.*

24. *Ibid.*, p. 100.

25. Beck, *World Risk Society*, *op. cit.*, pp. 75–76. See also Roy Boyne, “Cosmopolis and Risk: A Conversation with Ulrich Beck”, *Theory, Culture and Society*, Vol. 18, No. 4 (2001), pp. 47–63.

and are thus subject to the barrage of “accident scenarios, statistics, social research, technical planning, and a great variety of safety measures”.²⁶

Global Risk Society

Global risk society is distinct from industrial modernity for Beck in one crucial respect: the “social compact” or risk contract is increasingly broken down. Risks are now incalculable and beyond the prospects for control, measurement, socialisation and compensation. “Nuclear power, many types of chemical and biotechnological production as well as continuing and threatening ecological destruction”, argues Beck, are breaking down the “security pact” of industrial society, and thus the “foundations of the established risk logic are being subverted or suspended”.²⁷ This is the entry into global risk society and it occurs when

the hazards which are now decided and consequently produced by society *undermine and/or cancel the established safety systems of the welfare state's existing risk calculations*. In contrast to early industrial risks, nuclear, chemical, ecological and genetic risk (a) can be limited in terms of neither time nor place, (b) are not accountable according to the established rules of causality, blame and liability, and (c) cannot be compensated for or insured against.²⁸

In the global risk society, no one any longer knows with certainty the extent of the risks we face through our collective technologies and innovations. Science now fails us, with conflicting reports, contradictory assessments and wide variance in risk calculations. Faith in the risk technocrats evaporates, the hegemony of experts dissolves and risk assessment becomes no more than a political game that advances sectional interests. The introduction of genetically modified food products in Western Europe, for example, has been mostly rejected by consumers not because of adverse findings by scientists in terms of prospective risks to human health, but because a wide spectrum of the population rejects the sanctity of the advice issued by risk experts who are seen as being influenced by big agrobusiness. Consumers now suspect the limited horizon of understanding that “experts” have about the unintended consequences of complex technologies and their risk externalities. The “social compact” of risk society thus breaks down under reflexive modernisation. Beck’s portrayal of global risk society is a rather depressing one, increasingly dangerous and beyond meaningful control. Certainty and knowledge appear to break down, and the risk society seems more and more to engulf us all in a kind of cultural mindset of increasing fears, phobias, hyper-risks, and the possibility of severe scientifically induced catastrophe.²⁹ For Beck, the consequence of global risk society is the production of “organized irresponsibility” with expert division, contradiction and the limits of scientific knowledge paralysing political responses to emerging threats and risks.³⁰

26. *Ibid.*, p. 76.

27. Beck, “From Industrial Society to the Risk Society: Questions of Survival, Social Structure and Ecological Enlightenment”, *op. cit.*, pp. 100–101.

28. Beck, *World Risk Society*, *op. cit.*, pp. 76–77. See also *ibid.*, p. 102.

29. *Ibid.*, p. 217.

30. Beck, *Risk Society: Towards a New Modernity*, *op. cit.*, p. 19.

Assessing the World Risk Society Thesis

The popularity of Beck's work is in part explained by its timing. Beck could not have foreseen that the publication of his first work on world risk society in May 1986 would coincide with a catastrophe of monumental proportions, namely the explosion of the nuclear power plant at Chernobyl, Ukraine, on 25 April. Beck's concerns about reflexive modernity, his fears about the limits of science and technology and of the ability of human beings to control the consequences of the technologies they invented were all amply demonstrated when the number four reactor at Chernobyl suffered two fatal explosions allowing deadly radiation (30–40 times the radioactivity released by the atomic bombs over Hiroshima and Nagasaki) to escape into the atmosphere. In the days following the explosion the sight of men willingly sacrificing their lives as they were deployed by helicopter to crudely dump soil and concrete on the reactor in the hope of plugging any further radiation leakages only underscored the inability of science to respond meaningfully to the crisis it had unleashed. There was no crisis management, no response plan, no containment strategy other than to close down the facility, encase it in concrete, evacuate millions of people, seal off thousands of hectares of land and create a 30 km radius no-go zone around the reactor, later extended to a 4,300 km² exclusion zone.³¹ World risk society had, it seemed, arrived with a vengeance.

Yet, despite the timely publication of Beck's work and its resonance with the Chernobyl disaster, the broader contours of his thesis remain problematic and have attracted rigorous debate. Much of this debate has focused on the way Beck conceives of risk, but also the way he explains the process of individualisation and globalisation as antithetical to the logic of industrial modernity, the state and state-based mechanisms for risk control. Indeed, much of Beck's thesis rests on his observations about globalisation and what Beck sees as its negative effects upon state autonomy and institutional capacity. These, he believes, are challenged by complex interdependence, the globalisation of markets, heightened connectivity in media and opinion formation, capital mobility, as well as the advent of supranationalism. The leading patterns of political organisation that, since the Peace of Westphalia in 1648, have governed society in terms of its spatial-political and economic configuration are, for Beck, now eroded by activities (economic and political) that occur between states and by processes that are not state bound. The outcome is the transition from a Westphalian-based system of governance to a post-Westphalian system, where the bounds of the state and its capacity effectively to regulate and control all manner of processes, risks and externalities is fatally compromised. States surrender parts of their sovereignty not willingly but surreptitiously, through cultural shifts, economic processes that bypass state regulatory regimes and political processes that ensnare states into complex regimes and transnational regulatory governance structures.³² The epicentre of society moves from a purely national setting to a worldwide community. Lorraine Eden and Stefanie Lenway capture the essence of this thesis:

31. Uranium Information Centre, Melbourne, Australia. Information available at: <<http://www.uic.com.au/nip22.h>>. See also Dirk Matten, "The Risk Society Thesis in Environmental Politics and Management: A Global Perspective", *Journal of Risk Research*, Vol. 7, No. 4 (2004), pp. 371–372.

32. *Ibid.*, p. 390.

If we visualize the world of the 1970s and 1980s as a chessboard, then the immovable blocks were the national boundaries and trade walls behind which governments, firms and the citizens found shelter. Protected by politically made walls, countries could maintain their own cultures, traditions and ways of life, as well as their own choice of governance modes.³³

For Eden and Lenway, however, globalisation and the spate of neo-liberal policies that emerged during the 1980s have removed or “at least significantly reduced the impact of these immovable blocks between economies”.³⁴ In the process, the post-Westphalian system is born. Beck’s reading of globalisation is a popular and widely held one; indeed, it has come to comprise the rationale for many of the anti-globalisation protest movements currently active all over the globe today. But what is the basis for the assumptions about the effects of globalisation on the state and the Westphalian system? If correct, we should be able to discern empirical variance and significant changes in, for example, the spread and distribution of wealth, foreign direct investment (FDI), the extent of multinational enterprise (MNE) relocation, perhaps increasing state failure as globalisation robs the state of its economic base and produces a fiscal crisis for the state. If, as Beck suggests, the state is now passing on to its citizens increasing burdens, off-loading its welfare obligations as the tax base dwindles due to forced competition to reduce taxes and increase its attractiveness to highly mobile capital, then we should be able to track these changes and observe absolute reductions in government revenues and smaller government.

An examination of disparate empirical sources, however, reveals little to support Beck’s thesis. First, there is little evidence of declining government tax receipts across a wide selection of OECD states. Nor is there evidence of declining government spending. In fact, across the OECD government spending has increased in real terms as a percentage of GDP year on year (see Table 1) since 1960—precisely when the effects of globalisation on Beck’s account began to transform the international economy. As a percentage of gross domestic product (GDP), for example, government spending increased from 32.2% in Britain in 1960 to 40.2% in 1998, in Canada from 28.6% to 42.1%, in Italy from 30.1% to 49.1% and in the United States from 26.8% to 32.8%. Tax revenues have similarly shown significant growth trends, contrary to Beck’s assertions. As a proportion of GDP, tax revenues increased in Britain from 28.5% of GDP in 1960 to 35.3% in 1998, in Canada from 23.8% to 36.8%, in Italy from 34.4% to 44.9% and even in the United States—an historically low-taxing state—increasing from 26.5% in 1960 to 28.5% in 1998. Rather than a fiscal crisis of the state or the retreat of the state in contemporary economic life, in OECD countries the state continues to be an integral part of the tapestry of modern economies.

The “hollowing out” of the welfare state thesis is also challenged by John Hobson, who notes that “reports of the death of taxation and the welfare state remain greatly exaggerated”.³⁵ Examining taxation policy in the OECD between

33. Lorraine Eden and Stefanie Lenway, “Introduction to the Symposium on Multinationals: The Janus Face of Globalization”, *Journal of International Business Studies*, Vol. 32, No. 3 (2001), p. 384.

34. *Ibid.*

35. John M. Hobson, “Disappearing Taxes or the ‘Race to the Middle’? Fiscal Policy in the OECD”, in Linda Weiss (ed.), *States in the Global Economy: Bringing Domestic Institutions back In* (Cambridge: Cambridge University Press, 2003), p. 37.

Table 1. Government Spending and Tax Revenue as a Percentage of GDP: Selected OECD States.

	Government Spending			Tax Revenue		
	1960	1980	1998	1960 ^a	1980	1997
Australia	21.2	31.4	32.9	22.4	28.4	30.3
Britain	32.2	43.0	40.2	28.5	35.1	35.3
Canada	28.6	38.8	42.1	23.8	32.0	36.8 ^c
France	24.6	46.1	54.3	N/A	41.7	46.1
Germany	32.4 ^b	47.9 ^b	46.9	31.3 ^b	38.2 ^b	37.5
Italy	30.1	42.1	49.1	34.4	30.4	44.9
Japan	17.5	32.0	36.9	18.2	25.4	28.4 ^c
Spain	N/A	32.2	41.8	14.0	23.9	35.3
Sweden	31.0	60.1	60.8	27.2	48.8	53.3
United States	26.8	31.4	32.8	26.5	26.9	28.5 ^c
Averages ^d	28.3	40.5	43.8	25.1	33.1	37.6

Notes:

^aEstimated; ^bWest Germany; ^c1996; ^dUnweighted.

Source: OECD figures as quoted in Raymond Vernon, "Big Business and National Governments: Reshaping the Compact in a Globalizing Economy", *Journal of International Business Studies*, Vol. 32, No. 3 (2001), p. 515.

1965 and 1999, for example, Hobson finds that rather than a downward trend of the tax burden there is, in fact, a clear upward trend—and not just for tax revenues but also for state expenditure (see Table 2). Indeed, as Hobson demonstrates, corporate tax rates in the OECD have actually increased at higher annual average rates than have government expenditure and aggregate tax burdens, with the average tax burdens applied specifically to capital increasing by more than 50% from 1960 to 1996–1999—the period typically identified with deepening and intensifying globalisation. As Hobson notes, "what is striking in an era of intensifying capital mobility, is the degree to which these broad fiscal indicators have *increased*, thereby suggesting a broadly positive rather than a negative relationship between globalisation and state fiscal capacity"—a finding diametrically opposite to the assertions of Beck and his characterisation of globalisation and its risk consequences for states and welfare societies.³⁶

The fiscal crisis of the state has thus not materialised, nor does it display any evidence of doing so in the near future.³⁷ While, of course, the figures produced above are not indicative of discretionary government spending on welfare entitlements per se—of which there certainly might be evidence of reduced expenditure—they suggest that if this is the case it is *not* due to the forces of globalisation nor a compromised revenue base but ideational change among domestic constituencies and the growth of new-right doctrines about the need for welfare reform. This is an entirely different set of issues, unrelated to induced

36. *Ibid.*, p. 41.

37. Beck, of course, is not alone in characterising the emergence of a fiscal crisis for modern states. Before him, James O'Connor famously postulated the decline of the welfare state and a crippling of its functions and reach. See James O'Connor, *The Fiscal Crisis of the State* (New York: St. Martin's Press, 1973).

Table 2. Tax and Expenditure Burdens, OECD, 1965–1999.

	1965– 1969	1970– 1974	1975– 1979	1980– 1984	1985– 1989	1990– 1994	1995– 1999
<i>Aggregate tax burdens</i>							
Average OECD	100	107	113	113	114	117	120
Average EU	100	106	114	118	119	122	125
<i>Average expenditure burdens</i>							
Average OECD	100	107	120	122	121	126	123
Average EU	100	106	121	125	126	129	128
<i>Average tax burdens on capital</i>							
Average OECD	100	117	143	141	148	148	152
<i>Average corporate income tax burden</i>							
Average OECD	100	105	109	116	126	117	131

Source: Adapted from John M. Hobson, "Disappearing Taxes or the 'Race to the Middle'? Fiscal Policy in the OECD", in Linda Weiss (ed.), *States in the Global Economy: Bringing Domestic Institutions back In* (Cambridge: Cambridge University Press, 2003), pp. 40, 44, 46.

fiscal austerity because of declining tax bases through capital mobility or globalisation.

As for the policy autonomy of states being "strait-jacketed" by globalising forces that *demand* conversion to neo-liberal policy agendas, fiscal conservatism and laissez-faire systems, there is little evidence of such homogenisation. Linda Weiss, for example, when examining policy autonomy and discretionary state manoeuvrability in emerging economies in Asia (Taiwan, South Korea) as well as developed states (Japan, Germany and Sweden), discovered greater latitude for state discretion than might be anticipated by mainstream globalisation theorists such as Beck. Rather than increasing institutional conformity between states or the loss of discretionary institutional capacity, divergence continues to be the order of the day. Indeed, Weiss's findings indicate that what she terms the "transformatory capacity" of the state remains robust, with states able to broker networks of domestic actors and innovate state policy to cultivate domestic industry transformation and engineer internationally competitive industry segments. Rather than globalisation being a "top-down" imposed process, as traditional globalisation theorists suggest, Weiss demonstrates the ways in which states and domestic policy innovation launch domestic actors into the international area—effectively becoming catalysts of globalisation.³⁸ By acting as "midwives", state institutions in Japan, Sweden, Germany, South Korea and Taiwan, Weiss demonstrates, but also in Australia, the United States, Britain and Singapore, have effectively launched overseas investment, regional relocation and global competitiveness. Globalisation, in others words, is a process utilised by states; it is an enabling strategy to mould policy goals and bring about nationally desirable developmental outcomes. Rather than "strait-jacketing" states, state-societal relations powerfully shape economic outcomes and harness globalisation. For Weiss, states remain powerful instrumentalities with strong institutional

38. Linda Weiss, *The Myth of the Powerless State: Governing the Economy in a Global Era* (Cambridge: Polity Press, 1998).

capacities which exhibit a high degree of institutional variation.³⁹ Globalisation, in short, is what states make of it.

These findings contrast sharply with Beck's depiction of globalisation and its direct causal link with increased risk through the alleged reduction in the size of the welfare state. Beck tends to exaggerate the impact of globalisation, particularly in terms of capital mobility and his suggestion that capital mobility generates a systemic fiscal crisis for the state. If we look at FDI patterns in terms of its origins and destination, however, we observe little variance from historical patterns. As Figure 1 demonstrates, in 1990 the triad regions of Western Europe, North America and Japan continued to account for the vast majority of FDI receipts—as they have done throughout the post-war period. In all, some 75% of the total accumulated stock of FDI and 60% of FDI flows in 1990 were concentrated in just three regions—North America, Western Europe and Japan. Globalisation has *not* changed this pattern other than to increase its volume. Capital might have become more mobile but it has not gone elsewhere and become more global or led to outright divestiture in the case of the triad economies.

Henry Wai-chung Yeung and Peter Dicken, among others, confirm the continuation of this trend for the 1990s. Rather than creating increased risk vulnerabilities because of capital mobility and its dispersal to cost-efficient havens in the far-flung corners of the earth, globalisation in fact displays a remarkable propensity to concentrate capital flows in developed economies, itself creating a problem for developing economies. Africa, for example, continues to attract less than 2% of global capital flows, while Latin America and the Caribbean are stalled at around 10–15% of global capital flows. Moreover, while about a third of FDI capital inflows find their way to developing countries as a whole, their dispersal tends to be predominately to Asia (around 20%), while in Asia itself 90% of these flows concentrate in just 10 Asian countries, with the vast majority heading for China, Singapore and Hong Kong.⁴⁰ Highly mobile capital, otherwise so often invoked as the nemesis of globalisation, in fact proves to be less mobile in terms of geographic spread than Beck suggests.

Similarly, if we look at the capitalisation of stock markets all over the world, which is indicative of the enormous growth in flows of portfolio foreign investment, we might expect to observe considerable leakage from triad stock exchanges and growth in the capitalisation of those in emerging economies consistent with mainstream globalisation theory. Yet little change is apparent, with the circulation of international portfolio investment seemingly content to stay in developed Western states and Japan (see Table 3).⁴¹ The United States, for example, still predominates with the vast bulk of the world's liquidity soaked up by the major US stock exchanges that in 2001 accounted for 48.5% of total global stock market

39. *Ibid.* See also Weiss, *States in the Global Economy*, *op. cit.*; Robert Wade, *Governing the Market: Economic Theory and the Role of the State in East Asian Industrialization* (Princeton, NJ: Princeton University Press, 2004).

40. See Henry Wai-chung Yeung and Peter Dicken, "Economic Globalisation and the Tropical World in the New Millennium: An Introduction", *Singapore Journal of Tropical Geography*, Vol. 21, No. 3 (2000), pp. 225–232.

41. Further evidence supporting the limited impact of globalisation of capital location is provided by Alan Rugman and Alain Verbeke, whose analysis of multinational enterprises and their location and investment patterns confirms the process of regionalisation rather than globalisation. See Alan Rugman and Alain Verbeke, "A Perspective on Regional and Global Strategies of Multinational Enterprises", *Journal of International Business Studies*, No. 35 (2004), pp. 3–18.

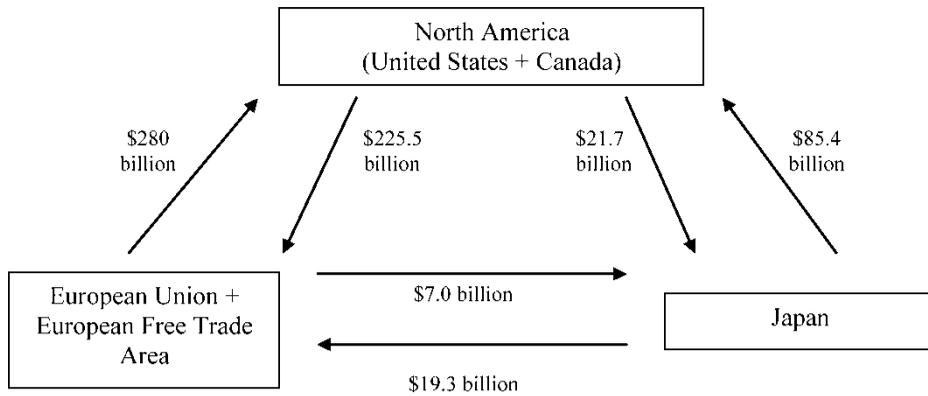


Figure 1. Triad FDI Flows 1990. All Figures in US\$ billions. Source: Paul Hirst and Grahame Thompson, *Globalization in Question: The International Economy and the Possibilities of Governance* (Cambridge: Polity Press, 1996), p. 63.

capitalisation. By contrast, Latin America, all of Asia (excluding Japan), non-developed Europe, the Middle East and Africa, accounted for a mere 10.5% of global stock market capitalisation. Capital might now be mobile but it has certainly not gone global.

The point in highlighting these examples is to demonstrate that the beneficiaries of international capital flows continue overwhelmingly to be developed Western states and Japan. To be sure, this suggests the internationalisation of these economies and a structural transition in their economic composition, but does not suggest capital flight or capital scarcity and thus necessarily increased risk and vulnerability for industrial society as Beck insists. The process of financial liberalisation and capital mobility has thus been considerably more nuanced than Beck appreciates. Rather than an imposed condition foisted upon states, globalisation, at least in the sense of capital mobility, has been the result of deliberative state actions through capital account liberalisation, that is, state-sponsored initiatives generated by domestic actors.⁴² The causality of the globalisation process is thus opposite to that suggested by Beck and mainstream globalisation theorists. This might explain why many states have actually benefited from capital account liberalisation, developing highly successful financial service sectors and employment growth.⁴³ At the very least, it demonstrates ample state capacity for adaptability, with most developed states structurally adjusting their economic composition to profit from the evolving forms of international capital circulation.⁴⁴

42. The transition from managed exchange rates and capital controls indicative of the Bretton Woods era to financial liberalisation is addressed by Eric Helleiner, *States and the Reemergence of Global Finance: From Bretton Woods to the 1990s* (Ithaca, NY: Cornell University Press, 1994).

43. Jessie Poon, for example, analyses the evolution of international financial centres since the 1980s, demonstrating how new financial service centres have emerged and the relationships they have formed with each other. See Jessie Poon, "Hierarchical Tendencies of Capital Markets among International Financial Centers", *Growth and Change*, Vol. 34, No. 2 (2003), pp. 135–156.

44. To be fair, there is a vast army of social scientists other than Beck who propound a similar thesis concerning globalisation and its consequences for the state, although not in relation to the risk society. Much the same criticisms can thus be levelled at these theorists. See, for example, Philip Bobbitt, *The Shield of Achilles: War, Peace and the Course of History* (London: Penguin, 2002). See especially

Table 3. Capitalisation of World Stock Markets: 2001.

Country/region	Percentage of Global Total
United States	48.5
Developed Europe	31.3
Japan	9.7
Rest of Asia	5.3
Latin America	1.4
Rest of world	3.8

Source: Roger Lee, "The Marginalization of Everywhere: Emerging Geographies of Emerging Economies", in Jamie Peck and Henry Wai-chung Yeung (eds.), *Remaking the Global Economy: Economic Geographical Perspectives* (London: Sage, 2003), p. 73.

Finally, and perhaps most tellingly, Beck's much feared rise of reflexive modernity through the process of radicalised globalisation does not appear to have affected the durability of the state that, for all its weakness and supposed declining utility, appears to be enjoying something of a renaissance. At the very time when globalisation was accelerating, judged by increased flows of FDI and international trade, and at the same time as the state, according to Beck's account, was experiencing diminishing juridical authority through growing permeability and loss of political control, the number of states grew significantly—from 127 in 1970 to 191 in 2004. This, to say the least, is an oddity and suggests that rather than experiencing a transition to a post-Westphalian order, as postulated by Beck, we are in fact experiencing a deepening of the Westphalian system—evidence of the continuing utility of the state as a medium for economic and security protection—but it is losing in other domains. As Louise Pauly notes:

If sovereignty is defined as policy autonomy, then increased international capital mobility seems necessarily to imply a loss of sovereignty. This old chestnut ignores, however, both an extensive literature on the evolution of the legal concept of sovereignty and a generation of research on the political trade-offs entailed by international economic interdependence. Furthermore, it downplays the stark historical lesson of 1914: Under conditions of crisis, the locus of ultimate political authority in the modern age—the state—is laid bare. Especially through its effects on domestic politics, capital mobility constrains states, but not in an absolute sense. If a crisis increases their willingness to bear the consequences, states can still defy markets. More broadly, the abrogation of the emergent regime of international capital mobility by the collectivity of states may be unlikely and undesirable, but it is certainly not inconceivable. As long as that remains the case, states retain their sovereignty. Nevertheless, in practical terms, it is undeniable that most states today do confront heightened pressures on their economic policies as a result of more freely flowing capital. The phenomenon itself, however, is not new. What is

Chapter 10 and his thesis of the emergence of the market-state which, much like Beck's, suggests that the state is now failing in its traditional role as protector of its citizens in terms of their economic security, national culture, and political autonomy.

new is the widespread perception that all states and societies are now similarly affected.⁴⁵

Implications for Beck's Risk Society Thesis

Beck's use of globalisation as one of the principal determinants of risk under reflexive modernity makes his characterisation of globalisation central to validating the risk society thesis. As we have seen, however, it fails many empirical tests with relatively crude postulations. There is little empirical evidence to support Beck's suggestion that the state is in systematic retreat, that its fiscal base has been eroded, or its expenditure abilities reduced. If anything, among OECD countries, the institutional reach of the state, its fiscal base and expenditure commitments have all increased commensurate with deepening globalisation. Does this, then, invalidate Beck's world risk society thesis?

The answer to this question comes in many parts—much like Beck's thesis. As one of Beck's "five interrelated processes" that contribute to and generate increased risk, the extent of globalisation in terms of its dislocating impact upon the state, its political authority and ability to provide welfare has been overstated by Beck. While new historical precedents have been established through growing levels of interdependence, especially in terms of economic linkages (trade, finance, and investment), the suggestion that the state is withering away or that we are in a post-Westphalian system is premature, at least in these domains.

These observations, however, do not necessarily discount Beck's notion that individuals over the last few decades have been exposed to increasing personal vulnerabilities. Since the mid- to late 1970s some OECD states (such as Britain, Australia and New Zealand) have witnessed a repudiation of social-democratic forms of governance such as a diminution of welfare entitlements combined with an increasing use of user-pays and fee-for-service systems in the provision of previously universally provided public goods (particularly in education, health, and transportation). Economic individualisation has thus undoubtedly exposed some groups to greater vulnerabilities and reduced the level of equitable access in relation to health and educational services. Indeed, the gulf between the rich and poor has been widening throughout the OECD. However, this widening gap is not a result of globalisation impoverishing disadvantaged strata of society but rather, as Timothy Smeeding notes, "by raising incomes at the top of the income distribution [spectrum.]"⁴⁶ As he goes on to note:

45. Louise W. Pauly, "Capital Mobility, State Autonomy, and Political Legitimacy", *Journal of International Affairs*, Vol. 48, No. 2 (1995), p. 371.

46. Timothy Smeeding, *Globalization, Inequality and the Rich Countries of the G-20: Evidence from the Luxembourg Income Study Group*, Luxembourg Income Study Working Paper No. 320 (New York: Maxwell School of Citizenship and Public Affairs, Syracuse University, 2002), p. 28, available: <www.lisproject.org/publications/liswps/320.pdf>. The stratification in income distribution commonly assumed to result from globalisation through growing income inequality is also questioned by Ramesh Mishra when comparing empirical evidence for Germany, Japan and Sweden. In Germany, for example, all income groups have experienced net gains in income levels since 1991. Wage and salary differentials remain low, with earnings from salaries rising by 10% since 1991 even as globalisation ensued. What has contributed to increasing wealth inequality, however, has been the fact that returns from capital for this same period have risen by 40%. Again, the mechanism responsible for growing inequality in Germany stems not from a net loss to any one stratum of society. All have gained, but from more rapid wealth appreciation through disproportionately higher returns on capital as opposed to

Notwithstanding [the influence of globalisation] domestic policies—labor market institutions, welfare policies, etc.—can act as a powerful countervailing force to market driven inequality. Even in a globalized world, the overall distribution of income in a country remains very much a consequence of the domestic political, institutional and economic choices made by those individual countries—both rich and middle income ones.⁴⁷

Beck gives too little attention to the autonomous ideational changes that have championed the neo-liberal agenda—incorrectly ascribing these to structural forces endemic to radical modernisation. Of course, it is entirely conceivable that, depending on the prevailing political climate and the constellation of political forces, this agenda might be reversed, partially abandoned or modified. Thus the rise of the risk society, at least as it relates to the individualisation of risk through declining welfare provision or progressive taxation systems and globalisation, might not be as predetermined as Beck suggests.

Equally, some of Beck's other "interrelated processes" also appear problematic. For example, his assertion that rising and endemic underemployment will usurp the distributive function necessary to the reproduction of industrial modernity and transpose greater risks and vulnerabilities onto a growing segment of society does not appear empirically sustainable. To be sure, there has been a pronounced increase in the rate of casual and flexible employment practices, but the wholesale offshore movement of jobs has not taken place. Job redundancy and the replacement of "old economy" industries, for example, while a feature of the latter part of the 20th century and early part of the new millennium, have also been accompanied by job creation in the so-called "new economy" sectors (such as biotechnology, information technology, financial services, education, and the hospitality and tourism industries). Consequently, the fact that global unemployment stood at only 6.2% of the global workforce in 2003 (according to the International Labour Organisation—ILO) fails to indicate the emergence of a structural employment crisis.⁴⁸ Indeed, this rate came off the back of a severe global economic slowdown (2000–2003), the war on terror and disruptions to the global hospitality, tourism and aviation industries, and global panic associated with the outbreak of SARS in Asia. This rate, in other words, is cyclical not systemic and, according to the ILO, likely to trend downwards as global economic activity picks up over the next couple of years.⁴⁹

What, then, might account for these premature assertions by Beck? The answer perhaps lies in appreciating the historical backdrop to his central thesis. Beck formulated many of his observations amid a period of tumultuous change in Germany. First, the rise of the Greens led to rapidly changing political affiliations in the 1980s, while the events surrounding the fall of the Berlin Wall and the problems of economic restructuring as a result of German reunification and

salary increases. See Ramesh Mishra, *Globalization and the Welfare State* (Cheltenham: Edward Elgar, 1999), p. 82.

47. *Ibid.*

48. International Labour Organization, "Global Unemployment Remains at Record Levels in 2003 but Annual ILO Jobs Report Sees Signs of Recovery", Press Release (22 January 2004), available: <<http://www.ilo.org/public/english/bureau/inf/pr/2004/1.htm>>.

49. See, for example, the global employment outlook from the International Labour Office, *Global Employment Trends* (Geneva: International Labour Organisation, 2004).

post-reunification economic adaptation were tumultuous. The latter, in particular, have posed continuing challenges for Germany, especially in terms of labour market integration, economic equalisation and the modernisation of East German industry and infrastructure. Beck has undoubtedly been influenced by these events and the processes of accommodation and dislocation that naturally accompany them. At worst, Beck might thus be accused of a kind of “presentism”—a preoccupation with proximate current events and an assumption of both their ubiquity and universal validity as indices of a new risk civilisation.⁵⁰ Robert Dingwall, for example, goes so far as to describe *Risk Society* as “a profoundly German book”. As he notes, “most of the citations are to other German authors, the acknowledgements are to German colleagues and the book’s drafting ‘in the open hill above Starnberger See’ (p. 15) is lovingly recorded”.⁵¹ This is not, Dingwall insists, a xenophobic criticism but an observation of the milieu in which Beck’s thoughts were influenced and the context in which his thesis has evolved—perhaps making Beck’s concerns more local and parochial than he would care to admit. The point is a broader one, however. Anthony Elliott, for example, asks whether Beck’s observations overstate the phenomena and relevance of risk.⁵² How, for example, should we compare risks in different historical periods? Are we really living in a unique historical epoch in which the calculus of risk is so extreme that it distinguishes itself from all previous epochs? As Brian Turner notes:

[A] serious criticism of Beck’s arguments would be to suggest that risk has not changed so profoundly and significantly over the last three centuries. For example, were the epidemics of syphilis and bubonic plague in earlier periods any different from the modern environment illnesses to which Beck draws our attention? That is, do Beck’s criteria of risk, such as their impersonal and unobservable nature, really stand up to historical scrutiny? The devastating plagues of earlier centuries were certainly global, democratic and general. Peasants and aristocrats died equally horrible deaths. In addition, with the spread of capitalist colonialism, it is clearly the case that in previous centuries many aboriginal peoples such as those of North America and Australia were engulfed by environmental, medical and political catastrophes which wiped out entire populations. If we take a broader view of the notion of risk as entailing at least a strong cultural element whereby risk is seen to be a necessary part of the human condition, then we could argue that the profound uncertainties about life, which occasionally overwhelmed earlier civilizations, were not unlike the anxieties of our own fin-de-siècle civilizations.⁵³

This goes to the core of Beck’s thesis and questions its basic assumptions about the depth and extent of risk under reflexive modernity. Yet Turner fails to take his critique one step further and question whether, regardless of how extensive risk

50. The notion of presentism is advanced by Robert Cox. See Robert W. Cox, *Production, Power and World Order: Social Forces in the Making of History* (New York: Columbia University Press, 1987).

51. The Starnberger See is a large lake south of Munich. See Robert Dingwall, “Risk Society: The Cult Theory of the Millennium?”, *Social Policy and Administration*, Vol. 33, No. 4 (1999), p. 475.

52. Anthony Elliott, “Beck’s Sociology of Risk: A Critical Assessment”, *Sociology*, Vol. 36, No. 2 (2002), p. 299.

53. Bryn S. Turner as quoted in *ibid.*, pp. 299–300.

is, the regime of control and the social compact that distributes risk under industrial modernity is, in fact, breaking down as Beck asserts. Again, it seems highly problematic to suggest that the orderly distribution of risk or the ability to compensate or insure against risk are automatically mitigated on the basis of exceptionalism—the advent of nuclear weaponry, the prospects of nuclear mishap or the looming prospect of ecological disaster possibilities, and until they manifest themselves their possibility should not detract from the strength of existing regimes of control. Many states continue to display a high level of adeptness in indemnifying their constituents against natural disasters (floods, hurricanes, earthquakes, famine, humanitarian disaster). Indeed, the control regimes surrounding emergency management and response have probably never been so well formulated as they are today. The tsunami tragedy of 26 December 2004 in the Indian Ocean, for example, while representing one of the most devastating natural disasters of the last few centuries, inflicting cataclysmic destruction on multiple populations in several countries, was also one of the most well managed in terms of emergency response, humanitarian assistance and reconstructive aid efforts. Within hours of the disaster, emergency response teams were activated in Thailand, Sri Lanka and Indonesia, and within days international emergency and humanitarian assistance was deployed on a global scale, with these efforts redoubled as the calamity of the devastation became apparent. Perhaps only in terms of the immediate humanitarian emergency response in Western Europe at the end of the Second World War has the world witnessed such a massive mobilisation of resources, inter-agency effort and coordination, and global political coordination and response. Rather than a crisis of risk control and management, current crisis and emergency response systems represent an historical highpoint, having achieved greater levels of response effectiveness, early warning preparedness and crisis management than at any time before in history.⁵⁴

But for Beck, of course, this is not important, since all this would be swept away by the magnitude of looming, exceptional risks. But how accurate is this assumption? The Cold War has ended, the risk of nuclear confrontation has diminished (although proliferation may raise it), and so has the prospect of nuclear weapons accidents. Nuclear arsenals continue to be reduced and technical safety systems increased. Whilst there remains the prospect of weapons of mass destruction “falling into the wrong hands” and the development and deployment of so-called “dirty-bombs” based on the use of low-grade uranium, such a prospect scarcely matches the level of terror threatened during the Cold War. The consequences of risk exposure in these instances have traditionally been socialised, so why does Beck assume that such would not be the case again? The social compact would be stressed and challenged but not necessarily irreversibly broken. Likewise, even with recent events such as the BSE crisis in the United

54. We could make similar claims of crisis and emergency response measures to recent global health pandemics such as AIDS (Acquired Immune Deficiency Syndrome) or SARS (Severe Acute Respiratory Syndrome). Both have invoked a global inter-governmental and inter-agency effort to a considerable degree, directing resource allocation and the development of effective global monitoring, reporting and response systems. While the question of resource adequacy in the case of AIDS and its correlation to poverty and development levels is far from satisfactory in Africa and developing Asia, the point is that the ability to mount global response efforts, many with outstanding achievements, have never been more realisable than they are today.

Kingdom, Europe and Canada, the outbreak of AIDS and SARS, the terrorist attacks in the United States, the ecological catastrophe of the cod crisis in Eastern Canada, the fish stock crisis in Europe, or any number of other events, the social compact has remained intact and subject to collective accommodation and response efforts. Imperfect though these may be, they have not yet led to systemic failure in the sense of realising the penultimate consequences of reflexive modernity. Nearly all have been addressed, most rectified or at the very least processes put in place to ameliorate their worst consequences and systemic causes.

Beck prefers to discount the success of these risk management efforts and tends to adopt, instead, a fatalistic view of the human condition, pointing to our inability to correct errors, an ineptitude when it comes to moderating risk-producing behaviour, and a collective inertia in the face of looming risk(s). Yet these assumptions seem to be less founded on empirical realities and more on a philosophy of fatalism, leading Beck to proffer a relatively simplistic prognosis that "institutions founder on their own success".⁵⁵ But do they? Again, the empirical evidence for this is problematic. Beck, for example, invokes the case of the German crystal lead factory in Upper Palatinate in the Federal Republic of Germany:

Flecks of lead and arsenic the size of a penny had fallen on the town, and fluoride vapours had turned leaves brown, etched windows and caused bricks to crumble away. Residents were suffering from skins rashes, nausea and headaches. There was no question where all of that originated. The white dust was pouring visibly from the smokestacks of the factory.⁵⁶

In terms of responsibility for the environmental risks produced by the factory, Beck is quite adamant that this was "a clear case". But, as he explains in disgust,

on the tenth day of the trial the presiding judge offered to drop charges in return for a fine DM10,000, a result which is typical of environmental crimes in the Federal Republic (1985: 12,000 investigations, twenty-seven convictions with prison terms, twenty-four of those suspended, the rest dropped).⁵⁷

Science and the "organized irresponsibility" of the "security bureaucracies", Beck insists, increasingly dominate under reflexive modernity and, in the process, the apportionment of blame becomes obfuscated by an inept technocracy. In the case of the German crystal lead factory, Beck notes, "the commission of the crime could not and was not denied by anyone. A mitigating factor came into play for the culprits: there were three other glass factories in the vicinity which emitted the same pollutants". As a result, "the greater the number of smokestacks and discharge pipes through which pollutants and toxins are omitted, the lower the 'residual probability' that a culprit can be made responsible".⁵⁸ The limits of science and of the bureaucracy are revealed by their inability directly to connect

55. As quoted in Beck, Giddens and Lash, *op. cit.*, p. 1.

56. Beck, "From Industrial Society to the Risk Society: Questions of Survival, Social Structure and Ecological Enlightenment", *op. cit.*, p. 102.

57. *Ibid.*

58. *Ibid.*, p. 103.

the polluter with specific pollutants. The more pollution generated and the more polluters, for Beck, essentially dilutes the social compact and the ability to apportion blame, responsibility and thus secure compensation.

The example provided by Beck is meant to demonstrate the increasing failure of the social compact, of science and the technocracy to apportion blame and compensate for risk production. Eloquent though this example is, again its reification onto a universal plane seems premature. To what extent, for example, is the paucity of environmental law in the Federal Republic true, say, of the United States, Australia, Canada, or New Zealand? And in what sense should the example of the crystal lead factory be taken as a systemic condition of reflexive modernity? Surely it reflects little more than the paucity of outdated law in the German Federal Republic—a process that can be easily rectified by drafting better laws and by engaging political processes—much as Green movements throughout the world have done with increasing success.⁵⁹ Beck, it seems, denies politics and the ability of political actors to change laws and respond to environmental damage. More generally, Beck fails to recognise that risk distribution and compensation have always been contentious affairs fraught with different legal opinions and with those responsible for the generation of risk keen to avoid the costs associated with it. Why, then, is this epoch distinctive from previous epochs where the same motifs have applied?

Unfortunately, for Beck, the point where his argument could be sustained empirically, and probably has greatest insight and utility, is precisely the point where he places too little investigative and analytical weight. The epochal distinctiveness of the current global economic order, for example, especially in terms of the risk posed by the constellation of opposing financial architectures, between semi-liberalised and non-liberalised state financial systems, the extraordinary growth in arbitrage instruments of various kinds, and the structural imbalances this creates in a global financial system now fiercely interdependent makes for an increasingly vexed global financial order posing greater risk to global wealth and the normal functioning of markets. While Beck refers to this phenomenon simply in terms of the structural changes foisted on FDI patterns by globalisation, he is left with little scope for exploring the fundamental changes in the global financial architecture and the increasingly precarious risk environment this generates and which, potentially, poses greater risk to global financial stability and the possibility of systemic global crisis. Beck, however, pays little heed to the basic difference between the movement of productive capital (FDI), short-term capital and the rise of the speculative or symbol economy. It is the latter, and the extraordinary growth in the volume of these transactions and the various arbitrage instruments engineered to secure them, where the emergence of the risk society thesis might be profitably applied but where Beck fails to do so.

Conclusion: Beck's Contribution to Risk Discourse

It is obvious that a purely empirical reading of Beck reveals serious shortcomings with the risk society thesis. To be fair to Beck, however, is this the correct way to read him? As Dirk Matten notes, "Beck's ideas are more of a provocative and

59. Attempts at the legal and regulatory control of risk are addressed by George L. Priest, "The New Legal Structure of Risk Control", *Dædalus*, Vol. 119, No. 4 (1990), pp. 207–227.

conceptual nature rather than a minute empirical proof of certain social changes".⁶⁰ They are perhaps better understood as a cultural and social commentary about the condition of late modernity and of its contradictions that both embody progress but also harm and risk. Like many of his contemporaries, Beck is alarmed by the fact of progress in almost every area of human endeavour amid a rampant disregard for ecological preservation, the use of technologies for nefarious purposes and the accelerated generation of unintended outcomes. Beck's fixation with risk can thus perhaps be appreciated in an era in which all risk, no matter how finite, becomes ethically unacceptable and a bellwether of the social psyche. When Aaron Wildavsky asks "why are the healthiest, longest lived nations on earth so panicked about their health?" the answer must surely lie not in the empirical condition of longevity, the betterment of the human condition and the fact of medical advance.⁶¹ It is, perhaps, not so much a question about whether in fact there are more risks but how we perceive them and the adequacy of their management, compensation and mitigation. Read as a moment in the success of modernity, and at a time when risk tolerance has been reduced, risk aversion increased, and risk perception sensitised, Beck has undoubtedly captured the collective essence of a global society ill at ease. His greatest contribution perhaps lies in exposing these apparent paradoxes, capturing the essence of our collective angst about the limits of science, progress and rationality, about the sublimation of nature and the natural environment into ever more remote corners of our everyday experience, while at the same time we are still confronted by the limitation of knowledge, the fallibility of our existence, and the finitude of our mortality. Despite the success of science, technical knowledge, and the great leaps forward in our collective well-being, in the end each of us still faces the perils of everyday existence, the probabilities of meeting our fate through incurable illness, the uncertainty of our personal futures, or the possibility of accident and misfortune through exposure to the very products derived through scientific progress. Given the impossibility of transforming uncertainty, risk and harm into instruments amenable to total control and mitigation, Beck's work will surely resonate for generations to come.

60. Matten, *op. cit.*, p. 372.

61. Aaron Wildavsky, as quoted in John Adams, *Risk* (London: Routledge, 2002), p. 183.