

The COP21 Negotiations: One Step Forward, Two Steps Back

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Abstract

COP21, although a gesture of good will and an acknowledgment by governments of the global scale of the environmental problem, presented nary a solution or even a workable plan to address the issue. In fact, the Paris Agreement constituted a significant step back from the perhaps overly ambitious – or simply too costly – goals of the Kyoto Protocol. A superior strategic plan for collective action led by Europe and China would be to set more concrete goals that are closer to home. For example, developing countries could be persuaded more easily to reduce their pollution levels rather than switch away from cheap energy sources. Improving industrial infrastructure without renouncing fossil fuel energy was how developed nations achieved their own economic power. Once developing countries are able to feed and provide jobs to growing populations, they can focus more decisively on environmental protection, clean water, and the elimination of toxic waste. Because these issues have an immediate impact on the electorate – few things get as much voter attention as reports of babies sickened by polluted water – they can gather more political support to introduce costly remedial or preventative measures. Environmentalist strategies in the abstract, focused on justified but distant issues, do not advance practical results, since sinking exotic vacation islands like the Maldives are not what will convince elected officials worldwide to expend real political capital.

Author's Note

Long before law school, where I participated in Environmental Moot Court, I found myself involved in environmental policy matters. I also did pro bono work for the New York League of Conservation Voters as part of my second-year summer internship. I studied the environmental aspects of nanotechnology during my joint degree studies for M.Sc. in Nanotechnology for Medicine and Health Care at the University of Oxford. As part of my Study Abroad semester, I took a class on

International Economic Negotiations at Sciences Po with Professor Jérôme Da Ros as part of my Global Alliance Certificate in Global Business Law and Governance. During that time in Paris, I conducted a study into success and failures of the Paris Accord in April 2017, ahead of President Trump's rescission of U.S. accession to its standards and processes. Already prior to that presidential action, it had been clear that sustainable development within effective measures on climate change could not and would not depend on sovereign choices of any single nation or bloc, but that a global momentum had been set in motion by the Kyoto Protocol process that, regardless of its undeniable vulnerability to populist opportunism, would enforce its inherent logic within a decade or less. At the same time, I showed that this scientific logic was ultimately independent of national political recognition and that a withdrawal from it was about as significant as a "rejection" of the laws of physics. This is true regardless of any outcome of the enduring debate as to whether man-made or natural or cosmic factors are the prevailing root causes of climate change, since the contributory factor of human action has a sufficiently demonstrable effect to warrant measures well beyond those set forth in the Paris Accord. This research relates back, in part, to my 2015 article in Volume 14 of this journal on *Legal Aspects of Technology Assessment in Sustainable Urban Development*. Political considerations aside, sustainable environmental policy cannot ignore the systems aspect of human activity embedded in nature, just as subsequent administrations will not escape the need to revert to logic and science that were temporarily postponed for reasons without relevance to future generations.

Keywords: Climate change, global warming, Paris Agreement, United Nations Framework Convention on Climate Change, Kyoto Protocol, COP21.

1. Introduction

If the outcome of COP21¹ negotiations can be characterized as a success, they were successful in one respect only: getting 195 countries to agree to agree.

The Conference of the Parties (COP) acts as the supreme decision-making body of the 1992 United Nations Framework Convention on Climate Change (UNFCCC).² All State Parties to the Convention are represented at the COP to review the Convention's implementation and any other legal instruments that the Conference of the Parties may adopt. The COP makes the necessary decisions in order to promote effective implementation of the Convention on institutional and administrative levels (United Nations Framework Convention on Climate Change, n.d.).

In fact, after 21 annual sessions of the Conference of the Parties (COP21) to the UNFCCC, the Paris Agreement³ was not an advancement building on the achievements of previous conferences but rather a clear step back from the 1997 Kyoto Protocol.⁴

2. The Goals of the Paris Agreement

The Paris Agreement traded financial enforcement mechanisms for reputational mechanisms of “naming and shaming.” By replacing mandatory carbon emission targets for individual States with unspecified “aims,” the Paris Agreement moved away from specific goals of reducing greenhouse gases towards abstract aspirations of reducing planetary temperature (United Nations Framework Convention on Climate Change, n.d.). While there is a correlation between planetary warming and greenhouse gas emissions, there is not sufficient understanding to translate human action into quantifiable temperature reduction (Meinshausen et al., 2009, April 30; Washington, et al., 2009, April; Khilyuk, 2003; Zhao, 2011). Our understanding of the climate is demonstrated by the reliability of weather forecasts – meteorologists cannot even accurately predict weather conditions for the next few days.⁵ Despite

¹ For an overview of COP21, *see* Gouvernement de France (n.d.); COP21 Paris (n.d.).

² The United Nations Framework Convention on Climate Change (UNFCCC) is an international environmental treaty adopted on May 9, 1992, opened for signature at the Earth Summit in Rio de Janeiro June 3–14, 1992, entered into force March 21, 1994. The purpose of UNFCCC is to “stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system” (Art. 2 UNFCCC) (United Nations Framework Convention on Climate Change, 1992).

³ For an overview of the Paris Agreement, *see* United Nations (2015, December 15).

⁴ The Kyoto Protocol is a treaty extending UNFCCC, adopted in Kyoto, Japan, on December 11, 1997, entered into force on February 16, 2005, and structured by successive “rounds of commitments” aiming to advance standards for the reduction of greenhouse gas emissions. (United Nations Framework Convention on Climate Change, n.d.).

⁵ If climate science as reflected in long term weather forecasts were able to provide good predictions, the entire market of agricultural commodities futures would collapse. Instead, speculation on the size of the Florida orange harvest or cocoa beans is alive and well – the derivatives markets now even trade in weather futures. *See* Clements (2012, April 19).

computational advances, complex system modeling (Caytas, 2015), and Big Data analysis, we still do not understand how weather works – and even less do we know how to manipulate it. Yet, the Paris Agreement would require State parties to achieve weather outcomes on a planetary level (*See* World Resources Institute (2015)). But to obtain results on a planetary scale, even if we knew how to achieve these outcomes, all States would need to contribute – otherwise we face the free rider problem.

3. The Kyoto Protocol

While the Kyoto protocol may have been an important precursor to a conceptual shift, and while it is important to recognize the incremental nature of adopting fundamental ecological paradigm changes into international *ius cogens*, there are subject matters of considerable temporal urgency that are black or white and do not lend themselves to traditional political compromise, horse-trading, or gradualism. If (and that remains a big ‘if’ in many major centers of economic and political decision-making) CO2 emissions create vital risk to the survival of the human species among many others, a theoretical economic solution such as emissions trading, which only increases cost⁶ and thus creates a disincentive to polluting, has no place in global risk management policy. Nobody would argue, for example, that financial disincentives - say, tax credits for every year of good behavior - would be a viable tool for the interdiction of homicide. If one accepts the premise of grievous urgency and of causality to global warming of CO2 emissions induced by anthropogenic activity,⁷ then the Kyoto Protocol was a resounding failure. Of 193 UN Member States, all of 37 accepted binding targets: the EU’s 28 Member States plus such environmental heavyweights as Belarus, Iceland, Kazakhstan, Liechtenstein, Norway, Switzerland and Ukraine. In short, with the sole outlier of Kazakhstan, binding (still enacted with a highly theoretical mechanism of enforcement and sanctions unlikely to exceed the equivalent of a slap on the wrist or some blame-and-shame) CO2 targets were from the outset limited to a purely European exercise that did not include heavily industrialized Russia. This is not altogether surprising since Europe, one of the most densely populated and industrially developed regions on Earth, has enacted the most comprehensive and concrete legal standards on environmental liability (Fach Gomez, 2017, September 22; Wagner, 2009, Hinteregger, 2008) and is a leader in renewable

⁶ Studies indicate that to achieve a 7 percent reduction in CO2 emissions provided under the Kyoto Protocol, the U.S. would need to impose a carbon tax of \$50-150 per ton. Coal prices would rise by over 100 percent, while oil and natural gas prices would rise by 35-40 percent while the price of gasoline would climb 12-14 percent. *See* Goulder et al., 2002. On the other hand, Kyoto includes carbon sequestration as a means of reducing national emissions but does not explicitly provide credit for afforestation.

⁷ While substantial evidence shows that methane emissions from (largely bovine) livestock may rival or exceed the role of industrial or combustion engine emissions, industrial farming, too, is human-controlled and neither sacrosanct nor without even medium-term alternatives. *See* Lemonick, 2017, September 29; FAO, 2006. But even “cowless milk production” has developed as an available technology. *See* Levitt, 2018, August 26. On the other hand, cosmic and other non-human influences have accounted for all major warming periods in the existence of the planet and have well preceded the emergence of *homo sapiens*. *See* What Does Past Climate Change Tell Us About Global Warming? 2015, July.

energies. If a clock is ticking towards a planetary time bomb, then the Kyoto Protocol can only be branded as a total failure, reminiscent of countering an identified risk of asteroid collision with a democratic process of raising awareness. Unfortunately, mountains roared and gave birth to a mouse called emissions trading. Experience with voluntary and nonbinding guidelines accepted by the other 156 UN Member States – to the extent that they bothered to accede to the Kyoto exercise – permits only one conclusion: they fully intend to limit their compliance to an endorsement of the purpose and principle of greenhouse gas reduction without agreeing to any effective sanctions regime (merely an increased cost of emissions clearly does not amount to that). This is, then, indicative of enormous residual skepticism of one or both underlying premises: (1) that human-controlled CO₂ emissions cause climate change; and (2) the likelihood of its reversal or at least arrest by severe reduction of emissions. Absent such skepticism, even flawed compliance by major parties or imperfect enforcement would not justify the quasi-abstention of 156 parties. Ultimately, the PR effort to advance environmental protection standards failed in Kyoto: a feeble sense of urgency was balanced by overwhelming clarity of quantifiable opportunity cost in jobs, tax revenue, and GDP prosperity – in short, due to the absence of an effective environmental lobby. So, the fatal flaw of the Kyoto mechanism is the leeway it accords to voluntarism. Consequently, it provides a clear example of the free rider problem. New Zealand, which had exceeded its carbon emission reduction goals, announced that it would not be participating in the second round of the Kyoto goals because other countries were not pulling their weight. The vast majority of parties seized the same opportunity: to date, only 79 out of the required 144 nations have ratified the Doha Amendment relating to the second commitment period of the Kyoto Protocol (United Nations Framework Convention on Climate Change, 2017, April 12). The Doha Amendment establishes new commitments for parties, provides a revised list of greenhouse gases, and amends several articles of the Kyoto Protocol. (United Nations Treaty Collection, 2012, December 8). The United States refused to ratify even the Kyoto Protocol, claiming it was unfair that only developed countries were to bear the economic and industrial burdens of emission reduction. Even Canada, when faced with a hefty bill for failing to meet its targets, decided to withdraw altogether (Government of Canada, 2011, December 15). Scientific consensus is that the effects of the Kyoto Protocol on greenhouse gas emissions have been very small -- almost irrelevant (Clark, 2012, November 26, with statistical evidence). Its only significance lies in the fact that Kyoto was the first step towards stabilizing the climate system (Wigley, 2006, Spring) in a series of international efforts stretching over decades. While its concept of national targets has remained controversial, the protocol adopts several flexibility mechanisms (international emissions permit trading, Joint Implementation, and the Clean Development Mechanism – the latter two are characterized as “project-based mechanisms”). While these mechanisms are widely supported, many would prefer alternatives such as an international carbon tax (Goulder et al., 2002). There is no room to revisit the conceptual debate over a more or less inclusive treaty (regarding LDC commitments) and a more or less gradual approach. Although its chief merits include laying groundwork for future climate change policies with the development of long-term legal and fiscal institutions, potential monitoring problems involving various greenhouse gases lead to questions of whether Kyoto can ever be

effectively implemented. In arguably too many ways, Kyoto has remained unfinished business.

4. Political Realities of COP21

As a consensus-based measure, the Paris Agreement achieved as much as many UN resolutions do: a well-meaning aspirational message most countries will ratify because there are simply no demonstrable downsides to acceding. States can applaud and “support” noble climate change goals, yet not be held effectively responsible for failing to even attempt to achieve them. After all, States owe their first duty to an electorate which typically cares more about unemployment, inflation, and economic development than about global issues that will only be faced by future generations. Worrying about the inundation of small islands (*e.g.*, Puka, 2013, August 22) is a luxury a miner facing unemployment cannot afford. States may alleviate pangs of conscience by sending financial aid and accepting refugees from small countries affected by global warming while professing their active support of the common human interest. This price tag will be incommensurably lower than if they were to reform their nation’s heavy industry and energy consumption. Furthermore, environmental policy is generally exposed to a severe and under-analyzed generational conflict: it is not easy to forgo tangible present benefits to avoid distant and abstract detriment that will not meaningfully affect any of the current significant voting blocs. It is primarily senior citizens who most faithfully exercise their franchise, and it is safe to say that none of them will be alive when the bill for environmentally irresponsible CO₂ emissions will come due. In fact, it is debatable if serious effects will be suffered by many voters alive today. An overwhelming majority would likely prioritize present-day economic and employment benefits—even if they could be persuaded of grievously adverse long-term consequences. Environmental choices somewhat resemble the dilemma of investing in retirement accounts. Therefore, it is incomparably more acceptable politically (not to mention cheaper) to authorize (or especially privatize) spending for abstract research on projects like colonizing Mars and the search for distant exoplanets, an option virtually no one alive today likely considers viable in their lifetime and which presupposes that Planet Blue will become uninhabitable for whatever reason. Climate change, overpopulation, military contamination, collision with celestial objects, or the proliferation of artificial intelligence are just some theories. In short, global consciousness of global problems and the realization of a need for global solutions exists no more than support for global government. It is fair to conclude that, in an age where not even the ideology of nation states can be overcome, the time for this type of solution has not yet arrived.

5. Environmental Issues Remain Largely Unaddressed

Kyoto and previous UNFCCC goals focus on carbon emissions (United Nations Treaty Collection, 1992, May 9) and thus on fossil fuels, creating perverse incentives – another game-theoretic issue. First, it disfavors renewable biofuels, which, after all, generate carbon emissions (Gray, 2010, April 22). Second, states without favorable geographic locations for natural energy sources such as solar, geothermal, and hydrothermal will be incentivized to switch to nuclear energy (Moniz, 2011, October 17). While it is true that nuclear power plants do not emit significant amounts of carbon, their risks (while controversial) can result in catastrophic consequences, both

in the short term and long-term (Nuclear Energy Institute, 2015, March; Bell, 2014, November 1). For good reason, powerful industrialized nations have initiated exit strategies from nuclear energy, not least because it externalizes the costs and risks of nuclear fuel deposits along with the responsibility of cleanup if it fails to become economically viable. Third, countries hard-pressed to meet targets will either engage in buying carbon tax credits or equivalent relief measures or shut down their own fossil fuel-based power plants outright and buy electric energy from their neighbors – who may produce said energy by burning more coal (Health and Environment Alliance, 2016, July 5). Trading in carbon tax credits and outsourcing energy production counteracts the noble carbon reduction measures that were introduced on a supranational scale. COP 21 may well have “succeeded” because it essentially failed to adequately address CO2 emissions in the first place. Environmental effects of this inadequacy have not been analyzed in any satisfactory depth. As critics of the exercise argue, that may be because persuasive evidence of operative negative causality (that is, of the proposition that drastic reduction of emissions would actually halt or reverse global warming) is difficult to come by and would necessarily have to rely on hypotheticals and conjectures. However, the effects of COP 21 pledges have been measured by studies and fallen far short of the required dimension, as current pledges amount to only a third of what is needed. What the world promised in Paris is not nearly sufficient, and even total success consistent with COP 21’s expectations would expose the world to a rise in temperatures of about 3 degrees (Roberts, 2017, November 6, with references).

6. COP 21 – A Symbolic Gesture

The circumstances mentioned above help us understand the toothless outcome of the Paris Agreement. With Kyoto’s experiences in hindsight, its goal was to set standards low so that consensus could actually be reached. It was more about public relations than about arriving at substantively effective solutions. Signing the Paris Agreement was as symbolic a gesture as President Clinton’s signing of the Kyoto Protocol, knowing full well that there was no chance the Protocol would change anything in United States energy policy.⁸ The Trump administration was unlikely to ratify the Paris Agreement for equally political reasons: its record to date is characterized by one coherent priority unprecedented in American history, of rescinding and unwinding almost all actions of its predecessor (McGrane, 2017, December 16). Whether it be about the Paris Accord, offshore drilling (Friedman, 2018, January 4), multilateral trade (Bremmer, 2017, November 17), affordable health care (Pear et al., 2017, October 11), gender diversity in the armed forces, immigration, secondary education, tax policy, securities regulation, diplomacy or foreign affairs and other areas – the common denominator of almost all initiatives is to eradicate the work of the prior administration(s).⁹ Indeed, the current

⁸ This is especially apparent considering the fact that, just one year earlier, the U.S. Senate had passed a resolution not to allow international agreements to interfere with vital U.S. industries such as oil and gas (the Byrd-Hagel Resolution, S. RES. 98, Report No. 105-54, adopted July 25, 1997).

⁹ Departure from the standard practice of most democratic changes of government around the world, which is to build upon the legacy body of legislation and regulation for

government went even further and announced complete U.S. withdrawal from COP 21 (Shear, 2017, June 1). This action by President Trump appears to have galvanized Sino-European commitment to the Paris goals (Smith-Spark, 2017, June 1; Beesley et al., 2017, June 1; Chemnick, 2017, May 31) just as his withdrawal from TPP has far from ended the multilateral trade convention (Capri, 2017, November 15). It has also created some likelihood that COP 21 goals will be re-emphasized by others, and has mobilized U.S. partisan opposition (Sengupta et al., 2017, June 1; Stokols, 2017, June 2). California has since signed an agreement with China to cooperate on the reduction of emissions (Brown, 2017, June 6).

The Paris Agreement does not bind its parties to do anything other than report on their progress towards reduction of global warming and does not introduce an enforcement mechanism. Despite this, in the two years since signing only 143 of 195 countries have ratified it (United Nations Framework Convention on Climate Change, n.d.). Political stakes therefore outweigh even aspirational declarations about climate change. Local industries and the energy base are often the foundations or critical elements of nations' economic power. Their protection takes precedence over rising sea levels and fears of a second ice age – both of which may only affect distant generations, if at all.

Yet, even as COP 21 has remained largely symbolic, it represented a tangible step towards an important global conceptual shift that even Exxon has praised as “monumental” (Parkin et al., 2017, January 25).¹⁰ Charitably put, it was a step in the right direction, even if one must acknowledge that it was a wholly inadequate baby step. It also represented a shift away from the original ambitions of the Kyoto Protocol for a considerable number of substantial players committing to binding emission targets, which has simply not happened outside the European vanguard. Accordingly, the Paris Agreement sought (and, to its limited credit, found) consensus with vaguer and non-binding but nonetheless potentially awareness-forming goal-setting that follows the familiar pattern established over the years of ‘hardening’ international economic soft law (Seidl-Hohenveldern, 1979). A salient fact of the matter is that, as the global financial crisis of 2008 has shown, traditional methods of slow and incremental awareness-building can no longer address the rapidity, magnitude, and demand for expedited responses to contemporary global crises. While it can be viewed as ‘too little, too late’ in the context of a global response to climate change, the real merit of COP 21 is ultimately its symbolic importance of emergency rulemaking and executive policy. The familiar, decades-long process of

continuity's sake while making adjustments that seldom ever amount to a 180° reversal sets a precedent especially dangerous and potentially harmful in environmental and ecological matters because it creates a seesaw effect: as the pendulum of political power swings back and forth, it is fair to assume that most of the Trump legacy will equally be rescinded by future administrations, a pernicious form of *damnatio memoriae* (elimination of remembrance) that limits developments of significant importance to all mankind to the myopic blink of four-year or at most eight-year terms. Legislation at all levels becomes less durable (thus less reliable and less, well, meaningful) if it acquires term limits identical with the life span of the ad hoc majority that created it. See Ben-Shahar (2017, October 28) and Collinson (2017, September 21).

¹⁰ Secretary-General Ban Ki-Moon sounded a similar note: “The Paris Agreement is a monumental triumph for people and our planet.” (UN News Service, 2015, December 12).

scholarly and diplomatic conferences, producing hundreds if not thousands of studies in painstaking detail in order to arrive at a generation-spanning consensus, increasingly appears insufficient. It remains without a satisfactory methodology to create more expedited, yet democratically accountable and thus legitimate uniform law and enforcement (see as an example Permanent Bureau of The Hague Conference, 2010).

7. Conclusions and Alternatives

Traditional mechanisms for generating and amending international law present only disappointingly inadequate options, and hope springs instead from the acceleration of technology development. There is some evidence that renewable energy technology can produce enough energy to support current consumption (“Can the World Thrive on 100% Renewable Energy?” 2017, July 13). Again, speed of change is rooted in the dimensions of replacement cost in view of the huge installed base of non-renewable technology and its socio-political acceptance in an age of populism. The mere pretense of attacking ‘elites’ (which, for some reason, appear to include a livable, breathable environment) suffices to discredit almost any proposal submitted for democratic review (see, e.g., Caytas, 2015, April 23). A switch to renewable energies aside, climate change is already impacting the country and the world. Learning to adapt and minimizing or mitigating these effects appears an inevitable strategy dictated by time. (Evans, 2017, August 21).

Whatever the Paris Agreement’s indisputable value for building greenhouse emission awareness and setting aspirational goals may be, it fails like its predecessor with the absence of an enforceable, effective sanctions regime. Human behavior, especially if it carries substantial commercial and economic benefits in the short term, is highly unlikely to quickly and substantially change on a voluntary basis. However, fiscal instruments are neither toothless nor ineffectual, and aside from the forementioned international carbon tax (an option also unlikely to be implemented in the near term) one of the most intriguing proposals was to use the U.S. tax code and its equivalent in other G20 countries to phase out taxpayer subsidies of fossil fuels, a pledge President Obama made in 2009. Subsidies not only reduce cost of labor and equipment involved in drilling but make nearly half of current U.S. oil production viable in the first place. Thus, a different kind of tax reform than the one just enacted by Congress would be more effective in averting climate change than any variant of COP 21 could be – and vice versa: tax subsidies enable oil production that results in 13 to 20 percent of U.S. carbon emissions (McDonnell, 2017, October 2). Very similar circumstances have been created in other G20 countries as a result of effective lobbying by the fossil fuel industry.

While many are tempted by the thought of just sitting out a U.S. administration perceived as ‘toxic’ and proceeding jointly after the next inevitable pendulum swing, this could prove a fallacious global strategy -- not only because time for ecologically effective action may be running out. Considering historic climate cycles, a four-year term is comparable to a nanosecond, and cosmic influences such as sun spots and solar winds may neutralize any decarbonization achievements. While science has proved the reality and threats of climate change, and may have proved human complicity in contributing factors, it has not proved their exclusivity, much less the causality to a reversal from reducing the carbon footprint of *Homo sapiens* to the levels of a millennium ago. Although a gesture of good will and an acknowledgment

of the global scale of the environmental problem created by greenhouse gases, COP21 presented nary a solution or even a workable plan to address the issue. In fact, the Paris Agreement constituted a significant step back from the overly ambitious – or simply too costly – goals of the Kyoto Protocol. A better plan for collective action would involve more concrete goals that are closer to home. For example, developing countries could more easily be persuaded to reduce pollution levels rather than to switch away from cheap energy sources (“The East is Grey,” 2013, August 10). Developed nations achieved their own economic power by improving industrial infrastructure without renouncing fossil fuel. Once developing countries are able to feed and provide jobs to growing populations, they can focus more decisively on environmental protection, clean water, and elimination of toxic waste. Because dramatic environmental issues have an immediate impact on the electorate – few things get as much voter attention as reports of burning rivers, choking air, or babies sickened by polluted water – they can gather more political support to introduce costly remedial or preventative measures. Sinking islands will not convince worldwide elected officials to expend political capital.

Ultimately, two heavy-duty tools exist to fundamentally affect greenhouse gas emission, and both start with the letter T: taxation and technology. Much as the near-term outlook appears to look bleak, both tools, especially when used in conjunction, hold significant promise. Dramatic changes are well capable of implementation within a decade under an appropriate political and regulatory framework prioritizing innovation and environmentally conscious tax policy. The latter would unquestionably also need to favor the energy industry, albeit not fossil or nuclear energy. Schumpeter’s ‘creative destruction’ results from disruptive innovation and invigorates entrepreneurial capitalism notwithstanding its deleterious effect on entrenched interests and ‘old money’ as it creates ‘new money.’ Fossil energy had a good run for over a century. So did Kodak technology. But smarter solutions exist that can be made accessible by exercising environmental and ecological priorities through fiscal means.

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