## Framework

#### the standard is maximizing expected wellbeing

#### 1 – Extinction o/ws under any framework, even under moral uncertainty – infinite future generations

Pummer 15 — (Theron Pummer, Junior Research Fellow in Philosophy at St. Anne's College, University of Oxford, “Moral Agreement on Saving the World“, Practical Ethics University of Oxford, 5-18-2015, Available Online at http://blog.practicalethics.ox.ac.uk/2015/05/moral-agreement-on-saving-the-world/, accessed 7-2-2018, HKR-AM) \*\*we do not endorse ableist language=

There appears to be lot of disagreement in moral philosophy. Whether these many apparent disagreements are deep and irresolvable, I believe there is at least one thing it is reasonable to agree on right now, whatever general moral view we adopt: that it is very important to reduce the risk that all intelligent beings on this planet are eliminated by an enormous catastrophe, such as a nuclear war. How we might in fact try to reduce such existential risks is discussed elsewhere. My claim here is only that we – whether we’re consequentialists, deontologists, or virtue ethicists – should all agree that we should try to save the world. According to consequentialism, we should maximize the good, where this is taken to be the goodness, from an impartial perspective, of outcomes. Clearly one thing that makes an outcome good is that the people in it are doing well. There is little disagreement here. If the happiness or well-being of possible future people is just as important as that of people who already exist, and if they would have good lives, it is not hard to see how reducing existential risk is easily the most important thing in the whole world. This is for the familiar reason that there are so many people who could exist in the future – there are trillions upon trillions… upon trillions. There are so many possible future people that reducing existential risk is arguably the most important thing in the world, even if the well-being of these possible people were given only 0.001% as much weight as that of existing people. Even on a wholly person-affecting view – according to which there’s nothing (apart from effects on existing people) to be said in favor of creating happy people – the case for reducing existential risk is very strong. As noted in this seminal paper, this case is strengthened by the fact that there’s a good chance that many existing people will, with the aid of life-extension technology, live very long and very high quality lives. You might think what I have just argued applies to consequentialists only. There is a tendency to assume that, if an argument appeals to consequentialist considerations (the goodness of outcomes), it is irrelevant to non-consequentialists. But that is a huge mistake. Non-consequentialism is the view that there’s more that determines rightness than the goodness of consequences or outcomes; it is not the view that the latter don’t matter. Even John Rawls wrote, “All ethical doctrines worth our attention take consequences into account in judging rightness. One which did not would simply be irrational, crazy.” Minimally plausible versions of deontology and virtue ethics must be concerned in part with promoting the good, from an impartial point of view. They’d thus imply very strong reasons to reduce existential risk, at least when this doesn’t significantly involve doing harm to others or damaging one’s character. What’s even more surprising, perhaps, is that even if our own good (or that of those near and dear to us) has much greater weight than goodness from the impartial “point of view of the universe,” indeed even if the latter is entirely morally irrelevant, we may nonetheless have very strong reasons to reduce existential risk. Even egoism, the view that each agent should maximize her own good, might imply strong reasons to reduce existential risk. It will depend, among other things, on what one’s own good consists in. If well-being consisted in pleasure only, it is somewhat harder to argue that egoism would imply strong reasons to reduce existential risk – perhaps we could argue that one would maximize her expected hedonic well-being by funding life extension technology or by having herself cryogenically frozen at the time of her bodily death as well as giving money to reduce existential risk (so that there is a world for her to live in!). I am not sure, however, how strong the reasons to do this would be. But views which imply that, if I don’t care about other people, I have no or very little reason to help them are not even minimally plausible views (in addition to hedonistic egoism, I here have in mind views that imply that one has no reason to perform an act unless one actually desires to do that act). To be minimally plausible, egoism will need to be paired with a more sophisticated account of well-being. To see this, it is enough to consider, as Plato did, the possibility of a ring of invisibility – suppose that, while wearing it, Ayn could derive some pleasure by helping the poor, but instead could derive just a bit more by severely harming them. Hedonistic egoism would absurdly imply she should do the latter. To avoid this implication, egoists would need to build something like the meaningfulness of a life into well-being, in some robust way, where this would to a significant extent be a function of other-regarding concerns (see chapter 12 of this classic intro to ethics). But once these elements are included, we can (roughly, as above) argue that this sort of egoism will imply strong reasons to reduce existential risk. Add to all of this Samuel Scheffler’s recent intriguing arguments (quick podcast version available here) that most of what makes our lives go well would be undermined if there were no future generations of intelligent persons. On his view, my life would contain vastly less well-being if (say) a year after my death the world came to an end. So obviously if Scheffler were right I’d have very strong reason to reduce existential risk. We should also take into account moral uncertainty. What is it reasonable for one to do, when one is uncertain not (only) about the empirical facts, but also about the moral facts? I’ve just argued that there’s agreement among minimally plausible ethical views that we have strong reason to reduce existential risk – not only consequentialists, but also deontologists, virtue ethicists, and sophisticated egoists should agree. But even those (hedonistic egoists) who disagree should have a significant level of confidence that they are mistaken, and that one of the above views is correct. Even if they were 90% sure that their view is the correct one (and 10% sure that one of these other ones is correct), they would have pretty strong reason, from the standpoint of moral uncertainty, to reduce existential risk. Perhaps most disturbingly still, even if we are only 1% sure that the well-being of possible future people matters, it is at least arguable that, from the standpoint of moral uncertainty, reducing existential risk is the most important thing in the world. Again, this is largely for the reason that there are so many people who could exist in the future – there are trillions upon trillions… upon trillions. (For more on this and other related issues, see this excellent dissertation). Of course, it is uncertain whether these untold trillions would, in general, have good lives. It’s possible they’ll be miserable. It is enough for my claim that there is moral agreement in the relevant sense if, at least given certain empirical claims about what future lives would most likely be like, all minimally plausible moral views would converge on the conclusion that we should try to save the world. While there are some non-crazy views that place significantly greater moral weight on avoiding suffering than on promoting happiness, for reasons others have offered (and for independent reasons I won’t get into here unless requested to), they nonetheless seem to be fairly implausible views. And even if things did not go well for our ancestors, I am optimistic that they will overall go fantastically well for our descendants, if we allow them to. I suspect that most of us alive today – at least those of us not suffering from extreme illness or poverty – have lives that are well worth living, and that things will continue to improve. Derek Parfit, whose work has emphasized future generations as well as agreement in ethics, described our situation clearly and accurately: “We live during the hinge of history. Given the scientific and technological discoveries of the last two centuries, the world has never changed as fast. We shall soon have even greater powers to transform, not only our surroundings, but ourselves and our successors. If we act wisely in the next few centuries, humanity will survive its most dangerous and decisive period. Our descendants could, if necessary, go elsewhere, spreading through this galaxy…. Our descendants might, I believe, make the further future very good. But that good future may also depend in part on us. If our selfish recklessness ends human history, we would be acting very wrongly.” (From chapter 36 of On What Matters)

## Advantage 1 is Whistleblowing

#### European trade secrets protections for medicine chill whistleblowing – that undermines public health and drug efficacy

HAI et al 14 — (Health Action International and a coalition of other NGOs, HAI works to expand health access in Europe, “EU trade secrets directive threat to health, environment, free speech and worker mobility”, 12-17-14, Available Online at <https://corporateeurope.org/sites/default/files/attachments/statement_-_eu_trade_secrets_directive_needs_amendments.pdf>, accessed 9-8-21, HKR-AM)

AMSTERDAM—We strongly oppose the hasty push by the European Commission and Council for a new European Union (EU) directive on trade secrets because it contains: ¬ An unreasonably broad definition of “trade secrets” that enables almost anything within a company to be deemed as such; ¬ Overly-broad protection for companies, which could sue anyone who “unlawfully acquires, uses or discloses” their so-called “trade secrets”; and ¬ Inadequate safeguards that will not ensure that EU consumers, journalists, whistleblowers, researchers and workers have reliable access to important data that is in the public interest. Contrary to the Commission’s goals, this unbalanced piece of legislation would result in legal uncertainty. Unless radically amended by the Council and European Parliament, the proposed directive could endanger freedom of expression and information, corporate accountability, information sharing—possibly even innovation—in the EU. Specifically, we share great concern that under the draft directive: ¬ Companies in the health, environment and food safety fields could refuse compliance with transparency policies even when the public interest is at stake. Health: Pharmaceutical companies argue that all aspects of clinical development should be considered a trade secret. ii Access to biomedical research data by regulatory authorities, researchers, doctors and patients—particularly data on drug efficacy and adverse drug reactions—is critical, however, for protecting patient safety and conducting further research and independent analyses. This information also prevents scarce public resources from being spent on therapies that are no better than existing treatments, do not work, or do more harm than good.iii Moreover, disclosure of pharmaceutical research is needed to avoid unethical repetition of clinical trials on people. iv The proposed directive should not obstruct recent EU developments to increase sharing and transparency of this data.v 2/5 Environment: Trade secret protection can be used to refuse the release of information on hazardous products within the chemical industry. Trade secret protection may, for example, be invoked by companies to hide information on chemicals in plastics, clothing, cleaning products and other items that can cause severe damage to the environment and human health. They could also use the directive to refuse disclosing information on the dumping of chemicals, including fracking fluids, or releasing toxins into the air. Food safety: Under EU law, all food products, genetically modified organisms and pesticides are regulated by the European Food Safety Authority (EFSA). Toxicological studies that the EFSA relies on to assess the risks associated with these products are, however, performed by manufacturers themselves.vi Scientific scrutiny of the EFSA's assessments is only possible with complete access to these studies. Companies argue, though, that this information contains confidential business information and strongly oppose its disclosure.vii It is essential that the risk assessment work of public bodies is properly monitored by the scientific community. All data that these public bodies use must therefore be exempt from the scope of the directive. ¬ The right to freedom of expression and information could be seriously harmed. Under the proposed directive, whistleblowers can use undisclosed information to reveal misconduct or wrongdoing, but only if “…the alleged acquisition, use or disclosure of the trade secret was necessary for such revelation and that the respondent acted in the public interest”. Unfortunately, though, determining whether disclosure was necessary can often only be evaluated afterwards. In addition, it remains unclear whether many types of information (e.g., plans to terminate numerous employees) qualify as “misconduct” or “wrongdoing”. This creates legal uncertainty for journalists, particularly those who specialise in economic investigationsviii , and whistleblowers.ix ¬ The mobility of EU workers could be undermined. The proposed directive poses a danger of lock-in effects for workers. It could create situations where an employee will avoid jobs in the same field as his/her former employer, rather than risking not being able to use his/her own skills and competences, and being liable for damages. This inhibits one’s career development, as well as professional and geographical mobility in the labour market.x In addition, despite the Commission’s desire for a “magic bullet” that will keep Europe in the innovation game, closed-door trade secret protection may make it more difficult for the EU to engage in promising open and collaborative forms of research. In fact, there is a risk that the measures and remedies provided in this directive will undermine legitimate competition—even facilitate anti-competitive behaviour. Unsurprisingly, the text is strongly supported by multinational companies. In fact, industry coalitions in the EU and the United States (US) are lobbying, through a unified Trade Secrets Coalition, for the adoption of trade secret protection.xi In the US, two new bills are pending before Congress. xii If passed, these texts would allow trade secret protection to be included in the Trans-Atlantic Trade and Investment Partnership (TTIP)—something that will be incredibly difficult to repeal in the future through democratic processes.xiii Given that TTIP is expected to set a new global standard, its potential inclusion of trade secret protection is particularly worrisome. We urge the Council and the European Parliament to radically amend the directive. This includes limiting the definition of what constitutes a trade secret and strengthening safeguards and exceptions to ensure that data in the public interest cannot be protected as trade secrets. The right to freely use and disseminate information should be the rule, and trade secret protection the exception.

#### Current law places the burden of proof on whistleblowers, which reinforces legal uncertainty – empirics prove a lack of accountability for corporations.

Moody 16 — (Glyn Moody, Contributing Policy Editor at Ars Technica. He has been writing about the Internet, free software, copyright, patents and digital rights for over 20 years., “New EU trade secrets law could jail whistleblowers, block drug trial data access”, Ars Technica, 4-14-16, Available Online at <https://arstechnica.com/tech-policy/2016/04/new-eu-trade-secrets-law-whistleblowers-journalists-drug-trials/>, accessed 8-27-21, HKR-AM)

However, the Pirate Party MEP, Julia Reda, believes the new rules will harm journalism, writing that they have "created major uncertainties about the role of whistleblowers and investigative journalists. All information, including information about malpractice, can be protected as a trade secret. As a result, the burden of proof that the public interest outweighs the business interest will now always lie with the whistleblower."

One area where whistleblowing is crucially important concerns drug safety. Health Action International (HAI), a non-governmental organisation dedicated to strengthening medicines policy to improve public health, said it was was "deeply disappointed with today’s adoption of the European Union Trade Secrets Directive."

"Under the Directive, researchers, journalists and whistle-blowers that expose illicit practices by the pharmaceutical industry, or reveal important medicine safety and efficacy information, will not be adequately protected under law," HAI wrote.

"Trade secret protection has long been a recurring argument by the pharmaceutical industry to justify data secrecy." Indeed, as HAI points out, "the trade secrets argument was used recently by the company sponsoring the clinical trial in France where one person died and others were injured." The journal Nature reported that the company involved refused to hand over information about the disastrous drug trial, "citing French laws that protect the release of trade secrets."

#### This burden structure makes intimidation lawsuits inevitable, further deterring whistleblowing.

CEO 17 — (Corporate Europe Observatory, non-profit research and campaign group whose declared aim is to "expose any effects of corporate lobbying on EU policy making"., “Adapting the EU Directive on Trade Secrets ‘Protection’ into National Law”, February 2017, Available Online at <https://corporateeurope.org/sites/default/files/attachments/trade_secrets_protection_directive_-_a_transposition_briefing.pdf>, accessed 9-9-21, HKR-AM)

Indeed, whistleblowers denounce wrongdoing, either by using internal reporting mechanisms set up by the institution they work for, or, when these are neither sufficient nor safe, by taking the risks to reveal confidential information to the public, sometimes via the press, sometimes not. Over the past decade many of them have been prosecuted (Chelsea Manning, Antoine Deltour, Raphaël Halet) by companies or governments. Given the veil of secrecy many corporate activities operate under, whistleblowers are sometimes the only available sources on corporate wrongdoing.

Journalists’ work will be made much more difficult if their sources are criminalised for forwarding them confidential business information that is of public interest. Scandals can break out without material proofs (for example Watergate, Rainbow Warrior) but never without sources.

It must be said that the Directive is the first EU legislation which actually acknowledges the role of whistleblowers, in its Recital 20:

“The measures, procedures and remedies provided for in this Directive should not restrict whistleblowing activity. Therefore, the protection of trade secrets should not extend to cases in which disclosure of a trade secret serves the public interest, insofar as directly relevant misconduct, wrongdoing or illegal activity is revealed. This should not be seen as preventing the competent judicial authorities from allowing an exception to the application of measures, procedures and remedies in a case where the respondent had every reason to believe in good faith that his or her conduct satisfied the appropriate criteria set out in this Directive.”

But while they reflect the intention of the legislator for the judges to take public interest into account when they interpret the law, recitals are not binding and such positive language is not present in the Articles.

Also, as with the exception on freedom of information, the final text is an improvement compared to the original Commission proposal, which stated: “for revealing an applicant’s misconduct, wrongdoing or illegal activity, provided that the alleged acquisition, use or disclosure of the trade secret was necessary for such revelation and that the respondent acted in the public interest”. This formulation put a higher burden of proof on the whistleblower as they would have had to convince the judge of both the necessity of the ‘violation’ of the trade secret and the fact that they had acted in the public interest.

Now what we have is an improved wording where the whistleblower is only judged on his intention to protect the public interest, making a “honesty” / “good faith” defence possible. However, the fundamental problem remains that the burden of the proof is on the whistleblower to demonstrate their good intentions, which, at the end of the day, can only be evaluated by a judge. This means that intimidation lawsuits by large companies against individuals can be pursued. This reversal of the burden of the proof goes against most recent international standards, such as the 2014 definition by the Council of Europe.a

“ The scope as delimited by the EU Directive is large but not necessarily problematic for whistleblowers. However, the burden of proof is now placed on the whistle-blower who has to act “for the purpose of protecting the general public interest”. It is a serious concern because it goes against all international standards where the burden is placed on the claimant.16 — Nicole Marie Meyer, Transparency International France

“ The status attributed to the whistleblower is better than nothing, but it remains a complex situation because he/ she will have to fulfil the different criteria on whistleblowing in the directive [which] will protect those who can prove they live up to the criteria, but the protection is only against the directive itself. It stays a risky situation anyway because the protection isn’t 100% guaranteed. If the case is not clear enough, the content of the directive becomes very important.17 — Martin Jefflén, President of the Council of European Professional and Managerial Staff (Eurocadres)

What if this Directive in reality gets used to put potential whistleblowers in the kind of financial risk originally designed for whole companies committing commercial espionage? The prospect of being sued for such amounts would deter most from speaking out. The rights given to whistleblowers and the exercise of the freedom of information are closely related issues, and the Directive fails to give whistleblowers rights that are in proportion to the potential powers it grants to trade secrets holders to punish them. This problem is particularly serious in countries where legal protection for media sources is weak or even absent.

#### Effective protections for European medical whistleblowers are crucial to strengthening public health and prevent pandemics – COVID was the test run

Dreyfus and Galizzi 20 — (Suelette Dreyfus, PhD, Researcher at the University of Melbourne, and Bruno Galizzi, part of the Blueprint for Free Speech Spain, “Protect whistleblowers, protect everyone's health”, 5-19-20, Blueprint for Free Speech, Available Online at <https://www.blueprintforfreespeech.net/en/news/protect-whistleblowers-protect-everyones-health>, accessed 9-8-21, HKR-AM)

The worldwide spread of coronavirus has highlighted the importance of whistleblowers like never before. The medical community caught a glimpse of the dark emergence of the virus when Dr. Li Wenliang from China tried to warn colleagues about the disease. Like many, he suffered retaliation from local officials for telling his community unpleasant truths. The highest levels of government intervened to rehabilitate his reputation only when he had died from the virus.

Whistleblowers from around the world are revealing irregularities that are hidden by governments, companies and institutions. They reveal when health workers are put at risk for lacking the proper protective equipment; they tell us when the supply chains that bring us food - or medical supplies - are being tampered with or corrupted, etc. For this reason, more than 100 civil society organizations, journalists, unions, and experts from around the world released a statement asking to protect the whistleblowers in times of Covid-19. The letter emphasizes the centrality of citizens and workers in "guaranteeing that proper accountability is maintained in our governments, corporate institutions and markets, and in the defense of their human rights and the freedoms of all people."

Neither heroes nor martyrs

In Spain, the State Confederation of Medical Unions (CESM) has filed a complaint with the Supreme Court about the distribution of defective medical material, based on situations that have been experienced at the local level. Not surprisingly, unions are valuable institutions to which an whistleblower could turn to report a fact, particularly on public health and safety.

Although this is not always the case in Spain, many unions and organizations have exposed the lack or non-compliance of protection measures, or the lack of means to fight the virus, unleashing the #NiHéroesNiMartires trend. Protecting those who blow the whistle, in this case, also saves lives. The European Center for Disease Prevention and Control (ECDC) places Spain among the countries with the highest percentage of infected among its health personnel. Even when we applaud them from our balconies every day, healthcare workers continue to face a double vulnerability at the same time: contagion and retaliation. In fact, in recent weeks, many have been exposed to prevent or combat crimes or irregularities. The lack of protection they have contrasts, without a doubt, with the value that the public interest complaints they share provide us.

This is something that does not happen only in the field of health care, as we have seen in the globally known case of Tim Bay, Amazon's vice president, who decided to leave one of the most powerful companies after having witnessed the dismissal of employees who had denounced the vulnerabilities of workers in the warehouses of the technological giant.

Just a fight against corruption?

Some organizations are recognizing the vital value of protecting whistleblowers for the duration of the pandemic, not afterward. The Group of States against Corruption (GRECO) has recently released a series of legal references to prevent and fight corruption during this period. They recognize that fraudulent practices have an effect on medical services, making them more expensive and of lower quality, leading to unequal access to them, to the detriment of the most vulnerable populations.

The report again points out that the protection of whistleblowers is essential to prevent the effect of corruption on public institutions and the management of funds. Once again, protecting those who warn against corruption also saves lives, since it allows strengthening the health system by protecting those who report corruption from within. Let's not forget that the economic costs of corruption for Spain have been estimated by different sources, reaching 90 billion euros, according to a report published by the Los Verdes / ALE alliance in the European Parliament, defining it as 90% of public health spending by 2018.

But the protection of whistleblowers goes further, and has an effect on the protection of the environment, nuclear safety, transport, the quality of products, distribution chains and, as we have already seen, public health. This is recognized by the rapporteur of the Committee on Legal Affairs of the European Parliament Sylvain Waserman, in his latest report last October.

In Poland, Andrzej Hawranek, Director of the State Health Inspectorate, reported the lack of sufficient evidence to determine the spread of the virus in the city of Krakow. Thanks to his publications on the local situation, he forced the health and epidemiological units to report daily on the situation. The knowledge and democratization of public, updated and reliable information on the state of the pandemic is essential to be able to carry out successful and tailored management. Protecting whistleblowers and our right to know also saves lives.

Towards the new normality, protecting those who protect us

In a bitter irony, Spain is one of the countries hardest hit by the coronavirus and, at the same time, one of the few countries in the European Union that does not have a national law to protect whistleblowers.

Now is the time to change that. The transposition of the European Directive 2019/1937 is an opportunity to incorporate legal provisions at the national level, and promote a cultural change to provide citizens with mechanisms for active participation in the protection of the public interest.

Last February, when the world was yet another, Blueprint for Free Speech, together with the National Commission of Markets and Competition, organized a public event bringing together spokespersons and representatives of political parties precisely to discuss this matter. That event was the first time that a wide and diverse party table (Ciudadanos, Esquerra Republicana, Partido Popular, Unidas Podemos, Vox) sat publicly in Madrid to discuss protection of whistleblowers.

Different positions were heard, some of them distant from what was established by the aforementioned European Directive, but all recognized the complete need to protect alerters in an integral way. Civil society was once again ahead of the interests of legislators proposing various alternatives that were waiting to be debated, one of them currently on the Table of Congress.

In this period of de-escalation and transition to the "new normal" one cannot look the other way. The iron and urgent commitment must be doubled to protect the whistleblowers, who have demonstrated to promote a more just and democratic operation of the institutions, in defense of our fundamental and human rights.

#### COVID causes a societal illusion of preparedness – but even given current policy we’re still incredibly vulnerable

Lander 8/4/21 [Eric Lander, President Biden’s Science Advisory and Director of the White House Office of Science and Technology Policy) “Opinion: As bad as Covid-19 has been, a future pandemic could be even worse—unless we act now” 8/4/21, The Washington Post] RM

[Coronavirus](https://www.washingtonpost.com/coronavirus/?itid=lk_inline_manual_3) vaccines can end the current pandemic if enough people choose to protect themselves and their loved ones by getting vaccinated. But in the years to come, we will still need to defend against a pandemic side effect: collective amnesia.

As public health emergencies recede, societies often quickly forget their experiences — and **fail to prepare for future challenges**. For pandemics, such a course would be disastrous.

**New infectious diseases have been emerging at an accelerating pace,** and they are spreading faster.

Our federal government is responsible for defending the United States against future threats. That’s why President Biden has asked Congress to fund his plan to build on current scientific progress to keep new infectious-disease threats from turning into pandemics like covid-19.

As the president’s science adviser, I know what’s becoming possible. For the first time in our history, we have an opportunity not just to refill our stockpiles but also to transform our capabilities. However, **if we don’t start preparing now for future pandemics, the window for action will close.**

Covid-19 has been a catastrophe: The toll in the United States alone is [more than 614,000 lives](https://www.washingtonpost.com/graphics/2020/national/coronavirus-us-cases-deaths/?itid=lk_inline_manual_11) and has been estimated to exceed [$16 trillion](https://jamanetwork.com/journals/jama/fullarticle/2771764), with disproportionate impact on vulnerable and marginalized communities.

But a future pandemic could be even worse — unless we take steps now.

It’s important to remember that the virus behind covid-19 is far less deadly than the 1918 influenza. The virus also belongs to a well-understood family, coronaviruses. It was possible to design vaccines within days of knowing the virus’s genetic code because 20 years of [basic scientific research](https://science.sciencemag.org/content/372/6538/109.full) had revealed which protein to target and how to stabilize it. And while the current virus spins off variants, its mutation rate is slower than that of most viruses.

**Unfortunately, most of the 26 families of viruses that infect humans are less well understood or harder to control**. We have a great deal of work still ahead.

The development of [mRNA vaccine technology](https://www.washingtonpost.com/health/2020/12/06/covid-vaccine-messenger-rna/?itid=lk_inline_manual_17) — thanks to more than a decade of foresighted basic research — was a game-changer. It shortened the time needed to design and test vaccines to less than a year — far faster than for any previous vaccine. And it’s been surprisingly effective against covid-19.

Still, there’s much more to do. We don’t yet know how mRNA vaccines will perform against other viruses down the road. And **when the next pandemic breaks out, we’ll want to be able to respond even faster.**

#### Extinction – climate pressures and changing system equilibrium make the risk uniquely high

Supriya 4/19 [Lakshmi Supriya got her BSc in Industrial Chemistry from IIT Kharagpur (India) and a Ph.D. in Polymer Science and Engineering from Virginia Tech (USA). She has more than a decade of global industry experience working in the USA, Europe, and India. After her Ph.D., she worked as part of the R&D group in diverse industries starting with semiconductor packaging at Intel, Arizona, where she developed a new elastomeric thermal solution, which has now been commercialized and is used in the core i3 and i5 processors. From there she went on to work at two startups, one managing the microfluidics chip manufacturing lab at a biotechnology company and the other developing polymer formulations for oil extraction from oil sands. She also worked at Saint Gobain North America, developing various material solutions for photovoltaics and processing techniques and new applications for fluoropolymers. Most recently, she managed the Indian R&D team of Enthone (now part of MacDermid) developing electroplating technologies for precious metals.) “Humans versus viruses - Can we avoid extinction in near future?” News Medical Life Sciences, 4/19/21, https://www.news-medical.net/news/20210419/Humans-versus-viruses-Can-we-avoid-extinction-in-near-future.aspx] RM

Expert argues that human-caused changes to the environment can lead to the emergence of pathogens, not only from outside but also from our own microbiome, which can pave the way for large-scale destruction of humans and **even our extinction**.

Whenever there is a change in any system, it will cause other changes to reach a balance or equilibrium, generally at a point different from the original balance. Although this principle was originally posited by the French chemist Henry Le Chatelier for chemical reactions, this theory can be applied to almost anything else.

In an essay published on the online server Preprints\*, Eleftherios P. Diamandis of the University of Toronto and the Mount Sinai Hospital, Toronto, argues that changes caused by humans, to the climate, and everything around us will lead to changes that may have a dramatic impact on human life. Because our ecosystems are so complex, we don’t know how our actions will affect us in the long run, so humans generally disregard them.

Changing our environment

Everything around us is changing, from living organisms to the climate, water, and soil. Some estimates say about half the organisms that existed 50 years ago have already become extinct, and about 80% of the species may become extinct in the future.

As the debate on global warming continues, according to data, the last six years have been the warmest on record. Global warming is melting ice, and sea levels have been increasing. The changing climate is causing more and more wildfires, which are leading to other related damage. At the same time, increased flooding is causing large-scale devastation.

One question that arises is how much environmental damage have humans already done? A recent study compared the natural biomass on Earth to the mass produced by humans and found humans produce a mass equal to their weight every week. This human-made mass is mainly for buildings, roads, and plastic products.

In the early 1900s, human-made mass was about 3% of the global biomass. Today both are about equal. Projections say by 2040, the human-made mass will be triple that of Earth’s biomass. But, slowing down human activity that causes such production may be difficult, given it is considered part of our growth as a civilization.

Emerging pathogens

Although we are made up of human cells, we have almost ten times that of bacteria just in our guts and more on our skin. These microbes not only affect locally but also affect the entire body. There is a balance between the good and bad bacteria, and any change in the environment may cause this balance to shift, especially on the skin, the consequences of which are unknown.

Although most bacteria on and inside of us are harmless, gut bacteria can also have viruses. If viruses don’t kill the bacteria immediately, they can incorporate into the bacterial genome and stay latent for a long time until reactivation by environmental factors, when they can become pathogenic. They can also escape from the gut and enter other organs or the bloodstream. Bacteria can then use these viruses to kill other bacteria or help them evolve to more virulent strains.

An example of the evolution of pathogens is the cause of the current pandemic, the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Several mutations are now known that make the virus more infectious and resistant to immune responses, and strengthening its to enter cells via surface receptors.

The brain

There is evidence that the SARS-CoV-2 can also affect the brain. The virus may enter the brain via the olfactory tract or through the angiotensin-converting enzyme 2 (ACE2) pathway. Viruses can also affect our senses, such as a loss of smell and taste, and there could be other so far unkown neurological effects. The loss of smell seen in COVID-19 could be a new viral syndrome specific to this disease.

Many books and movies have described pandemics caused by pathogens that wipe out large populations and cause severe diseases. In the essay, the author provides a hypothetical scenario where a gut bacteria suddenly starts producing viral proteins. Some virions spread through the body and get transmitted through the human population. After a few months, the virus started causing blindness, and within a year, large populations lost their vision.

Pandemics can cause other diseases that can threaten humanity’s entire existence. **The COVID-19 pandemic brought this possibility to the forefront**. If we continue disturbing the equilibrium between us and the environment, we don’t know what the consequences may be and **the next pandemic could lead us to extinction.**

## Advantage 2 is Uniformity

#### EU trade secret regulations are fragmented – lack of clear standards on protection across countries undermine businesses. Uniform trade secret legislation is key – single state exceptions doom growth.

Junge 16 — (Fabian Junge, Law @ Maastricht University, “THE NECESSITY OF EUROPEAN HARMONIZATION IN THE AREA OF TRADE SECRETS”, MAASTRICHT EUROPEAN PRIVATE LAW INSTITUTE WORKING PAPER No. 2016/04, Available Online at <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2839693>, accessed 9-8-21, HKR-AM)

The EU and its Member States with their far-reaching economic, political and social integration are even more under pressure to facilitate sufficient common standards of trade secret protection. As has been shown above, the vast majority of EU Member States, taken individually, guarantees the protection of trade secrets to a sufficient extent. The existing fragmentation, however, caused by the differences in the domestic legal systems has serious impacts on the functioning and development of the internal market as well as on actual or potential cross-border activities both affecting the economic growth in the EU.

By relying on different definitions of trade secrets, prohibited acts or possible defendants, by applying different methods of incorporating the TRIPS-mandated trade secret protection, by unequally classifying trade secrets and by basing enforcement mechanisms predominantly in national law, the EU and its Member States created a situation of legal uncertainty for European businesses and subverted the incentives for relying on trade secret protection. Especially trade secrets holders are hampered with their ability to fully engage on the internal market and to take advantage of the benefits of trade secret protection.

Besides decreasing the incentives for cross-border investments, collaborations, outsourcing, R&D activities or technology transfer, the diverse protection standards undermine the demand of trade secret holders to enforce their right to judicial protection in alleged cross-border misappropriations for three main reasons.

First of all, depending on the jurisdiction a non-disclosure during proceedings is not inherently guaranteed. Combined with potential difficulties, inter alia, seeking remedies, gathering evidence or proving that the respective information falls under the definition of trade secret in that respective Member State, taking recourse to legal protection might be pointless or even harmful.

Secondly, connected with the proceedings are increased transaction and litigation costs to ensure that, when deciding to press charges in another Member State, the claim fulfills the respective requirements. Furthermore, the legitimate trade secret holder must produce comprehensive and complete documentation to prove a misappropriation and to allow the courts to accurately calculate damages or the order of proportionate measures.

Thirdly, the basic rule to assess the applicable law for non-contractual cross-border disputes is enshrined in Art. 4 (1) Rome II Regulation93 stating that the respective dispute should be governed by the “law of the country in which the damage occurs irrespective of the country in which the event giving rise to the damage occurred and irrespective of the country or countries in which the indirect consequences of that event occur”. The alternatives in Art. 4 (2) and (3) Rome II Regulation are unlikely to be available for trade secrets holders seeking redress, if the misappropriator is an unconnected third party residing in a different Member State or third country. Even more troublesome, depending on whether trade secrets are classified under the scope of unfair competition law or as intellectual property right Art. 6 or Art. 8 Rome II Regulation might be applicable as well.

Overall, in a situation where trade secret misappropriation caused damages in multiple Member States a trade secret holder needs to, based on the mosaic theory, analyze all potential jurisdictions without necessarily being familiar with said jurisdictions. Moreover, it is possible that the applicable law provides less protection to him than the law of his home Member State. Also, comparable outcomes in multiple Member States are highly unlikely. Even worse, if trade secrets were disclosed during litigation in a less protective and comprehensive Member State, they might not be eligible for protection in other Member States anymore, and hence, lose their value without the trade secret holder’s fault or will.94

If the misappropriator is solely residing in a third country, the issue of the applicable law will be dealt with on the basis of national law, because it falls outside the scope of the Brussels I Regulation95. Therefore, trade secret holders only have access to judicial protection or can enforce foreign judgments, if domestic law allows it. The conditions for access as well as for recognition and enforcement of third country judgments differ greatly between the Member States.96 In principle, goods produced by the misappropriator in a Member State or third country not providing trade secret protection for the legitimate trade secret holder could be freely sold on the internal market.

Difficulties with both cross-border litigation and domestic litigation on trade secrets are supported by the fact that, while only a limited number of domestic cases have been reported, cross-border case law appears to be completely absent. Reminiscing the number of companies being the target of misappropriation, or attempts to misappropriate, their reluctance to bring an action is certainly worrisome with respect to the EU’s and its Member States’ capacity for an effective enforcement mechanism.97

#### European consistency in trade secret whistleblowing laws is key – current legal vagueness create uncertainty for whistleblowers and businesses

Junge 16 — (Fabian Junge, Law @ Maastricht University, “THE NECESSITY OF EUROPEAN HARMONIZATION IN THE AREA OF TRADE SECRETS”, MAASTRICHT EUROPEAN PRIVATE LAW INSTITUTE WORKING PAPER No. 2016/04, Available Online at <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2839693>, accessed 8-27-21, HKR-AM)

Art. 5 (b) in conjunction with Recital 20 Trade Secrets Directive embodies the so called whistleblower protection. Alongside the issue of eventual restriction of the fundamental rights of expression and information, the potential impact of the Trade Secrets Directive on whistleblower protection engendered criticism during the negotiations. It appears that the final text could calm the debates by clearly determining that, if the acquisition, use or disclosure of a trade secret was carried out for revealing misconduct, wrongdoing or illegal activity, it shall be deemed justified, if its purpose was to protect the general public interest.

While Recital 20 points out that the misconduct, wrongdoing or illegal activity must be directly relevant to the trade secret, it also allows judicial authorities to extent the protection of whistleblowing activities to cases, in which Art. 5 (b) Trade Secrets Directive is actually not satisfied, but the respondent had acted in good faith believing that his actions would have fallen under the exception. What exactly constitutes “public interest” and whether this issue shall be solved in either EU or national law remains unclear.

Moreover, the Trade Secrets Directive does not provide definitions for “misconduct” and “wrongdoing” resulting in legal uncertainty for potential whistleblowers having a critical impact on their decision to go public. Compared to the protection from prosecution awarded to journalists whistleblower have a lesser standing, because their protection does not arise automatically and they need to prove that the criteria for protection are fulfilled.

Overall, it remains to be seen whether the now adopted provision is sufficient enough to encourage future whistleblower and whether subsequent legislation on European level is necessary to address the issue.

Art. 5 (c) Trade Secrets Directive enhances the protection of workers and workers’ representatives. The provision stipulates that disclosure by workers to their representatives as part of the legitimate exercise by those representatives of their functions will be considered as an exception, if two prerequisites are satisfied. First of all, the disclosure must be in accordance with Union or national law. Secondly, the disclosure must have been necessary for performing the function. What exactly amounts to being necessary will inevitably be resolved on national level, until the CJEU will clarify the matter. Lastly, Art 5 (d) Trade Secrets Directive incorporates a broad catch-all provision allowing an exception to trade secret protection for the purpose of protecting a legitimate interest recognized by Union or national law. There is no guidance in the Trade Secrets Directive on what constitutes a legitimate interest rendering it unclear as to what should be covered.

It is evident that the exceptions are drafted in a very open and broad manner to encompass as many theoretical scenarios as possible. By not only referring to EU Law but also to national law, the Member States and its courts are granted a wide margin of appreciation to determine the scope of the exception potentially leading to discrepancies in the Member States’ application. Setting out the exceptions in such a general manner allows the Member States to adopt flexible definitions and concepts to either limit the scope of trade secret protection or to limit the exceptions. As long as these questions have not been resolved on European level the degree of trade secret protection

and of legitimate exceptions will certainly vary in the EU, which is consequently detrimental to the approximation of national laws and to the aims targeted by the Trade Secrets Directive.

#### Only the plan’s universal and maximal mandate solves

Junge 16 — (Fabian Junge, Law @ Maastricht University, “THE NECESSITY OF EUROPEAN HARMONIZATION IN THE AREA OF TRADE SECRETS”, MAASTRICHT EUROPEAN PRIVATE LAW INSTITUTE WORKING PAPER No. 2016/04, Available Online at <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2839693>, accessed 9-8-21, HKR-AM)

Notwithstanding the fact that harmonization can be beneficial even when only achieving a minimum common level of protection, the decision to opt for minimum harmonization comprises downsides by its inherent inability to fully abolish national differences. Although the national provisions on trade secret protection are approximated, they are still embedded into different domestic legal regimes. By allowing Member States to go beyond what the Trade Secrets Directive requires the level of protection in the EU will still vary and certain barriers to cross-border activities will inevitably remain due to the inconsistent harmonization processes in the various Member States. As a result, businesses in the EU are protected in every Member State at least to the extent set out in the Trade Secrets Directive, but will still have to deal with 28 different legal regimes. Ultimately, this limits the benefits of the approximation for trade secret protection.102

It will be interesting to see how the Member States implement the provisions of the Trade Secrets Directive and how different the transposition approaches will be. Doubtfully, any Member State can refer solely to its existing laws to comply with the Trade Secrets Directive. Presumably, as a first step most Member States will amend their existing legislation to be in accordance with the Trade Secrets Directive before evaluating whether a separate legislative act on trade secrets, e.g. as in Sweden, can improve the rules further. Conflicts might arise when Member States have to introduce definitions or concepts entailed in the Trade Secrets Directive, which have not been used or which had a different scope before. Another issue will certainly occur, if Member States are not able to implement the Trade Secret Directive satisfactory without weakening their existing legal regimes, e.g. with respect to criminal sanctions.

The main risk involved with harmonizing trade secret protection to a minimum extent remains the possibility that the outcome will eventually be comparable to the post-TRIPS implementation phase - namely that the laws of the Member States have de facto been approximated, but not sufficiently enough to achieve the envisaged aims. Therefore, contrary to the European Commission’s initial finding and to underline this risk, this Thesis will point out subsequently several issues arising out of the adopted harmonizing approach, which likely will lead to national and EU litigation to correct the situation. Relying on maximum harmonization, either by means of a regulation or a directive, could have facilitated the aim of the Trade Secrets Directive even more, but might have been politically unenforceable.

#### Independently, whistleblowing protections are key to preserving market dynamics and increasing investment.

Abazi 16 — (Vigjilenca Abazi, Assistant Professor @ Maastricht University, “Trade Secrets and Whistleblower Protection in the European Union”, European Papers, Vol. 1, 2016, No 3, European Forum, Insight of 3 September 2016, pp. 1061-1072, Available Online at https://www.europeanpapers.eu/en/europeanforum/trade-secrets-and-whistleblower-protection-in-the-eu, accessed 9-9-21, HKR-AM)

Whistleblowing is a compound and complex instrument bringing together elements of accountability, freedom of expression and labour law protections of the whistleblower. It is this compound nature of whistleblowing and especially its aspects related to the improvement of the internal market that the debate regarding the Trade Secrets Directive has not paid attention. Reducing fragmentation and diversity of the legal framework on the protection of trade secrets was a repeated argument by the Commission in showing why EU level protection of trade secrets is necessary. For example, the Commission argued that such fragmentation impairs cross-border research and development as well as circulation of innovative knowledge.[23] Moreover, the Commission pointed to the lack of rules in some Member States regarding calculation of damages or protection of trade secrets during litigation.[24]

All these aspects to the lack of sufficient safeguards for trade secrets protection are comparable to the lack of rules about whistleblower protection that also have negative implications for the competitiveness of the internal market. Market abuse could be avoided in light of the fact that whistleblowers may bring new information to the attention of the competent authorities for possible insider dealing and market manipulation.[25] In addition, whistleblower protection is crucial for anti-corruption and ensuring a market as equal playing field. Significant variation between the ways in which different Member States provide protection for whistleblowers creates barriers for exposing information by whistleblowers which in turn may lead to obstacles to the functioning of the internal market while putting at stake the principle of equality. Such relevant aspects about whistleblower protection for the internal market are most recently also pointed by the Commission regarding measures against tax evasion and tax avoidance. More specifically, the Commission notes that whistleblower protection would “help disciplining companies and protect societal interests, which have the potential to enhance trust in the market and therefore attract potential investors and business partners”.[26]

Overall, protection for whistleblowers is necessary both from the perspectives of accountability and of internal market. The exception for whistleblower protection provided in Art. 5, let. b), of EU Trade Secrets Directive is the first step towards what should be a dedicated and advanced EU legal protection for whistleblowers. A separate legal act on whistleblower protection could ensure a working environment that does not discourage individuals from exposing (suspected) wrongdoing, corruption, misconduct, fraud and other similar acts, which in turn could make companies more profitable and competitive. Indeed, the Commission in a recent Communication on further measures to enhance transparency and the fight against tax evasion and avoidance has recognized the salience of a separate EU legal act on whistleblower protection,[27] but it remains to be seen whether the Commission would propose a legislative act on whistleblower protection in the EU.

#### European economic decline causes multiple scenarios for global war

Wright 12 [Thomas Wright, fellow with the Managing Global Order at the Brookings Institution. What if Europe Fails? 2012. <http://csis.org/files/publication/twq12SummerWright.pdf>]

Yet, verbal warnings from nervous leaders and economists aside, there has been remarkably little analysis of what the end of European integration might mean for Europe and the rest of the world. This article does not predict that failure will occur it only seeks to explain the geopolitical implications if it does. The severity and trajectory of the crisis since 2008 suggest that failure is a high-impact event with a non-trivial probability. It may not occur, but it certainly merits serious analysis. Failure is widely seen as an imminent danger.

Would the failure of the Euro really mean the beginning of the end of democracy in Europe? Could the global economy survive without a vibrant European economy? What would European architecture look like after the end of European integration? What are the implications for the United States, China, and the Middle East? Since the international order has been primarily a Western construction, with Europe as a key pillar, would the disintegration of the European Union or the Eurozone have lasting and deleterious effects on world politics in the coming decade?

Thinking through and prioritizing the consequences of a failed Europe yield five of the utmost importance. First, the most immediate casualty of the failure of the European project would be the global economy. A disorderly collapse (as opposed to an orderly failure, which will be explained shortly) would probably trigger a new depression and could lead to the unraveling of economic integration as countries introduce protectionist measures to limit the contagion effects of a collapse. Bare survival would drag down Europe’s economy and would generate increasing and dangerous levels of volatility in the international economic order.

Second, the geopolitical consequences of an economic crisis depend not just on the severity of the crisis but also the geopolitical climate in which it occurs. Europe’s geopolitical climate is as healthy as can be reasonably expected. This would prevent a simple repeat of the 1930s in Europe, which has been one of the more alarming predictions from some observers, although certain new and fragile democracies in Europe might come under pressure.

Third, failure would cement Germany’s rise as the leading country in Europe and as an indispensable hub in the European Union and Eurozone, if they continue to exist, but anti-Germanism would become a more potent force in politics on the European periphery.

Fourth, economic downturn as a result of disintegration would undermine political authority in those parts of the world where the legitimacy of governments is shallow, and it would exacerbate international tensions where the geopolitical climate is relatively malign. The places most at risk are the Middle East and China.¶ Fifth, disintegration would weaken Europe on the world stage–it would severely damage the transatlantic alliance, both by sapping its resources and by diverting Europe’s attention to its internal crisis–and would, finally, undermine the multilateral order.

Taking these five implications in their totality, one thing is clear. Failure will badly damage Europe and the international order, but some types of failure–most notably a disorderly collapse–are worse than others. Currently, the pain is concentrated on the so-called European periphery (Greece, Portugal, Spain, Italy, and Ireland). Disorderly collapse would affect all European countries, as well as North America and East Asia. If a solution to the Eurocrisis is perceived as beyond reach, leaders of the major powers will shift their priorities to managing failure in order to contain its effects. This will be strenuously resisted on the periphery, which is already experiencing extremely high levels of pain and does not want to accept the permanence of the status quo. Consequently, their electorates will become more risk-acceptant and will pressure Germany and other core member states to accommodate them through financial transfers and assistance in exchange for not deliberately triggering a break-up. This bitter split will divide and largely define a failing Europe. Absent movement toward a solution, EU politics is about to take an ugly turn.

How Failure Could Occur A framework can help us understand the geopolitical implications if the Euro and/or the European Union fail. As conceptualized here, failure could take two forms. The first is a form of failure which allows the Eurozone and the European Union to barely surviveunder conditions of low growth, high unemployment, and social unrestnot because the member states continue to believe in the project but because they cannot figure out how to extract themselves at an acceptable price. The second is a failure that leads to the disorderly collapse of the Euro and/or the European Union. There is, of course, a third scenariosuccess. I deliberately avoid this scenario in order to comprehensively explore the consequences of failure. However, success is also far from assured for several reasonsthe EU response is defined by Germany and has little prospect of restoring growth on the periphery; nationalism is a powerful and growing force which will complicate moves to the creation of a United States of Europe; and serious fault lines remain, which means the Eurozone will be crisis-prone for some time to come. As a senior German official told the Financial Times, ‘‘It seems to me that we have invented a machine from hell that we cannot turn off.’’5 The Eurocrisis resulted from the creation of a monetary union absent a political and financial union. This arrangement facilitated cheap supplies of money to the periphery in the Euro’s first decade and left the debt (both public and private) in the hands of each member state after the 2008 crisis. The states worst affected (Greece, Portugal, Ireland, Spain, and Italy) are each unique, but all face rising borrowing costs and are unable to devalue their currency to become EU politics is about to take an ugly turn. What if Europe Fails? THE WASHINGTON QUARTERLY j SUMMER 2012 25 more competitive. The crisis negotiations have focused on ways to put the peripheral economies on a sustainable path (through competitiveness reforms) and to address the causes of the crisis. The country-specific plans have failed to have the desired affect because the austerity measures introduced have depressed growth and deepened the recession. Some progress appears to have been made at the Eurozone’s summit in June 2012, particularly in banking and sovereign bond purchases but many problems were left unaddressed. The dominant view among experts is that the crisis can only be solved if the Eurozone moves toward full fiscal, financial, and political union, where all of the key decisions about tax and expenditure would be taken at the European level. However, the political climate is extremely hostile to ambitious plans of this nature. The periphery will not be inclined to buy into an indefinite austerity program and to trust Germany to protect their interests. And the core has serious misgivings about sacrificing fiscal sovereignty and underwriting the periphery. Much existing analysis assumes that political hurdles can be overcome, largely because a failed Europe is deemed unthinkable. Yet, failure is a regular occurrence in world affairsone need only look at the way the politics of tackling climate change evolved in the 2000s. As a purely analytical matter, it is prudent to allow for the possibility that political hurdles will not be overcome because they are truly insurmountable. The absence of a solution is a necessary but insufficient condition for true failure. There are at least four accidents or triggers that could precipitate an inadvertent unraveling, and failure, in Europe. . The Eurozone reforms are implemented but fail. This would lead to the first scenario of failurebare survival. Austerity without end leads to low to non-existent growth, exacerbated regional tensions, and an end to further integration. Most member states would gladly leave if only they could find a way to do so with acceptable economic costs. . Europe’s plan is rejected at a national level leading to fragmentation. The national political barriers to treaty changes or a major and permanent sacrifice of sovereignty are considerable and include referendums, parliamentary supermajorities, and the support of constitutional courts. Some countries may fail to ratify the reforms or withdraw from them later. Depending upon the precise circumstances, they may be forced to leave the Euro, they may judge the costs of exit to be less than the current costs of staying in, or they could be excluded from formal governance structures. Failure could take two forms\*one much worse than the other. Thomas Wright 26 THE WASHINGTON QUARTERLY j SUMMER 2012 . The Eurozone incorrectly calculates it can survive a pruning. Throughout the crisis, experts and some political leaders have speculated that the Eurozone could survive, and may even benefit from, losing one or two of its weaker members such as Greece. The logic is fairly straightforward: a smaller, more cohesive group of strong economies would lack the structural flaws of a larger, more diverse Eurozone. The new Eurozone could absorb the contagion brought about by the exit of a small economy, although probably not a large state like Italy. This may be true, but as the world learned with Lehman Brothers, there is no way of knowing for sure. Pruning could set in motion a series of events resulting in mass defaults and the collapse of the Euro. . Economic shock to the system. Europe’s leaders may wish to avoid the breakup of the single currency, but the Eurozone remains vulnerable to a sudden and destabilizing crisis that triggers a breakup. This shock could take the form of a contagion following default or a bondholder haircut from a peripheral country, the collapse of one or more of Europe’s largest banks, or the collapse of the Euro swap market.6 Any of these events could cause contagion throughout the Eurozone and overwhelm the European Union’s capacity to bail out member states. By their very nature, the timing and scale of an external shock are hard to predict. Failure of the European project could occur under any of these scenarios, but what might happen if it does? The Global Economy Imperiled The most immediate and obvious impact would be on the European and global economy. The two scenarios under consideration are bad, but one is much worse than the other. It is the overwhelming view of senior economists, financial institutions, and international organizations that the disorderly collapse of the Eurozone, resulting in a return to national currencies, has a high probability of causing a new depression and ending the period of economic integration which has characterized world politics since the Cold War. For instance, the OECD’s Economic Outlook in November 2011 warned: The establishment and likely large exchange rate changes of the new national currencies could imply large losses for debt and asset holders, including banks that could become insolvent. Such turbulence in Europe, with the massive wealth destruction, bankruptcies and a collapse in confidence in European integration and Four accidents or triggers could precipitate an inadvertent unraveling, and failure, in Europe. What if Europe Fails? THE WASHINGTON QUARTERLY j SUMMER 2012 27 cooperation, would most likely result in a deep depression in both the exiting and remaining euro area countries as well as in the world economy.7 In the private sector, Citi’s chief economist William Buiter wrote that disorderly defaults and eurozone exits by the five periphery statesGreece, Ireland, Portugal, Spain, and Italywould drag down not just the European banking system but also the north Atlantic financial system and the internationally exposed parts of the rest of the global banking system. The resulting financial crisis would trigger a global depression that would last for years, with GDP likely falling by more than 10 per cent and unemployment in the West reaching 20 per cent or more. Emerging markets would be dragged down too.8 Other analysts have reached similar conclusions about the consequences of a Euro break up. HSBC predicted, ‘‘A euro break-up would be a disaster, threatening another Great Depression;’’ UBS estimated that a breakup would cost each peripheral economy up to 40 percent of their GDP in year one; ING estimated that the Eurozone as a whole (including Germany) could see a 9 percent drop in the first year following break up, while inflation in the periphery would soar to double digits; IMF chief Christine Lagarde warned that the global economy faces the prospect of ‘‘economic retraction, rising protectionism, isolation and ... what happened in the 30s.’’9 Following a disorderly breakup, it is highly likely that it would be every state for itself as governments sought to do everything possible to insulate their countries against the greatest economic shock in the West since World War II. A return to national currencies would result in tremendous fluctuations, uncertainty, and volatility following redenomination, including a redenomination of complex international contracts.10 It would also mean that countries with a weak currency would immediately be bankrupt, as their assets would have depreciated while their debts would be denominated in the currency of the creditor state. These states would introduce capital controls to prevent capital flight and the collapse in value of the new currencies. Strong states would introduce tariffs to protect against competitive devaluations and cheap imports. The European single market would not likely survive. Globally, governments would try to save what they could and would likely replicate some of the protectionist measures introduced in Europe. The net effect could jeopardize global economic integration and open the door to neo-mercantilism and protectionism. In a bare survival scenario, the Eurozone muddles through intact but never properly addresses the root causes of the crisis. Sovereign debt continues to be costly and peripheral states are forced into new bailouts or some form of default. As economists Simon Johnson and Peter Boone put it, ‘‘At the least, we expect several more sovereign defaults and multiple crises to plague Europe in the next few years. There is simply too much debt, and adjustment programs are too slow Thomas Wright 28 THE WASHINGTON QUARTERLY j SUMMER 2012 to prevent it.’’11 Widespread austerity would suppress demand and cause a deep and prolonged recession with low growth and high unemployment. Europe’s problems would fester in the markets and prevent confidence from returning. Berkeley University economist Barry Eichengreen has argued, ‘‘If Europe fails to grow, it will not be able to dig its way out of its debt hole and restore the confidence necessary for the euro to remain a significant source of international liquidity.’’12 The destruction of the European growth engine would drag down international trade, damaging both the United States and China, although U.S. borrowing costs are likely to remain low as it stays a safe haven for capital. The overall picture from a Europe barely hanging on is one of a lost decade. The consequences of a lost European decade are quite different than that of a disorderly collapse. The rest of the world would suffer because of reduced European demand and investment but they would be spared the great shock that could result from a disorderly breakup. The bulk of the economic costs would be borne by Europeans themselves. The absence of the shock of a depression means that governments would not be forced into a protectionist or mercantilist policy. They would have some choice in the matter and as Adam Posen, an external member of the Monetary Policy Committee of the Bank of England, has argued, they would choose to keep the global economy relatively open.13 The emerging powers have benefited greatly from the global economy and have even seen their positions improve during the crisis. They have no incentive to pull up the drawbridge. On the other hand, the West’s leadership would continue to support the open global economy for geopolitical as well as economic reasons, even though the benefits would be less obvious than they were in the past. There would be populist backlashes in the West, but actions taken are unlikely to pose an existential threat to openness. However, Posen also astutely observes that the continuation of economic integration would take a very different form after the crisis. The decline of Europe means that it would be much harder to manage globalization.14 The world would come closer to unfettered markets as international governance structures are weakened. It would be a volatile environment and prone to populism, imperial competition for resources, and economic crisis. In sum, Europe’s failure would hit the global economy hardest. The worst-case scenario could plunge the world into a new depression and the end of a long period of global economic integration. The more benign scenario would drag down global growth but have the opposite effect on the general direction of the economic ordercontinued economic integration, including the free movement The decline of Europe means that it would be much harder to manage globalization. What if Europe Fails? THE WASHINGTON QUARTERLY j SUMMER 2012 29 of capital, but in a way that is increasingly unmanageable as well as unfettered, introducing dangerous levels of volatility into the economic cycle. Don’t Expect a Return to the 1930s The contemporary international economic order is in a state of crisis, which may be akin to the crisis of the interwar economic order from 1929—1932. We have yet to see if the crisis deepens even further, as it did then, but the early stages have been similar.15 However, the effect of an economic order’s collapse depends upon the geopolitical climate in which it occurs. The 1930s was a particularly harsh, vulnerable, and unforgiving period. Odd as it seems, it is our great fortune that the current once-a-century economic crisis takes place in a much more benign geopolitical environment, at least as far as Europe is concerned. Europe has invaluable antibodies today which would slow the effects of any political cancer stemming from a second great depression. Fortunately, European politics today is not dominated by ideological competition between the extremes. Voters do not have to choose one evil over another. Western Europe has enjoyed over half a century of stable liberal democracy, widely perceived as the only legitimate means of government. No major party calls openly for a new authoritarian system of government, although it is important to add the caveat that some small extremist parties, such as the Greek Nazi party Golden Dawn, do seek to overthrow democracy (they have been condemned and isolated by the rest of the Greek political system). Europe has long struggled with a ‘‘democratic deficit,’’ whereby technocratic elites operate without a popular mandate, but it is not remotely comparable in scale to the legitimacy crisis of the early 1930s or even the 1920s. The strength of democracy means fringe parties have a far higher mountain to climb. The Great Depression led to Europe’s apocalypse, at least in part, because the basis of the post-World War I order, the Treaty of Versailles, was generally regarded by Germans as punitive and unjust. Thankfully, there is no European geopolitical grievance remotely comparable to Versailles. The European Union is a security community where war between its member states is unthinkable and unplanned for. By contrast with the interwar period, Europe’s fringe parties appeal to domestic issues rather than rearmament and a more assertive foreign policy. Even if the European Union fell apart, one could safely assume that Europe’s leaders would still make strenuous efforts to preserve the peace. The full effect of an economic order’s collapse depends upon the geopolitical climate. Thomas Wright 30 THE WASHINGTON QUARTERLY j SUMMER 2012 The U.S. commitment through NATO also has a positive pacifying effect. In a greater Europe, only Russia would like to revise the order in its favor. Yet, Moscow has significant constraints preventing its resurgence, including a weak economy, demographic trends, and NATO’s enlargement. The geopolitical state of Europe today is about as healthy as one could reasonably expect when viewed in a historical context. If the geopolitical path mirrored that of the economy, the future would indeed be bleak. Fortunately, it provides a buffer against a repeat of Europe’s most tragic episode. Yet, there is still cause for concern. Europe may not be about to return to the 1930s, but the failure of the European project would still be extremely damaging by most other metrics. A growing number of governments would be influenced by populist and nationalist sentiment. In creditor countries, such as Finland and Holland, populist parties would have a powerful message about being put on the hook for the perceived folly of debtor nations. In debtor countries, such as Greece, Ireland, and Portugal, populism is directed against the perceived unfairness of the bailouts and the imposition of austerity by the European Union. Both scenarios entail continued austerity in many parts of Europe, core and periphery. In a recent paper, Jacopo Ponticelli and Hans-Joachim Voth conducted cross-country research for the period 1919 to the present day and found that austerity has tended to go hand-in-hand with politically-motivated violence and social instability.16 Rising populism and nationalism would inhibit regional cooperation and make beggar-thy-neighbor policies much more likely. In some exceptional cases, democracy could be at risk. The canary in the coal mine may be Hungary, which has come under intense criticism for Prime Minister Viktor Orban’s efforts to consolidate his party’s hold on power. Orban used his large majority in parliament, won after his predecessor was discredited by the collapse of the Hungarian economy and the intervention of the IMF in 2008, to rewrite the constitution. The new rules reduced the independence of the judiciary and the central bank, and revised electoral laws in favor of the governing party, raising concern throughout Europe and in the United States. Greece is another obvious concernthe shock of a complete collapse of the Greek economy could lead to widespread social unrest, some violence, the further empowerment of populist parties, and an increase in support for extremist and xenophobic parties such as Golden Dawn. Finally, if the Eurozone and the European Union survive, it may be in name only. Genuine cooperation would be hard to sustain under the glare of skeptical and engaged domestic audiences. What is agreed in an intergovernmental setting may fall apart in national parliaments. Large states would use all the leverage they could muster to advance their national interests, usually narrowly defined. What if Europe Fails? THE WASHINGTON QUARTERLY j SUMMER 2012 31 In sum, European democracy should easily weather the storm of a failure of integration, although there may be one or two exceptions. Yet, that is not to say that European politics would not take a turn for the worse in some important respects. The Centrality of Germany and the Rise of Anti-Germanism The great geopolitical irony of the Eurocrisis is that while monetary union was originally designed to constrain German influence in the European Union, it created the crisis that led to the growth of Germany’s relative power and much more assertive German leadership, at least in the area of political economy. After the Cold War, France insisted upon monetary union as the quid pro quo for German reunification. Germany agreed, judging it consistent with its postwar goal of avoiding the isolation of Germany in Europe by Europeanizing Germany instead of Germanizing Europe. Now, while no German politician deliberately seeks isolation, Germany appears to have decided that the only way to save the European Union, and to prevent it from becoming what Merkel called ‘‘a sort of partial museum,’’ is by Germanizing it.17 This entails persuading the other member states to reform their economies so they become more like Germany, or at least so their economic policies are heavily influenced by Berlin. This shift appears to be in line with public opinion. A poll conducted by the Allensbach Institute in January 2011 found that more than 50 percent of Germans have little to no faith in the European Union, and over 70 percent do not see Europe as the future of Germany.18 Germany remains a country heavily socialized to the norms advanced by the European Union, but it is beginning to spread its wings a little more than it used to. In Oxford scholar’s Timothy Garton Ash’s clever turn of phrase, we are now en route to ‘‘a European Germany in a German Europe.’’19 Another Briton, Charles Grant of the Center on European Reform, has observed that the crisis means ‘‘Germany is the unquestioned leader for the first time in the history of the EU. But whether it knows how to lead is a different matter entirely. Many Germans are uncomfortable with the role.’’20 This may be why Germany has framed the policy choices available in the Eurocrisis as a Lutheran morality tale between responsible austerity and irresponsible profligacy, rather than as a clash of equally legitimate interests. In this telling, Germans are innocent bystanders forced to grapple with the mistakes of others. Framing the crisis as a morality tale means that Germany is not merely advancing its own interests, but is pursuing the right choice for the Eurozone as a whole. It is the element of righteousness that has enabled Germany to cast aside the restraints which would have remained in place if its foreign economic policy were to be conceptualized as driven by national interest alone. As long as Germans think of Thomas Wright 32 THE WASHINGTON QUARTERLY j SUMMER 2012 their policy choice as the morally correct path, they will find it easier to overcome the historical psychological barriers to pursuing an assertive foreign economic policy. There is abundant evidence of Germany’s assertiveness in foreign economic policy during the past two years. Merkel’s government has won argument after argument against other member states, often against strenuous objections and deep reservations. Examples include the continent-wide adoption of austerity economics, the hawkish and inflation-focused approach of the European Central Bank (ECB), the imposition of ECB bailouts on Ireland and Portugal, and the strict conditionality attached to those arrangements. Germany has also proposed structural changes to European treaties, law, and procedures which would strengthen its influence. The German Chancellor made this clear in her November 2010 Bruges speech, in which she criticized the influence and role of the European Commission and European Parliamentthe so-called ‘‘community method’’and argued in favor of the ‘‘Union method’’or what former German foreign minister Joschka Fischer has called the ‘‘national primacy’’ approachwhere governments in the European Council make the key decisions.21 The European Council gives the advantage to the large member states, whereas the Commission is seen as the protector of the small states. Subsequently, the EU Commission, which has hitherto been in the ascendant, dramatically declined in influence relative to the Council. Merkel has also insisted upon formal treaty changes to compel member states to adhere to German budgetary practices. It is important to add the caveat that the June 2012 summit saw Germany suffer its first major political defeat when Italy and Spain used their leverage to exact concessions on banking recapitalization and sovereign bond purchases. However, it was just one step, which could yet fail to materialize. On much else, Germany’s views continue to hold sway. Germany has been able to win most of these arguments because it is the wealthiest member of the Eurozone, the least economically affected by the downturn, and the indispensable partner of all other member states. Amidst the storm, it stands as a safe haven. In January 2012, an auction of six-month German government bills produced a negative interest rate of minus 0.01 percent.22 In effect, investors were paying to loan money to Germany. In 2011, German exports reached record levels of over t1 trillion while the unemployment rate was Germany’s lowest since 1993.23 Europe may be in crisis, but so far Germans experience it in the abstract, not in their pocketbooks. Although Germany has benefited from Euro membership and would suffer if it Germans think of their policy choice as the morally correct path, enabling their assertiveness. What if Europe Fails? THE WASHINGTON QUARTERLY j SUMMER 2012 33 collapsed, it is the only member state that can be reasonably confident of a sound currency in a post-Euro environment. Diplomatically, Germany is also the indispensable partner. As European Council on Foreign Relations’ scholars Ulrike Guerot and Mark Leonard have noted, as German power has increased, mini-lateral coalitions are increasingly forming around Germany as other member states choose to accommodate German power and, in doing so, attempt to ensure it is used to their benefit.’’24 In the benign scenario of bare survival, the experience of the past two years would likely continue and accelerate. In a continuing economic crisis, Germany would remain the indispensable power, a necessary partner for those who hope to survive. With its own money and future on the line, Germany would strike a hard bargain, extending its reach inside the bureaucracies of other states to ensure they adhere to their commitments, even if they were made under economic duress and asymmetric conditions. A worst-case scenario of disorderly collapse is more difficult to comprehend, as it could result in the destruction of the continent’s institutional architecture. In narrow economic terms, Germany would be damaged by a collapse of the European Union, especially by the appreciation of its new currency and the collapse in demand in its export markets, but it would also be best positioned relative to other member states. It is highly likely that it would pursue a unilateral economic policy to stabilize its economy, regardless of the impact upon the rest of the Union. Politically, the collapse of the European Union would be a calamity for Germany, wrecking its chief postwar foreign policy objective. The notion that they had no choice and were the victims of the mistakes of others might cushion the psychological blow. Geopolitically, Germany would have to adjust to a regional system without an effective economic and political multilateral architecture, where it is the leading power that develops bilateral relations with others. It may try to reconstitute a smaller core community, including France and its immediate western neighbors. Globally, it would become the most important European power as the United States and China come to grips with the changing landscape. The great risk with the moral frame for German foreign economic policy, which would arise in either scenario, is that it is likely to aggravate other nations who see it as a sanctimonious and insincere power play. Moreover, while Germany’s neighbors accept the need for German leadership to find a way out of the crisis, they are unlikely to accept German economic hegemony indefinitely, especially since German perceptions of what other countries should do diverges significantly from how the populations of those countries see it. The measures that the European Union has taken to address the crisis promise to exacerbate the democratic deficit in the Union. The main beneficiary of this shift in power Thomas Wright 34 THE WASHINGTON QUARTERLY j SUMMER 2012 from other member states is already perceived to be Germany, rather than a truly representative or equitable EU institution. The past two years have already seen a noticeable increase in anti-German feeling in the peripheral countries. In Greece, the use of Nazi imagery to protest German proposals is widespread.25 The structural pressures which increase anti-German sentiment are abetted by unfortunate but inevitable misunderstandings which are immediately disseminated through the media. For instance, in September 2010, German EU Energy Commissioner Gu¨nther Oettinger suggested that EU officials take over tax collection in Greece so they could ‘‘operate without concern for resistance.’’ He also said that ‘‘deficit sinners’’ be made to fly their flags at half-mast as a symbolic ‘‘deterrent’’ to others.26 Comments like these are usually frivolous, isolated, and accidental, but they are not always perceived as such and can fan the flames of nationalism and populism. Anti-German sentiment will continue and increase, particularly if Germany is seen to do relatively well while the rest of the European Union sees their economies deteriorate. In January 2012, Mario Monti, the technocrat who became prime minister of Italy after the fall of Silvio Berlusconi, told the German newspaper Die Welt, ‘‘I am demanding heavy sacrifices from Italians. I can only do this if concrete advantages become visible.’’ If not, he said, ‘‘a protest against Europe will develop in Italy, including against Germany, which is seen as the ringleader of EU intolerance, and against the European Central Bank.’’27

China and the Middle East are Particularly Vulnerable

In a disorderly collapse, a key question is how the rest of the world will cope with a global depression. Earlier, I argued that Europe was not destined for a return to the 1930s because it enjoys a more robust geopolitical condition. But what is true of Western Europe is not necessarily true of the rest of the world. Just as economic growth can generate political liberalization and reform, so too can an economic downturn put pressure on governments. Those countries which are most vulnerable are those with the greatest economic problems and poor geopolitical conditions either because their regimes are fragile or because the neighborhood is particularly dangerous.

Therefore, there should be little surprise that 2011 saw the fall of regimes in the Middle East and North Africa, where governments were generally perceived as illegitimate and poor providers of public goods such as economic opportunities and basic services. Indeed, King Abdullah of Jordan made this point explicitly, arguing that the Arab Spring started because of ‘‘economic difficulties ... not because of politics.’’28 A new global depression would bring punishing global pressures to bear on new and weak governments in the Middle East and North Africa. At a minimum, populism and revolutionary movements would flourish. Some political systems would collapse as people look for alternatives. Governments with resource wealth would be better placed than those without, but they would still suffer as the price of raw materials falls in line with global demand. Political instability inside Middle Eastern countries is likely to bring with it great geopolitical risks. The rise of revolutionary, nationalist, ideological, and revisionist parties is likely to seriously impair regional cooperation, especially with Israel.

China is also highly vulnerable to a global depression induced by the disorderly collapse of the Euro. The Chinese Communist Party has long been assumed to be reliant upon high annual rates of growth. Those would likely evaporate in a global depression as the assumption that legitimacy is a derivative of growth is put to the test. Unlike Western European governments, social unrest in China could lead to demands for a change of political systems or it might lead to the use of militant nationalism as a legitimizing and mobilizing force, with all that might mean for regional instability. Moreover, the geopolitical climate in Asia is not nearly as benign as in Europe. Rising nationalisms would be set against a backdrop of profound uncertainty about the future, territorial disputes both in land and at sea, unresolved historical grievances, and security competition that is already robust. A more assertive and nationalistic China would reverberate throughout the region, heightening anxiety and sparking counter-reactions.

In the more benign scenario of bare survival, it is possible to imagine that the rest of the world would remain relatively insulated from the worst effects of the European recession, as long as it did not significantly drag down global growth rates. Given the deep economic interdependence across the Atlantic, the U.S. recovery would remain tepid and constrained by Europe’s troubles, but the emerging economiesled by Chinamight continue to grow and reduce the gap with the West. If global growth is relatively unscathed, emerging powers could benefit from Europe’s troubles and might be able to insist on a greater say in the governance of global issues, including by increasing their representation in international financial institutions. In this way, the benign scenario might involve an extension of current trends. While the difference between the probability of the two scenarios is relatively small, the effects of the worse of the two are exponentially greater on Asia.

The Western Order Would Be Badly Damaged

Western Europe has been an integral part of the U.S.-led international order since its foundation in the years after World War II. NATO’s greatest role was undoubtedly in waging a successful cold war against the Soviet Union while consolidating democracy in Western Europe, but it continues to play a central part in international politics. In recent years, NATO has spearheaded interventions in the Balkans, Afghanistan, and North Africa. Politically and diplomatically, Europe and the United States form a powerful constituency for openness, democracy, and human rights on the world stage, even if they occasionally disagree about how to pursue these goals.

If Europe fails, the transatlantic pillar of the international order would begin to crumble. In the relatively benign scenario of bare survival, Europe would turn inward as it became preoccupied politically, economically, and diplomatically with tackling its own existential crisis. Under such conditions, it is hard to see how Europeans would be willing to play a truly global role in world affairs. Even if they did, military budgets would continue to drop under the constraints of austerity, and the capabilities gap with the United States would widen. Europe’s soft power, which optimists have long pointed to as the European Union’s real contribution to world politics, would be decimated as European-style integration became a warning to be avoided, not a model to be emulated.

If failure takes the form of a disorderly collapse, the outcome would be immeasurably worse. As Europe reels from the shock of historic proportions, the United States would have to cope with a rapidly worsening geopolitical climate, particularly in the Middle East, North Africa, and China, but also in a number of fragile states around the world. The demand for international leadership and crisis management would skyrocket at precisely the time when a pillar of the West is in a state of collapse. The United States would be compelled to go it alone while Americans would undoubtedly be angered and frustrated at what they would accurately perceive as a European crisis that could have been avoided had better decisions been taken earlier on.

### Solvency

#### Plan Text: The member states of the European Union ought to reduce trade secret protections for medicines by requiring that plaintiffs prove that the acquisition, use, and disclosure of the trade secret did not pertain to revealing misconduct, wrongdoing, or illegal activity, or to protecting the general public interest.

#### The plan shifts the burden of proof from whistleblowers to plaintiffs.

Abazi 16 — (Vigjilenca Abazi, Assistant Professor @ Maastricht University, “Trade Secrets and Whistleblower Protection in the European Union”, European Papers, Vol. 1, 2016, No 3, European Forum, Insight of 3 September 2016, pp. 1061-1072, Available Online at https://www.europeanpapers.eu/en/europeanforum/trade-secrets-and-whistleblower-protection-in-the-eu, accessed 9-9-21, HKR-AM)

The most disconcerting aspect of Art. 5, let. b), is that the whistleblower has the burden of proof about, first, whether the information pertains to “misconduct, wrongdoing or illegal activity” and, secondly, that the disclosure is made in the public interest. In line with best practice and international standards,[16] it is generally the plaintiff who is required to demonstrate by “clear and convincing evidence any claims or statements that the disclosure is purposefully dishonest, or is absent of public interest and that any measures taken against a whistle-blower are not in any way related to the disclosure”.[17] The current text of the Art. 5, let. b), differs from the initial proposal of the Commission as it does not require the whistleblower to show that the disclosure as such is necessary in addition to being in the public interest, which would have made the burden of proof even more challenging than the current requirements.[18] In practical terms, we are yet to see how the dynamics unfold between resourceful companies invoking protection to trade secrets and individuals who need to provide convincing evidence that their disclosure is done in the public interest.

Art. 5, let. b), refers to “general public interest”, which is a change of text in light of the compromise between the European Parliament and the Commission’s initial proposal that referred merely to “public interest”. Many questions arise in this regard. What is precisely the scope of general public interest? Will such definitions give rise to variations in interpretation in different cases and different courts throughout the EU Member States leading to an increased fragmentation of what is already a weak and fragmented system of whistleblower protection?[19] In addition to these concerns, it has been rightly pointed out that there are a number of cases, which show the difficulty in determining whether there is a public interest involved. For example, as argued by Aplin, the case of Browne v. Associated Newspapers Ltd[20] involved a revelation that a chief executive of a significant company misused the resources of that company for private purposes and shared confidential information with his partner.[21] It remains to be seen in practice whether such revelations could be considered as exposing trade secrets and doing so in the general public interest.

Overall, Art. 5, let. b), of Trade Secrets Directive shows weaknesses in the legal protection of whistleblowers in light of the scope of what may be regarded a trade secret, issues that are exempt from protection, questions of general public interest as well as the burden of proof. Importantly, the exception provided in Art. 5, let. b), should be read and understood in the broader legal context of (the missing) whistleblower protection in EU Member States.