



[Plan-A.show](#) Episode 4: Dealing With Disruptions Caused by the War in Ukraine and Moving Towards Greater Resilience

Introduction

[00:00:00] **Niels:** Hello and welcome to [Plan-A.show](#). The podcast that explores questions of sustainability, resilience, and multi-generational thinking in our businesses, societies and personal lives.

[00:00:18] Following up on our last episode, in which we started exploring the impact of the war in Ukraine on Europe's fossil fuel supplies, we are today looking at other aspects of the economies of the region.

[00:00:30] For a more general comment about the situation in Ukraine and its human impact, as well as an introduction on the subject of Europe's fossil fuel dependency, or not, on Russian exports, please listen back to our Episode 3 "The war in Ukraine and getting back to a Plan A", which you can find on [Plan-A.show/3](#).

[00:00:49] In today's episode, both Ukraine and Russia are large exporters of raw materials as well as agricultural goods. Those, in turn, frequently get processed abroad and then further feed into many different industries from chemical to foodstuffs.

[00:01:06] How might those industries be impacted; and will there be any ripple effects? Why is the region called the bread basket of the world? Why do our computers need neon gas? And, if we can't prevent disasters, how can we deal with them?

[00:01:19] All of this, and more, coming up.

Disrupted Supply Chains

[00:01:22] **Eirik:** To pick up on this theme of interconnectedness, I wanted to talk a little bit about how the impact of the current war in Ukraine goes beyond just a potential shortage of supply in fossil fuels. In fact, there are three potential impacts that I would like to touch on.

[00:01:40] These are, firstly, the impact on other commodities and raw materials that come from the region and are exported globally; the impact on supply chains, which are already under high stress due to the COVID pandemic; and then, finally, the potential impact on services exported out of the region, as well as service providers handling these global commodities.

[00:02:01] Obviously, these are all intricate geo-economic and political subjects about which you could write whole books. So, in this case, we just wanted to provide you with a bit of an introductory picture to give an indication about how far reaching the impacts of this war are likely to be.

[00:02:15] So thinking about commodities and raw materials beyond fossil fuels coming out of the region, there are a number of commodities produced in Ukraine, as well as Russia, that flow into, and are of higher importance to, global supply chains than their overall value might suggest.

[00:02:31] Between them, Ukraine and Russia account for a relatively tiny part of the world's economy, just about £1 in every £50. But, as mentioned, this £1 covers a lot of raw materials.

[00:02:44] So, for example, aside from fossil fuels, Ukraine exports mainly steel, as well as grains like barley, corn and wheat, chemicals, machinery and transport equipment. While Russia's main export, beyond



fossil fuels, are metals, machinery and equipment, chemical products and foodstuffs, as well as agricultural products.

[00:03:04] While that doesn't necessarily sound like it would have a major impact on a global scale, considering Russia and Ukraine only make up a small percentage of this global economy, the fact that they are huge producers of raw materials, that many industries and countries rely on, may have some significant longer-term impacts on businesses and countries around the world.

[00:03:26] In this vein, the OECD has recently issued a statement covering exports, which outlines that the countries which share a border with Ukraine or Russia are expected to feel the impact of this war the most, or at least initially.

[00:03:39] While Ukraine's and Russia's largest export partners are mostly European countries, the exported raw materials are often only processed in these countries and then exported again. So just to give you a couple examples of that:

[00:03:53] Ukraine and Russia together produce around one third of the world's wheat exports, earning the region the name "The Bread Basket of the World". A sizeable amount of this grain is exported to Turkey, where it is processed into flour, which is then exported again. And, for example, in 2020, Turkey exported 20% of all exported wheat flour globally. So the disruption of this grain production and export is particularly concerning, not only for the processing businesses in Turkey, that rely on it for their flour exports, but much more so for the countries relying on this grain and flour for their food security.

[00:04:29] And because this is very much a global market, with this flour going all across the world, feeding people in Europe, as well as Asia, the fallout from this could lead to food shortages in countries that are least equipped to mitigate them.

[00:04:41] As a result of the production and supply chain disruption, pressure on the supply of these kinds of raw materials or commodities is likely to increase, driving up prices, which, in turn, will impact poorer countries and people to a much greater extent than developed nations.

[00:04:58] So while many people in developed nations like ours will be able to handle the inflationary increase, it still has the potential to leave many people behind. And especially those people in poorer nations. For example, Yemen, which has, and is still experiencing, an ongoing conflict and war that has displaced millions, is heavily reliant on food imports and nearly half of their grain and bread imports originate from Ukraine and Russia. So you can see that a loss of these imports could further escalate the humanitarian disaster that is already taking place there.

[00:05:34] Similar to this example with grain, most other industries are connected at a global level through dense supply chains. And should one of the inputs to this long chain fail, then this can have impacts across a number of industries globally. And the fact that the region provides significant amounts of a variety of raw and partially processed materials, products like platinum, nickel, palladium, aluminium, sunflower oil, and steel, for example, which are all vital manufacturing ingredients for a broad range of products, means that the immediate and longer-term impacts could hit a number of different industries.

[00:06:12] So while semiconductor and other electronics manufacturers worry about global stocks of precious metals and stocks of neon and xenon gasses, makers of things like potato crisps and cosmetics may face shortages of sunflower oil, again, much of which is produced in Ukraine and Russia.

[00:06:29] But especially the impact on rare earth materials that are used across semiconductor and electronics manufacturing are concerning, given that there is already an ongoing global shortage in semiconductors, which is a product that is used universally. And, within this sector, to top it off, around 70% of the semiconductor industry is currently located in Taiwan, which further increases the potential for disruption, depending on how China's stance to the war and its sanctions evolve.



[00:06:59] And just to give a final example of how interconnected we are and how dependent we are on these products coming out of the region, I just wanted to briefly touch on the industrial dependency on gas.

[00:07:15] For example, the chemicals manufacturer Evonik in Germany is highly dependent on Russian gas as part of its chemical reaction and manufacturing processes. They use gas in the production of fertilizer, industrial and household cleaning products, paints and varnishes, as well as glues and much, much more.

[00:07:34] The main issue with this dependency is that it is absolute, as an Evonik spokesperson recently clarified in an article in the *Süddeutsche Zeitung* literally saying "there currently is no substitute for gas in the production process".

[00:07:48] Considering the broad application the chemical industry has and considering the fact that, in Germany, it uses around 15% of the total annual natural gas supply, you can get a sense of the potential size of the impact and the longterm fallout across industries from all of this.

[00:08:05] Also, industrial production, such as that in chemical parks, is often highly connected. Meaning that you've got a mini supply chain. And in chemical parks, that might literally be the case with pipe networks supplying various production facilities. This makes it much more difficult to just take one production offline, because of a supply chain shortage, as this production will also feed into the production of other companies' facilities.

[00:08:33] So in Germany, a gas shortage and the lack of alternatives in industrial processes could therefore have an impact on the country's major industries. Here we're talking about automotive, electronics, mechanical engineering, and so on. As, for all of these, a number of parts require gas as part of their production processes.

[00:08:52] While there are currently a number of scenarios floating around in the press in terms of the German and European gas supplies, and this is changing rapidly and we're kind of hearing different things as time goes on, but the more pessimistic one suggests that, without gas from Russia, supply could run out within a period of months.

[00:09:13] And it's very much like the CEO of Lanxess, which is another German chemicals company, said in the same article from the *Süddeutsche Zeitung*, "if no gas is supplied, supply chains will grind to a halt. And when they halt all other industries are impacted".

[00:09:28] To sort of wrap this up and drive this point of scale home, remember the semiconductor shortage I just talked about? Well, it turns out that a gas called neon is also very important in the process to produce these. And, as I mentioned, semiconductors are pretty much universal. And guess which country produces around 50% of the world's neon gas, that is important in their production process? Correct, that would be Ukraine.

[00:09:57] Hopefully, all of this, while not exhaustive or very detailed, paints you a bit of a picture as to how this war has the potential to create a cascade of impacts to other industries, countries, and people around the world.

[00:10:11] **Niels:** Do we have any feeling for the bigger picture in terms of if Russia ended up being fully isolated, no more exports, do we have a feeling for the overall impact that would have? Obviously it might be devastating for specific companies or specific industries. But can we say something along the lines of this would throw European economies back by five years, seven years, ten years, two years?

[00:10:38] **Eirik:** I'm not a hundred percent sure. So as part of the research that I did, I didn't come across anything that talked about it in those terms.



[00:10:47] And to be honest, the sort of major red flags that I came across in terms of the severity of the impact were largely around grain-based production. And how the lack of that could cascade through the world as there are a high number of developing and poorer countries highly dependent on that grain.

Optimizing for Fragility vs. Resilience

[00:11:08] **Scott:** Why such a relative way of talking about it? Why is this not like what's going to happen? Is there anything that can stop this from happening? What's the part of it that you're not sure with?

[00:11:19] **Eirik:** First off, I think that's a very good question, Scott. I think that's just a habit of mine, and perhaps a professional one when working in consultancy, to make any future or forward-looking statements non-definitive. Because there's simply too many variables.

[00:11:34] But, coming to the context of your question, I think there is very little that could avert these potential disasters.

[00:11:43] I mean, when you think about the most humanitarian threat, the loss of grain production and input into global supply, what is most likely going to happen is that once shortages become apparent and are not getting through to poorer nations that need them because they can't afford them, there will be much, much more investment needed to feed them with other foodstuffs.

[00:12:08] And then, of course, also investment into greater and more local production. I think that's the only thing that you can, in theory, do about this at short notice. I think we will touch upon this a little bit later again, in terms of the sort of structural changes of how we might be able to address that.

[00:12:24] **Niels:** We touched upon this a little bit in our last Factoid Friday, didn't we, at [Plan-A.show/2](https://plan-a.show/2). Where one of the phenomena in the agricultural market is that there's contracts years in advance for this stuff. So if I'm an industrial bakery, I've bought my flour two or three years in advance, or if I'm the company that is before me in the supply chain.

[00:12:47] And countries do have grain storage. I remember reading that Ukraine had said that they'd be fine for at least a year, in terms of their stored grains.

[00:12:57] But, of course, the question is, firstly, as you said, how quickly does it recover? And secondly, Ukraine is already a fairly advanced, comparatively rich country, if we're looking at other countries who are fully dependent on imports to feed their population and who might not have invested in storage. I remember this having been a subject when this—where did the port explode a few years back? Was that in Lebanon?

[00:13:21] **Eirik:** I think so, yes.

[00:13:23] **Niels:** They were saying that they had lost months of very vital food supply.

[00:13:28] With food, I'm never quite sure if it's truly a supply chain issue or something else. Because the planet produces more than enough food. That's the irony of this all. And yet, for years, the number of people who go hungry has actually increased. And yet still, we are producing enough food.

[00:13:45] **Eirik:** You're absolutely right. There is a simple solution and one very connected to how we consume food, quite literally. Off the top of my head, I think it's something like 40% of all food that is purchased, I believe this was either Europe or the U.S., is then discarded.

[00:14:04] **Niels:** We're back to Plan A, aren't we? It's one of those things where if, there was a more global perspective, or if that was taken into account at different stages in the process, we might be in a more resilient situation.



[00:14:16] **Scott:** It seems like we're dancing around the topic of there is no optimal solution when you have someone who is willing to invade a country non-provoked like this.

[00:14:27] Let's just assume everybody's happy with each other, all the supply chains are done, and everybody's eating well. If someone comes and disrupts that for no reason, or with no provocation, in a perfect system, it's going to cause massive disruptions.

[00:14:43] If the entire world were to optimize itself so that everybody gets the most out of it, doing the least destruction to this planet, it would always settle itself in a way that there's certain areas of the world that are more prone to produce certain things. But you can't account for a crazy person doing crazy things. Not without becoming like a nationalistic type of thing where you have smaller groups of people who are then all working towards their own goals. I don't understand like what the alternative to this would be.

[00:15:16] **Niels:** On that letter point that doesn't help either, because if every city produced their own food, you'd just need one regional crop failure and immediate mass disaster.

[00:15:27] **Scott:** That's what I'm saying. Like for me, there's no alternative to working towards those places produce what they're most prone to produce or most capable of producing. It'll always be a major disruption if someone comes in and does something like this.

[00:15:44] **Niels:** think you are absolutely right that, right now, we are confronted with something where we can't not have the disruption now. There's not a magic button we can press, and then suddenly there's new farmland cropping up somewhere else, right? I would hope that long-term, we can find ways to, if not avoid these conflicts at all times, at least make them a lot less likely.

[00:16:06] And apart from that, I'm very interested in just resilience. So how can we structure the food supply chain or anything else. Because if we assume that it's inevitable that things happen; it might be a crazy person going to war, it might be an asteroid, it might be a nuclear disaster, it might be tsunami; things will happen. And if we have our beautifully optimized systems where the second *anything* happens, *everything* crashes, I do fully agree that should be avoided. And that is an area worthy of exploration.

[00:16:38] Maybe I can pitch a book, at this point, by Juliette Kayyem *The Devil Never Sleeps: Learning to Live in an Age of Disasters*. In disaster management, they have this concept of "The Boom". The boom could be anything and the boom is inevitable. It could be an earthquake, it could be a tsunami, a war, whatever. A disaster will happen, probably ten disasters will happen.

[00:17:00] And you can worry about two things. You can worry about anything left of the boom, and then you concern yourself with, I don't want to deal with an earthquake destroying all our grain storage, so we'll just build the storage in a manner that they're more resilient to earthquakes.

[00:17:18] Or you can think of right of the boom, that is you presuppose the boom will occur. And then you worry about, okay, assuming we lose 50% of our grain storage, what do we do? So you'll have backups and redundancies and alternative supply chains, and you have almost like failsaves. You have alternatives on which you can then fall back without the whole thing crashing. So if you can no longer have potatoes, maybe at the very least you still have rice. You know, that sort of a thing.

[00:17:46] Coming back to your question, Scott, I think that is the sort of medium-term, longer-term thing to think about.



Disrupted Logistics

[00:17:50] **Eirik:** Unfortunately, the bad news doesn't stop with physical exports. And I wanted to briefly touch specifically on the impacts on supply chain networks.

[00:18:05] These are, of course, still highly stressed and reeling from the impacts of the global COVID pandemic. Port congestion, as well as freight costs and delays are all still high. And the whole logistics sector is really still struggling with that disruption.

[00:18:20] So in addition to the potential product and raw material shortages, when these materials and supplies that exist cannot get to where and when they are needed, whether that's due to delay or the scarcity, other companies' operations are at risk.

[00:18:37] And as you can imagine, supply chains going into and out of Ukraine are severely disrupted at the moment while Russia's are facing a broad barrage of sanctions, pretty much putting the entire region, in terms of supply chains, at standstill.

[00:18:53] But there are impacts beyond the supply chains that connect Ukraine and Russia to the rest of the world, as the war is also impacting those supply chains that run past or through the conflict zone.

[00:19:04] It has changed routing for air freight carriers on routes that now have to avoid Russian and Ukrainian airspace. And as a result of air cargo planes, having to divert, they take longer and spend more on fuel and therefore potentially opt for smaller and lighter loads.

[00:19:19] The New York Times recently quoted an analysis by Flexport, which showed that flights between New Delhi and London, for example, are now an average of 8% longer than prior to the war. While this may seem like a small impact, these kinds of longer trip times have the potential to create cascading delays and backlogs for industries that depend on air freight across sizable segments of the air cargo sector.

[00:19:45] These air cargo related industries, again are also quite varied. They include the aforementioned electronics and semiconductor manufacturing industries, but also industries such as fast fashion.

[00:19:58] Now moving from air to land transportation, and thinking about rail, there are many companies that have been building components and finished goods in China and using the Russian railway to move these items to Eastern and Western Europe.

[00:20:13] And of course it's possible to ship some of these items by air now rail routes through those countries aren't possible anymore, but that of course is significantly more expensive, especially now that airlines need to bypass Russia.

[00:20:27] So overall, this war on the back of a global health crisis and during an ongoing climate emergency, is adding increasing stress and strain onto a geo-economic and political system, further pushing against and beyond its limits.

[00:20:42] With many commentators now asking fundamental questions about how our economies operate and forecasting this to largely slow and bring an end to the just-in-time supply chain model, that many major companies have built their operations on, we can kind of already get a feeling of the types of impacts we might be seeing going forward.

[00:21:02] The Harvard Business Review recently published an article on how the war in Ukraine is further disrupting global supply chains with the emphasis being on "further". While the authors, David Simchi-Levi and Pierre Haren, stated that headwinds to the global supply chain model have started gathering pace during the financial crisis in 2008, so quite a while back, the disruption has only started increasing in the last four years. During which the China-U.S. Trade War, and then the supply chain disruptions caused by the pandemic, and the climate related events, have all made their impact.



[00:21:36] And, in turn, businesses have started reacting to all of this. There's a 2020 survey of around 3,000 U.S. firms, that is also cited in this Harvard Business Review article, that found that companies across a variety of industries had, were in the process of, or were planning to onshore some or all of their supply chains from their current offshore locations.

[00:22:00] Which is a massive indictment of the state of global trade. But in terms, perhaps, and this is on a side note, of the current climate emergency, which will require drastic change, it may be a potential opportunity to readjust operations in a way to make them more resilient and sustainable.

[00:22:20] So overall, due to this conflict, war, we can expect to continue seeing a swing away from global towards localization. However, this will not necessarily remedy the fundamental structural problems we are facing, even when not considering our dire need to react quickly and efficiently transition to a more sustainable economy.

[00:22:44] The fact that China is such a dominant producer and player within the global supply chain means that to reduce their dependence on it, other countries will have to make significant investments, which will only pay off over a long period of time. As an example, Intel has recently announced plans to spend around \$20 billion to build two semiconductor facilities in Ohio. But the first plant won't begin production until 2025. So again, while it's certainly possible to mitigate impacts, it will take some time to do so.

[00:23:22] So this war, in combination with the China-U.S. Trade War and other pandemic and climate related disruptions, is certain to accelerate the movement by Western companies to reduce their dependency on China for components and finished goods and on Russia for transportation and raw materials and lead to more localized or regional sourcing strategies.

[00:23:45] Now, if China decides to back Russia in its war with Ukraine, that would only fuel the movement and global shift away from China. And if you look at how businesses in Europe and America, for example, are viewing all of this disruption and the massive uncertainties they are facing when it comes to economic outlooks, you can see that the levels of concern are increasing. With the demand for services of risk management experts, that can support businesses in how to best plan for and cope with the impact of these kinds of crises, increasing massively.

[00:24:20] There's a quote from a BBC news article published earlier this month, that comes from an expert in risk management, Dr Pescaroli, a lecturer in the University College London's brilliantly named Institute for Risk and Disaster Reduction, and he brought exactly what we are trying to convey here to a very simple point. He said: "We live in an interconnected world. Every single company is going to be affected by Ukraine in some way, not just firms that do business in Russia."

[00:24:52] Note that he talks about every single company here. And, more worryingly, he goes on to say that Coronavirus showed that too many firms did not have a plan and contingency in place to deal with such significant disruption.

[00:25:05] So the question now is: have we learned anything from the pandemic and can we make plans not only to become more resilient in the way we organize our economic activities, but also begin to do so extremely quickly?

[00:25:20] Undoubtedly, this is all very much doom and gloom. First and foremost, there is a new and acute humanitarian disaster unfolding in Ukraine. Which, in combination with all the other stresses on the way we produce, consume, has the potential to cascade into manifold problems. Some of which that could escalate to have tragic impacts, such as grain shortages and starvation in many of the poorest regions in the world.



[00:25:45] But also, it should serve as the latest in a series of ever more pressing wake up calls that the way we live our lives is fragile and that it requires significant changes, international cooperation and major investment to be sustainable for generations to come.

Over-Consumption

[00:26:02] **Scott:** When I listen to that, you say something about doom and gloom, I went through a rollercoaster of, oh my God, this is so heavy, to, by the end of it, I was in a head space where I was thinking, you know what, I wish we could just all stop. You know, just stop, hit the stop button and consume less, want less, need less.

[00:26:28] I wish we were in different phases of our lives, everybody understood, like everybody understood that it's not things that you need, it's people you need, it's relationships you need. Because I feel like if we just stopped consuming for a handful of days, we could reset this thing to, actually, everything is just fine. I don't know. I heard it and I got to the point in my head where I was like, we're not that far away from okay. It feels really disastrous right now, but it just feels like it's possible.

[00:27:00] **Niels:** I'm fully on board, I think from our perspective and our specific experience, but at the same time, we should remain mindful that there's millions and millions in the world who are nowhere near our standard of living, and who should not pause, cannot pause. Maybe we can redirect the consumerism, less here, more elsewhere.

[00:27:21] **Scott:** But I don't consider, you know, , the poorer countries, the ones on whom's back we are consuming, the ones that are consuming their way into a problematic world. So that's definitely two middle fingers pointed towards the Western world about the way they live. I think the solution is easier than it seems. It's probably not going to work out easily, but I don't think we're far away from okay.

[00:27:43] **Niels:** It's what we wondered in the last episode, didn't we, [Plan-A.show/3](https://plan-a.show/3). Which is this, this concept of, oh, we cannot survive, in an economic sense, without gas from Russia. Well, surely we could just not use it. And yes, that would have impacts. We would have less of whatever we need it for. But I do completely agree with you, Scott, that we're kind of stuck in our way.

[00:28:06] And it all goes back to this concept of carbon lock-in and this idea of lifestyle inflation, where humans never want something to be taken away from them. It doesn't actually matter whether what is about to be taken away, makes them happy, is any way, shape or form useful. It's just, loss is very undesirable and we can't cope with it.

[00:28:26] And we don't stop and reflect and contemplate is it actually worth all the negative impacts. Fast fashion is a perfect example, Eirik you brought it up. I think one could argue, that not only does it not make you happy, it actually makes you unhappy. So there would be a double benefit of getting rid of it. But once you have something, it is so, so hard to take it away.

Resilience and Risk Management

[00:28:44] **Niels:** I do have a, maybe a humorous comment, to put us on a different path. You mentioned this risk and disaster reduction, what was it called?

[00:28:54] **Eirik:** It's an Institute for Risk and Disaster Reduction at University College London.

[00:29:00] **Niels:** That reminded me, I was in Kobe, Japan, and they have a museum, but they call it the Disaster Reduction and Human Renovation Institution. Which is all about how to deal with disasters; which I think is perfectly, I don't even think it's the mistranslation, it's just perfectly named.



[00:29:17] This book, *The Devil Never Sleeps*, I do highly recommend it, there's an anecdote in there where in the U.S., by now, in any natural disaster, the majority of the fatalities is not due to the disaster itself, but due to carbon monoxide poisoning after the disaster, because once electricity is out, power generators, they just have them running indoors. And you would just need, maybe a few leaflets to tell people not to do that, right? It would be a lot cheaper than building earthquake proof houses and these things.

[00:29:49] I guess it's both resilience: building the earthquake proof house is resilient, and then also assuming there will be an earthquake is resilient.

[00:29:56] **Eirik:** Exactly. The point is the little piggy that builds himself a wooden house, a straw house, and a brick house to cover for all potential eventualities. Because, you know, the straw house is probably going to be better in an earthquake while the brick house is definitely going to be better against the wolf...

[00:30:13] **Niels:** I have the perfect story on that front. In my childhood, there was a book I liked and I can't recall the title, I was very young. It's an illustrated book and winter is coming and all the little animals in the forest are preparing for winter. They all live in, I don't know, they have a flat sharing situation going on in their little burrow.

[00:30:32] And there's one mouse, who just sits in the sun. So all the other animals are running around, collecting nuts and collecting hay and all these things. Everyone is busy working and everyone is sweating. And the mouse is just sitting there with their eyes closed, enjoying the sunshine.

[00:30:48] And the other animals, they get upset and they are saying "help us, help us". "I am, I am", the mouse insists. And this goes on for a few pages, for a few weeks. Cut to: winter is there. Everyone is in their burrow. The hatches have been closed.

[00:31:00] And they have all the provisions. They have all the nuts they want and all the water and everything. But they're horribly depressed. It's dark, they're stuck there for months and months and months. And the little mouse, who enjoyed the sunshine all day long, enchants them with stories about the sun and about warmth and about all these things.

[00:31:16] And so the other animals realize that, actually, whilst what they were focused on was very important, what the seemingly lazy mouse was focused on was just as important. Because the mouse who enjoyed the sun knew that winter cannot be avoided, it will come for sure. And we will need some sunshine when it does arrive.

[00:31:35] **Scott:** That was a beautiful story, man.

[00:31:38] **Eirik:** I thoroughly enjoyed it. I agree.

[00:31:40] **Niels:** We'll link in the show notes.

[00:31:42] And with that, shall we move on?

[00:31:45] **Eirik:** I think so. Let's do that.

Disrupted Services

[00:31:46] **Eirik:** So having painted this, hopefully rather vivid and somewhat depressing and perhaps shocking picture of the potential impacts of the war in Ukraine on physical exports and their global supply chains, I wanted to briefly touch upon the export of services. As here, the picture differs significantly. It's not something I wanted to spend a lot of time on, but just to acknowledge the differences and the implications the war might have on service provision.



[00:32:16] At the moment, there are perhaps three key aspects to touch on.

[00:32:21] One being the disruption of the services market in Ukraine and Russia as service providers in these countries are either unable to continue operating or, in the case of Russian companies, may have their clients rescind their business.

[00:32:34] Second, there is the likely skills drain that will most certainly impact both countries going forward. However, it's probably going to have a much greater and longer term impact in Russia. And this is predominantly more likely across white collar jobs within service industries, as the people with skills and the means to do so are much more likely to be able to leave the country and build up an existence elsewhere.

[00:33:01] And should the war not conclude soon, which, let's be honest currently, unfortunately seems very unlikely, the question is how many of the people who have left and managed to find work elsewhere will return.

[00:33:14] Finally, there is Russia's exclusion or restriction in being able to use global financial networks.

[00:33:22] Again, the theme that combines all of these points is the interconnectedness we've been talking about. So services, just like physical exports, are now global. And all of these rely on the financial networks that we use to facilitate their transaction. And so, the moment supply or transaction channels are disrupted, this has massive implications for business as usual around the world.

[00:33:46] For example, it's estimated that there's around about 700,000 software developers in Ukraine, Russia, and Belarus. Again, that's a global industry. Again, it's an industry that is already faced with supply shortages in terms of lack of skilled IT professionals. And again, it's this global economy. So companies from around the world rely on software developers based in these regions.

[00:34:12] In fact, there are a number of software and IT companies that are already heavily impacted by the war simply due to the fact that their entire software development hubs, so the people who are actually writing their code and software, were sitting or based in those regions.

[00:34:28] In addition to all of this, the services sector within Europe, especially those engaged serving in, or part of, the logistics sector that handles any of these products and materials that are coming out of Ukraine, Russia, or are generally impacted by the war as discussed, these companies are facing significant uncertainties about their operations.

[00:34:51] So on a very brief and more anecdotal note, I recently heard that my uncle, who works in this sector out of Hamburg, he noted a significant spike in demand around these at risk products and materials. And at the moment they are finding this impossible to meet.

[00:35:11] Again, this is an escalation of demand to ensure supply during a shortage. And this is really reminiscent of this great and idiotic toilet paper shortage that occurred at the start of the COVID pandemic when everyone stocking up exasperated the actual shortage.

[00:35:27] And as a closing thought to the second point, this knowledge and skill drain that is likely to occur as the war drags on, this is likely to further increase global divisions. Because should the more highly skilled continue leaving Russia and Belarus, while this might be a gain for European countries and economies, it's probably going to come at a cost that stands in no relation to this gain. Because, beyond the acute humanitarian disaster, of course, the people leaving will also likely be those that would advocate for an end to this war and societal improvements back home in Russia and Belarus.

[00:36:10] So even when just briefly considering all of this, it becomes really apparent that how we work and live is not only great, but it's also incredibly fragile due to this multifaceted interconnectedness that we've established.



[00:36:24] And this fragility is just so exposed through these butterfly like effects where a seemingly small change can cause a large consequence or, well, a cascade of consequences, really. By no means do I want to categorize the war as a small change, don't get me wrong. But rather its impacts on the global economy and its scale in relation to that of Ukraine and Russia.

Reform or Catastrophe

[00:36:49] **Eirik:** So I'd like to conclude all this, and by that I mean the topics of export and supply chains, by paraphrasing the position taken by one of the current presidents, Sandrine Dixson-Declève, of the Club of Rome as part of a piece by Andrian Kreye that was published in the *Süddeutsche* a couple of days ago.

[00:37:10] The Club of Rome, by the way, for anyone who isn't aware, consists of a hundred full members selected from current and former heads of state and government, UN administrators, high-level politicians, government officials, diplomats, scientists, economists, and business leaders from around the globe. So in short, it's a fairly heavyweight organization.

[00:37:30] As an organization, it actually has not been a stranger to radical and non-traditionalist economic thinking. It first published a paper in 1972, for example, which was entitled and all about the limits to growth. At the time, not a very popular position to take.

[00:37:48] And the Club of Rome has been thinking about this global interconnectedness since the late 1960s. So pretty much what we've just been talking about here.

[00:37:57] And it's current president, Sandrine Dixson-Declève, has been calling for a system change, saying:

[00:38:04] "The war in Ukraine shows us once again that our global economic system is not resilient. We have turned food into world trade goods. It subjects them to trade balances and that is why the most important issue right now is access to food and not the type of food."

[00:38:20] And, as we talked about, a global food system dependent on global supply chains is acutely endangered. However, Sandrine Dixson-Declève sees this simply as the beginning, saying:

[00:38:32] "COVID was the first alarm. Ukraine the next. It can't be that there is just one granary, or bread basket, in the world. We need one for Africa and one for Asia. The mutual dependencies, when it comes to basic products such as food and energy, are no longer tenable."

[00:38:50] "We live in an age of multiple crises for which we have no powers of resistance. There will be more conflicts, for example over access to drinking water and other raw materials. Societies will become more unstable. What will happen if, in addition to the pandemic and war, another harvest failure occurs due to climate change?"

[00:39:13] It is basically, as the article from where this quote has taken, then concludes a question of reform or catastrophe.

[00:39:22] To finish this thought on a more positive note, there is still time to enact reform and change. And the current suffering of the people in Ukraine and other places around the world, such as Yemen, Afghanistan, and Syria, should serve all of us as a stark and immediate reminder of what we actually hold most dear. And that we should be doing all we can and sparing no expense to ensure that we start working towards a a more "enkelfähig" and sustainable future.



Credits

[00:39:49] **Niels:** This was [Plan-A.show/4](https://plan-a.show/4). Go there to download or share this episode or to read its transcript.

[00:40:05] To donate to the Pines Forest School, which we mentioned in the last episode, go to www.pinesforestschool.pl/donate. To donate to the UN Refugee Agency, go to donate.unhcr.org, that's the letters UNHCR.org.

[00:40:28] If you have any comments or questions, please email us at feedback@plan-a.show. If you work in any of the areas discussed on this podcast, we would love to record an episode with you. Please get in touch.

[00:40:41] [Plan-A.show](https://plan-a.show) was created by Eirik Bar, Niels Ganser and Scott Denton. This episode was edited by Eirik and Niels. This episode's music is by Nikolay Skvortsov.

[00:40:52] Thank you for listening.