

Transcript of the video from our VISION event with Adam Tooze on 19 May 2002, you can view the video by clicking <u>here.</u>

Not Back to the Future: Trust and Leadership in a Radically Uncertain World

Billy Glennon, CEO VISION Consulting

I'd like to welcome the customers of VISION, friends of VISION, some family, and hopefully some future customers of VISION this evening.

I'd particularly like to welcome Dr. Fernando Flores, an old friend, mentor, business partner, whose thinking has been at the core of what's made VISION different in the last 20 years. Fernando has come with his wife, Gloria, from California for this event. So welcome, Fernando. I'd also like to welcome Leo Clancy, who's Head of Enterprise Ireland, responsible for growing Irish business internationally. So welcome Leo.

I want to say two really simple things about VISION and get on to the main business of the night.

Our tagline is fast and thinking. We bring a perspective on the world, often coming from a background of philosophy, that allows us to observe what's going on that other people don't quite see. And we apply that to the world and to the world of our clients. That enables us to anticipate things and move much more quickly. That's the thinking part. And then the fast part, we move like lightning to produce results.

We're very proud of the work that we did for the HSE in Ireland where we rolled out the GP vaccines in Ireland at a record pace. And the highlight was setting up a 100-person call centre hiring the people developing the software and issuing antigen tests in the space of a week. And then on really large capital projects, getting those projects to site in half the time and getting them off site in half the time.

What is going on with the world?

Every one of us has probably a local view, an individual view. My 16 year-old daughter is holed up in Spain, because she contracted COVID and she can't

travel for a week. Adam Tooze was telling me that COVID is accelerating again in New York and they are having to put in restrictions. So, the pandemic isn't over yet.

I was at a charity in Jamaica a couple of weeks ago. A charity that we're involved in, that takes disabled kids that are abandoned in the street but pride themselves on being self-sufficient. And an Irish guy about 20 years ago built a fish farm. There are no fish in the fish farm. And I said how come there are no fish in the fish farm and he said: "Look, the fish meal comes from the Ukraine. And we have been unable to get fish meal since it started." Inflation. For me, from personal experience, the number of 7% to 8% that people are quoting ... it feels closer to 20% in terms of what I'm what I'm seeing.

And we haven't mentioned climate change and we haven't mentioned the war in Ukraine, but here's one personal example. Ellie in our finance department is from the Ukraine. She came to us about two months ago in tears. Her family, her sister's family, were in real fear of being overwhelmed by the Russian advance. Signing the cheque for €5,000 to get her out of there is an easy thing to do. But you think of a family, their whole future, disappearing, getting out of the Ukraine, trying even to find a place to settle. And that's really close to us.

And that's what Adam is going to talk to us about tonight. But before I talk about Adam, I want to talk a little bit about our panellists.

Alistair Phillips-Davies is the CEO of SSE. Alistair and I have known each other a long time and I really appreciate you joining us tonight, Alistair. One of the things that I admire about what Alistair is doing is that, over the last four or five years, he's taken a vertically integrated energy company, and is turning it into a renewable energy generation and distribution company, pioneering some of the biggest capital projects in the North Sea and in the Atlantic.

So Alistair's at the centre of this climate change debate and move to renewable energy and I'm really interested in what he's got to say.

Martin Bradley is Head of EMEA for Macquarie Asset Management, one of the largest infrastructure investment companies in the world. Being head of Macquarie, you've got to be financially aware. But in my conversations with Martin, what strikes me is how passionate he is that private equity plays its part in the transformation and that he is willing to hold off some of their returns for significant periods of time, for the sake of creating the new future. And he speaks about that with a missionary zeal which I am taken by.

And Jennifer Cassidy, an Oxford Professor, is very much in demand by the media organisations. Her PhD is in the area of digital diplomacy. She did her case study on the annexation of Crimea by Russia. And I discovered yesterday that Jennifer started out really interested in a career in music. So how somebody from Dublin with a passion for music ends up as a Professor in Oxford University, I'm really interested in that.

Adam Tooze is a historian economist to whom Fernando and Martin Macken recommended that we pay attention. He's a historian but in a different way. He understands that you need to reinterpret history in the light of what's happening now. That's what makes him really interesting. History, for him, is not a static, fact-based thing. It's about interpretation. You need to interpret history in terms of the present and, in that way, you can anticipate the future. I believe Adam is one of the voices that we will need to listen to over the next number of years. And I believe his sense of anticipation about what's going to happen is really strong for the short run. That's why we invited Adam to speak here tonight.

We're delighted that Adam has been able to come here to join us. The intention of the evening is to be informal. There are some very experienced people here who are right in the middle of many of the issues that we're facing. And I'm just interested in seeing how the conversation goes. We're going to record Adam's speech. But beyond that the conversations are Chatham House rules. What that means is that you can report on what happens, but you can't report who said it. That's the basic rule. And without further ado, I'd like to call on Adam.

Adam Tooze, Kathryn and Shelby Cullom Davis chair at Columbia University in New York and Director of the European Institute Introduction: What is History?

It's a real pleasure to be here. Thank you so much for the welcome, Billy, and thank you to the entire VISION team.

Global overview 2022

Adam Tooze May 2022

This is the second of a series of conversations that we've had that go back to the end of last year when we did an event in Dublin. And it has struck me that, no BS, there's really an alignment between the way in which your company tries to think about the future, the economy and the politics of moving forward and the urgency with which you act and the way I think that we need to think about history and politics and the present. I bring to that the sense of a historian who has worked on the early 20th century – World War One and World War Two and all of that – but, above all, the sensibility of somebody for whom history is something alive. It's immediate, it's driving, right?

The history that really interests me is the weird thing that happens between yesterday, today and tomorrow. The way in which today becomes tomorrow's yesterday and the way in which we constantly, therefore, have to reorientate ourselves. And that is a deep philosophical problem, but it's also an eminently practical, political and indeed, of course, economic problem. There are very few sectors of the world which are more obsessed, for instance, with the issue of expectations – which is essentially this issue of how we, from any given moment, project the future – than the business world and the financial markets where, as we all know, inflation expectations are the key variable in the current moment.

Four Radical Uncertainties

So it was a real pleasure to accept this invitation until I got my assignment for this evening, which is to give my take on what will happen in 2023! To which my response was a kind of embarrassed, "Well, what's **your** take?"

Q2 2023?

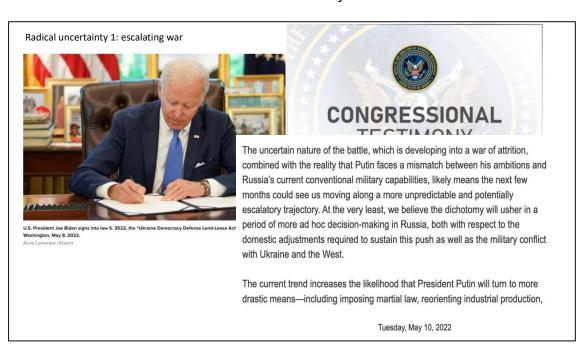
The good news is that it is not just you! The world IS unhinged right now.

I mean we are all going to need a take at some point, as this moment arises. How are we going to orientate ourselves? And so I thought I would start the talk, broadly speaking, by just outlining, for absolutely fundamental reasons, why it is so incredibly difficult at this moment to form a coherent and intelligent take on where we're going to be 12 months from now. And then, not to leave

you completely in the lurch, point you to one area where I see a huge amount of energy. This is the part that the students I teach, the wider policy community that I'm engaged in are trying to shape a future. And the interesting thing about that is it converges so directly with the panellists that I'm privileged to share the stage with later, because it's all about infrastructure, industrial policy, and ways of shaping the future.

So if you're having a struggle with trying to form a coherent outlook for 2012, join the club! And the first reason why we don't know where we are – really, because we don't know where we're going and so maybe we don't even know where we've come from because these things are entangled with each other – is, of course, the war. We have to talk about the war, even if the war seems to have entered something like a lull period, I believe we are fundamentally underestimating the violent dynamic that's at work there. And as a historian, there have been two moments that have really scared me.

The first one was the nuclear threat in February. This is the second.

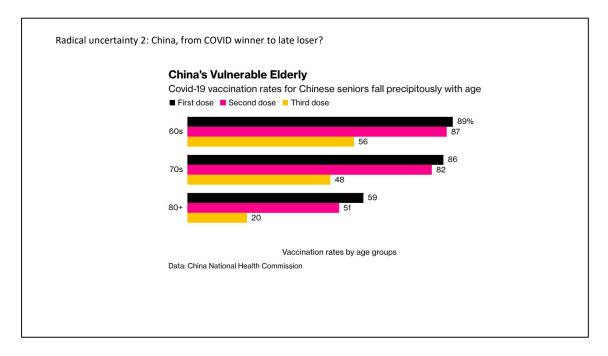


This is President Biden, a very benign and well-meaning President, signing into law on 9 May, Victory Day, America's latest LendLease Act. LendLease is not the Marshall Plan. When you think Marshall Plan, you're thinking post-war peaceful reconstruction. LendLease is the tool by which America fuelled our war effort against Nazi Germany and it is one of the hinges through which ultimately, conflict broke out between Nazi Germany and the United States. If you want to understand the deep riddle of why Adolf Hitler declared war on the United States and not the other way around on 11 December 1941, then this moment, when Roosevelt signed it into law in the spring of 1941, has quite a lot to do with it. Because this is all measures short of War. The United States is essentially committing itself to \$40 billion worth of commitment, they haven't

quite done the congressional deals yet. That is one third of Ukraine's GDP approximately before the war.

So America is going to bankroll the total war effort on the part of Ukraine with the explicit intention of stopping the Russians in their tracks, inflicting irreparable damage to Russia's military. And that is a hugely risky thing to do. You do not have to scratch the surface very hard in Washington DC right now to find people who will admit that we have never been here before. And you really don't have to go any further than the testimony given to Congress by the Director of National Intelligence, Avril Haines, and this extraordinary passage about "unpredictable escalation". So America's own leadership knows that the path that we are currently headed down has within it a substantial tail risk of apocalyptic risk. It cannot be denied at this point. They go on, further on in the testimony, to say we think on the nuclear side that there are substantial safety catches in place. But that, ladies and gentleman, is the world that we are in – hypotheses about how secure those safety catches are. That is as fundamental a source of uncertainty as you could possibly imagine.

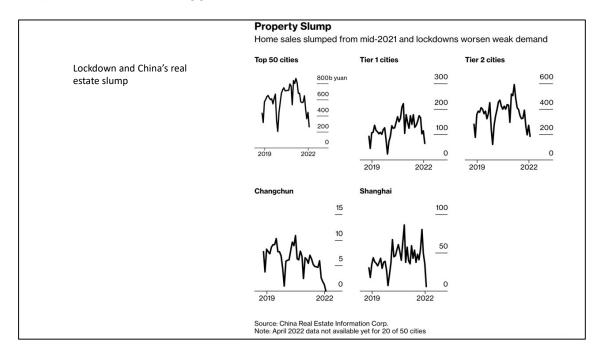




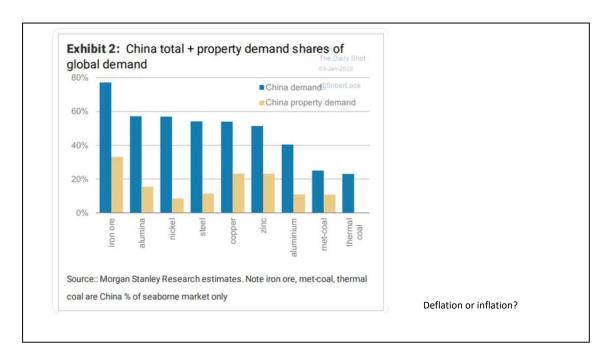
And the epidemic is not just a social inconvenience in New York. Right now, in the second largest economy in the world, and particularly its beating heart, the Shanghai and manufacturing zones of southern China, it is a manifest and immediate threat to the world economy in its current form. Just Omicron, nothing worse than Omicron is causing havoc on the Chinese side. In narrative terms, what it threatens to do, and again, we're talking about a huge destabilising shift in expectations here, from China's point of view, they threaten to become the last loser of the COVID epidemic. They came out of the first wave of the epidemic as the great victors but what Xi Jinping is currently

confronting is the possibility that he will become the last loser. Why? Because of this graph here, which is an astonishing graph, because the lines are organised by age 60s, 70s and 80s. And it shows you that the incidence of vaccination in China in March this year varied negatively with age. They were not vaccinating their old people. Not only are their vaccines not as effective as ours. But they weren't vaccinating the right people.

And this creates a huge vulnerability within the Chinese governmental apparatus, which they do not appear to have grasped. And they now confront that reality. Now, we could all break out in peals of laughter and *schadenfreude* and be delighted at the fact that another authoritarian regime is going to be humbled by its incompetence in this respect. But we are also dealing with a huge geopolitical, political and indeed economic liability, because what that is doing is devastating the efforts of the Chinese government to offset the shock that they delivered to their real estate sector last year. Very deliberately, the Chinese tried to do what we in Europe, notably in Ireland, failed to do before in 2008: deflate a housing bubble. Why? Because they could see it was risky. And they've watched us struggle with it.

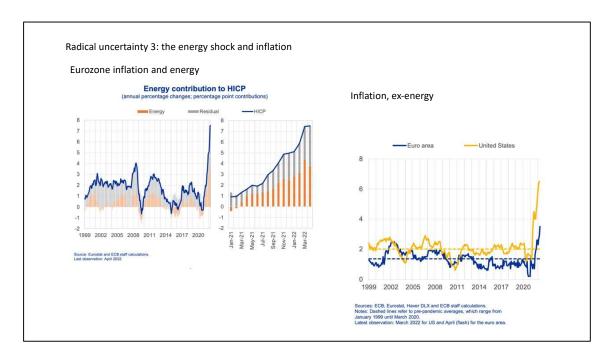


They decided in 2021, to prick the bubble, absolutely deliberately, three red lines, straight to the balance sheets of their property developers. Exactly what you should do from a macro-prudential point of view if you're in a strong place. Now they're in a situation where they have a collapsing real estate sector. They're trying to do offsetting stimulus and locking down at the same time. And the consequence of that is that they are seeing a nose-dive of their real estate sector. And why does that matter? It matters politically to Beijing but it also matters to the global economy.

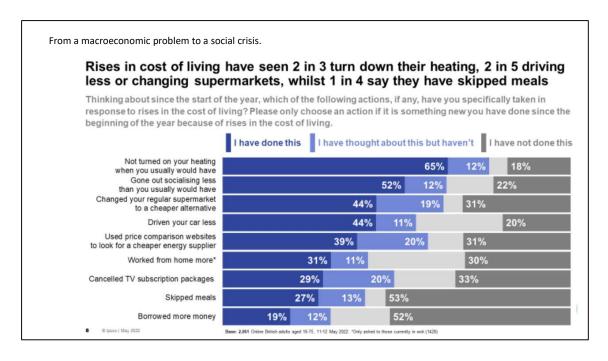


This is the share of China's demand for raw materials. The larger columns are China's demand total, the slightly shorter columns are Chinese real estate development as a share of global raw material use. A slowdown in the Chinese real estate sector is a massive shock to the global commodity economy. And it's a negative shock. So this is one of the bamboozling things that's going on right now. I was at a meeting on Wednesday with folks in New York representing PIMCO and JP Morgan. They are, right now in their assessment of the commodity markets and oil prices for the second half of this year, trying to weigh the well-known inflationary pressures against this which they see as a hugely deflationary pressure to those key markets. Because the Chinese real estate boom, which is really difficult to wrap one's head around, is the single largest surge in wealth and industrial production in the history of our species. They urbanised 300 million people in the space of a generation. That's the entire population of the United States. In a single generation they created more wealth in a single surge than has ever been done before. They transformed the environment. They poured more cement in three years than the United States in the entire 20th century. And they deliberately stopped that in its tracks and they're now facing a potential meltdown.

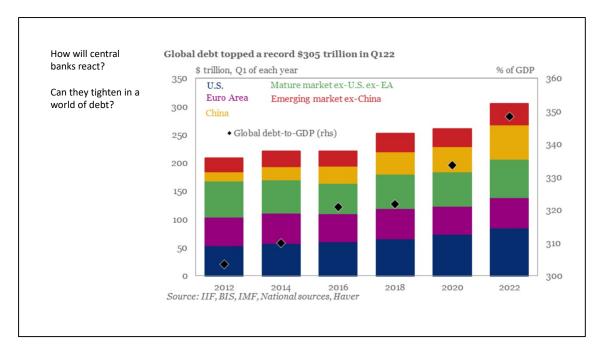
So this is a huge shock to the global economy offsetting the inflationary pressures that are my third exhibit in the radical uncertainty camp.



What exactly are we dealing with here in the current inflationary moment? On the one hand, it summons up memories of the 1970s and 1980s. But if we dig into the data we see something much more confusing: a highly localised shock, particularly in Europe driven by the energy sector, with on the other hand, and this is the anxious data produced by Isabel Schnabel in her latest talk, signs of acceleration across the board.



Now this is an extremely difficult set of data for the central bankers to read and there is uncertainty over how they are going to react. Why? Because the uncertainty over how will an interest rate mechanism work against a shock which is largely coming from a particular sector is compounded by the fact that this is the first phase of interest rate increases in a world which has gotten used to (a) low costs—so the United Kingdom right now is experiencing inflation not just as a macro economic crisis but as a social crisis—and (b) against the backdrop of epic levels of global debt. And we have not seen this balance sheet, globally stressed by significantly positive interest rates, before.



This is a risk that we have simply never had to tangle with on this scale. We have some experience but not a concerted push. How is this world going to react? In places like Europe where the politics of central banking are manifest, worn on the sleeve and spelled out loud, this conversation is being had in extraordinarily explicit terms.

Will tightening in Europe expose structural flaws?

Some 60 percent of respondents to Bloomberg's latest MLIV Pulse survey expect the euro will eventually end up level with the dollar. It noted that some 40 percent of respondents fear a eurozone recession more than inflation.

"We think they'll get to zero on the [ECB] deposit rate and that's it," Vincent Mortier of Europe's largest asset manager Amundi, said. "In the meantime the Fed will have done much more. If the ECB were focused only on inflation, then 1.5 per cent would be very likely. But it's not." According to Mortier, the ECB's official mandate — to keep inflation close to 2 per cent — has in effect become its third priority behind preserving "the integrity of the eurozone" by limiting the gaps in borrowing costs between member states, and supporting economic growth while the bloc reels from the fallout from Russia's invasion of Ukraine.

The central bank is focused on "the level of debt, sovereign financing needs to pay for the energy transition and for defence", Mortier said. "The ECB has no choice but to be pulled into this political project."

The ECB has said it could introduce a "new instrument" to keep a lid on the borrowing costs of weaker eurozone states, as the prospect of an end to central bank purchases drives a sharp increase in bond yields for Italy and Greece. But such a plan is unlikely to garner the necessary support from northern European members who worry about the use of monetary policy to finance government spending, Mortier said. In the absence of such a tool, the ECB will have little choice other than to slow the pace of interest rate rises, he added.

Many of you will have spotted this interview that was given by the Chief Investment Officer of Amundi to the Financial Times about a week ago. I thought in the history of Europe, this text may go down amongst the nerds of this world as an extraordinarily important moment. Obviously Amundi, the largest asset manager in the EU, is basically saying: "We think the Euro is going to parity against the dollar. Why? Because we don't think the ECB can raise interest rates in the current environment in line with the Fed. Why not? Because we don't think the ECB can escape the lock-in in European politics, which requires it to pay attention to spreads. We think inflation is now the third priority of the ECB. And yes, of course, they've announced they're going to introduce an instrument for controlling spreads, we don't think it's going to happen."

So the leading investment managers in Europe are fully processing the politics of Europe and taking a negative bet, a pessimistic bet, on the capacity of the Central Bank to steer inflation in Europe right now. That is an incredibly difficult situation to call because it has massive reflexivity built into it, because their actions themselves will condition the possibilities of what the ECB can do. We are in George Soros's world of reflexivity in the markets. The one central bank that we know is going to act is the Fed.

But the Fed brings me to my fourth area of radical uncertainty, which is the United States.

The Fed has made most clear what it is going to do.

But in the background you hear the sounds of the Biden administration's policy falling into ruins.

Biden's gamble is not paying off. The GOP is about to come roaring back.

Opinion | Inflation is rising, Biden's polls are falling, and his message is failing



Biden's Attempts to Spin Inflation as 'Putin Price Hike' Not Working: Polls

BY KATHERINE FUNG ON 5/11/22 AT 12:59 PM EDT

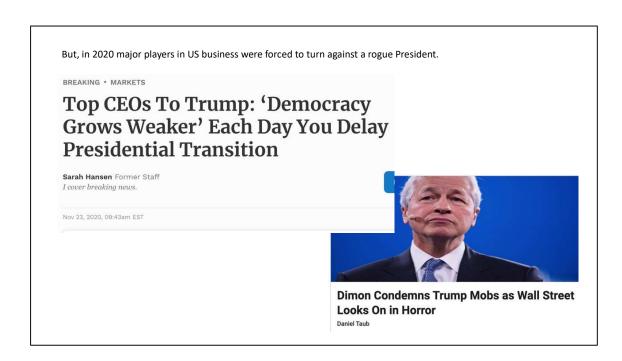
We are living right now in a kind of hiatus of stability or normality induced by the fact that the Democrats won narrowly in November 2020 and the Republicans narrowly agreed to concede the fact that they had and so Joe Biden is now president. But in the conversation about monetary policy and the inflation and the actions of the Fed – which are roiling America's stock markets every single hour right now as we speak - there is another thing going on, which is the shipwreck, the fiasco of the Biden administration. The Biden administration gambled last year that a large-scale fiscal policy would deliver a massive economic recovery. And it has. They took a calculated risk on inflation. They did this because they believed it would swing public opinion polls in their direction. And they could get a series of second- and third-wave welfare measures passed that would solidify and establish the Biden administration as a New Deal-era transformative administration for the United States. It turns out the Democratic Party is, in fact, a three-party coalition. And one bit of it, the smallest bit of it, has said no and the Biden administration has run up into a brick wall.

I was summoned to the White House three weeks ago to speak to the people there. And as you can imagine, in the life of a Brit, that's a rather remarkable moment. You don't expect to get summoned to the White House ever in your life. But it was, I have to tell you, the three most depressing hours I've ever spent in my professional experience, because the terrifying thing about it is it reminded me of one of the seminars that I run at university. And that is not what a power-political deal in DC should feel like in my book. Because they didn't have any answers to any of the questions that everyone's been asking for months and months and months, which is where you're going to get the votes. How do you get the second package done? What is Joe Manchin's price? Are you going to be able to do it in the next two months? And the answer was as far as I could see a blank.

And that means that we are heading rudderless into the fiasco of Democratic Party politics that will most likely transpire in the fall. We are looking at a major resurgence on the part of the GOP with or without Trump. Now, you could say as business people, why should I care? Trump was great for American business. If you can take a trip down memory lane, you can revisit the old websites of the Trump administration online. It's an eerie thing to do. You can see their signing-off letter, "Forget January 6th, look at all the things we did here". Trump administration was wonderful for raising the stock market. They literally boast of this as one of their accomplishments. They slashed regulations, right? They slashed taxes.



American business does great out of this. From a narrowly business point of view, you could say it's your win-win: either you end up with sensible people or you end up with the people who do big giveaways. The problem with that position, I think, is that in the end, it didn't pay off. Right?



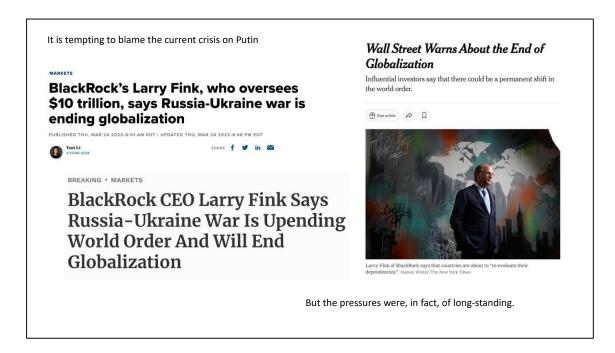
We have to take ourselves back to the truly remarkable moment in 2020, when the entire leadership of American business distanced itself from the party. which generally represents its interests and said: "No, you lost. You have to hand over the White House." Folks like Jamie Dimon, people like you in this room here, were summoned by their sense of historical responsibility in the United States to say: "No, as much as it hurts us. And it's going to be a bunch of lefties who take power," (Aside: not Bernie Sanders, who knows what they would have done if it'd been Bernie), "but Biden - he won fair and square. And for the sake of stability in this country, we need you to concede power, I can't even run my business. (Aside: Jamie Dimon: 'A lawyer and a shrink is what you need to run a big business like JP Morgan') I can't run my business if the company is torn apart by massive internal political dissent." So from the point of view of business this is not harmless to return to the GOP. And it is not harmless either because, in the end, the basic question about them has got to be can they deliver strategic leadership for still the most important state in the world, the United States?

And the real q	uestion is, can the Republican party in	its new populist m	ode provide strategic	long term
American soci	al problems			
China				
Trade				
Climate				
We need long radical and the	term strategic leadership because the y go deep.	range of challenge:	s I've just outlined, a	re

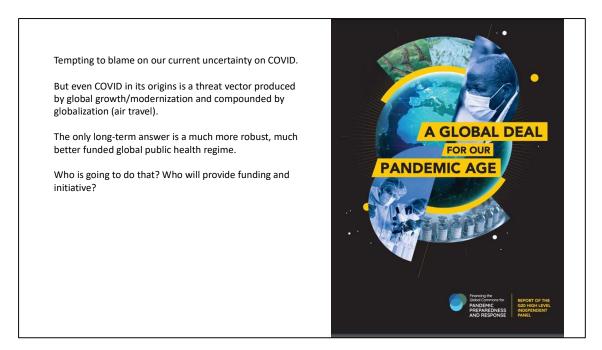
Can the GOP actually formulate a coherent programme on China, on trade, on climate, on America's domestic politics. It's an astonishing fact that President Trump ran for re-election in 2020 without a manifesto, no agenda. They had a party congress and decided not to have a manifesto, this party without an explicit vision.

The Historical Situation

Why does this matter? It matters because we are facing really fundamental challenges in the world economy right now. And that's where we move to the second phase of what I have to say this evening, as it were the historic situation here. And there are temptations. It's very tempting, like Larry Fink did in his letter to shareholders at Blackrock, to say the problems we've got right now are all about Russia.



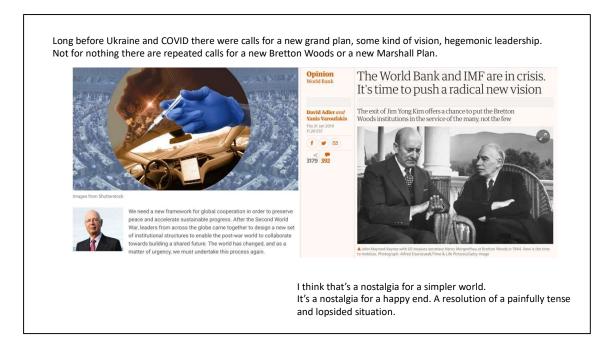
It's very tempting to say that this was all about COVID.



But both Russia is a lingering problem – as Jennifer was showing in her work this problem with Russia goes back decades – and COVID is as well. It's quite clear that it's a systemic risk of globalisation. It's not just a one off, it's a systemic risk about which we have been warned. The only way, not to solve it but to be able to look ourselves in the face and say we did our best to address it – which is what politics ought to deliver, not solutions, but good and meaningful and serious efforts – depends on large scale leadership. This report here, for instance, was issued by the G20 but the G20, right now, is broken. So

we're going to have to reinvent some mechanism for delivering a public health solution for the world or we will be faced with recurrent problems.

It's not for nothing, that even before the COVID crisis, even before the current war in Ukraine, voices from both the left and the right, were calling for grand new deals.



So the right here is Klaus Schwab, the CEO of Davos, and the left here is our old friend Yanis Varoufakis from 2019, concurring on the thing we need, which is a new Bretton Woods, a new Marshall Plan. Back to the Future in other words, back to 1945. This is, I have to say as a historian, a vain nostalgia. We're not there. We're not in the world of large-scale organised social forces and collective politics of that era. This is nostalgia of a comfort blanket variety. The world that we're in, unfortunately, I think, in many ways, is much more like the 1970s.

But the large, mobilized social forces of WWII, big historical visions and recently empowered, vigorous "big government" are not our reality in 2022.

We are separated from the 1940s and 1950s by the last half century of history, which started, with the chaos and uncertainty of the 1970s.

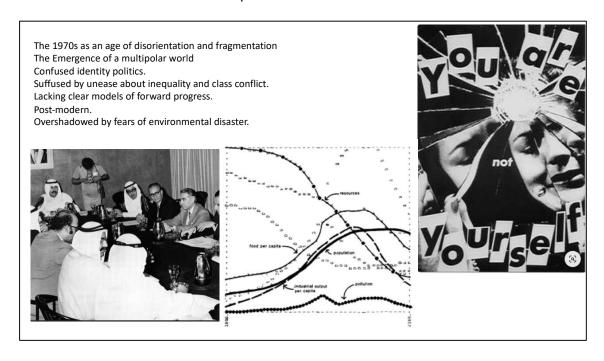
It is time to relearn the painful inflation lessons of the 1970s

Calibrating policy to avoid recession will require as much luck as judgment.

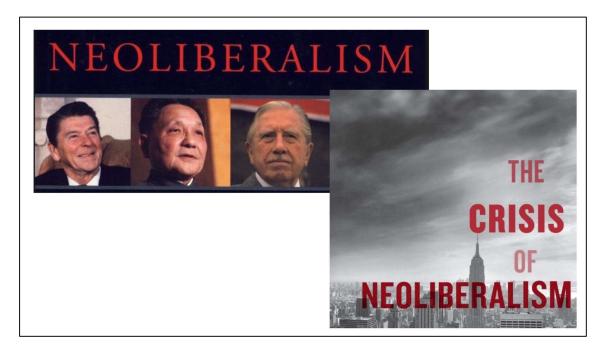
One thing is for sure. We won't be going back to the 2010s

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And looking around this room right now, it's literally true that that's all our histories. And there's nothing wrong with that. There's really nothing wrong with that. It was a very very important moment. And of course, one of the things that it does is insistently bring back, almost compulsively bring back, talk of inflation, stagflation and all that drama. But I actually think the 1970s are more interesting for a variety of other deeper reasons, which go into the fact that the 1970s are the moment where the politics of identity exploded onto the scene. It's the moment when geopolitics became infinitely more complex, and the cold war turned into a multipolar order.



It's the moment where inequalities surged for the last time as class conflict not merely inequality. That is the world which is hauntingly like ours. So you could say we should start there and move forward. Except there's something comforting even about thinking we're back in the 1970s – apart from the fact that we love the cars and the cars are going to not exist anymore very soon and that whole nostalgia thing – but the other thing, the other trick that this plays on you – and history is full of these kinds of tricks – is that of course, we know that the 1970s actually turned out to have an answer. And that answer was neoliberalism.



That answer was this combination of Deng and Pinochet and Thatcher and Reagan. That is the story that shaped us all. And then we have to wake up back into our nightmare and recognise that we are where we are and unable to answer these questions, because the formulae that were worked out then – and they were really workable formulae which shaped all our lives: separating politics and economics, dampening down class conflict, establishing independent central banks, creating free flowing global markets, allowing businesses to just do business. Wouldn't that be nice? But that isn't our world anymore. In fact, what we're living through is the Crisis of Neoliberalism. So, we are not going to be able to get back to the future. We need to think forward from here.

And that is the huge challenge which the organisers of this talk posed. And it's the huge challenge which people on the cutting edge of business face, particularly in the sectors of infrastructure. Because if you ask after all of this cloud of uncertainty where the new thinking is coming from, it is above all, in the era of industrial policy. It is above all in the sense that where we need to go forward are not general fixes, but specific fixes. We can identify certain concrete needs we have. We have the energy transition to address, we have

public health crises to address and furthermore, we actually have some examples of this working. And, certainly in the American context I'm immersed in, it's Operation Warp Speed, this weird and out-of-time, full-blown government effort to use the resources of the military to generate a vaccine, which has turned into a totem of what industrial policy is able to do.

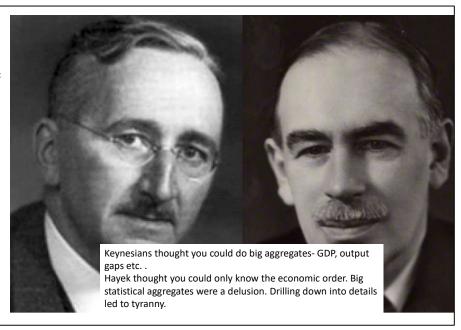
The conversation going on all across America right now is all about industrial policy. To address strategic challenges, social inequality, climate policy, health challenges etc.

It is not an abstract discussion. It draws on recent experience.



But we shouldn't underestimate what a break in thinking this implies, because it takes us to one of the absolutely foundational questions in economics, which is the issue of knowledge. How is it that we do industrial policy? How is it that we, here's the horrible phrase, pick winners? How do we actually do this? It sits astride between and against the two biggest bodies of thought, which fought it out in the 1970s.

This reframes the most fundamental problem in economics: the problem of economic knowledge.



The Keynesians who thought you could do economic policy by mapping the aggregates, the GDP numbers, the output gaps, and we still can't do without that. And the neoliberals led by people like Friedrich Hayek, who said: "You can't know it. It's too complex. Either you stand back and restrict yourself to understanding the legal order, which is what German economists obsess about or, if you go into the details, that way tyranny lies. Because once you get into the details, you're basically messing with everyone's business. And you're presuming that your judgement as a policymaker is better than that of the market." And that is what neoliberalism was ultimately a *fatwa* against. And what industrial policy says is this very weird thing: in general, we need to know far more about the specifics. It's a really paradoxical position to be in. And it's quite difficult to formulate as a general policy, because the only really sensible way to discuss industrial policy is on a 'case-by-case, it depends, what's your problem' type of basis. But that is what we're doing right now. And we should be clear about its dramatic effect.

So what we did with the vaccines was we started with a model of the human cell, we then built a supply chain down to the level of the individual truck for delivering something that would affect the cellular operation of our bodies. We did this to the scale of tens of billions of dollars, and it saved us. And that's why we're all here today. Because without that we couldn't be here. And you could say, well, business knows all of that. That's what Pfizer does every day of the week, except that of course, this time the American government came along and stamped its great big badge – they literally made this up, this is no kidding, they actually created a badge for Operation Warp Speed and it looks like that – on top of it.



And that I think, ladies and gentleman, is the message for folks in business right now: people are no longer going to leave you alone. They're not going to leave you alone because you have the information and the knowledge that government policy needs as soon as it moves into this terrain. The world has become so complicated and the general formulae, either of Keynesianism of neoliberalism, neither of them work. And so we are going to be in your business.

And I'm just going to quote international companies here to spare everyone's embarrassment but Huawei and Samsung, poor old BASF just trying to do

heavy chemicals, poor old VW just trying to build cars in places in China, where labour is cheap, just doing their regular business thing. They are in all sorts of massive political and geopolitical entanglement. And this is terrifying, it makes business incredibly difficult to do. It exposes you to all sorts of extraordinary risks. But then I think the upside of this or rather, the flip side of this is that you don't need to worry about essentially 1970 style nationalisation because, I hate to break it to you, you are the only game in town. There really isn't any other option. Public Private Partnership is the only thing that's being seriously discussed to address any of the major issues in the world. Now, as we were saying every single one of those partnerships looks different. Because sometimes you're talking energy transition, and sometimes you're talking cellular biology and molecular biology. But nevertheless, they all have a similar structure to think about what Mark Carney was doing at Glasgow pulling together the great financial assets of the world. This is the world that we're navigating, there's no way out of it. I described this earlier as essentially navigating a bad marriage. Let's not pretend this is going to be easy, let's not pretend it's necessarily going to be satisfying for either side. But there's really no way out of this. In any case. I think that is the world that really we have to brace ourselves for and prepare for.



And when I say well, there's no alternative to you and don't worry, you're not going to be nationalised in light of the heat that many businesses have been taking of late I think it would be fair to say, "Well, Adam, that's very easy for you to say as an academic. Try running my company in the last six months. It's been brutal." And I think that's perfectly reasonable as an assessment of the situation. I think in modern democracies we are in an incredibly delicate position. Let's take greenwashing as an example. This company is trying to do the right thing or maybe trying to play the game or who knows but are finding themselves in a toxic spiral of de-legitimization as a result.

greenwashing [grəən-wash-ing] /verb

- 1. Is a term used to describe the marketing tactics used by big-name, fast-fashion companies to advertise their new supposed sustainable lines of clothing.
- 2. The process of conveying a false impression or providing misleading information about how a company's products are more environmentally sound.

The public is suspicious.

But that suspicion is bread from a sense of disappointment and that disappointment points to how desperate everyone is for good news stories – on environment, customer service on tech.

Performance continues to convince customers and voters.
But you will also be punished for arrogance, deception and not listening.

But I think the thing to take away from that is the hopes projected onto you are absolutely massive. The hopes projected onto business at this point are huge and you have to find a way of navigating the fall-out from that.

Rules of thumb for navigating an unhinged world?

Eyes wide open. Every single day.

Stick with the trouble!

Develop early warning systems.

At the risk of being alarmist, take the signals seriously.

Be ready to respond promptly in a self-respecting, but also appropriately humble way if the feedback is not what you like.

Also recognize that sometimes noise – both good and bad - *is* the signal.

Don't misunderstand it as a fundamental challenge to what business does. We are not in the 70s anymore but, on the other hand, understand that much more is going to be expected because we aren't in the 90s either. And that is the location of the space that we are in at this moment historically. I see it as a huge challenge for you and it is a privilege to be able to discuss these kinds of

issues with this group here and I really look forward to having it out with the co-panellists.

Thank you very much for your attention.

