

Roundtable with Prof. Ken Endo, Dr. Shumpei Takemori, Tatsuya Terazawa & Masakazu Toyoda

How Should We Interpret Geopolitics, Economy & Energy Developments in Today's World?

By Japan SPOTLIGHT

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Experts



Prof. Ken Endo



Dr. Shumpei Takemori



Tatsuya Terazawa



Masakazu Toyoda

1 **Toyoda:** The Russian military invaded Ukraine on Feb. 24, 2022
 2 without any warning and many Ukrainians have been killed or have
 3 sought refuge overseas or are remaining in the country under
 4 serious threat of attacks as well as a shortage of electricity and food
 5 supplies.

6 The impact of these shortages is spreading out of Ukraine and
 7 world energy and food prices have been rising, threatening the lives
 8 of people all over the world, including in developing nations. This is
 9 what we call the Ukraine crisis.

10 This Roundtable of experts on international politics, international
 11 economy and energy aims to discuss how to interpret this crisis:
 12 what exactly is happening, why is it happening and how can we cope
 13 with it.

What Is Happening?

17 **Toyoda:** Mr. Terazawa, I would like to ask you how seriously the
 18 global energy situation is now under threat, how much energy prices
 19 are rising and how the situation is different among nations or
 20 regions. To my knowledge, Japan's imported energy prices are
 21 cheaper than many other countries' thanks to the high proportion of

long-term contracts in energy imports, but the situation has been
 recently changing. On the other hand, it seems that some companies
 have ceased to conclude such long-term contracts.

I have also another question. Do you think fossil fuels have truly
 no positive prospects? Or do you think we can continue to use them
 by turning them into hydrogen or ammonia by decarbonization?

Terazawa: Russian oil's share of the global market is 12% and its
 natural gas share is 24%.

Thus, with Russian oil and gas supplies to the West impeded,
 there must be an enormous impact on the global energy market.
 After the invasion, the price of crude oil once rose to US\$130 per
 barrel and the natural gas price in terms of crude oil equivalent rose
 to \$600 in the European market, while LNG in Northeast Asia hit
 \$400. Compared with the crude oil price, the price increase of natural
 gas or LNG was significant. This is because a tanker could transport
 crude oil anywhere in the world, but natural gas can only be
 transported by pipelines and LNG can be transported only by LNG
 tankers after being cooled. Thus, the latter two are short of mobility.
 With a supply shock, prices of the latter two fluctuate more than
 crude oil prices and this results in a more serious economic impact

1 overall.

2 At this moment, since there is concern about a stagnant global
3 economy, energy prices have started to drop; the current crude oil
4 price is around \$80, the European natural gas price in crude oil
5 equivalent is below \$200 and the Northeast Asian LNG price is less
6 than \$150. But we must say those energy prices remain high.

7 How much each nation pays for its energy is another story. While
8 nations in the West, including Japan, stop imports of Russian oil,
9 nations not participating in the economic sanctions against Russia
10 continue to buy Russian crude oil at discounted prices, cheaper than
11 the world oil price by 20-30%. The notable examples are India, China
12 and Turkey. These countries can continue to buy Russian energy at
13 prices close to those before the crisis, meaning that energy prices
14 are relatively moderate for them. On the other hand, the nations
15 suffering most from energy price hikes caused by the Ukraine crisis
16 are European nations. This is because prior to the crisis 40% of
17 Europe's gas consumption was from Russia through pipelines and
18 with the Ukraine crisis greatly limiting these imports, they are now
19 facing a supply shortage of natural gas. In addition, as they
20 compensate for this shortage with LNG imports from the rest of the
21 world at high prices, this will result in a serious impact on energy
22 prices in Europe.

23 As for Japan, we have in general a similar impact from the crude
24 oil price hike to that in the West, as this is the global market price.
25 On the other hand, Japan's LNG imports are significantly based on
26 long-term contracts and the contracted price is mostly connected
27 with crude oil prices. Since the crude oil price hike has been more
28 moderate than the spot market price of natural gas or LNG, Japan's
29 imported LNG price rise in long-term contracts has been restricted to
30 a moderate one. Thanks to these contracts, Japan has not faced yet
31 the supply shortage of LNG as in European nations. So I believe the
32 energy crisis impact overall on Japan has been more moderate than
33 in Europe.

34 However, these long-term contracts were concluded a long time
35 ago, and after 2029 the percentage of the long-term contracts in
36 particular will be declining. Japan had not renewed those contracts
37 before the Ukraine crisis, though there were opportunities for
38 renewal. The background was the growing uncertainty about the
39 future of fossil fuels. LNG users in Japan, electric power companies
40 or gas companies, were hesitating in making long-term
41 commitments. Under such circumstances, the crisis happened.

42 My concern is that Japanese companies are still hesitant about
43 committing to long-term contracts even after the crisis, while

German companies and others are working hard to secure LNG 1
imports and LNG-producing nations are becoming aggressive in 2
refusing to sell LNG to them without their long-term commitments. 3
Chinese national companies are now securing many long-term 4
contracts. So the weight of Japan's long-term contracts in LNG 5
imports will decline in the future and the weight of spot contracts 6
increase. Japan could suffer from a negative impact as in Europe 7
now. I think this would be a challenge for Japan in the future. 8

To overcome this, we would need a roadmap to show how natural 9
gas can be utilized in the long run. Otherwise, Japan's natural gas 10
users cannot step into concluding long-term contracts. 11

Assuming that natural gas would be made into hydrogen or 12
ammonia (realizing what we call blue hydrogen or blue ammonia) in 13
the long run, we should prepare a path for such new use of natural 14
gas to achieve less dependency on Russian energy sources while 15
securing long-term demand for natural gas as blue hydrogen or blue 16
ammonia. In that way we can make long-term commitments for 17
stable procurement of LNG. At the same time, we can contribute to 18
resolving global warming through blue hydrogen or blue ammonia. 19

20
21 **Takemori:** At this moment, gas and oil price rises are coming under
22 control, because global weather in autumn and winter 2022 was
23 historically warm. Without this, European gas storage would be
24 exhausted and planned blackouts or suspension of factory
25 operations would be needed. China's zero Covid-19 policy by
26 continued lockdown of major cities has also been affecting the
27 supply-demand situation of gas and oil, as the Chinese economy is a
28 fossil-fuel consumption-led economy emitting a quarter of the
29 world's carbon emissions and its decline in demand for energy
30 sources would ease the global energy situation enormously.

31 Europe could increase storage of gas in 2022 because it could
32 import Russian gas by pipeline in the first half of the year. However,
33 now that Nord Stream 1 is almost suspended and Nord Stream 2 will
34 not be used hereafter either, it will be difficult for Europe to build up
35 storage in 2023 and thus we presume that the winter in 2023 would
36 be very tough.

37 I think Japan's energy situation will be a tough one as well in the
38 winter of 2023. On the question of Japan's long-term contracts of
39 gas, in December 2021 when the risk of a Russian invasion of
40 Ukraine was globally recognized, the time for renewal of long-term
41 contracts by Japan with Qatar came, but it was not done. I wondered
42 why.

I have a question about the new direction of Russian exports of 43

1 gas. After Europe ceases importing Russian gas, Russia must
2 redirect it to other countries. There is a plan for a pipeline
3 construction, "Power of Siberia 2", from the Yamal Peninsula facing
4 the Arctic Sea through Mongolia to big cities in China. This is
5 planned to be completed around 2030. My question is if China will be
6 truly capable to realize this pipeline construction plan to import
7 Russian gas. I am skeptical about China's capability to achieve this
8 without Western nations' technological support. When the accident
9 in Nord Stream 2 happened in 2022, we clearly learned that Western
10 technology was needed to maintain the pipeline. The pipeline
11 stopped to operate because Canada, a producer of motor propellers
12 for the pipeline, refused to deliver those under repair to Gazprom due
13 to economic sanctions against Russia. With clarification that Russian
14 pipeline operations would need Western technology, I am skeptical
15 about only Chinese and Russian technologies being able to realize a
16 gigantic pipeline construction plan connecting the Arctic Sea with big
17 Chinese cities.

18
19 **Terazawa:** It is true that the energy situation will be more serious in
20 2023. In particular, China's decreased energy demand due to its zero
21 Covid-19 policy has certainly contributed to loosening demand and
22 supply at the end of 2022. If the Chinese economy recovers strongly
23 in 2023, global energy demand will increase strongly as well.

24 In the case of Europe, in the winter of 2022 it could pile up stocks
25 of Russian oil, but in 2023 it cannot do so. It is true that Europe will
26 face a more severe winter in 2023. It would normally take several
27 years to increase LNG supply capacity, so we will see uncertainty
28 and extreme instability in energy supplies including LNG and natural
29 gas until around 2025.

30 Certainly, Russia has a project to construct a pipeline to China and
31 is eager to achieve it. China was the largest LNG importing nation in
32 the world in 2021, having overtaken Japan. To meet its tremendous
33 demand, it has to diversify supply sources, so it would also eagerly
34 pursue construction of a pipeline from Russia as one of its
35 diversified supply sources. However, China would be shrewd to
36 avoid depending solely on one source like Europe and pursue a well-
37 balanced regional allocation of supply sources, considering Russian
38 sources as one of them.

39 How could it achieve this with its heavy dependency upon Western
40 technology? Having perceived a risk of depending on US technology,
41 given the current US-China high-technology conflict, China would try
42 to take maximum advantage of its own technology. It has its own
43 technology that has been used for pipeline construction so far and it

will seek to develop it, apart from whether it is the best or not.
However, as it will take time to accomplish such a pipeline, no
fundamental development will occur in the energy situation soon.
The instability of the LNG market will continue for the time being.

4
5
6 **Takemori:** I have another question for Prof. Endo. Before Russia's
7 invasion, Germany's dependence on Russian gas supply was very
8 high, with 55% of its energy consumption depending on Russia.
9 With the addition of Nord Stream 2, its dependency would further
10 increase. When Russia occupied the Crimea in 2014, German
11 Chancellor Angela Merkel must have actively joined in economic
12 sanctions against Russia, but at the same time Germany has been
13 deepening its dependence on Russia since then. Why do you think it
14 has been doing so?

15
16 **Endo:** Germany's dependence on Russia had been an important part
17 of its economic development model together with a cheap euro and
18 the gigantic Chinese market. With the Ukraine crisis, this model has
19 collapsed. Germany maintained a policy of engagement with Russia,
20 assuming that Moscow would liberalize its economy and eventually
21 politics, too.

22 However, the Ukraine crisis proved otherwise. Current German
23 President Frank-Walter Steinmeier expressed regret about his
24 permissive treatment of Russia when he was foreign affairs minister.

25
26 **Toyoda:** I would like to ask Prof. Takemori about the global
27 economic outlook. Needless to say, the Ukraine crisis has a big
28 impact on the global economy which is still reeling from the lingering
29 impact of the pandemic crisis. In the next few years, what do you
30 think the global economy will look like?

31
32 **Takemori:** In 2023, with the more severe energy outlook,
33 international organizations like the IMF or OECD have presented a
34 pessimistic outlook for the global economy. The short-term
35 challenge is inflation. To cope with it, the United States rapidly raised
36 interest rates and inflation fell to around 7%. Developing countries
37 must be relieved to see it. With high energy prices and food prices,
38 their economies have been slowing down. A continued climb in US
39 interest rates would exacerbate their foreign debt problems as they
40 have a large amount of debt in dollars, and many of them would have
41 to seek help from the IMF.

42 Meanwhile, in Europe, core price indexes except for energy items
43 have not been rising much, unlike in the US. This is why the

1 European Union's interest rate rise is more moderate than the US.
2 Another reason is that in the EU there is one central bank and each
3 member nation has its own public finances, which means a
4 significant rise in interest rates would put the public finances of the
5 weaker economies such as Italy, Spain and Greece into a critical
6 situation. So I think inflation in the EU will continue longer.
7 Whenever high inflation occurs, Germany makes noises to the ECB,
8 but today it is exceptionally quiet. This is probably because it regrets
9 its excessive energy dependency on Russia. With a worsening
10 economic situation hereafter, the EU may decide its own fiscal
11 expenditure again to support the member nations, such as with the
12 "Restoration Fund for Recovery from the Pandemic". But in the long
13 run, its energy policy must pursue blue energy, renewable energy
14 and small nuclear power as its core energy supply by around the
15 2030s. Meanwhile, the global decarbonization drive exerts downward
16 pressure on fossil fuel investments so that we see global fossil fuel
17 supply failing to meet global demand.

18 Until around 2025, the global energy situation will be at a critical
19 stage if all nations try to mitigate their energy dependency on Russia.
20 Even after 2025, I have concerns that the energy crisis may continue
21 until 2030.

22 On developing nations, their food crisis was focused on the
23 discussions at the international meetings in November 2022. At this
24 moment, the issue is not only about the war preventing Ukraine from
25 exporting its food items but also the high rise of prices of chemical
26 fertilizers overshadowing affected economies. There is even a
27 concern about whether it would be feasible to maintain a world
28 population of 8 billion people without chemical fertilizers using
29 ammonia. Anyhow, how we deal with this mid-term energy crisis will
30 be an extremely critical issue.

31
32 **Terazawa:** We argue on the impact of energy prices in dollar terms
33 in the world market, but in Japan the issue is yen-based. In the case
34 of Japan, the impact of energy price hikes is duplicated with the
35 yen's depreciation. I have two questions for Prof. Takemori. My first
36 question is how we should manage monetary policy in Japan,
37 seemingly today inviting yen depreciation. And my second question
38 is about energy subsidies.

39 Daniel Yergin, a distinguished energy policy expert, mentioned
40 that this crisis would be interpreted as the first crisis of an energy
41 transition which started in autumn 2021 even before the Russian
42 invasion.

43 The background of this crisis is underinvestment in fossil fuel

domains and rising prices triggered by it, and Russian President
Vladimir Putin's Ukraine invasion having tried to take advantage of
this situation. These serial events pushed energy prices even higher.

Under such circumstances, Germany has never thought about
changing its energy policy. Its policy is in general to accelerate the
use of renewable energy, though it provisionally prolonged use of
nuclear power but only until spring 2023, and also prolonged use of
coal in the short run.

Investment in fossil fuels has continued to decline reflecting this
policy adopted not only by Germany but also by other European
nations and the US. In this light, if demand for fossil fuels hereafter
remains higher than the level which people promoting policies for
mitigating global warming have ever thought, its supply would not
meet demand. Such underinvestment in fossil fuels in the long run
would result in an energy market structure extremely vulnerable to
external shocks. A big crisis like the current Ukraine crisis would
cause a seriously negative impact upon the world economy and I
have a concern that such a crisis could be repeated in this vulnerable
energy market structure.

I would like all nations including Germany to take note of this and
adopt a well-balanced energy policy to encourage necessary
investment in fossil fuels to meet rather continuous demand in the
long run as well as promoting renewable energy, since renewable
energy cannot meet all the energy demand quickly.

Takemori: Exchange rate fluctuations are generally caused by the
interest rate differential between the US and Japan. And in the US,
the high interest rate now is due to an extremely high inflation rate in
the US. Meanwhile, Japan's inflation rate is not so high. It is now
around 3% and thus Japan does not have an urgent need to raise
interest rates. I think low wage increases must be the reason for the
low inflation rate. To maintain full-life employment in Japan, there
tend to be so many workers in unnecessary sections of unnecessary
industries. To keep such inefficient employment, Japanese business
continues to go through any economic situation without raising
wages. This must be a cause of low productivity as well as low
wages and low prices. To work on reforming this fundamental
weakness of the Japanese economy, we should introduce "layoffs" in
Japan, though it would cause a serious economic challenge in the
short run. With its introduction, labor mobility will be enhanced.
Competition in the job market would be encouraged, and more
competent workers would get jobs with higher salaries. In other
words, employers would need to pay more to get competent

1 employees and thus wages would rise and the inflation rate could
2 also rise. There would be more room for raising interest rates, which
3 is supposed to be normal.

4 Anyway, on the fiscal policy side, we would need to pursue a wise
5 spending policy, namely more budgets for necessary policies such
6 as accommodating electric power systems to introduce solar or wind
7 power while cutting budgets for unnecessary policies. This will be
8 extremely important.

9 Many economists today would say that fiscal policy and monetary
10 policy should work together in the same direction, namely both of
11 them should work expansively on deflation and both should be
12 tightening on inflation. This means there would be fewer boundaries
13 between both. Both of them should work together in collaboration as
14 an integrated policy to control total effective demand. With
15 inflationary concerns modified, fiscal policy as such should focus on
16 what is to be truly needed selectively.

17
18 **Toyoda:** A question for Prof. Endo. In terms of international politics,
19 world nations seem to be divided into three groups: the US, Japan
20 and Europe; Russia and China; and lastly third countries. Meanwhile,
21 the Ukraine crisis was apparently and unanimously considered to be
22 caused by violation of international law. In spite of all this, the UN,
23 G7 or G20 are not working well in dealing with this violation. What
24 do you think is happening exactly?

25
26 **Endo:** I think this war is to be defined as an unlawful invasion
27 reversing a century-long effort by human beings to define wars as
28 unlawful actions and contain war crimes, or more specifically
29 contradicting the Anti-War Pact of Paris in 1928 or the Geneva
30 Protocol in 1924 defining a war of invasion as a crime.

31 However shocking it may look, this is a large-scale limited war,
32 since the combative nations and the means of combat are limited,
33 while in terms of the scale of human casualties and firepower
34 involved it is equivalent to what Russia experienced in the first phase
35 of German-Soviet conflict during World War II.

36 The United Nations Charter provides veto power for the permanent
37 members of the Security Council and therefore as is predicted, the
38 UN does not function if one of those members commits an unlawful
39 action.

40 In a different perspective, the implication of veto power given to
41 permanent members of the Security Council is that they are not to
42 engage in a war against each other. Without this veto system, other
43 members might have had to fight a war with the Russians, under the

1 mandate of a Security Council resolution. In this regard, the UN
2 Charter, as devised, could even be seen as preventing them from
3 starting a war.

4 It is true that nations are divided into three groups on this Russian
5 invasion: Russia and China and a few others supporting it, Japan, the
6 US and Europe opposing it, and developing nations murmuring. I
7 think there must be strong antipathy among the nations in the third
8 group, called the Global South, against the Western nations'
9 monopolizing of political correctness despite historical events such
10 as colonization, racial discrimination and the Iraq War. Each nation in
11 this group also has been pursuing its own national interest with
12 priority placed on a free and independent attitude. For example, India
13 has been importing cheap oil from Russia, loyal to its long history of
14 a nonalignment policy.

15 However, it is also true that there was extensive support for the
16 UN General Assembly's initial decision that Russia should get out of
17 Ukraine and stop its invasion: 141 agreed and only five opposed,
18 with 35 abstentions. This implies that concerns, criticism and
19 condemnation of Russia's invasion were widespread. Criticism of the
20 war is shared by many national leaders including Indian Prime
21 Minister Narendra Modi or Turkish President Recep Erdogan. In
22 particular, after having had to face the risk of a nuclear attack or
23 incident, more nations are becoming expressly concerned about the
24 war. The three group members are thus not necessarily fixed and
25 with widespread criticism against the war there have been changes
26 among group members little by little, reflecting it.

27 28 **Why Has This Happened?** 29

30 **Toyoda:** Can we interpret this war as being provoked by Putin's
31 nostalgia for the Soviet Union and a sense of being under threat of
32 from a NATO invasion of Russia, as well as the Russian authoritarian
33 political regime? Some people say that China is also under an
34 authoritarian regime like in Russia. The latest appointment of the key
35 officials in the Communist Party and the administration in 2022, to
36 the majority's view, showed that power is getting concentrated on
37 President Xi Jinping's aides and people with views different from his
38 are eliminated.

39 What do you think will happen to China hereafter, Prof. Endo?
40 Japan is most concerned about China-Taiwan relations. What do you
41 think about the possibility of Chinese military action pursuing the
42 integration of Taiwan into One China?
43

1 **Endo:** In International Relations studies, we are inclined to think
2 about war from three perspectives: international, national and
3 individual. In international dimensions, it is certainly true that the
4 Russians are concerned about NATO expansion reaching Ukraine
5 and accommodating facilities and equipment to defend missiles in
6 Poland, demonstrating power close to Russia's border. In this light,
7 there is some international criticism that the West has threatened
8 Russia too much with NATO expansion. However, at the same time,
9 there is another view that the West has threatened Russia too little.
10 The administration of President Joe Biden, following the trend of US
11 withdrawal from overseas conflicts, stated that it would not send
12 soldiers to Ukraine. Within this perspective, it could be seen as a
13 failure in deterring Russia, but whether a US threat could make Putin
14 give up his invasion would remain a big question.

15 Lastly on international dimensions, we should not forget about the
16 impact of the collapse of empires that has not been much talked
17 about. A collapse of a big empire could have a durable impact that
18 lasts more than one generation. Empires of the past tell the same
19 story: the Russian Empire, German Empire, Austro-Hungarian
20 Empire and Empire of Japan. Some Russians still have traumatic
21 feelings about the collapse of the Soviet Union in 1991 without a
22 gunshot having been fired.

23 Some groups in Russia have been eager to restore the Soviet
24 Union, but with independent states, new national borders and new
25 ethnic allocations. This war was provoked by such historical
26 developments from the impact of the collapse of the empire. The
27 wars that Russia started after the Cold War took place in "post-
28 Soviet space", i.e. the former Soviet Union's territory. All of them
29 were initiated with little regard to the West's intentions and actions.

30 In the national state dimensions, there have been contradictory
31 political developments: democracy versus authoritarianism or
32 dictatorship in the post-Cold War period. Putin had the impression
33 that waves of democratization were reaching Russia, as even Ukraine
34 was democratized after the waves of democratization in Eastern
35 Europe and Arabic nations. He would most likely consider these
36 waves as US-inspired anti-Russia movements. Some experts on
37 Russia refer to the Rose Revolution in Georgia and the Orange
38 Revolution in Ukraine around from 2003 to 2004 as decisive
39 incidents which made Putin convinced of an American conspiracy
40 behind the events.

41 Meanwhile, Russia itself has been becoming a more dictatorial
42 state and there are fewer obstacles to conducting an invasion within
43 its national politics. This is certainly Putin's war. He always desired

to restore the former Soviet Union's prestige and spheres of interest 1
and has attempted to take advantage of every weakness of the West, 2
such as with the energy dependence. He thought Biden would not be 3
able to produce any counter reaction against Russia since the whole 4
West itself has seemed weaker, exemplified by the withdrawal from 5
Afghanistan, and there is also the business of the US-China 6
confrontation. What is interesting about Putin is that he is not simply 7
trying to restore the former Soviet Union's spheres of interest but 8
also trying to get revenge on the US by imitating the American logic 9
used for justification of its resort to use of forces, which the 10
Bulgarian philosopher Ivan Krastev referred to as "emulation as 11
revenge". 12

To be more specific, Russia invaded Ukraine, saying that it has 13
been developing weapons of mass destruction and had also 14
committed genocide, like the Nazis, and that Russia would have to 15
make a humanistic intervention and change the regime. Showing off 16
the American logic itself used by the US government to start a war 17
against Iraq and others, it revealed the Americans' ruthlessness. This 18
is such a malicious way to start a war. 19

20
21 **Takemori:** I think the long-term energy issue affected Putin's actions
22 as well. He became Russian prime minister in 1999 and president in
23 2000. In the era of Mikhail Gorbachev as president, energy prices
24 had been low, but after 2000, in particular after China's entry into the
25 WTO in 2001, with its economic growth accelerating, energy prices
26 have been rising with China's high growth rate. This was, I believe,
27 the tailwind enabling Putin to win domestic elections continuously.

28 American shale oil production has increased since around 2012.
29 The primary reason was rising oil prices. The background was that
30 China's 4 trillion yuan macropolicy package to stimulate the
31 economy after the Lehman Shock pushed up energy demand. The
32 second reason was the US zero interest rate monetary policy that
33 made high-cost investment in shale oil profitable. Shale oil
34 production was generally unable to meet the cost without low
35 interest rates and high oil prices and those two conditions were met
36 then and encouraged US shale oil production to jump up.

37 However, OPEC tried to inflict damage on the US shale oil industry
38 by its decision to refrain from oil production cuts, and that resulted
39 in lowering crude oil prices to \$30 in 2016. In 2014 when Russia's
40 Crimea invasion took place, crude oil prices had already started to
41 fall. Putin may have thought that unless he took steps to stir up
42 patriotism among the Russians, his popularity would fall with the fall
43 of oil prices.

1 **Takemori:** He must have thought it would be the last chance to
2 consolidate his power, as the global energy shifts toward renewables
3 would one day wipe out demand for fossil fuels.
4

5 **Terazawa:** I think President Putin decided to invade Ukraine at the
6 best opportunity to take advantage of the weakness of the West in
7 the energy domain. It was a moment when the West was faced with
8 the biggest vulnerability in energy supplies with prices rising,
9 underinvestment in fossil fuels and lack of excess supply capacity.
10 Also from a long-term perspective, Russian gas leverage is foreseen
11 to decline under the progress of decarbonization. With this
12 background, he thought it would be a vital moment for him to restore
13 the glory of the Russian empire while he is still alive and mark his
14 name in history.

15 Even with the sanctions of the West, Russia can continue the war
16 because its revenue from energy is unchanged as non-Western
17 nations continue to buy its energy, and even at discounted prices
18 Russian energy revenue has remained unchanged. This is the reason
19 why the West must continue investment to achieve less dependency
20 on Russian energy. However, under pressure from global warming,
21 how much it can do so is uncertain. That is our concern.
22

23 **Endo:** Putin would think so far this war has been to a certain extent
24 successful in destabilizing the energy situation in the West.
25

26 **Terazawa:** It may be successful in the short run, but without the
27 technologies of the West it would be difficult in the long run to
28 develop oil and gas fields. I think this demerit would be bigger than
29 the short-term merits. So this war will never have been a good
30 decision for Russia as a country. It can be rationalized only in terms
31 of what Putin could do to restore national glory in his lifetime.
32

33 **Toyoda:** Prof. Takemori, do you think the economic sanctions on
34 Russia work well or not?
35

36 **Takemori:** Economic sanctions target Russian banks to stop their
37 international settlements, in other words they aim to make it
38 impossible for Russia to buy products made by the West with its
39 dollar income from energy exports. But at the request of European
40 nations heavily dependent on Russian energy sources, energy-
41 related payments were eliminated from the coverage of sanctions on
42 export payments to Russia. This made sanctions as a whole
43 ineffective, as Russia does not export manufacturing products and

its dollar income consists mainly of energy exports. In addition,
Russia can conduct transactions in currencies other than US dollars
with China or India. So the sanctions had little effect on its earning
income in foreign currencies.

On the other hand, it works well on the purchases of goods from
the West. If Russia tries to buy massive amounts of weapons or
machines, once these transactions are revealed they can be stopped.
At this moment, the Russian army's weapons are becoming obsolete
and fewer spares are available. This is certainly the result of
sanctions and the shrinking Russian economy.

The US is applying this lesson in its policy toward China. It has
already promulgated acts to stop providing China with new
technologies in order to make Chinese semiconductor products
obsolete. Russia's current economic power or military power is
gradually deteriorating by failing to receive new products or
technologies from the West. Likewise, the US is promoting a policy
to prevent China from buying advanced technologies and goods from
the West. This will be the core strategy of the West toward China in
the era of the "New Cold War".

Terazawa: In addition to its inability to get new technologies, the
sanctions are working well in creating a tremendous outflow of the
best and brightest in Russia overseas. Investment flows into Russia
could be discouraged as well. These could have a strong negative
effect on the Russian economy in the long run, though sanctions on
the energy industry do not seem to be working well in the short
term.

This could apply to China as well. It is not only about rejecting
technology transfers to China but also whether China's best and
brightest studying abroad will come back to China or stay abroad to
escape its authoritarianism. This will be a key to China's long-term
development. For the US to contain China, it will be important to
attract those best and brightest to the West.

Toyoda: Coming back to the issue of energy, I would like to ask Mr.
Terazawa if we could truly give up upstream investment in fossil
fuels.

Terazawa: I do not think we can stop upstream investment abruptly.
Thinking about newly developing countries and also many "Hard-to-
Abate Sectors" where decarbonization would be difficult to be
achieved, there will still be stable demand for fossil fuels. As we still
have a long way to go before 2050, without investment to sustain

1 robust demand for fossil fuels during this period, our energy market
2 would become very unstable and with some external shocks, energy
3 price hikes would occur easily.

4 In addition, in the light of the global environment, what needs to
5 be mitigated is not fossil fuels but CO₂. Thus, decarbonization of
6 fossil fuels such as by creating blue hydrogen or blue ammonia from
7 fossil fuel gas or elimination of CO₂ emissions from fossil fuels by
8 CCS (Carbon dioxide Capture and Storage) would make it possible
9 for fossil fuels and decarbonization to co-exist consistently.

10 From the perspective of promoting less dependency on Russian
11 energy as well, I think the need for investment will increase, as
12 elimination of energy imports from Russia will need equivalent
13 investment even with the unchanged global energy balance.
14 Underinvestment in fossil fuels has been concentrated on certain
15 regions or energy companies. For example, European and American
16 companies have been particularly underinvesting with pressure from
17 their shareholders. In contrast, Middle East countries or state
18 enterprises have been investing more. Thus, contrary to the common
19 view on the Middle East, its influence has been rising rather than
20 declining.

21 In total, I think we will need to maintain investment in fossil fuels
22 not only from the need for upstream investment in them to achieve a
23 stable energy market but also from the need to achieve less
24 dependency upon Russian energy as well as less dependency upon
25 the Middle East or state enterprises for fossil fuels.

26 **What Is to Be Done Hereafter?**

27
28
29 **Toyoda:** Lastly, shall we discuss about what to do hereafter? On the
30 global economy, the economic outlook for 2023 by the IMF is very
31 pessimistic. National government expenditures have been increasing,
32 as well as fiscal deficits. Prof. Takemori, what do you think is to be
33 done to achieve both goals consistently, getting the economy back
34 on a robust growth track and budget sustainability?
35

36 **Takemori:** I think the main concern in predicting the economy is how
37 this war will come to an end. On April 29, 2022, Jurgen Habermas, a
38 93-year-old German philosopher, wrote an article in the German
39 paper *Süddeutsche Zeitung* in which he said: "It was the lesson our
40 generation learned that no one would be a winner in a nuclear war."
41 This means that we cannot force a country which has nuclear
42 arsenals to surrender; the only possibility is to seek a compromise
43 with the country. Of course, the key issue of the current war is

whether Ukraine can regain its territory deprived by Russia, but at
the same time this war matters in terms of global security. There
needs to be a compromise in this regard. A compromise might
emerge in 2023 when the West may try to mitigate its energy
constraints, though there would be an enormous cost with Putin's
victory in the war of energy. Without an end of the Ukraine war, I
think the global economy will not be stable. After the end of this war,
we will face another challenge provoked by China. China cannot
hereafter update its high-technology goods or enhance the quality of
those goods, as the high-tech industries in the West will stop
providing China with their new semiconductor technologies from
2024. This will push up the price of electronics products in general.
It is true that China has been providing cheap and high-quality goods
so far, but this will not be possible anymore. Production in South
Korea and Taiwan would not make up for China's production decline.
It would have a negative impact on the global economy. With these
two uncertain factors of Russia and China, short-term economic
predictions are extremely difficult.

Endo: How this war ends will be determined by two factors: the
current cost of the war and future risks. Some suggest finishing the
war to minimize the current cost, but others insist on continuing it to
get rid of the seed of a possible war in the future. There is a fight
between the two. Ukraine is now in the second category. I agree with
Prof. Takemori in saying a compromise might be necessary, if
eagerness to continue the war among the West proves limited.

The biggest risk in thinking about how the war may end would be
the US. If former President Donald Trump had won a second term,
as some speculate, the US may have left NATO. If the Russian
invasion had happened after the US left NATO, NATO would have
been powerless and Ukraine could not have continued to resist.
Russia, in reality, has not won many wars by its aggression and it
has succeeded only in pushing out Napoleon and Hitler. It has been
tough in trench warfare to protect its acquired pieces of land. In this
war as well, it will try to protect what it has already taken by trench
warfare. In such circumstances, how long the West can continue to
supply weapons to Ukraine or support it wholly will be a key
question. Though Ukraine is now still in high spirits, if the West's
support declines I guess there could be a moment in the future when
it will have to think about a ceasefire, which might mean stopping
short of regaining its entire territory.

This is an unlawful invasion. There will be an impact on China-
Taiwan relations, though Taiwan is in some ways different from

1 Ukraine, in particular as China considers the issue of Taiwan as a
2 domestic political question. The important lesson of the Ukraine war
3 is first of all that nations with the intention and power to change the
4 status quo and with greater authoritarianism could take extremely
5 risky political actions. In spite of the long history of attempts to make
6 wars of invasion unlawful, we cannot exclude the possibility of wars
7 under such circumstances. This posture could be applied to China
8 under Xi, with its intention to change the status quo, referring to the
9 possibility of resorting to weapons, and with its deepening
10 authoritarianism.

11 However, it seems to be quite a challenge for China to invade
12 Taiwan in terms of its military capacity. The Chinese army cannot
13 easily pass over the 100-kilometer long Taiwan Strait with its strong
14 oceanic current. The Russian army has struggled to pass over only a
15 river. Missile attacks would be possible, but they would result in
16 increasing Taiwanese readiness to resist. The Ukraine crisis must
17 have also given Beijing a simulation opportunity in examining the
18 West's reaction to unlawful war or invasion, namely their restored
19 unity, though in reduced size, economic sanctions against Russia
20 and continuous support for Ukraine. Judging from these
21 observations, I think China's invasion of Taiwan is most unlikely in
22 the near future. We must be well prepared for it, though, since China
23 has never given up its intention to regain Taiwan, and with its greater
24 power and deeper authoritarianism, this risk cannot be excluded.

25
26 **Toyoda:** Assuming that economic sanctions against China are
27 possible in the future, will Japanese companies start thinking about
28 the need for decoupling. Can you comment on this point?
29

30 **Endo:** There have already been developments in businesses invested
31 or settled in China escaping to third nations following the deepened
32 conflict between the US and China. It is understandable to see an
33 increasing number of Japanese companies engaged in such risk
34 assessment with the start of the Ukraine war.

35 For the time being, a Taiwan invasion will not happen, I suppose.
36 But there is a possibility that the US, through thoughtless action,
37 might trigger a crisis. The US has occasionally given wrong signs to
38 its enemies. A long time ago, on the occasion of the Korean War,
39 State Secretary Dean Acheson drew what we call the Acheson line
40 between the Korean Peninsula and the Tsushima Strait, defining the
41 region inside the line as definitely defended by the US army. This
42 sign helped to make Kim Il-sung, then the leader of North Korea,
43 decide to start the war in the Korean Peninsula.

1 On the Gulf War as well, the US ambassador to Kuwait did not say
2 clearly "No" to Iraqi President Saddam Hussain and Saddam thought
3 he could invade Kuwait. With such confusing signs from the US or
4 no clear sign from the US president, China may think this would be
5 an opportunity for invasion. A Taiwan crisis would be dependent
6 upon three factors: Taiwan's willingness to resist, the US willingness
7 and capacity to intervene, and also China's willingness and capacity
8 to change the current situation.
9

10 **Takemori:** Russia has been considering "time as their enemy" over
11 the long term as its economy, depending on only fossil fuels with the
12 progress of decarbonization, is gradually shrinking. In contrast,
13 China has been thinking that "time would support China", since as
14 time goes by the situation becomes more favorable for it as it could
15 keep competitiveness in its manufacturing sectors with its
16 technology catching up with the West as well as maintaining cheap
17 wages.

18 The American strategy to contain China is to stop this catching-up
19 process by ceasing to provide advanced technology and aiming to
20 reduce its military capacity and eliminate the threat of all the high-
21 tech industries in the world being monopolized by China. To achieve
22 this, semiconductors are under export control and chip technology
23 as well as human resources and services related to supercomputers
24 and AI are subject to export bans now. For example, ASML, a Dutch
25 company with lithography technology vital for producing nano-
26 semiconductors, is not going to be involved in business with China.
27 In the domain of supercomputers, China cannot be the recipient of
28 NVIDIA, chips necessary for AI, and thus its technology would stop
29 improving.

30 Japan now considers China as an important part of the global
31 supply chain. But Japan will have to think about withdrawal from
32 business in China or relocation of its supply chains, as
33 semiconductors built in components provided by China would
34 become more expensive and less high-quality. This may not happen
35 immediately but in five years Japanese companies will be faced with
36 a question of whether they can maintain Chinese components as a
37 core part of their supply chain.
38

39 **Toyoda:** To pursue both climate change mitigation and energy
40 security in a balanced way, the global commitment to restrict the
41 global average temperature rise to 1.5 C in comparison to the pre-
42 Industrial Revolution age may be difficult to achieve. Mr. Terazawa,
43 what do you think about this?

1 **Terazawa:** This 1.5 C goal does look difficult to achieve.
2 Furthermore, in responding to the Ukraine crisis, coal-fired power
3 has been increasing, which will make it even more difficult to
4 achieve. Meanwhile, in terms of the energy flow argument, European
5 nations are now ready to promote decarbonization further in dealing
6 with the Ukraine crisis to consolidate energy security. The emerging
7 economies and developing economies are also ready to promote
8 renewable energy. Therefore, though it is extremely difficult to
9 achieve carbon neutrality in 2050, it is also true that expansive use of
10 renewable energy and decarbonization will proceed across the world.

11 Taiwan committed to stop utilizing nuclear power in 2025 and also
12 to reduce coal-fired power. It would increase use of renewable
13 energy. But due to its constraints in using renewable energy, it will
14 have to use more natural gas and increase use of gas-fired power.
15 The Taiwan example shows us that we will need fossil fuels in
16 pursuing the option of no use of nuclear power while pursuing
17 decarbonization. We will need to continue necessary investment in
18 fossil fuels. Without nuclear power, the goal to achieve carbon
19 neutrality in 2050 will be still more difficult to achieve. We need a
20 national debate on nuclear power if Japan truly seeks for carbon
21 neutrality. Carbon neutrality and abandoning nuclear power cannot
22 be consistent for Japan.

23 **Building Japan's Future**

24
25
26 **Toyoda:** Finally, could all of you give your brief recommendations on
27 what Japan should do from now on?
28

29 **Endo:** We are seeing the emerging reality that the UN, the only
30 critical public assistance system, does not work well in the domain
31 of international security. On the possible conflict with China,
32 including territorial issues like the Senkaku Islands, the UN system
33 will not function well either, as it is a permanent member of its
34 Security Council. If it does not work, we should seek mutual
35 assistance. To the extent that the US remains a reliable partner, this
36 mutual assistance system should be strengthened. However, this
37 mutual assistance system may occasionally not work well either
38 depending upon US domestic politics. We will need self-help in this
39 case to some extent including increased defense expenditure.

40 We will need to examine seriously how limited resources, financial
41 or human, are to be wisely allocated, according to well-defined
42 purposes. We should pursue well-focused and functional self-help. I
43 believe we should put greater emphasis on defense capabilities,

1 instead of a deterrence strategy with middle-range missiles equipped
2 with conventional warheads which may not function, and strengthen
3 our defense of the Southwest Islands.
4

5 **Takemori:** Most Favored Nation and National Treatment, two basic
6 concepts of the WTO, are dead. Russia and China are now
7 differentiated. We are seeing friend-shoring, a concept well accepted.
8 Instead of the WTO rules, we see more discussion on geopolitics. I
9 am glad to see in Japan discussion on fiscal sources of increased
10 defense expenditure finally emerging after a long time. I do not think
11 it is a bad idea for Japanese industries to consider corporate taxes as
12 fiscal sources for increased defense expenditure, because we can
13 take advantage of increased defense expenditure for industrial policy
14 to raise the potential of Japanese science technology and military
15 technology.
16

17 Hereafter, the Japanese government must think about what
18 industrial sectors could contribute to enhancing national security and
19 raising international competitiveness. Wasting budgets cannot be
20 allowed. We have to transform our fiscal expenditure to maximize its
21 benefits.
22

23 **Terazawa:** It is extremely difficult to achieve both goals of mitigating
24 global warming and strengthening energy security. It is so in
25 particular for Japan. We Japanese seem to have spent so much time
26 and energy discussing each advocate's preference or dogmatic
27 arguments such as "Which is better, nuclear power or renewable
28 energy?" But we will need to face reality and seek realistic solutions
29 at this stage to engage with these two big issues. There are no
30 exceptions to this among the government, industries and the people.
31 So whether you like it or not, we will need to utilize all energy
32 sources, renewable energy, energy saving, investment in fossil fuels,
33 nuclear power, etc. Otherwise, we cannot achieve both goals.
34

35 Taking advantage of the Ukraine crisis as a wakeup call, the
36 government, industries and people of Japan, under strict economic
37 and natural resources constraints, will need arguments focused on
38 reality to produce solutions rather than dogmas. **JS**
39
40
41

42 Written by Naoyuki Haraoka, editor-in-chief of *Japan SPOTLIGHT*, with the
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