WEBINAR SUMMARY:

The Impact of Donald Trump's Tariffs on the Japanese Economy

Talk by Dr Daisuke Adachi moderated by Professor Hugh Whittaker

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Dr. Daisuke Adachi's Talk:

Many thanks to the organisers for putting together this exciting event. I am very happy to give a brief talk on this highly pressing issue. While Donald Trump's tariffs are not the sole focus of my research, they represent an important area of my work. I have a strong interest in analysing labour markets, international trade, and the interaction between the two: a field that is increasingly relevant in today's world. My perspective comes primarily from that angle. I will not focus heavily on macroeconomic implications or industrial dynamics; though these are important and interesting questions, they are outside my immediate expertise and the scope of today's presentation.

Analysis of Tariff Impacts

Let me begin with the latest available data regarding Trump's tariffs, sourced from the Tax Foundation in the United States, which compiles data from the Federal Register. This represents the highest-quality, most reliable data currently available.

This map plots the average reciprocal tariff rates ongoing as of November 1, 2025. You can see that almost every country except the United States is colored. The lowest average rate shown on this map is 10%, and the average is generally higher than 10%. Certain countries, such as Brazil and India, stand out with average tariff rates from the United States reaching up to 50%. This gives us a snapshot of the current state of Trump's tariffs.

To establish some basic background, a tariff is a tax imposed on imported goods. When goods cross a border. more specifically, when they arrive at the importing country's customs office, they must clear customs, which includes paying the duties imposed by the tariff system. Because countries have diverse geopolitical and economic interests, tariffs have long served as a major political tool. They have wide-ranging international economic effects, a reality that has persisted for one to two centuries as modern customs systems developed. However, this has become increasingly true in recent years due to the rise of protectionism worldwide, including in the United States.

There are frequent political discussions surrounding tariffs, tariff rates, and policy uncertainty. These discussions, however, often deviate from academic research, which aims to provide objective, neutral findings based on reliable data and empirical methods.

Today, I will review existing studies on recent tariff events, specifically the Trump tariffs during his first and second administrations. Solid academic research, gathering good data, conducting rigorous analysis, and writing a paper, takes considerable time. Because the second administration's tariff events occurred relatively recently, within the last six months to a year, there is not yet a large volume of accumulated empirical evidence. Instead, we have several excellent papers analysing the first Trump administration's trade wars in 2018 and 2019.

To recall the timeline, the first wave of tariff hikes occurred around 2018 and 2019, allowing us to track five to six years of aftermath concerning international relations, employment, and other key economic variables. I will focus primarily on these historical outcomes, but I will also address the more recent "Liberation Day" and reciprocal tariff events toward the end of this first section. In the second part, I will discuss the speculative implications for Japan. While the first part is based on solid analysis, the second part will be more speculative.

The very first wave of tariff hikes occurred in January 2018, when the Trump administration targeted highly specific products: solar panels and washing machines. While it is difficult to pin down exactly why these two products were selected, it involved significant input from lobbying groups and various international relations considerations. It began with these very narrowly targeted products.

The second wave began around February, March, and April of 2018, when the administration expanded the targeted products to steel and aluminum, which had a much greater economic impact. Following this, trade relations between the United States and other countries, most notably China, deteriorated significantly. Starting in June, August, and September of 2018, Chinese imports became broadly targeted by Trump's tariffs, irrespective of the specific goods being imported.

We must also account for retaliatory tariffs from trading partners. Increased import tariffs harm foreign exporting sectors and producers. Consequently, countries often retaliate against unilateral tariff increases. This case was no exception: we saw retaliatory tariffs on steel and aluminum from China, the EU, Canada, Mexico, Turkey, and Russia by the end of the first half of 2018. China subsequently expanded its retaliation further. This highlights that trade policy is interactive rather than unilateral; we must focus on the retaliatory cycle that drives shifting tariff rates.

One of the primary rationales for raising tariffs was to revive US manufacturing employment. This is a variable that is relatively easy to extract from macroeconomic statistics. If we plot US industrial production and manufacturing employment (both absolute numbers and as a share of total employment) leading up to 2019, we observe an upward trend. However, we must note that this upward trend was already well underway prior to the implementation of the tariffs in early 2018. This was a period of relatively stable global economic growth and a general upward trend. Even without the tariffs, manufacturing employment was increasing. We do not see any

discernable, positive impact on manufacturing employment resulting specifically from the 2018 tariff changes. At best, the evidence does not support the claim that Trump's tariffs revived manufacturing employment.

We can also look at the political economy impacts, specifically voting outcomes across different regions. In international trade, it is well established that trade shocks have highly localised effects depending on a region's industrial specialisation.

Researchers studying the "China shock" of the early 2000s measured region-level exposure to Chinese import penetration. Regions specialising in industries where China had a strong comparative advantage, such as textiles and light manufacturing, experienced significant declines in employment, overall income, and business activity.

A recent paper examined how regional exposure to this China trade shock correlated with subsequent presidential election outcomes. This paper plotted the ratio of republican to democratic votes on the y-axis against the severity of the negative China trade shock on the x-axis. The findings were quite surprising: even though these hard-hit regions faced severe downward trends in employment and wages, they strongly supported protectionist policies. While this is somewhat difficult to explain using traditional economic theory, the regional data clearly shows that communities most damaged by Chinese imports voted in support of tariffs.

There is also a very interesting theoretical and empirical discussion regarding how tariffs affect the adoption of automation, specifically industrial robots. Industrial robots represent a technological change that shifts employment structures, and there are offsetting forces at play. To summarise a somewhat technical discussion:

1. The Positive Force: A tariff increase can accelerate robot adoption by creating policy uncertainty. This uncertainty leads to precautionary savings as economic agents seek to avoid consumption volatility. This increased supply of funds lowers real interest rates, which lowers the cost of capital and increases the incentive to invest in capital equipment, including robots.
2. The Negative Force: On the other hand, increased policy uncertainty directly reduces investment incentives because firms may prefer to wait until the uncertainty resolves.

The actual outcome is a combination of these two offsetting forces. Determining which force dominates is an empirical and quantitative question. Through calibration, the authors of this study found that robot density actually increases as a result of tariff hikes. Empirically, the positive effect operating through real interest rates is stronger.

Because robots are designed to perform tasks previously handled by low-skilled or routine workers, this increased adoption substitutes for labour. This introduces an additional concern for those focused on employment and the labour share of income. Automation acts as an indirect mechanism that can reduce employment and labour income share, compounding the direct effects of tariffs on business operations.

Regarding the second wave of tariffs: specifically the "Liberation Day" tariffs proposed for February and April, researchers have analysed these using quantitative trade models covering roughly 100 to 200 countries. The models indicate that if the US increases tariff rates unilaterally, it benefits, while its closest trading partners, such

as Canada, Mexico, and certain Southeast Asian nations, are negatively affected. The model suggests a US gain at the expense of global losses. However, this assumes no retaliation. Once retaliatory tariffs are factored into the model, the outcome changes significantly: retaliation hurts the US economy, while several other countries experience mild positive economic benefits from the trade war. Because we do not yet have sufficient micro-level data to empirically analyse this second wave, these insights remain theoretical.

Implications for the Japanese Economy

Let me now discuss the potential implications for Japan, which I will summarise in three points.

First, it is not the headline tariff rate itself that matters most, but rather the policy uncertainty it creates. Using the Economic Policy Uncertainty Index (published by several economists) alongside White House press releases detailing tariff announcements and implementations, we can see the impact. Announcements of tariff increases create substantial uncertainty before they are actually implemented. If we plot this data from February to April of this year, the uncertainty index spiked to a scale of 100 to 200. This is unusually high; normally, the index sits between 10 and 50, and 50 is already considered elevated. This spike in policy uncertainty is what primarily alters the economic behavior of business agents.

Second, we must examine the implications for industrial robots. Japan remains a dominant producer and exporter of industrial robots, which represent cutting-edge technology globally. During the 1990s and 2000s, Japanese robot manufacturers largely drove global prices and adoption rates. Data shows that Japan exports approximately one-third of the world's industrial robots. Given the relationship between tariff-induced policy uncertainty, capital demand, and robot adoption, any shift in global robot demand directly impacts Japan. We must keep this connection in mind when assessing the tariff's economic impact on Japan.

Third, we can look at innovation, drawing a parallel to the rare earth elements crisis of 2010–2011. While not a tariff war, this was an instance of Chinese export controls on rare earths, of which China was the dominant global producer. These restrictions caused global rare earth prices to skyrocket by 300% to 400%, causing widespread panic in industries reliant on these materials. However, the global economy, including Japan, responded. The price shock induced substantial R&D and innovation, leading to more efficient utilisation of rare earths and a significant reduction in import dependence on China. This demonstrates that export controls and trade barriers do not just restrict trade; they also trigger reactive innovation.

In summary, there is no strong empirical evidence that US manufacturing employment was revived by tariff hikes. However, voters in struggling regions have consistently supported protectionist policies.

Trade policy uncertainty remains the primary driver of behavioral changes in the economy. Quantitative simulations suggest that tariffs can accelerate robot adoption, which presents further challenges to vulnerable labour markets.

Rather than focusing solely on headline tariff numbers, we should look at the underlying policy uncertainty. Surviving this period requires long-term corporate strategies rather than myopic, short-term reactions to daily news, whether regarding automation or long-term innovation.

Q&A and Discussion led by Professor Hugh Whittaker:

Professor Hugh Whittaker: Thank you very much, Dr. Adachi. I would like to follow up on a few points you raised. I strongly appreciate your concluding call to look at long-term trends rather than fixating on daily announcements. We have been jerked around by frequent tariff rate announcements from President Trump.

My first question relates to your data from 2018 and 2019 under the first Trump administration. During Trump 1, while steel and aluminum tariffs did affect Japan, the primary target was China, initially through solar panels and washing machines, and later across all imports. Japan experienced a significant indirect impact because it relies heavily on exports to China; many Chinese exports that incorporate Japanese components were hit by US tariffs.

Under Trump 2, we are seeing more direct tariffs on Japan, including on automobiles, which is Japan's leading sector. Could you discuss the differential impacts on Japan between Trump 1 and Trump 2, specifically regarding direct versus indirect value chain impacts?

Dr. Daisuke Adachi: That is an excellent point. There are indeed distinct differences in both targeted products and targeted countries between the first and second waves. The impact of the second wave is likely to be much more comprehensive for several reasons.

First, it directly affects major Japanese exports to the US at the current tariff rates. Second, from a global value chain (GVC) perspective, modern production is characterised by highly integrated cross-border networks. Japan is tightly connected to the Chinese economy and other nations through these import-export networks.

The second wave is more comprehensive because, under the "Liberation Day" framework, tariffs are not limited to specific goods but encompass all types of trade between the US and its partners. This broad coverage, combined with the global value chain network, means the indirect effects on Japan will likely be amplified and have a much larger economic footprint than in the first wave.

Professor Hugh Whittaker: While Japanese exporters, particularly in the automotive sector, are facing these tariffs, corporate Japan actually appears to be revising its profit expectations upward. Toyota, for instance, expects profits to exceed $20 billion this year. Corporate Japan seems to be weathering these tariffs robustly, aided in large part by a super-weak yen.

However, this weak yen presents a significant policy dilemma for Prime Minister Takaichi. She favors low interest rates to stimulate growth, but a weak yen imports inflation and raises the cost of living, which has

become a highly sensitive political issue. How do you think this uncertainty and policy dilemma might be addressed by the Prime Minister?

Dr. Daisuke Adachi: This is another critical point. Exchange rate fluctuations always have both positive and negative consequences, which naturally creates a dilemma for any policymaker, not just the Japanese Prime Minister. The yen has been substantially depreciated and undervalued in recent years.

While the export pricing mechanisms you mentioned are highly relevant, I would highlight an additional dimension: the investment strategies of corporate Japan. A major corporate response to tariff increases is tariff avoidance. Companies avoid paying US import duties by establishing subsidiaries and increasing direct investment in the US to facilitate local production.

This creates additional complexity. Localised production seems to conflict with the short-term profitability of domestic manufacturing and exporting under a weak yen. Foreign direct investment (FDI) has been highly active in recent months. Consequently, the policy dilemma facing Japanese decision-makers is incredibly intricate.

Furthermore, Japanese taxpayers are highly concerned about high inflation in recent months. This public concern exerts pressure on policymakers to move away from highly dovish monetary and fiscal policies to slow down the depreciation of the yen, even if it affects high stock prices.

Professor Hugh Whittaker: To follow up on that, Japanese companies are heavily investing in the US, partly to reach agreements with Trump and for other strategic reasons. While some returns on these investments will eventually flow back to Japan, this outflow of investment capital could exacerbate domestic tensions between Japanese workers/consumers and the corporate beneficiaries of that investment income. This could deepen the political dilemma for Prime Minister Takaichi.

Given your expertise in labour economics, how do you view the potential negative impact on Japanese workers resulting from this outward shift in investment?

Dr. Daisuke Adachi: Foreign direct investment in advanced economies like the US is driven by unique strategic motivations. The current investment strategies of major Japanese corporations are not simply traditional cost-minimisation plays, such as moving production to developing countries with cheap labour.

Instead, this FDI is primarily motivated by navigating policy differences between Japan and the US, as well as shifting policy within the US over time. It also promotes collaborative innovation, such as joint ventures between Japanese subsidiaries and US partners.

From an economic theory perspective, we must be precise in interpreting these foreign investment trends. The underlying motivation matters because the reasons driving FDI dictate its ultimate impact on regional economies, local employment, and domestic labour markets in Japan.

Professor Hugh Whittaker: My final question touches on what feels like an undertone in your presentation: the idea that tariffs might occasionally act as a blessing in disguise. They are painful in the short term, but they incentivise innovation.

Industrial robots are a prime example: Japanese robot manufacturers are reporting strong profits, largely driven by supplying AI-related industries. Perhaps tariffs will accelerate a structural shift toward these cutting-edge sectors. Is it fair to interpret your perspective as suggesting we focus on innovation to turn these challenges into a blessing in disguise?

Dr. Daisuke Adachi: It is an intriguing question. I do not necessarily hold a strictly optimistic or pessimistic view, but the scale of the global innovation response to temporary supply disruptions, such as the rare earths export controls by China, is indeed striking. This reactive innovation is definitely a factor that mitigates the negative impacts of trade barriers.

Tariffs are undoubtedly a dominant force shaping international trade and import/export activity. However, if we look beyond international trade, which is substantial but does not represent the majority of global production and economic activity, long-term R&D, innovation, and technological progress have a far more profound structural impact.

The critical, remaining empirical question is whether the positive innovation response is powerful enough to fully mitigate or even overturn the negative economic drag of tariffs. While we do not have a definitive answer yet, it is a qualitatively reassuring finding from academic literature that trade policies can act as a catalyst for technological advancement.

Professor Hugh Whittaker: The Japanese economy did contract slightly last quarter, but corporate profits remain highly buoyant, and the contraction was milder and is expected to be more short-term than many anticipated. The initial pessimism seems to be giving way to a more nuanced outlook.

Thank you very much, Daisuke, for guiding us through this technical discussion on tariffs and their impact on the Japanese economy.