



Trade War

A Matrix Game of International Trade

by Tim Price

Background

Barack Obama's presidency fostered hopes for increased co-operation and heightened levels of friendship between the two nations. As the two most influential and powerful countries in the world, there have been increasingly strong suggestions within American political circles of creating a G-2(Chimerica) relationship for the United States and China to work out solutions to global problems together. However, despite efforts to improve relations and seek out areas for cooperation and shared interests, tensions in the relationship remained.

These tensions have got worse under the presidency of Trump.

Since January 22, 2018, China and the United States have been engaged in a trade war involving the mutual placement of tariffs. However, the roots of this dispute go much further back. In the 2016 presidential campaign, Donald Trump pledged to fix China's "long-time abuse of the broken international system and unfair practices". In April 2018, the United States filed a request for consultation to the World Trade Organization to investigate whether China was violating any intellectual property rights.

Among other things, the US accuses China of currency manipulation, espionage and unfair trade practices which disadvantage US firms. Trump has sought to link the trade dispute to other issues of concern including Taiwan and the One China policy.

China is known for taking a long view. Back in 1986, Deng Xiao Peng established "Program 863," a sort of academy of sciences and technologies charged with closing the scientific gap between China and the world's advanced economies in a short period of time. The 863 program and its institutional derivatives not only sponsored actual research, they also promoted the acquisition of advanced technologies from other countries with little distinction as to whether it was obtained legally or illegally. Some have argued that the more recent "Made in China 2025" is simply an updated version of this, encouraging and rewarding corporations and private individuals to obtain technology on its behalf.

The New York Times is quoted as saying: Big American companies fiercely protect their intellectual property and trade secrets, fearful of giving an edge to rivals. But they have little choice in China—and Washington is looking on with alarm. To gain access to the Chinese market, American companies are being forced to transfer technology, create joint ventures, lower prices and aid homegrown players. Those efforts form the backbone of President Xi Jinping's ambitious plan to ensure that China's companies, military and government dominate core areas of technology like artificial intelligence and semiconductors.

China is increasingly challenging norms and existing power structures; seeking to shape the facts on the ground to benefit China and allow it freedom of manoeuvre. This is occurring on multiple fronts, including:

- Technology Dominance
- International Law
- Military Superiority
- Spheres of Influence
- Information control
- International norms

The growing tension between the US and China, as they increasingly compete across multiple fronts, has stressed the UK policy position, which has maintained twin goals of being open to China and Chinese investment while maintaining the 'Special Relationship' with the US.

The Huawei issue has brought this to a head. Although successful internationally, Huawei has faced difficulties in some markets, due to cybersecurity allegations — primarily from the United States government — that Huawei's infrastructure equipment may enable surveillance by the Chinese government. Especially with the development of 5G wireless networks (which China has aggressively promoted), there have been calls from the U.S. to prevent use of products by Huawei or fellow Chinese telecom ZTE by the U.S. or its allies.

US president Donald Trump has made Huawei the biggest story in tech right now by banning it from doing business with US companies. Huawei, China's tech champion, has lost access to Google's Android and Intel's chips, and it's even seen other international partners like ARM and Panasonic bowing to American influence and discontinuing trade. Having previously been on track to becoming the world's biggest smartphone maker, Huawei is now in such dire straits that the best metaphor its founder could come up with to allay fears is that the company is like a plane with a hole in its side: not doing great, but still up in the air. The Huawei ban lands atop a pile of punitive 25 percent tariffs he's imposed on many Chinese imports to the US, and a promised further round of such tariffs on practically every Chinese export imaginable.

China observers say that China very much cares about these restrictions on its most important overseas market, and it has every incentive to respond, whether to alleviate the sanctions or as a show of its own economic strength. But both agree that China has few, if any, good options available.

Observers have asked pointedly, "What does China have left to retaliate with?" It's already imposed tariffs on the few classes of goods for which it wants to protect its internal market, and it's excluded American internet giants like Google and Facebook, so what can China realistically threaten to do as a counter measure? Some observers note that "China took the first shots" in the present trade war when it threw out many US tech firms, and it is now the US who is finally responding.

Retaliation is particularly risky because China's economy relies on ever increasing trade with the world, as evidenced by the massive Belt and Road Initiative to develop land and sea routes for faster transport of goods. And Huawei, though a privately held entity, has been very helpful in procuring high-value overseas business with its lead in network infrastructure, 5G equipment, and, most recently, premium smartphones.

Some analysts note that because the country lacks a social safety net, it cannot afford to ever take its foot off the gas, which is what the Huawei setback inevitably represents. Economists, have long held 6.5 percent economic growth as the threshold below which China can't dip if it's to sustain its growing debt, and China reported 6.4 percent growth in the first quarter of 2019, before Trump's harshest tariffs had taken effect.

China does, however, have some options. **China holds a trillion dollars of US debt**, which it could dump on global markets and thus trigger an interest rate spike for the US economy. The Washington Post explained the mechanics of this, however argued that China would be doing almost as much harm to itself in the process. A slowdown in the US economy would lead to even less appetite for Chinese exports, the US dollar might also go down in value and make Chinese goods less appealing, and whatever US treasuries China is left with would also be worth less. This illustrates the inherent symbiosis between Chinese production and American consumption, which have together formed the backbone of the global economy over the past 20 years.

The most threatening retort has been a visit by president Xi Jinping to a **rare earths'** facility. This was a wordless reminder of China's dominance in collecting and processing the rare earth minerals essential to every smartphone, laptop, hybrid car, and practically anything more advanced than a gas oven. Yet, rare earths are not the secret weapon China imagines them to be. They're not all that rare, the response to Beijing hoarding its supply would be production becoming economically viable and ramping up elsewhere, and the ultimate outcome would be fewer jobs and fewer exports for China. Many see this as an untenable scenario and points to China's ill-fated attempts to use rare earths as a trade cudgel in its dealings with Japan and the US in the past. Indeed, earlier this year, researchers found a deposit of rare-earth minerals off the coast of Japan that could supply the world for centuries, as soon as extraction becomes economically valuable.

Tactical, Operational and Strategic levels of the Conflict

On one level, the Huawei issue is a tactical decision about the balance between prosperity and security. However, it can also be viewed, along with sanctions, tariffs and indictments as a lever in the US campaign to push back against perceived Chinese unfair and illegal trade and economic practices. But even this optic may miss a wider strategic element - how far is this skirmish over Huawei or the trade dispute a 'flash in the pan', and how much is it about the future of the internet, technology and the geopolitical world order?

The Matrix Game Construction Kit

The ultimate matrix game design kit

In a "matrix game" there are few pre-set rules limiting what players can do. Instead, each is free to undertake any plausible action during their turn. The chances of success or failure, as well as the effects of the action, are largely determined through structured argument and discussion. This process allows for imaginative game dynamics that are lively and open-ended, and yet also grounded in reality.



Matrix games are particularly well-suited for complex conflicts and issues involving multiple actors and stakeholders, varying interests and agendas, and a broad range of (diplomatic/political, military, social, and economic) dimensions. The game system crowdsources ideas and insight from participants, thereby fostering greater analytical insight.

First developed by Chris Engle, matrix games have been played by hobbyists for years. They have also been used as serious games for training at the US Army War College, National Defense University, the Central Intelligence Agency, and elsewhere; for defence planning, capability assessment, and acquisitions in Australia, Canada, the UK, and US; for security planning for the Vancouver Olympics; as a research and analytical support tool at the UK Foreign Office; and as an educational method in various universities. They are particularly well-suited for multi-sided conflicts or other issues that involve a broad range of capabilities and interaction.

MaGCK contains everything that is required to play two different matrix games, or to design your own matrix games addressing almost any aspect of modern conflict:

- A core set of matrix game rules.
- Player briefings and supplementary rules for ISIS CRISIS, a matrix game that explores the rise and decline of the so-called "Islamic State" insurgency in Iraq. Two scenarios are included: "The Caliphate Reborn?" (set in September 2014) and "Road to Mosul" (starting January 2016).
- Player briefings, map tiles, and supplementary rules for A RECKONING OF VULTURES, a game that explores coup plotting and political skullduggery in a fictional dictatorship.
- 255 large blank game tokens in eight colours, together with over 700 stickers depicting various unit types, other assets, capabilities, and effects. The stickers are used to customize the game tokens, offering enormous flexibility for matrix game designers.
- 80 smaller discs in the same colours as above, which can be used to indicate damage, supplies and resources, political influence, or other characteristics.
- 10 two-sided tracking mats, with various scales (+/-3, 1-3, 1-10, days, months, and so forth)
- Assorted dice.

In addition, purchasers of MaGCK gain access to templates so they can print additional stickers using readily-available sticker sheets and any laser printer—thus making it possible to produce an unlimited number of games and scenarios. See: <https://www.thegamecrafter.com/games/magck-matrix-game-construction-kit>

Abbreviated Matrix Game Rules

How to Play a Matrix Game

In a Matrix Game, actions are resolved by a structured sequence of logical "arguments". Each player takes turns to make an argument, with successful arguments advancing the game, and the player's position. There are a number of ways you can do this, depending on the size of the game and the purpose (each has their own strengths and weaknesses), but the one recommended for this game is:

The "Pros and Cons" System

In this system, each argument is broken down into:

- The active Player's states: Something That Happens and a Number of Reasons Why it Might Happen (Pros).
- The other Player's state: A Number of Reasons Why it Might NOT Happen (if they can think of any) (Cons).

The game needs a Facilitator to adjudicate on the arguments, but if you have a limited number of players, you can take it in turns to be the Facilitator – this works out much better than you might imagine and helps reinforce the idea that your role in the game might be in conflict with others, but you are all working together to generate a credible narrative.

The advantage of this system is that you formalise the Pros and Cons of an argument and the role of the Facilitator becomes that of ensuring that the Pros and Cons carry equal weight - perhaps making compelling reasons worth two Pros and two or three weaker reasons against only worth one Con. You need to ensure you don't end up with a laundry list of trivial reasons, or the player re-stating a reason already accepted in a slightly different way in a desperate attempt to gain points.

One very useful benefit of the "Pros and Cons" system is that it provides reasons for failure should the dice roll not succeed. You can also more easily run the game with very knowledgeable players.

Notes about arguments

The important thing to remember in a Matrix game is that arguments can be made about anything that is relevant to the scenario. You can argue about your own troops or about the enemy, the existence of people, places, things or events, the weather, plague, disease or public opinion. The actions and consequences of arguments are reflected in the

placement of the generic counters on a map (examples are enclosed below), forming narrative markers for the game; or by writing the results on a whiteboard or flipchart so the players can keep track of what is going on.

Some things can seem a little odd to new players – "how can he argue about my troops?" – It is true, he can't give them orders, but he could argue that their morale and motivation are low because they haven't been paid in months. The only criteria for judgement is the likelihood of the event taking place. With a bit of imagination, common sense and rational thinking, it is possible to present persuasive arguments as to what should happen in any scenario - from traditional military campaigns to the strange world of defence procurement.

A common error in Matrix games is for a player to argue about another player being influenced by something or them agreeing to a course of action. The player is present and can simply be asked – so that a little time between turns to allow the players to negotiate with each other (in secret if necessary) makes for a better game. It might be that a player wants to argue that all parties come to negotiations – in which case let them state their case, then ask the other players if they want to come along. If they agree then the argument is an automatic success. Arguments are for measurable actions – if the players want to negotiate with each other, they can do that in between turns.

Sometimes players get carried away with their arguments and try to do several different things. This isn't allowed in a Matrix game – you only get to do one action a turn because part of the insight comes from deciding what the highest priority is. The action itself could be large (like a general mobilisation of the Militia), but it must be a single action, so mobilising the Militia and providing the Police with heavy weapons would be two separate actions – which one do you want to do first?

If two arguments are in direct opposition ("This happens" - "No it doesn't") they represent a Logical Inconsistency since they cannot both be true. The earlier argument has already happened, so it is impossible for it not to have happened. The later player may argue that the event is reversed, but this tends to make for a poor narrative in the game and should be discouraged.

Reasonable Assumptions and Established Facts

It is important that the Facilitator understands the difference between "reasonable assumptions" in the game, such as the proposition that well trained and equipped Special Forces soldiers are going to be much more effective in combat than untrained protestors; and "established facts" which are facts that have been specifically mentioned in the game briefings or have become established during play as the result of successful arguments.

The former can be deployed as supporting reasons (Pros and Cons), but the latter need to have been argued successfully in order for them to be included. Many inexperienced players will make vast all-encompassing arguments full of assumptions that are not reasonable. For example: It is not a reasonable assumption that an unarmed Protestor counter could fight off trained Police. It is reasonable to assume that the Police are trained, armed, equipped and quite capable of dealing with a group of protestors (after all, that is their job). It would be necessary to argue for large number of Protestors, argue that they had weapons of some sort or argue that they were especially devoted or fanatical about their cause, for them to have a reasonable chance of beating the Police.

Of course, you might argue that your Protesters undergo special training, get access to firearms, or are simply fired up with enthusiasm by the powerful and impassioned speech from their leader, so they get a bonus. In this case, you should mark the counter with a +1 or something similar (depending on the strength of the argument) to show their improved status.

Game Length and Turn Length

The game should last a minimum of 6 turns as it is essential that sufficient turns are allowed to develop the narrative and force the players to have to live with the consequences of their actions from earlier in the game. Each turn represents a deliberately vague period defined by the game Facilitator and the arguments are the "headline events" that took place in the period.

End of Turn "Consequence Management"

At the end of each game turn (a cycle of player arguments) the Facilitator should go over those successful and failed arguments that have generate new "established facts" in the game. They should also review situations that are on-going, such as the generation of refugees from fighting or the arrival of

new recruits to a popular cause. If these have not been countered during the turn by a successful argument, the Facilitator should make them continue until someone does make an argument to stop them.

It might also be that some of the arguments, when considered as a whole, will have additional or even unintended consequences that are reasonable to expect to arise. It is therefore worth taking time to consider the consequences of the players' arguments beyond their immediate results. Invite the players to consider the events of the turn, suggest possible consequences and then agree on the most likely that should be taken forward to the next turn.

In some games, it is worthwhile having an individual (if you have one to spare) who is particularly experienced about the sort of subject that the Matrix Game is focussed on, make "the law of unintended consequences" arguments at the end of a turn. This can help to formalise the process and provide good examples to widen the players' understanding of the consequences of their actions.

Inter-Turn Negotiations

As we have already said, the actual "arguments" of the Matrix Game are about actions that take place in the course of the game. In most cases, the actors represented by the players may well want to engage in face to face negotiation with each other in an effort to strike a deal. Players attempting to make Arguments saying that they want to "influence the Prime Minister" are essentially pointless if the Prime Minister is represented by another player. If they want to strike a deal, then they had better head off to a quiet corner of the room and try a little influence in real life. Of course, if a player wants to make an argument about a position or group not represented by another player, they are welcome to do so in the normal way.

In analytical games, it is important to record the essential elements of these discussions. What was suggested? Was agreement reached and why? If no agreement was reached what were the private and public reasons why the negotiations were unsuccessful? Analysis of these "off-table" negotiations and the reasons the players felt why they were successful or failures can provide important insights.

Secret arguments

There will be some cases where you want to hide from the other players the thing you want to argue about. It could be that you have booby trapped a piece of equipment you think your opponent will use, or that you have swapped the vital blueprints for a set of fake ones in case the safe is broken into. In this case, you simply write down your argument on a piece of paper and present it to the Facilitator announcing to the other players that you are making a secret argument. The Facilitator will make a judgment and you will roll the dice normally, but the other players have no idea what it is about.

You should be careful, however, that the players don't make too many secret arguments. This can ruin the game's atmosphere and reduce the focus, so that the game drags on unnecessarily. They also depend on the judgement of the Facilitator as to their success or failure, rather than being decided on a consensual basis from the participants. They must only be permitted when they refer to quite specific things or events. An argument about gathering information from a spy, in most games, will be quite a generic argument and should be argued openly. Similarly Arguing about the placement of an IED to catch forces moving down a route should be made openly as the results will take effect the same turn. It is only really for secret things you need to establish several turns in advance.

Measures of Success

In many arguments success or failure may not be a simple "Yes" or "No" proposition. There might well be a sliding scale of success or failure in terms of numbers or the quality of the outcome, which is

Full rules here: <https://www.thegamecrafter.com/games/pdf-only-magck-matrix-game-construction-kit-user-guide>

Game Turn Length:

The length represented by a game turn may be variable during the game based on the events taking place, but are intended to be over a period of about a year (giving time for trade tariffs to take effect).

Actors in the Game and Order of Play:

- Western Firms
- Chinese Government
- UK Government
- Chinese Technology Industry
- US Government
- Russia

usually represented by the score on the dice. If you needed a 7+ to succeed and rolled a double-six (12), this can indicate an especially notable success. Conversely, a roll of a double-one, it could represent a disastrous failure.

More information

There has been quite a lot of discussion about Matrix games, including links to example games on the "PAXsims" Blog that are worth reading:

<https://paxsims.wordpress.com/?s=Matrix+Game>

Professor Rex Brynen was also interviewed by the GrogHeads "GrogCast" Podcast, a copy of what he said about Matrix Games is here:

<http://grogheads.com/?podcast=grogcast-season-2-episode-12> with the discussion about Matrix Games starting at the 31-minute mark.

Conduct of the Game:

The players should be formed into teams around the Actors in the game. They should be provided with the introductory background (above) and their Actor brief; and provided with a short period in which to study the brief. They should then write down a few (3 or 4) short, pithy, objectives they would wish to achieve in the game in accordance with their briefs. One of these should be a longer-term objective, with a reach of at least 10 years in order to ensure that the players address something other than short-term goals and reactions to other player's actions in the game. Play should then commence in the normal way. The final turn should be followed by a discussion of the objectives, and comparison made with the Actor's achievements during the game.

A quick guide to the US-China trade war

The US and China are locked in an escalating trade battle. US President Donald Trump has complained about China's trading practices since before he took office in 2016. The US launched an investigation into Chinese trade policies in 2017. It imposed tariffs on billions of dollars' worth of Chinese products last year, and Beijing retaliated in kind.

After months of hostilities, both countries agreed to halt new trade tariffs in December to allow for talks. Optimism had grown over the prospect of a deal, but that faded, and now the US has more than doubled tariffs on \$200bn (£153.7bn) worth of Chinese products. Beijing retaliated three days later with tariff hikes on \$60bn of US goods.

What tariffs are in place?

Last year, the US imposed three rounds of tariffs on more than \$250bn worth of Chinese goods. The duties of up to 25% cover a wide range of industrial and consumer items - from handbags to railway equipment. Beijing hit back with tariffs on \$110bn of US goods, accusing the US of starting "the largest trade war in economic history". China has targeted products including chemicals, coal and medical equipment with levies that range from 5% to 25%. It has also targeted products made in US districts with strong support for the Republicans, and goods that can be purchased elsewhere, such as soybeans.

After agreeing a truce in December, both sides began to talk.

But the US raised tariffs on \$200bn of Chinese products to 25% from 10%. China retaliated but officials say the countries are still talking. The US has also started the process for hitting an additional \$300bn of Chinese goods with tariffs.

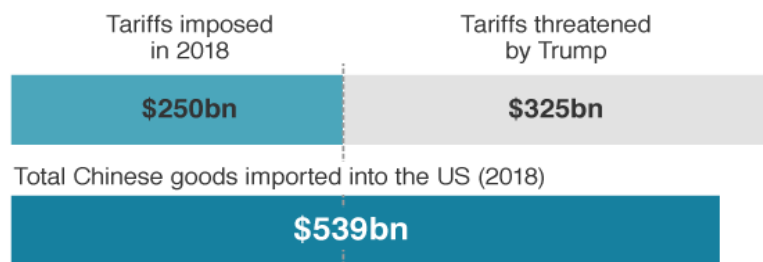
Why tariffs?

Tariffs imposed on Chinese goods, in theory, make US-made products cheaper than imported ones, and encourage consumers to buy American. They are also increasingly seen as a negotiation tactic in the trade war.

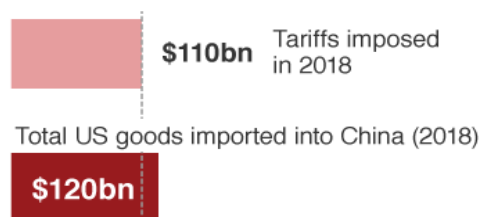
What is the impact so far?

Both US and international firms have said they are being harmed. Fears about a further escalation have rattled investors and hit stock markets. The IMF warned a full-blown trade war would weaken the global economy.

US tariffs on China



Chinese tariffs on US



World economy

The International Monetary Fund says an escalation of the tit-for-tat tariffs could shave 0.5% off global growth by 2020. Morgan Stanley estimates that a full-blown escalation of the trade dispute could knock 0.81 percentage points off global gross domestic product. This scenario would involve the US slapping 25% tariffs on all goods from both China and the EU, and them responding with similar measures. Most of the impact - or almost 80% - would come through a disruption of domestic and international supply chains.

Belt and Road's Global Reach

The Belt and Road Initiative involves the construction of roads, railroads, ports, oil and gas pipelines, power plants, telecom facilities and much more. Here is a sampling of recent projects in a few countries along the initiative's new trade routes involving Chinese companies working alongside local partners.

Indonesia

China-Indonesia Trade Zone

A 500-hectare economic zone and 120-hectare industrial area launched in 2013 in Bekasi, Jawa Barat.

Jakarta-Bandung High-Speed Railway

A \$5.5 billion, 150 km rail line with a top speed of 350 km/hour started in 2016.

Russia

Yamal LNG

Largest Sino-Russia project with first phase expected to be operational in 2017.

The Power of Siberia

Pipeline that will provide 38 billion cubic meters of gas a year to China for 30 years, expected to be operational in 2018 or 2019.

Pakistan

Haier-Ruba Economic Zone

The flagship project of the China-Pakistan Economic Corridor.

Karot Hydropower Project

A \$1.65 billion project with a 720 MW capacity expected to be operational in 2020.

Peshawar-Karachi Highway

A 1,152 km highway with first 400 km expected to be finished in 2019.

Myanmar

China-Myanmar Oil and Gas Pipelines

A 2,000 km network linking Myanmar's southwest coast with southwest China.

Myitsone Hydropower Station

Being reassessed after 2011 suspension.

China-Myanmar Railway

A 10 billion yuan (\$1.45 billion), 1,920 km line, started in August 2016, linking Kunning and Yargon.

Kazakhstan

Southern Natural Gas Pipeline

A 1,452 km pipeline, finished in April 2017, which provides gas to southern Kazakhstan and will provide 5 billion cubic meters of gas a year to China.

Mangystau Photovoltaic Power Station

A 5-MW photovoltaic power station under construction.

Sri Lanka

Colombo Port City

Sri Lanka's largest foreign-investment project with first phase attracting \$1.4 billion.

Hambantota Port

Completed in 2011 with a total construction cost of \$1.5 billion, the port has eight 100,000-ton container terminals.

Egypt

Egypt Transmission Project

A \$758 million transmission line covering most of the Nile River Delta, due to be finished in 2018.

Suez Trade Zone

Home to 58 enterprises and 2,000 employees, with total investment of \$610 million.

U.K.

Claver Wind Project

China General Nuclear Power purchased an 80% stake in three onshore wind farms with installed capacity of 72 MW in 2014.

Hinkley Point C Nuclear Power Station

An £18 billion (\$23 billion) plant with investment from China General Nuclear Power and France's EDF due for operation in 2025.

Ethiopia

Ethiopian Transmission Project

A \$1.46 billion power project completed in December 2015.

Addis Ababa-Djibouti Railway

A \$4 billion, 753 km line that cuts intercity travel time to 10 hours from seven days.

Hungary

Budapest-Beigrade High-Speed Railway

Expected to cost \$2.8 billion and take two years to complete.

Western Firms

As a US-led trade war rages on, some companies are starting to feel the pain. The US has been embroiled in a tit-for-tat trade battle on several fronts over the past few months. The one that's creating the most interest is the one with China, as the world's two largest economies wrangle for global influence.



In the latest move, China said that it would levy new tariffs on more than 5,200 US products if the US goes ahead with its latest threat to impose 25% tariffs on \$200bn (£152bn) of Chinese goods. Earlier this year, the US also started charging levies on the imports of steel and aluminium, including from the European Union, Mexico, and Canada. These countries have retaliated.

When talks fell apart the effect on financial markets was muted. Most firms and investors are betting on a long struggle between the superpowers but not a sudden crisis or a financial panic. As the conflict over the tech industry escalates, however, that assumption looks suspect. Recently America's Commerce Department said that companies would need a special licence to deal with Huawei, which it deemed a threat to American interests. Fears that other Chinese tech firms will be blacklisted have caused their shares to tumble and there are worries of a chain reaction.

Supply Chains, Regulation and Markets

For many western companies China represents both an opportunity and a threat. China plays a vital role in the supply chains of many Western companies, including raw material extraction, transport and manufacturing. The size of the Chinese market, coupled with the growing disposable income of the middle class is also seen as a key growth area for many Western companies, however this does not come without risk. Onerous regulation, intellectual property theft and a high level of corruption are all major issues which Western companies face.

Key Sectors:

Vehicle Manufacturing – The car industry seems to have been the most affected so far, with three major automakers recently warning that changes to trade policies are hurting performance. Ford and General Motors lowered profit forecasts, citing higher steel and aluminium prices caused by new US tariffs. Fiat Chrysler also cut its revenue outlook after sales in China slumped, as buyers postponed purchases in anticipation of lower car tariffs. Jaguar Land Rover, the UK's biggest car firm, also recently reported a loss for the first time in three years after sales slowed down in China. Ironically some of the hardest-hit companies are American or producing in the US, even though the tariffs imposed by the US are intended to help domestic companies.

Food and drink – Some companies in the food and drinks industry are also lowering their outlooks and putting up their prices to cope with the new status quo. Tyson Foods recently cut its profit forecast, saying retaliatory duties on US pork and beef exports had lowered US meat prices. US spirits and wine giant Brown-Forman has said it will increase the price of Jack Daniel's and other whiskeys in some European countries, according to media reports. Coca-Cola has also said it will increase prices in North America this year to compensate for higher freight rates and metal prices, according to the Wall Street Journal.

Technology – Western Technology firms have a difficult relationship with China. The Chinese market is huge and Chinese factories often form key parts of the supply chain, however theft of intellectual property, technology transfer and onerous regulation create risks. As a result of the trade dispute and other friction, Technology companies are increasingly looking to other countries to manufacture their products.

Key Questions

- Which industries / technologies should we prioritise?
- How do we handle the conflicting regulations and ethical requirements of different markets?
- How do we balance short term vs long term interests?
- How do we balance the various risks? – (Reputation, legal, financial.)
- How do we maximise shareholder returns?

Chinese Government



Once regarded as an unstoppable giant and stalwart of the global economy, China today shows signs of economic and political fragility. The interrelated risks of an abrupt economic slowdown, a collapse of the financial system, and political instability in China are now apparent, warn international observers. In spite of these risks, or perhaps because of them, Chinese foreign policy is at its most assertive and activist in decades.

The American President is blaming China for its failures in growth and trade and is lashing out like a wounded animal.

During his election campaign, President Donald Trump threatened to impose 35% to 45% tariffs on Chinese imports to force China into renegotiating its trade balance with the U.S. The immediate result of that would be a fierce trade war that America would almost certainly lose. And while we don't know yet whether Trump will follow through with this threat, his abandonment of the Trans Pacific Partnership (TPP) in his first few days in office is an indication that he is not shying away from his campaign pledges.

Trump is now entering uncharted waters. He has already demonstrated his ignorance of Asian affairs when he publicly accepted a phone call from Taiwan's president, Tsai Ing-wen, in December, and shortly afterwards announced that he didn't understand the "One China" policy, or why he should respect it. His abandonment of the TPP will simply accelerate China's displacement of America as the world's leading economic power.

It's not the 80s anymore. Twenty years ago, the situation might have been different. China was dramatically underdeveloped, and it wanted access to Western technology and manufacturing techniques. China has most of what it needs now, and what it doesn't have it can easily obtain from vendors outside the U.S. While the American market looked enticing a few decades ago, it is relatively mature, and today the newer emerging market countries have become much more interesting to Beijing.

According to the Nikkei Asian Review: "Even as China grows stronger, the contradictions of the country's one-party rule are likely to become more serious and the country more internally unstable. If this happens, the Chinese leadership may have difficulty controlling the far-flung organs of government, which may sometimes behave recklessly.

The ruling Communist Party gives the impression that its leadership has tightened its grip over the country. President Xi Jinping has succeeded in bringing down his political rivals through an anti-corruption campaign and removing limits on his term of office. He can remain in power indefinitely.

The power struggle in the upper reaches of the party has played itself out and Xi has no challengers. However, the party has only about 90 million members, a small fraction of the population. Xi has the party speaking with one voice, but that does not mean he has won the hearts of China's 1.4 billion people. There are growing problems in Chinese society that could weaken the government's ability to hold the country together: enormous economic disparities, endless corruption and smouldering discontent in the Xinjiang Uighur Tibet autonomous regions to name a few".¹

Key Questions

- How can we foster an international order that places China technologically, economically and militarily at the apex?
- How should we prioritise between projecting power globally, achieving regional dominance and retaining domestic control?
- How should we prioritise between different areas of power? (Economic, military, social, cultural, intelligence and technological)
- How can Chinese industry be best exploited to increase Chinese economic, military and political power?
- What is the US/West's intent towards China? Is the US seeking to contain China in the long term or seeking short term rebalancing?

¹ <https://asia.nikkei.com/Spotlight/Comment/China-s-fragility-is-as-worrying-as-its-strength>

UK Government



Concerns over the US/China trade war are important, but pale into insignificance over the uncertainty to do with Brexit, and future trade relations with the rest of the world. On the one hand, a trade war between the USA and China offers valuable opportunities for UK businesses, but on the other hand it risks relations with one of our oldest and most powerful allies.

Her Majesty's Government maintains a close intelligence and security relationship with the US and other FVEY partners. Outside the EU, the US is the UK's largest trading partner and many US firms have traditionally seen the UK as their bridge into Europe.

China is a key economic partner. China is a source of inward investment and a supplier of consumer and manufactured goods; it is also a huge potential market for UK companies.

The United Kingdom and China have a strong economic relationship and our position as leading nations. Our trading relationship is worth £68.5bn a year, our fifth-largest with any country. More than 10,000 UK businesses sell goods and services to China, making it our sixth-largest export market, unlocking wealth and opportunity for our people by supporting jobs and economic growth.

The partnership has its challenges. China's growing influence is putting pressure on the global system, and we have serious concerns about issues including its stance on human rights, its respect for certain international agreements and its theft of, and failure to protect, intellectual property.

There are other areas where China's approach to the rules-based international system concerns us, including its failure to respect freedom of navigation in the South China Sea. We and our allies and partners have to show the strength of our own commitment to the rules-based international system and the consequences for China and the rest of the world should we fail to promote and protect a stable system of international cooperation.

US tensions with China are a concern; our economy is closely linked with both countries and any friction in their relationship risks UK prosperity. The UK also finds itself at an interesting juncture, not yet out of the European trading block and actively looking for new international partners with which it can grow its trading relationships. How far will the UK be able to take advantage of the opportunities presented by both, and at what cost?

There are difficult trade-offs between short and long term and between prosperity and security - We have a delicate line to walk.

Huawei

U.S. President Donald Trump plans to tell the British government that Washington may limit intelligence sharing with the U.K. if it continues to allow Chinese tech giant Huawei to build part of its 5G mobile network, the Financial Times has reported. A government-led committee warned it found new significant issues with Huawei products that could pose a risk to the British telecommunications industry. The Huawei oversight board, which is chaired by the head of GCHQ's National Cyber Security Centre (NCSC), said it had found "significant technical issues in Huawei's engineering processes leading to new risks in the UK telecommunications networks". However, it did not call for a ban on Huawei's equipment being used in the roll out of 5G networks. The US has put increasing pressure on the UK and other countries to stop Huawei from being involved in the deployment of future 5G networks. Countries including Australia have stopped Huawei from being involved, citing national security concerns.

Key Questions

- How can the UK maintain or improve its international standing?
- How can the UK balance prosperity against security?
- How does the UK manoeuvre amongst the differing power blocks of China, the US, the EU and Russia?
- How will Brexit affect the UK's relative economic, military and diplomatic power?
- What are the UK's short term and long term interests? – how can these be balanced?
- How can the UK encourage other states to adhere to a rules based international system?

Chinese Technology Industry

China's once scorching tech sector is cooling off. Electric vehicles, industrial robots, and microchip production all slowed recently. Big firms like Alibaba, Tencent, and search engine Baidu have slashed jobs. Overall, one in five Chinese

tech companies plans to cut recruitment, says jobs site Liepin.com.

The US-China trade war is partly why - both nations have imposed tariffs on each other's goods in 2018. But China's economy, which has enjoyed double-digit growth in six of the last 15 years, will slow to 6.3% growth in 2019, predicts the IMF. This is still double the world's average, but China's slowest growth since 1990.

And China's start-up scene, boasting a third of the world's "unicorns" - start-ups worth more than \$1bn (£769m) - is plotting a "strategic restructuring" as the economy and tech sector cool. "What drove things completely insane was too much money," argues the managing director of Chinaccelerator. There was a "real push for economic growth from the government" and big funding from state coffers, he says, but this has levelled off.

China's 6,200 online peer-to-peer lending platforms, like Weida and Yirendai, were a thriving bubble two years ago. But 80% have closed or hit major difficulties since, says the Yingcan Group, a Shanghai consultancy. Amid a government crackdown, this number might dip below 300 by the year's end.

One reason is that China's market is more saturated. While only 56% of the population is on the internet, Tencent, Shenzhen's internet giant that last year became Asia's first \$500bn-plus company, says this percentage includes most of the people who buy online. "When you account for those who are too young or old to own a smartphone, and people who have a little bit of money, we're basically at saturation," Mr Norris says. So it's pricier to get customers.

This means start-ups are having to link up with China's online giants. In the last year or so, "over half the unicorns" aligned with either Tencent or Alibaba, making "a bifurcation of the market into clans", says Mr Bean. For start-ups wanting to train artificial intelligence models on big amounts of data, linking with Tencent, Alibaba, or Baidu creates huge advantages. China has "a huge amount of data already", says Shenzhen resident Yang Yang, founder of Unimaker, a 3D printing start-up. And big data helps Chinese start-ups localise and improve to beat overseas companies trying for a foothold.

The 863 program has supported the economic expansion and competitiveness of Chinese companies. Its institutional derivatives not only sponsored actual research, they also promoted the acquisition of advanced technologies from other countries with little distinction as to whether it was obtained legally or illegally.

Some have argued that the more recent "Made in China 2025" is simply an updated version of this, encouraging and rewarding corporations and private individuals to obtain technology on its behalf. If "over the table" options are reducing, perhaps "under the table" options may be more rewarding?

China's sunny gold rush days may be ending, but the coming winter may deliver a cold blast of efficiency that many tech firms need. Chinese companies need to reach out but will the world continue to embrace them?

Key Questions

- How can Chinese technology industry achieve global technology primacy?
- How could/should Chinese technology industry support the wider objectives of the Chinese state?
- How should Chinese technology companies prioritise their investment, research and acquisition?
- How can Chinese technology companies reach new markets?
- How should the industry manage the relationship with the state? Can it be managed?



US Government



Since July 6, 2018, China and the United States have been engaged in a trade war involving the mutual placement of tariffs. The President of the United States, Donald Trump, has exercised authority granted by Congress in the Trade Act of 1974, to unilaterally impose tariffs on \$250 billion of Chinese goods after the Office of the United States Trade Representative determined China's trade practices were unfairly limiting U.S. exports. China's Ministry of Commerce said in a statement that the United States "has launched the biggest trade war in economic history so far" and imposed retaliatory tariffs on U.S. goods of a similar value.

U.S. Trade Representative Robert Lighthizer, after a seven-month investigation into China and intellectual property, explained that the value of the tariffs imposed was based on U.S. estimates of the actual economic damage caused by China's alleged IP theft and the forced transfer of technology to Chinese companies.

Many countries and companies have accused Chinese spies and hackers of stealing technological and scientific secrets through the planting of software bugs and by infiltrating industries, institutions, and universities. China has been accused of having benefited itself from stealing foreign designs, flouting of product copyrights and a two-speed patent system that discriminates against foreign firms with unreasonably longer registration processes, and its intelligence services have also been accused of assisting Chinese companies in stealing trade secrets.

The U.S. claims that Chinese policies put U.S. patent holders at a disadvantage in Chinese markets by encouraging foreign companies to engage in joint ventures with Chinese companies. This supposedly then gives Chinese companies access and permission to use, improve, copy or illegally develop their technologies. The Trump administration views the "Made in China 2025" industrialization plan as a threat to the U.S. economy and national security. The White House has urged the Chinese to abandon the program. However, China argues it has strengthened intellectual property right (IPR) protections and that the U.S. has ignored the effort; that the U.S. has ignored WTO rules and ignored the calls of its own industries to reduce tariffs. China firmly opposes these U.S. trade practices, believing they represent "unilateralism" and "protectionism".

US companies have entered agreements establishing more than 20,000 equity joint ventures, contractual joint ventures, and wholly foreign-owned enterprises in mainland China. More than 100 US-based multinationals have projects in mainland China, some with multiple investments. Cumulative US investment in mainland China is valued at \$48 billion. The US trade deficit with mainland China exceeded \$350 billion in 2006 and was the United States' largest bilateral trade deficit. China is a major creditor and the second largest foreign holder of US public debt.

The Long Game

In August 2017, Schumer and other senior Democrats backed a proposed inquiry into Chinese trade practices; Oregon senator Ron Wyden stated in a letter that the government needed to take action "to counter China's attempts to strong-arm U.S. innovators into giving up their intellectual property and drive U.S. firms further out of the Chinese market."

The hawks in the White House may believe that isolating the tech industry will slow China's long-term development and that isolation is a good negotiating tactic, since China has more to lose in the short term than America does. In fact the brutal fallout from a full-blown tech war would rapidly be felt by financial markets as well as by America's allies and the world's consumers. In the long run it may even make China self-sufficient or create two distinct technology ecosystems.

Key Questions

- How can US primacy be maintained?
- How far should china be contained, tolerated, managed or embraced?
- How can this be achieved?
- How limited or expansive should US aims be in the trade conflict with China be?
- How far/hard should the US push China, US industry, US Allies / Regional actors?
- What costs should the US be prepared to accept in order to achieve its objectives?

Russia

Putin has stated that the fall of the Soviet Union was the greatest tragedy of the 20th century. Russia sees itself as a great power by natural right. The idea of entering into a world where China and the US are the bipolar superpowers where Russia is a regional concern is almost repellent.

Russia under Putin has increasingly inserted itself into world affairs and changed the facts on the ground. And while Russia has not always achieved its objectives, you cannot argue its actions have not been without consequence. Russian troops or proxies have been active in Georgia, Ukraine, Syria, Libya and Venezuela. Russia is also responsible for several major cyber-attacks, at least one attempted coup and likely several attempted or successful assassinations.



Relations with the West remain tense, and while Russia has some friends in Europe, the EU as a whole has remained relatively united on sanctions. The Salisbury incident damaged Russia's standing and likely set back any relaxation or Ukraine related sanctions. The UK voice speaking out against Russia has only become more shrill.

Relations with China

Until now, Russia's relationship with China has looked decidedly one-sided, but Donald Trump's trade war has changed all that, and Moscow could be a natural hedge against international pressure.

Even as Russia's economy modestly rebounds amid rising oil prices, its pivot to the east is expected to persist. But while China has already become Russia's major trading partner, helping offset the impact of geopolitical uncertainty with the West, the Kremlin is now striving to assert itself as an indispensable destination for Beijing amid the trade war with Washington.

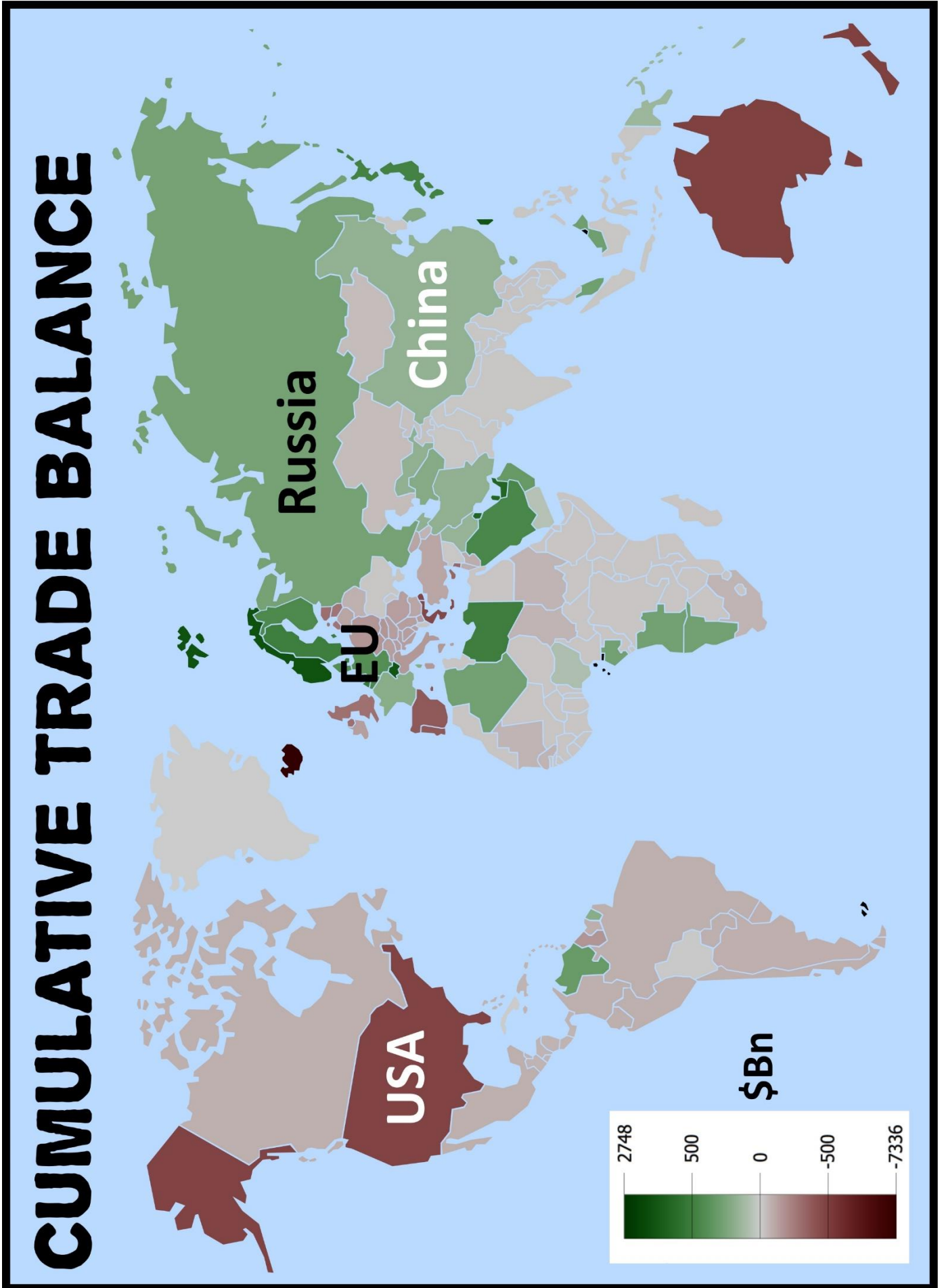
Russia's economic growth reached a six-year high last year although it is still constrained by sanctions, the price of oil and structural issues. Despite the need to introduce effective structural reforms and boost decreasing household incomes, the model relying on the export of hydrocarbons remains intact, and appears to be a double-edged sword.

While it is hard to underestimate the importance of China for Russia's financial and economic stability and as its perfect trading partner post-Crimea, the partnership is nonetheless marked by deepening asymmetries. Russia does not make it into the top 10 in imports and ranks 10th in Chinese exports. More than three-quarters of Russia's exports are raw materials, while China sells back electronics and a variety of consumer goods. This pattern concerns many in the Kremlin, as Russia resembles a raw materials appendage of lesser importance than Beijing's other partners. The situation facing Russia is not clear cut and decisions as to how Russia should prioritise its global, regional and domestic interests may not have a right answer, let alone an obvious right answer.

Key Questions

- How can Russia re-establish itself and be recognised as a great power?
- How should Russia ensure regime security?
- How do Chinese interest align with Russian interests?
- How closely should Russia embrace China?
- Should Russia try to prevent an America/China duopoly emerging?
- How can Russia exploit geopolitical tension and division to its advantage?
- How can Russia shape its near abroad to increase Russia's security and status?
- How can Russia deter hostile acts against it?
- What is the best way of Russia achieving both a strong military and strong economy?
- Should Russia seek to weaken and divide its geopolitical rivals and adversaries, and if so which ones?

Map:



Example Counters:

