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How local content rules and subsidies are altering the global economy

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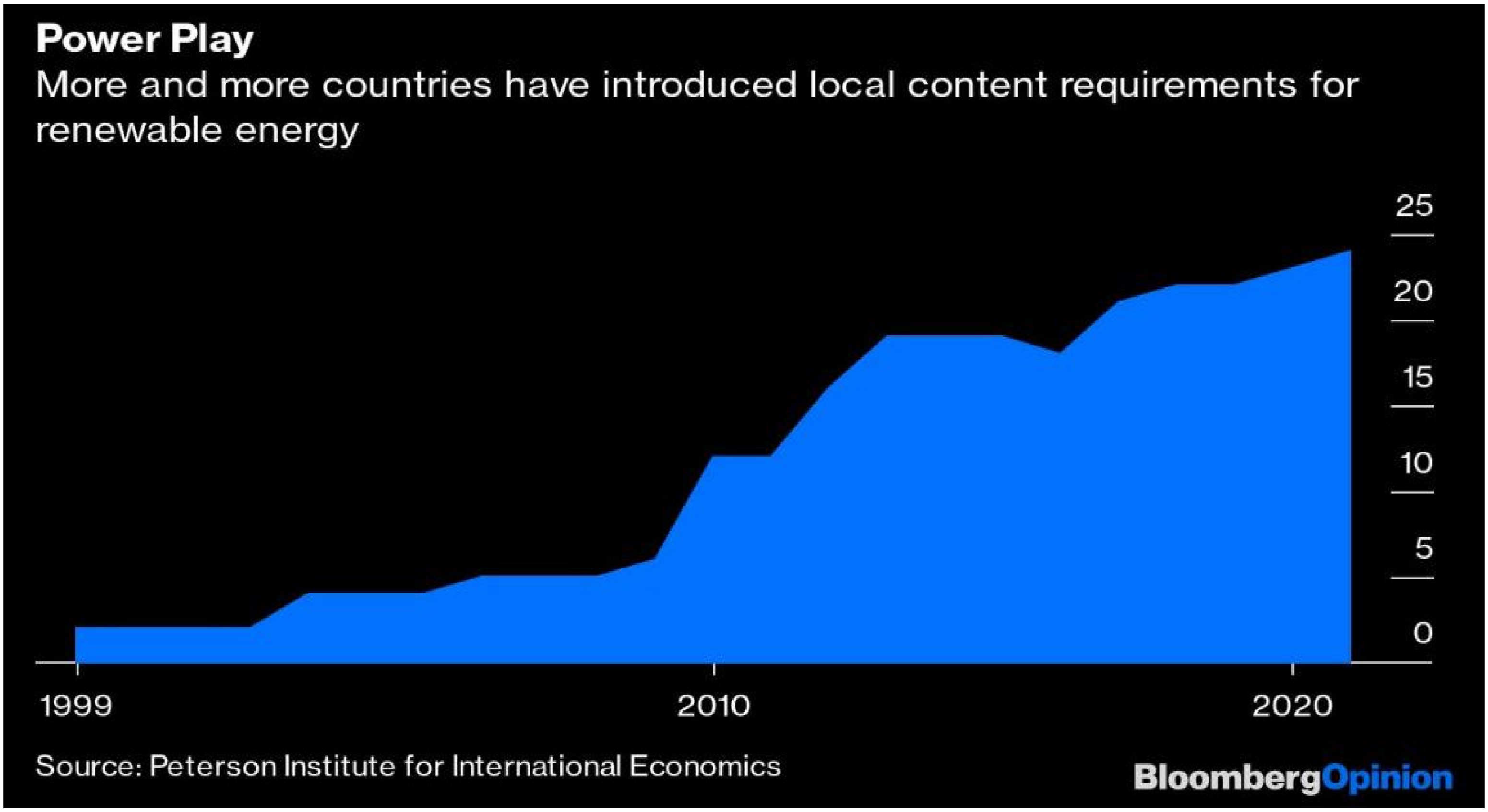
Introduction

The world is witnessing a shift from a more free-market economy to one in which governments have a much greater say in the allocation of capital and, therefore, which sectors/companies come out on top. This shift is particularly shown by the significant subsidies and incentives that nations are using to encourage domestic production. A prime example of this turn can be found in the renewable energy sector, where the number of countries that introduced local content requirements doubled to 24 from 2011 to 2021.[1]

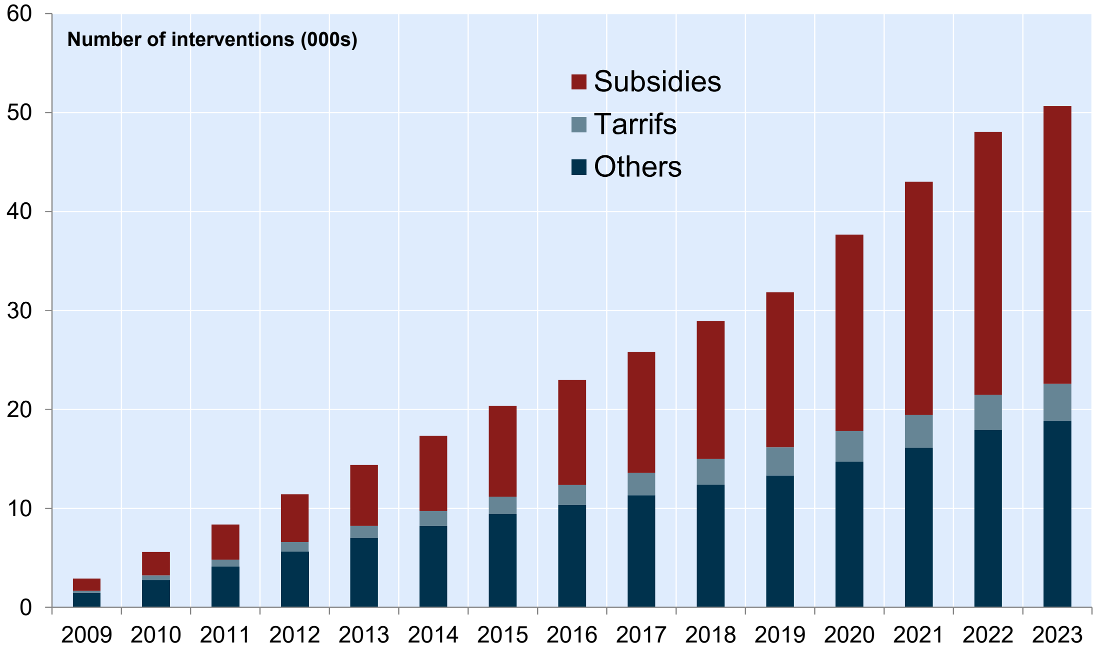


Source: "Your Local Solar Panel Plant May Be Holding Back Net Zero," Washington Post, March 6, 2023

In all, the number of subsidies, tariffs and trade-restrictive measures have risen 150% over the past decade to more than 50,000 worldwide.[2]

[1] "Your Local Solar Panel Plant May Be Holding Back Net Zero," Bloomberg, March 6, 2203
[2] "Subsidies race casts pall over global free trade," Nikkei Asian Review, July 8, 2023

Subsidies, tariffs and other protectionist measures are increasingly distorting global trade.
Number of active government interventions by type



NBF Economics and Strategy (data via Global Trade Alert)

This global shift toward more state-directed economic policies means that geopolitical objectives are increasingly taking precedence over the selection of companies capable of providing products or services at the lowest cost or most efficiently. In this new landscape, countries face the daunting challenge of massively subsidizing key sectors at a time of much higher interest rates and debt levels.

In the following sections, we will take a closer look at these factors and how they will affect in particular the European Union, the United States, and China.

China has long out-subsidized countries in key sectors

China's leadership in the green energy sector has been built in large part on extensive government support. The Center for Strategic and International Studies reported that in 2019, China's subsidies to various sectors amounted to $250 billion, significantly more than the United States' $84 billion. When compared as a percentage of GDP, China's subsidies were more than four times that of the United States (1.73% vs. 0.39%).[3]

China has also been accused of forcing foreign companies to share their intellectual property, either directly or through joint ventures, as a condition of entering its huge consumer market.

China is increasingly excluding foreign-made goods

In addition to providing massive subsidies to domestic companies, China gives preference to its own brands in many sectors. Below are a few examples:

- Healthcare: In 2021, China set minimum local content rules ranging from 25% to 100% for hundreds of items, including X-ray and MRI machines.[4]
- Office equipment: China is implementing regulations that require its companies and government agencies to purchase equipment that is entirely designed and manufactured in China. This includes printers and copiers.[5]

[3] "Estimating Chinese Industrial Policy Spending in Comparative Perspective, Center for Strategic and International Studies, May 2022
[4] "China quietly sets new 'buy Chinese' targets for state companies - U.S. sources," Reuters, August 2, 2021
[5] "Finding a way to manage China's protectionism in procurement," Japan Times, March 16, 2023

China has also issued a directive prohibiting government and state-owned enterprise employees from using foreign smartphones, including iPhones. The ban went into effect last October for departments that deal with trade secrets and will be extended to all state employees starting next March. This measure is reminiscent of the 2021 directive banning senior military and government officials from using Tesla cars owing to data security concerns. Many investors mistakenly assumed that Apple and Tesla would not be targeted because they (directly and indirectly) employ millions of people in China.

Ironically, when China joined the WTO in 2001, the assumption was that it would emulate the West and gradually embrace free-market reforms. Instead, as we show in the following sections, the West has in a way borrowed a page from China's trade playbook. Like Beijing, Western countries are now not only subsidizing more heavily, they are also imposing tariffs, local content rules, and restrictions on foreign investment.

United States: if you can't beat them, join them

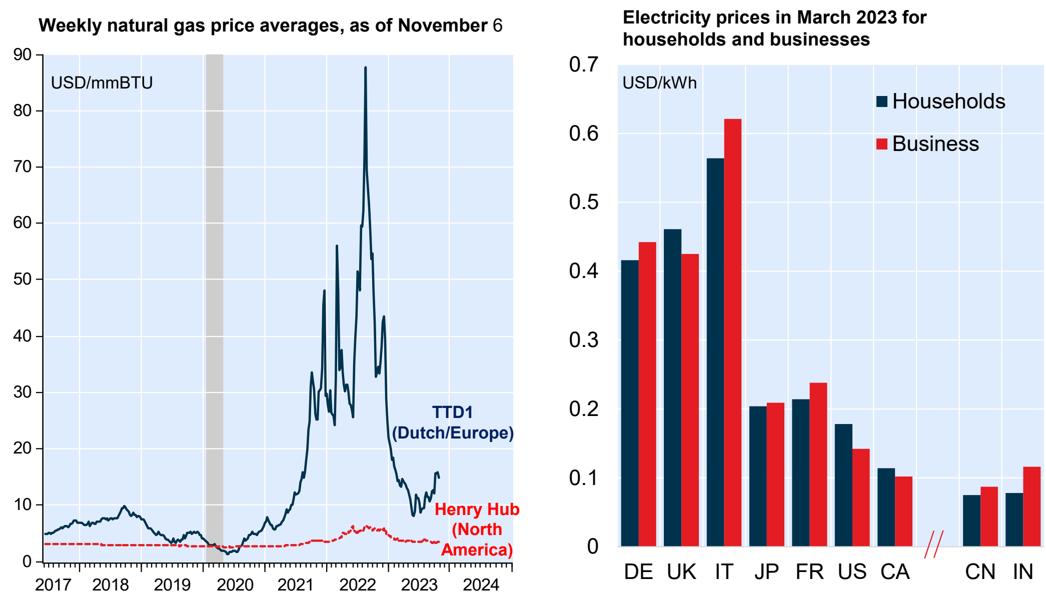
In an attempt to loosen China's iron grip on green energy supply chains and other key sectors, the United States has begun pouring massive subsidies into local manufacturing. Although subsidies have long been part of America's economic landscape, the amounts today are now much higher than ever before.

While the headline figures show $465 billion being spent on microchip, climate and infrastructure-related projects, the actual total is much higher because most subsidies are in the form of virtually unlimited tax credits that incentivize domestic production. The Economist has estimated that subsidies could total $100 billion a year over the next decade, roughly double the amount before the pandemic.[6] Goldman Sachs has calculated an even higher dollar figure for this time period: $1.2 trillion. Referring to these tax credits, the CEO of Mittal said, "It's open-ended. It's perfect."[7] A Volkswagen executive described them as a "gold rush."[8]

EU fighting a two-front subsidy war against both the U.S. and China

Europe's leaders have complained that America is attracting European companies with huge subsidies. These subsidies are in addition to the lower energy costs that America enjoys over Europe. Although energy prices have dropped significantly since hitting record highs in 2022, European gas and electricity bills are still much higher than those of industrial producers in China and the United States.

Europe pays some of the highest prices for natural gas and electricity in the world



NBF Economics and Strategy (data via GlobalPetrolPrices.com, Bloomberg)

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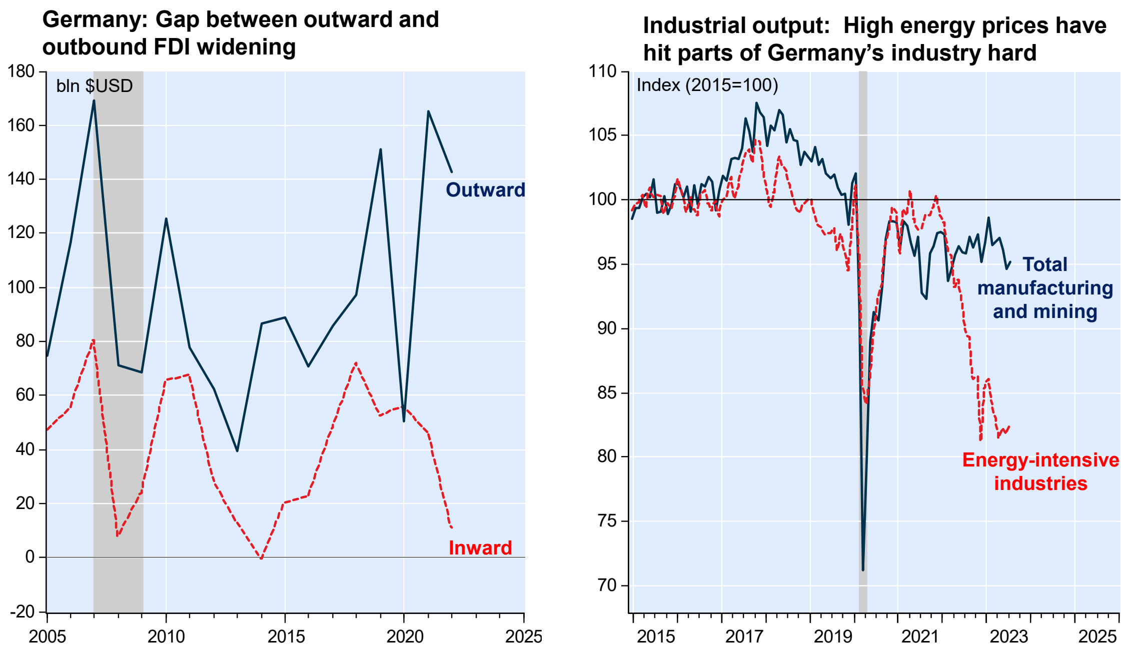
[6] "What America's protectionist turn means for the world," The Economist, January 9, 2023
[7] "Europe's Green Deal is something between a mirage and almighty mess," The Telegraph, September 15, 2023
[8] "How US Green Deal Has Opened Floodgates for Subsidies" Washington Post, April 27, 2023

Robert Habeck, Germany's vice-chancellor and economics minister, recently referred to America's subsidies in alarming terms. "It's like a declaration of war," he said, "The [Americans] want to have the semiconductors, they want the solar industry, they want the hydrogen industry, they want the electrolysers."[9]

Germany was already experiencing a decline in investment before America's subsidies kicked in. The German Institute for Economic Research reported that the gap between German companies investing abroad and foreign investment in Germany was at its widest ever in 2022. That year, Germany saw a significant outflow of more than €135 billion in foreign direct investment, while attracting a meagre €10.5 billion in return. Considering that Germany is Europe's leading economy, its struggles cast a shadow over the European Union's economic outlook.

Germany's growing economic challenges



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The EU's subsidy plan

While the EU has long provided financial support to its companies, America's subsidy bonanza has forced it to open the taps further and apply other regulatory measures. These include the proposed Green Deal Industrial Plan, which offers €250 billion (repurposed from unspent pandemic aid) to subsidize Europe's green industries, and a carbon border tax that went into effect in October 2023. Initially, importers will only have to report their carbon footprint. The actual tax is expected to be levied in a few years and will first apply to energy-intensive industries such as aluminum, steel, fertilizers, and chemicals.

Implementing a carbon border tax carries certain risks. These include the potential for developing countries, which have much lower per capita emissions than the EU, to respond with counter-tariffs. There could also be disputes between countries over the methods used to calculate the carbon footprint of different products.

In addition to the above measures, the EU also felt compelled to allow individual states to suspend anti-subsidy rules for green energy initiatives. This decision was driven by the realization that, without a unified treasury, it is virtually impossible to compete with the financial might of the United States and China. However, this policy shift has raised fears among less affluent members that they will not be able to match the funding levels of wealthier countries. This concern is underscored by the fact that Germany accounted for 53% of the €672 billion the EU spent on subsidies last year.[10]

[9] "A global subsidy war? Keeping up with the Americans," Financial Times, July 13, 2022
[10] "Competition State aid brief," European Commission

The China EV challenge facing Europe

While the EU is concerned about investment flowing to the United States, one of the most serious short-term challenge it faces is the approaching wave of low-cost Chinese EV imports. The automotive industry is the most important manufacturing sector in the EU, accounting for more than 6% of jobs.[11]

About 1 in 5 cars sold in Europe are electric. Chinese brands, almost non-existent in 2019, secured 8% of the EV market last year. Cars manufactured in China, including by Western companies, accounted for 15%.[12] By 2025, the market share of Chinese brands alone is projected to reach 15%.[13]

China's dominance in the battery supply chain, including the necessary minerals, not only affords a significant competitive advantage, but it also provides leverage to mandate that locally produced EVs use Chinese-made batteries. The vast Chinese market amplifies these advantages by generating substantial economies of scale. With the exception of Tesla, all the highest-selling EV models in China are domestic.

Amid concerns about the potential risk to millions of jobs in the auto industry, an investigation has been launched into Beijing's financial support for the EV sector. The President of the European Commission voiced these worries recently: "The global markets are currently inundated with more affordable electric cars, their prices being artificially suppressed by substantial state subsidies."[14] The investigation, which could take up to nine months to complete, is likely to conclude that the Chinese government has given its companies an unfair advantage through subsidies and other measures.

However, deciding on an appropriate response is complicated by the fact that the EU countries need to agree on a common strategy. For example, because French carmakers have only a 0.4% share of the Chinese market, France has been a strong advocate of tariffs on EV imports. France's main concern is to protect its companies from losing EU market share to China. Germany, on the other hand, has a 17% share of the Chinese auto market and faces the challenge of maintaining market share in both the EU and China. This leaves Germany particularly vulnerable to retaliation from China.

Why the U.S is not facing a wave of EV imports from China

The United States is conspicuously absent from the list of prominent destinations for Chinese auto exports. Several factors account for this, including a significant 27% tariff on Chinese imports, local content requirements and, perhaps most importantly, bipartisan support for restricting Chinese imports. Moreover, the USMCA trade agreement includes a clause requiring that 40% of car content (and 45% of truck content) be produced in high-wage factories. It also mandates that 70% of the steel and aluminum used in cars come from North America.[15]

Some analysts have suggested that China could ease trade tensions by emulating Japan's factory opening strategy of the 1980s. It's important to note, however, that unlike Japan, China is viewed as a geopolitical rival. This perception, despite the potential to learn from China's expertise, creates a more hostile environment for Chinese companies in the American EV space.

The hostility is clearly demonstrated in the backlash against Ford's intentions to construct a battery plant in partnership with CATL, China's leading battery manufacturer. The controversy resulted in construction being suspended. Ford defended the collaboration as a strategic step to harness China's expertise, whereas GM warned that securing subsidies for this facility might pave the way for Chinese dominance in the U.S. auto manufacturing sector.[16]

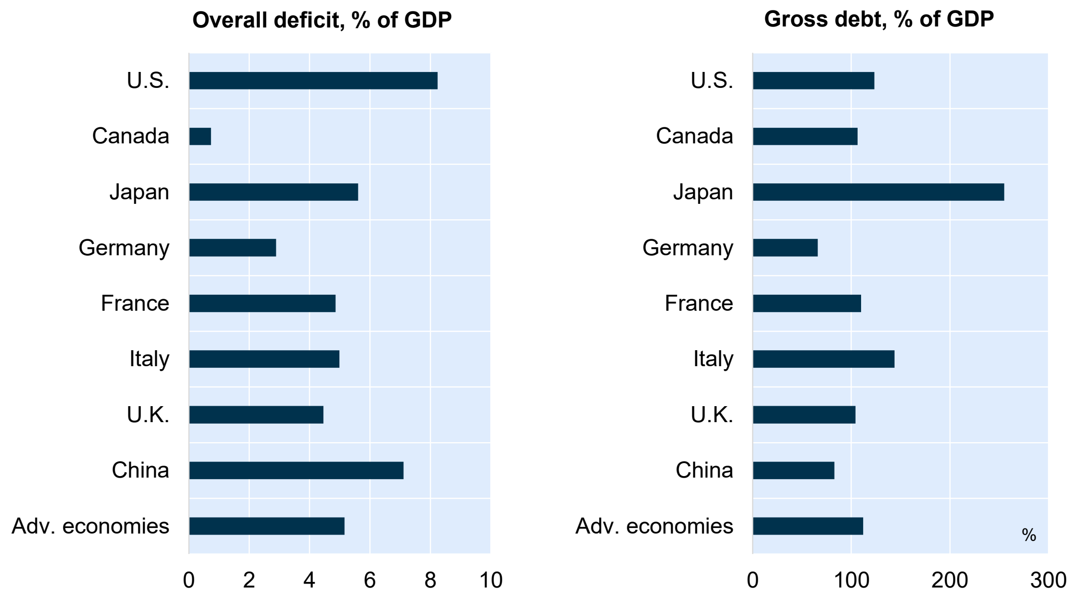
National security concerns constitute another barrier against Chinese auto imports. EVs have dozens of sensors and complex software systems that some experts say could be used for cyber espionage. In fact, as mentioned earlier, Beijing has already banned Tesla's cars from sensitive locations for this very reason.

When will the trend of subsidizing key sectors hit the wall of higher interest rates and debt?

Countries are stepping up their industrial policy interventions at a time when debt levels are rising. The IMF estimates that the total gross public debt of the world's advanced economies as a share of GDP was 113% in 2022, up from 81% in 2000. Much higher interest rates have in turn led to a sharp rise in debt servicing costs.

[11] "The real reasons for the west's protectionism," Financial Times, September18, 2023
[12] "Europe's EV Troubles Run Deeper Than China," Wall Street Journal, September 14, 2023
[13] "EU tries to buy time in electric car race with China," Financial Times, September 15, 2023
[14] "EU to investigate 'flood' of Chinese electric cars, weigh tariffs," Reuters, September 13, 2023
[15] "The New American Way of Trade," Foreign Affairs, September 27, 2023
[16] "This Ford vs. GM Feud Could Shape the Future of EVs in America," Wall Street Journal, September 28, 2023

The high deficit and debt levels of the world's major economies
2022

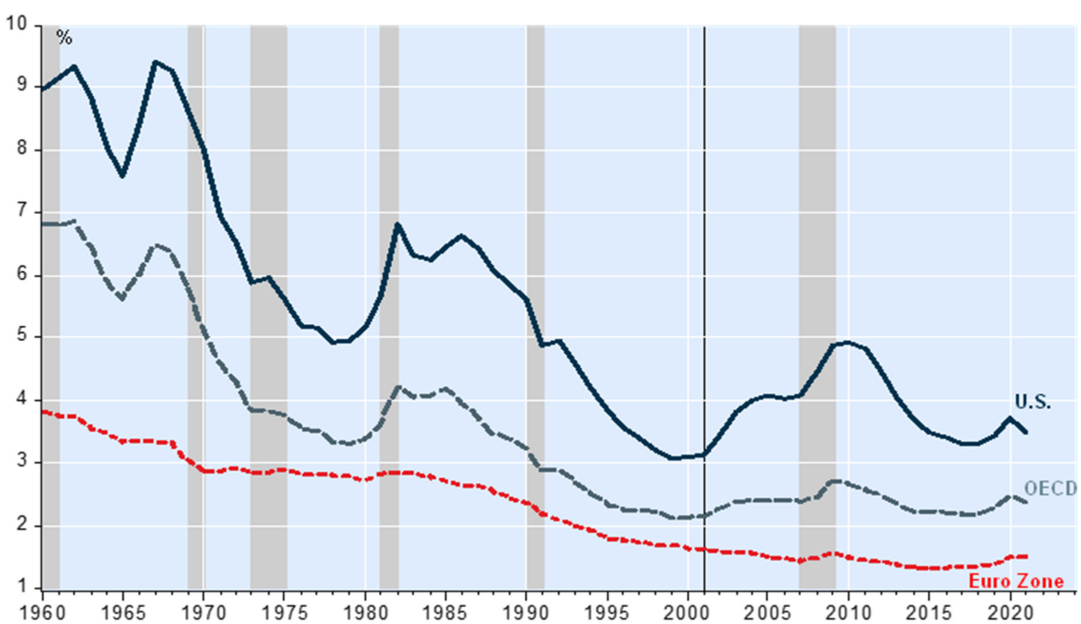


NBF Economics and Strategy (data via IMF)

In addition to subsidizing the transition to green energy, government spending is also driven by other factors, including the following two sectors.

Defence: Most Western countries, especially in Europe, had until recently enjoyed the peace dividend resulting from the fall of the Soviet Union, allowing them to cut defense budgets. By the end of 2021, fewer than half of NATO's 31 members met the defence spending target of 2% of GDP. But Russia's invasion of Ukraine, tensions between the West and China, and now the war between Israel and the Palestinians have prompted many governments to rebuild their military capabilities.

World: Expect an increase in military spending
Military expenditures as a share of GDP



NBF Economics and Strategy (data via World Bank)

Demographics: The old-age dependency ratio—the ratio of people 65 and over to those 20 to 64—is set to rise across the OECD. In 2020, there was about 30.4 elderly people for every 100 working-age people in these countries. According to the United Nations, this ratio is projected to reach 52.7 by 2050.[17] This means that spending on healthcare and pensions will rise sharply.

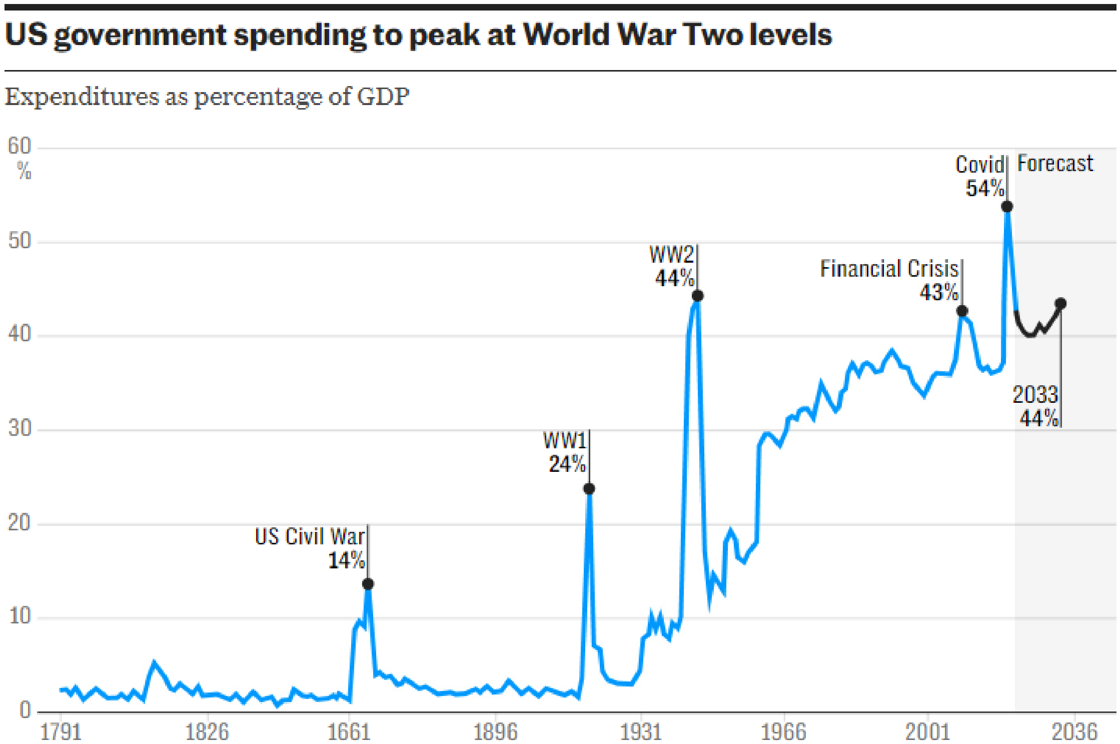
As a result, a growing number of nations, particularly in Europe, face the growing dilemma of balancing the need for increased defence spending and financial support for critical industries with the public's demand to maintain and even expand social safety nets. France is a case in point. Soon after announcing a substantial boost in defence spending last year, the government faced extensive protests when it implemented minor cuts to the national pension system. We believe that this was just the first of many other similar situations to come.

China's debt challenges

China is among the countries that have experienced a significant increase in debt levels. The official public debt-to-GDP ratio, which includes local government borrowing, has doubled in the last decade to 77% in 2022. The International Monetary Fund expects this ratio to exceed 100% by 2027. Factors such as a slowing economy and a rapidly aging population are expected to be the main drivers of this escalating debt burden. This means China is no position to launch the sort of massive stimulus ($568 billion) that played a key role in helping the global economy recover from the 2008 financial crisis.

The U.S. is not immune to debt-related worries

Although the United States can manage high debt levels more effectively than many other nations thanks to the dollar's reserve currency status, its deep financial markets, its lower operating/energy costs, and its relatively robust economy, it too faces constraints. Its gross debt-to-GDP ratio has nearly doubled from just 62% in 2007 to 122% in 2022 (the highest since the end of WWII), according to the IMF. What's more, Fitch Ratings expects the ratio of debt interest to tax revenue to reach 10% by 2025. This means that by 2025 or 2026, federal interest payments could exceed the nation's defense budget.[18] (The 2022 defense budget was $767 billion.) In the event of a significant economic downturn, the country's fiscal challenges would take a sharp turn for the worse.



Source: "Two cheers for Bidenomics, but beware the runaway debts," The Telegraph, September 13, 2023

[17] "Demographic Old-Age to Working-Age Ratio," OECD, 2019
[18] Moody's Analytics

Although U.S. taxes are low compared to many of its OECD counterparts, its fiscal situation is complicated by the inability of Democrats and Republicans to reach a compromise that would raise taxes and cut spending to at least slow the rate of debt growth. Indeed, this impasse is increasingly being cited by credit rating agencies as one of the factors influencing their assessment of the U.S. debt rating.

Conclusion: a zero-sum game

In a global landscape where local content rules and subsidies increasingly empower governments to become larger allocators of capital, the importance of efficiency and comparative advantage is beginning to be overshadowed by national security concerns. In this environment, there is a growing tendency to exclude products from key sectors manufactured by geopolitical rivals, rather than focusing on creating superior products. The result is higher operational costs.

In 2021, Boston Consulting estimated that between $900 billion and $1.2 trillion would be required to create multiple self-sufficient semiconductor supply chains around the world. Annual operating costs would increase by an amount in the range of $45 billion to $125 billion. This suggests that even a partial unwinding of these supply chains will be very time consuming and expensive.

In this era of higher operating costs, it is imperative for investors to assess the ability of companies to raise prices sufficiently. If these companies lack the necessary pricing power, the focus then turns to their ability to exert political influence by lobbying for subsidies and/or tariff support.

Further evidence that great power tensions are reshaping global supply chains comes from a recent Wall Street Journal analysis of Chinese customs data. For the first time since China began opening its economy more than four decades ago, its trade with Latin America, Africa and emerging Asia (36% of total trade) has surpassed its combined trade with the United States, Europe and Japan (33%).[19]

Governments are also finding that their promises of money today create expectations of more money tomorrow. For example, last May, Stellantis threatened to leave Canada if its EV battery plant in Ontario did not get a deal similar to the one Volkswagen got.

This more protectionist global economy will be particularly challenging for smaller companies. Unlike large corporations, many do not have the resources to overcome protectionist measures by establishing operations in the world's largest markets. Smaller companies also have fewer resources to hire expensive lobbyists to champion their interests in various capitals.

Finally, all of this raises the question of when the ability to provide substantial subsidies to key sectors, combined with a reluctance to cut popular social programs, will collide with the challenges of higher interest rates and mounting debt. With its slower economy, higher operating costs and lack of a common treasury, the EU is more likely than the United States and China to be the first to feel the effects of this impending collision.

[19] "It's U.S. vs. China in an Increasingly Divided World Economy," Wall Street Journal, November 3, 2023

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