

# Testimony before the U.S.-China Economic and Security Review Commission

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## ***China's non-market practices, impact on the world, and what to do about it?***

I want to thank you for the opportunity to contribute to the deliberations of this Commission. Today, my remarks will focus on China's non-market practices and their negative impact on the world, especially the US and the EU. Then, I will offer some potential actions to reduce such adverse impacts, starting with developing and applying the concept of competitive neutrality internationally and in China, followed by possible instruments based on the European experience. Finally, the usefulness of leveraging on like-minded partners to preserve international orders and the functioning of market economies in a global setting is also essential.

### **1. The state of play: China's non-market practices, impact on the world, and what to do about it?**

As China's economic and geopolitical weight continues to grow, its entanglements with the world are only increasing. However, beyond its size, China also has a different economic model characterized as state-capitalism and as socialism with Chinese characteristics by President Xi himself. The combination of China's sheer economic size and its state-driven economic model has international implications. This section looks at the size and characteristics of its model and the global impact.

China's economic size has ballooned over the years, and it now contributes to the lion's share of global economic growth (Figure 1). More specifically, the percentage of China's GDP in the world increased from 3.6% in 2000 to 17.4% in 2020. In trade, the share of exports in the world also surged from 3.9% in 2000 to 14.8% in 2020. The strong growth momentum and exports have nurtured the expansion of Chinese firms and financial institutions.

There are 124 Chinese firms on the Fortune Global 500 league table as of 2019, higher than 121 in the US (Figure 2). If we exclude financial institutions, 72% of the Fortune Global 500 league table firms are state-owned enterprises.

However, it is also important to note that Chinese entities have mainly grown on the back of their domestic market, and they are still lagging from a global perspective. There are only 9 Chinese firms among the top 100 non-financial multinational enterprises measured by foreign assets (Figure 3). Even if it is small compared to the US, Chinese firms' share of overseas revenues has grown over time (Figure 4). From a sectoral perspective, semiconductors and information technology have the largest share of overseas revenues (Figure 5).

In addition, Chinese financial institutions are the largest globally, with total assets rising from 195% of GDP in 2002 to 302% in 2021 (Figure 6). Compared to Asian peers, the size of China's banking sector is bigger than Japan and Korea as a percentage of GDP, which are known to be bank-based financial systems (Figure 7). The overwhelming relevance of the banking sector to channel credit in China is an additional aspect of China's state-led capitalism, namely the government-controlled financial industries through its banks.

There is plenty of literature on the bias in resource allocation toward state-owned enterprises (SOEs) in China and state-controlled banks. In the past, the focus was mainly on how such distortions could reduce market access to China and hurt the interests of US multinationals or any other foreign firms. However, given China's dominance from large companies and the higher overseas corporate revenues today, China's economic model will impact the rest of the world in its own and third markets.

The trend is even more the case as China strikes more trade and investment deals with other countries and economic blocs, such as the Regional Comprehensive Economic Partnership (RCEP) with ASEAN and other major Asian economies. In a nutshell, China's state-led capitalism is bound to affect the US much more now than in the past because of the growing size of China's economy, corporates, and trade and investment agreements.

The other key reason its impact might be more prominent is that China's economic model is becoming increasingly interventionist. How the state interferes in the Chinese economy is complex and hard to measure because of the different channels to support specific companies or sectors. Government subsidy is the most obvious tool, and part of the support can be measured through publicly available data in corporates' financial statements. Based on this approach, Chinese firms received \$50 billion (RMB 323 billion) worth of government subsidies in 2020, up from \$35 billion (RMB 224 billion) in 2017 (Figure 8). This amount is small compared with more comprehensive definitions of government support to corporations. However, it is still worth analyzing as it can offer a sense of the trends in the Chinese government's support of its industries.

First, 85% of all listed firms have received fiscal support, which is beyond loss-making companies. The share of loss-making firms as a share of total listed firms surged from 12% in 2017 to 21% in 2020 (Figure 9). The subsidies reported (\$50 billion) only managed to reduce the ratio of loss-making firms to 18% in 2020.

Second, there is a sharp increase in the subsidies received by Chinese firms in the new sectors, such as technology and renewables. The share of new sectors in total subsidies grew from 47% in 2017 to 51% in 2018-2020, mirroring the policy shift towards the industrial upgrade, support from indigenous innovation, and moving up the ladder (Figure 10). In turn, old sectors, such as industrial, metals and materials, and infrastructure, saw their share of subsidies reduced from 53% in 2017 to 49% in 2020. An even more granular breakdown points to the industrial sector and information technology as major recipients of subsidies with 24% and 27% of the total respectively between 2017 and 2020 (Figure 11). For information technology, 27% of profits came from subsidies in 2020. Beyond these two, software and service, technology hardware, automobiles, transport, and semiconductors are the sub-sectors with a high share of subsidies to profits (Figure 12). The above sectoral breakdown of Chinese publicly known subsidies fits quite closely the sectors in which China has been more successful internationally.

Finally, subsidies are channeled to both SOEs and privately-owned companies (POEs), and the latter forms 50% of total subsidies (Figure 13). This trend can be interpreted as more equal treatment between state-owned and private firms in China, but also as broader government influence in the private sector. For example, Chinese SOEs can get golden shares in tech firms. Anti-trust measures and data laws can also favor state-owned firms and create extra constraints for private firms, including the obligation to have a party representative in the companies' oversight bodies. Both SOEs and POEs have a more extensive reliance on subsidies for profits (Figure 14).

Although the above narrow definition of subsidies offers some hints about the Chinese leadership sectoral preferences, it still does not reflect the whole picture. It can even show that Chinese subsidies look like those granted by the US or European member states, as Evenett and Fritz (2021)<sup>1</sup> analyzed in a cross-country comparison of government subsidies. The reality is that the government can give subsidies in different forms, many of which are not reflected in financial statements.

An example is that the utility sector in China has received support as the government has subsidized households' costs on the policy of coal-to-gas conversion, which can boost corporate revenue. Other relevant comparisons are in the semiconductor and electric vehicle (EV) industries. For the former, beyond the higher share of subsidies to profit ratio of 21%, Chinese semiconductor firms have also received significant financial support through two ad-hoc semiconductor funds, namely China Integrated Circuit Industry Investment Fund Phase I and II) with the equivalent of \$53 billion (RMB 344 billion) distributed since 2014.

In the case of EVs, local players are the primary recipients of subsidies. Based on the "regulations on the standards of automotive power battery industry" in 2015, the Chinese government created a whitelist to offer subsidies to qualified domestic battery makers leaving all foreign firms out of the game. In other words, this means only firms able to fulfill all the requirements can receive the subsidies, and many foreign firms are not eligible. The policy has also helped upstream makers of EV battery components, supported by domestic orders to expand capacity and achieve economies of scale. Such an approach is why Chinese battery maker Contemporary Amperex Technology Ltd (CATL) has become the leading battery manufacturer, with a market share of 31%. Beyond fast domestic growth in China, CATL's share of overseas revenue has surged from 5% in 2019 to 30% in 2021.

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<sup>1</sup> <https://www.globaltradealert.org/reports/gta-28-report>

## 2. Competitive neutrality to better gauge the degree of government in the Chinese economy

Given the lack of conclusive evidence on the size of Chinese government support to its corporate sector and the distortions it creates globally, it seems vital to introduce a more comprehensive definition that is comparable across countries and helps step up the dialogue with Chinese counterparts.

The concept of competitive neutrality seems the best place to achieve this objective. The OECD developed this concept in 2004 following Australia's own experience in measuring competitive neutrality to offer equal footing to Australian private companies versus state-owned ones.

In 2004, the OECD started the first discussion on how the role of the government affects the way markets function. Through subsidies and skewed government procurement rules, the public sector may enjoy financial advantages over private firms (OECD, 2004<sup>2</sup>). Competitive neutrality would ensure that private and public enterprises operate under the same rules and conditions and thus compete on an equal footing. Otherwise, the government should at least appropriately measure the differences and take actions based on the results (OECD, 2009<sup>3</sup>). The idea should then be formalized into national practices and regulations to ensure a level playing field (OECD, 2012<sup>4</sup>). While the meaning of competitive neutrality is clear, measurement of it is less obvious considering the realities in different countries and access to data (OECD, 2012<sup>4</sup>; UNCTAD, 2014<sup>5</sup>).

Several countries have taken steps to implement competitive neutrality. A frontrunner is Australia, which underwent a comprehensive reform of the state's role in the economy in the 1990s. Starting from the Hilmer Report in 1993, Australia created the environment to inject greater competition into its markets (Commonwealth of Australia, 1993<sup>6</sup>). However, the framework relied heavily on ex-ante components, namely policies governing the operation of state-owned enterprises, which gave them an arm's length relationship with the government (Brennan, 2019<sup>7</sup>). The key aspects are maintaining neutrality in terms of regulation, debt, and tax while ensuring SOEs achieve commercial rates of return and that loss-making institutions exit the market.

Against such a backdrop, Garcia-Herrero and Ng (2021<sup>8</sup>) developed a data-rich approach to gauge the degree (or the lack thereof) of competitive neutrality in the Chinese economy. To that end, we measure the monetary and fiscal support given to Chinese companies across different sectors. In particular, we focus on debt and tax neutrality, measured by interest expense-to-total debt and the effective tax rate.

In China, the state still controls the financial sector, meaning that banks and other financial institutions also play an important role in the competitive environment companies in China are facing. Commercial banks are the biggest bondholders in China. As a simple measure of debt neutrality, we calculated how low interest payments might be per unit of debt for a certain SOE compared to a private company within a specific sector.

On tax neutrality, the lack of data on subsidies and other types of benefits prompted us to focus on tax payments and how low the effective tax rate of a certain SOE might be versus a private company within each sector. A generally lower effective tax rate for SOEs is an obvious form of financial support since it allows companies to retain their earnings and boost returns on assets.

The return on assets is a measurement of the result of the existence or non-existence of comparative neutrality. It is an important indicator to assess how efficiently/productively an SOE utilizes its resources. If an SOE has received financial support from the government and its profitability is high, it may mean that the support has been well-utilized. The opposite means the government support has not translated into an efficient outcome, which means the subsidies may be better allocated. We set out to measure whether there is competitive neutrality between SOEs and privately-owned enterprises (POEs) in China. Foreign firms are not included as it is hard to argue they will enjoy competitive neutrality with local firms if it does not even exist for SOEs and POEs.

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<sup>2</sup> Organization for Economic Co-operation and Development (2004). 'Policy Roundtable: Regulating Market Activities by the Public Sector'

<sup>3</sup> Organization for Economic Co-operation and Development (2009). 'Policy Roundtable: State Owned Enterprises and the Principle of Competitive Neutrality'

<sup>4</sup> Organization for Economic Co-operation and Development (2009) 'Competitive Neutrality: Maintaining a level playing field between public and private business'

<sup>5</sup> UNCTAD (2014) 'Competitive neutrality and its application in selected developing countries'

<sup>6</sup> Commonwealth of Australia (1993) 'National Competition Policy'

<sup>7</sup> Brennan M. (2019) 'Competitive Neutrality in Australia', International Monetary Fund

<sup>8</sup> <https://www.bruegel.org/wp-content/uploads/2021/02/PC-05-2021-3.pdf>

Our results support the view that China's competitive environment is poor, with conditions tending to favor SOEs. For the cost of funding, the implicit interest rate on the cost of debt is generally higher for POEs than SOEs (Figure 15). As for the effective tax rate, it is also higher for POEs (Figure 16). In addition, the return on assets (ROA) has been higher for private firms than state-owned enterprises until recently, which means that higher implicit subsidies have not changed the trend of lower return on equity of SOEs (Figure 17).

From a sectoral perspective, private firms cannot borrow as much as SOEs in most sectors, including renewables, healthcare, and ICT – the sectors with a relatively high private ownership. For funding costs and effective tax ratios for different sectors, SOEs tend to pay lower effective tax rates than private firms in most cases (Figure 18).

Therefore, the general and sectoral trends show that private firms cannot leverage as much as SOEs while facing higher funding costs. As SOEs often carry large responsibilities in supporting government-led spending and the fiscal cash flows, the business environment is relatively favorable versus private firms. As such, tax advantages to compensate for the lack of competitive neutrality in other areas have now diminished.

Given the above, it seems clear that developing a workable definition of competitive neutrality that the US and other like-minded countries can use in their respective economic dialogue with Chinese counterparts could help. It would reduce the pressure on chasing the proper definition of state support and subsidies to Chinese corporates given the lack of transparency and thereby have a more constructive conversation on market access. This framework is also appropriate for foreign companies operating in China to measure competitive neutrality.

### **3. What else can the US do? Some ideas from Europe**

The EU has switched its view on China from an economic partner to a competitor and systemic rival<sup>9</sup>. The change has led to engagement measures, such as the completed EU-China Comprehensive Agreement on Investment (CAI) negotiations. However, the deal has not been ratified, and it is likely to be stalled in the foreseeable future as China has imposed sanctions on Members of the European Parliament (MEPs) in retaliation for EU sanctions on Chinese individuals for human rights abuses. At the same time, the EU has introduced "autonomous" measures to deal with the competition and rivalry part of the bilateral relations.

Starting with the "carrot" part of EU strategy toward China, CAI is an engagement tool to increase European foreign direct investment (FDI) in China while keeping the EU's relatively open the door to Chinese investment in the continent. In that context, CAI includes measures to ensure more equal treatment in subsidies beyond those covered by the WTO, namely in the services sector and transparency in state aid<sup>10</sup>.

The steps forward in terms of market access achieved by the EU in its negotiations for CAI are bound to benefit other countries under the Most Favoured Nation rule. The arrangement is quite different from the achievements obtained by the US in its negotiations for the "Phase 1 deal", which is one of the key reasons why the EU further pushed to reach an agreement with China on CAI after eight years of arduous negotiations. In particular, the EU managed to secure some of the provisions obtained by the US negotiators through the "Phase One" deal for American companies, such as banning forced technology transfer.

CAI offers an example of how China's growing web of national security laws and China's Corporate Credit System enter new-generation trade and investment deals, offering much more leverage for China regarding its commitments<sup>11</sup>. In any event, the latest EU-China Summit last April 1 did not open the door to potential ratification of CAI any time soon as Chinese sanctions on MEPs remain in place.

Beyond the "carrot" aspect of CAI, the EU has also developed "sticks" to deal with China, under so-called "autonomous" measures. Two of them are worth noting. The first is the anti-subsidy legislation, approved by the European Commission and now pending ratification by the European Parliament. This instrument aims at closing the existing regulatory gap, whereby subsidies granted by non-EU governments go currently unchecked, while subsidies granted by Member States are subjected to scrutiny.

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<sup>9</sup> <https://ec.europa.eu/info/sites/default/files/communication-eu-china-a-strategic-outlook.pdf>

<sup>10</sup> For a review of CAI and its impact on the EU, see [https://reinhardbuetikofer.eu/wp-content/uploads/2021/04/CAI\\_Report\\_Final.pdf](https://reinhardbuetikofer.eu/wp-content/uploads/2021/04/CAI_Report_Final.pdf)

<sup>11</sup> A good analysis of this important point is offered by Violi, Kampourakis, Triefus and Arcuri (2020) "Legal Analysis of Selected Issues under the EU-China Comprehensive Agreement on Investment."

The tools included in this draft legislation to tackle foreign subsidies effectively are to give the Commission the power to investigate the existence of distorting foreign subsidies, including in the financing of acquisitions of European companies, bids in public procurements, and other general cases and take redressive measures under the EU's competition policy. The latter includes the divestment of certain assets by the company being subsidized and the access to the infrastructure in the case of procurement measures<sup>12</sup>. Any EU firms or industrial groups to lodge a complaint with the Commission if there is the impression that imports of a product from a non-EU country are subsidized and injuring the EU industry producing the same product.

I understand that the US has also introduced legislation, namely the Level the Playing Field Act 2.0, which is addresses subsidies by a government to companies in another country, referred to as "transnational" or "cross-border" subsidies. Comparing EU and US efforts on this front would seem warranted.

The second autonomous measure worth highlighting is the anti-coercion mechanism proposed by the EU Commission in December 2021<sup>13</sup>. It is designed to de-escalate and induce discontinuation of specific coercive measures. Still, offering dialogue as a first step and this anti-coercion tool grants the EU Commission a toolbox of countermeasures in the case of coercion towards an EU member state or the EU. Such countermeasures include imposing tariffs and restricting imports from the country in question, restrictions on services or investment, or even steps to limit the country's access to the EU's internal market.

The current case of China's retaliation against Lithuania offers a clear case of the potential use of the new anti-coercion mechanism once the EU Parliament is ratified. It goes without saying that the current geopolitical environment is strengthening the stance of policymakers on the EU autonomous measures and the anti-coercion mechanism much more positive, especially after Russia invaded Ukraine. In the same vein, it would seem useful to compare the EU's actions with existing ones in the US for the foreign subsidy legislation, including the Countering China Economic Coercion Act.

Other than the two autonomous measures, it is essential to mention the EU foreign investment screening mechanism, which became fully operational in October 2020<sup>14</sup>. However, the US is surely well ahead of the EU thanks to the reform of the Committee of Foreign Investment in the US (CFIUS). The two mechanisms above mainly focus on trade, but there are many other ways China creates non-market incentives in the global economy. An obvious one is through the acquisition of companies abroad. In that regard, it seems crucial to understand better how Chinese firms' operations overseas are also creating distortions in our markets and how to react.

An example is the use of companies purchased by Chinese entities as an entry point to operate in the US or the EU's single market. The European Commission has already started to react to this threat by using anti-circumvention legislation to target entirely new production plants established by Chinese companies abroad when such plants use Chinese inputs under sanctions from EU Trade Defence Instruments (TDIs).

The Commission extended the duties on imported aluminum foil from China to imports from Thailand after a Chinese producer built a rolling plant using imported aluminum foil stock from China. Similarly, it extended the trade defense duties on importing glass fiber fabrics from China to imports from Morocco after a Chinese firm set up a new plant in Morocco. Still, it imported the necessary glass fiber ravings (which were targeted by separate trade defense investigations by the Commission in the past as a different product from the fabrics) from China.

In a recently initiated anti-circumvention investigation, the Commission now targets a new glass fabric production line established in Turkey owned by the same group as that targeted by the Commission in Egypt. I understand that the US is following a similar path as it has extended trade defense duties to import oil country tubular goods from China to imports from the Philippines and Brunei. A similar pattern can be seen in the case of corrosion-resistant steel products from BRI countries, like Malaysia. Furthermore, in February 2022, a US producer requested the US authorities to investigate solar cells and modules manufactured in Malaysia, Thailand, Vietnam, and Cambodia using inputs from China.

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<sup>12</sup> [https://ec.europa.eu/competition-policy/international/foreign-subsidies\\_en#:~:text=On%205%20May%202021%2C%20the,extensive%20consultation%20process%20with%20stakeholders.](https://ec.europa.eu/competition-policy/international/foreign-subsidies_en#:~:text=On%205%20May%202021%2C%20the,extensive%20consultation%20process%20with%20stakeholders.)

<sup>13</sup>

<https://trade.ec.europa.eu/doclib/press/index.cfm?id=2339#:~:text=The%20anticoercion%20instrument%20is%20designed,which%20can%20take%20many%20forms.>

<sup>14</sup> [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_20\\_1867](https://ec.europa.eu/commission/presscorner/detail/en/ip_20_1867)

More generally, it seems important to increase the oversight of Chinese companies' operations overseas and the supply chains they are building. More and more, they are shifting the final assembly of products to other emerging economies while keeping all the inputs, including R&D and capital investment in China.

In addition, Chinese financing of overseas projects at below market rates through their policy banks and how to respond can create extra distortion. The EU has recently announced a major program, the Global Gateway, which aims to mobilize up to €300 billion in investments between 2021 and 2027 in developing assistance and other types of funding across the emerging and developing world with the objectives of contributing to the green transition globally, pandemic recovery and digitalization.

The European initiative is still in its infancy, but it shows the way toward increasing awareness of how China's subsidized funding can be adding to the distortions. The US has also responded to this need from a more micro approach. The US EXIM has set up the China and Transformational Exports Program (CETP) to help US companies compete for projects against Chinese competitors in specific strategic sectors is welcome by granting them similar financial conditions to those awarded by Chinese financial institutions. It is a good idea but with still limited funding (\$141 million so far for 104 transactions). It seems crucial to balance the need to counter the distortions created by China's directed lending overseas and create new ones by mimicking a model of subsidies that will introduce further imbalances in the global economy.

#### **4. Joining forces: the Transatlantic Alliance, the Indo-pacific and the CPTPP**

China's sheer size and increasing impact on the global economy, coupled with an even more state-led economy, has material consequences for the world. There is no way the US can isolate its economy from the change. As such, the world must come up with an action plan in cooperation and finding the right policy tools.

First, the growing influence of China's state-led economic model means it is important to engage like-minded countries to find solutions to the distortions created. In that context, the EU-US Trade and Technology Council could serve as the platform for coordination. It is a relevant issue for global trade, economics, and technologies, precisely within its scope. Its working group dedicates to tackling "global trade challenges," which surely include distortions from China. In that regard, given the magnitude of the joint effort needed to fight back against Chinese distortions, the EU and the US should set aside, at least temporarily, the irritants in their trade relationship and the areas where their views do not converge and focus on reducing the distortions in the global economy.

Beyond the EU, involving Asian economies in setting up rules to reduce the impact of such a huge state-led economy on the rest of the world seems critical. There are two potential venues. The most obvious is to jump on the existing wagon, namely the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), or create a new venue based on the Indo-pacific strategy.

Focusing first on the former CPTPP option, it is important to realize that this economic block is superior to its coverage of market distortions, such as SOEs and subsidies, versus the RCEP. The fact that China (Mainland) officially submitted its application last September, three months after the United Kingdom and only days before Taiwan, points to the systemic importance of CPTPP for different reasons. The entry of China into the CPTPP can be a de-facto quality stamp of its economic model. In other words, it is a general acceptance of the Chinese economy being a market economy.

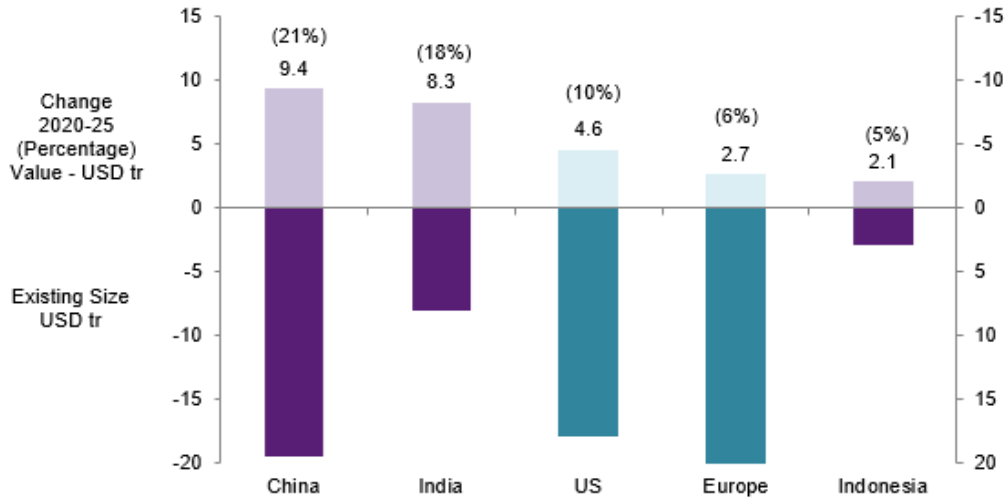
As for the United Kingdom, the quest to be part of Asia's large market is the apparent reason, especially after Brexit. For the US, its application means it is not only a security power but also an economic one and that it is open for business. It is even more the case if the US and the EU were to align forces by applying to CPTPP or embark on a new trade and investment deal with like-minded partners. For the latter, a critical factor in defining how like-minded partners might have to be the economy's structure and how close each of those Asian economies might be to a market economy.

Second, some potential tools to deal with this issue are reviewed, such as introducing and implementing the concept of competitive neutrality internationally and, most importantly, in China. Making such a concept more operational could improve the efficacy of the US's measures and those of the EU and other like-minded parties – to identify relevant distortions in the Chinese economy, especially that stemming from the large state support to specific companies. The EU's increasing efforts to protect its single market from foreign non-market practices are worth analysing.

No matter how the US economic and political landscape might evolve in the future, the size of the challenge that the Chinese economic model presents is such that alliances should be at the top of the agenda. A closer Transatlantic relation in economic and technology fields is long overdue and should include protecting the well-functioning of our markets from foreign non-market practices. Beyond that, the US would need to show the rest of Asia that it is not only a security power but an economic one by pushing a trade and investment deal in the region. Bringing the EU and the UK into this endeavour would make it more relevant. No economy is big enough to embark on this goal alone.

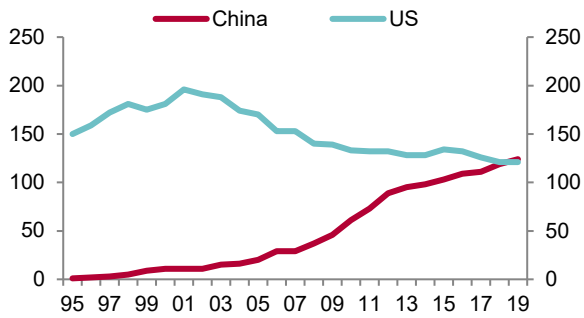
# Appendix

**Figure 1**  
Contribution to world growth (USD tr, PPP, %)



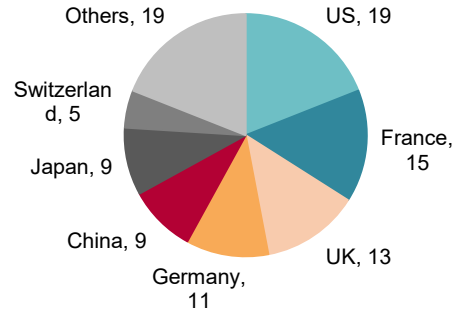
Source: Natixis

**Figure 2**  
Number of Firms in Fortune 500 by Country



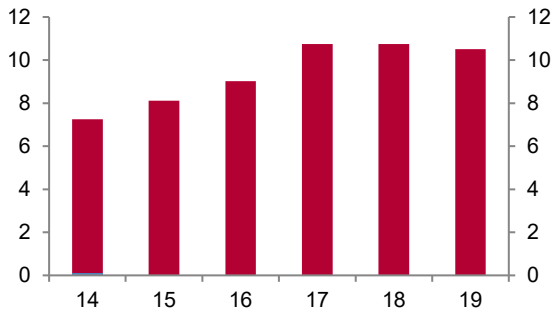
Source: Bruegel, Fortune 500

**Figure 3**  
The world's top 100 non-financial MNEs, ranked by foreign assets (%), 2019



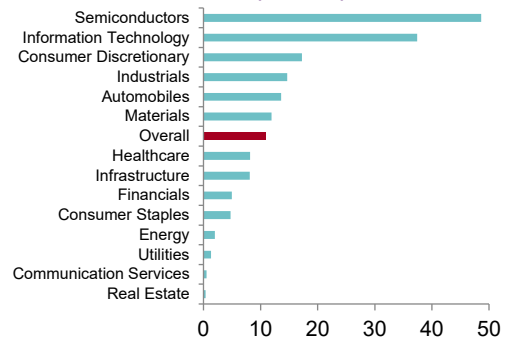
Source: Bruegel, UNCTAD

**Figure 4**  
Proportion of Overseas Revenue (%)



N.B. China onshore shares included.  
Source: Bruegel, Financial Statements, WIND

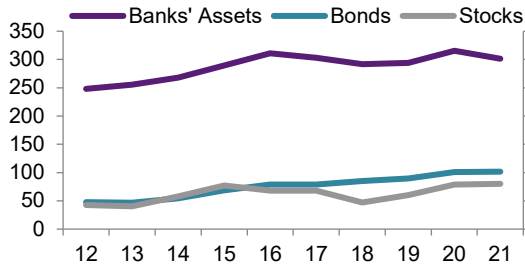
**Figure 5**  
China: Proportion of Overseas Revenue by Sector (%), 2019



N.B. China onshore shares included.  
Source: Bruegel, Financial Statements, WIND

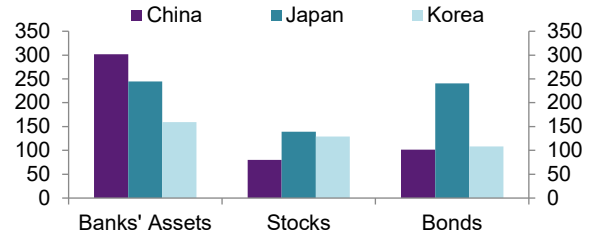


**Figure 6**  
China: Banks' Assets and Financial Markets  
(% of GDP)



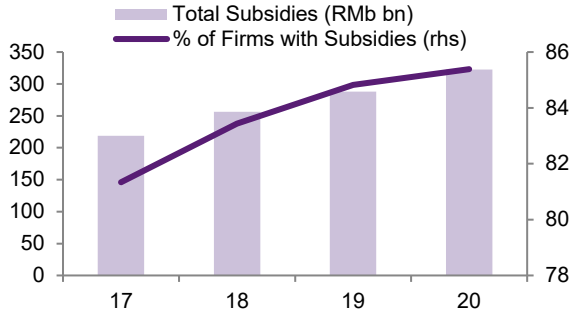
Source: Natixis, China Banking and Insurance Regulatory Commission, Shenzhen Stock Exchange, Shanghai Stock Exchange, China Central Depository & Clearing Co., Shanghai Clearing House, China National Bureau of Statistics

**Figure 7**  
China: Banks' Assets and Financial Markets  
(2021, % of GDP)



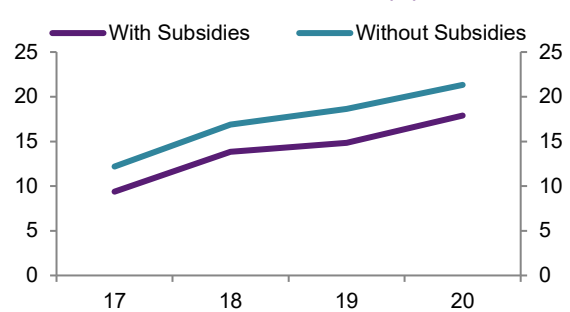
Source: Natixis, China Banking and Insurance Regulatory Commission, Shenzhen Stock Exchange, Shanghai Stock Exchange, China Central Depository & Clearing Co., Shanghai Clearing House, China's National Bureau of Statistics, Japan's Economic and Social Research Institute, Bank of Japan, Japan Exchange Group, Japan Securities Dealers Association, Bank of Korea, Korea Financial Supervisory Service, Korea Exchange

**Figure 8**  
China: Direct Government Subsidies into Listed Firms



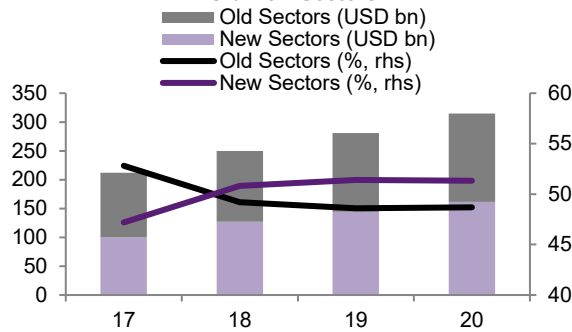
N.B. Listed firms in both onshore and offshore markets included.  
Source: Natixis, Financial Statements, Bloomberg

**Figure 9**  
China: Share of Loss-making Firms and Government Subsidies (%)



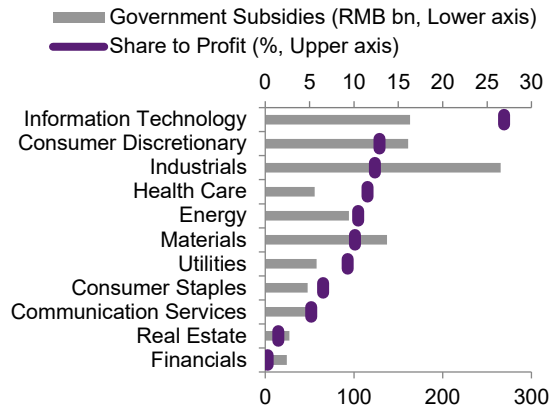
N.B. Listed firms in both onshore and offshore markets included.  
Source: Natixis, Financial Statements, Bloomberg, WIND

**Figure 10**  
China: Direct Government Subsidies by Old/New Sectors



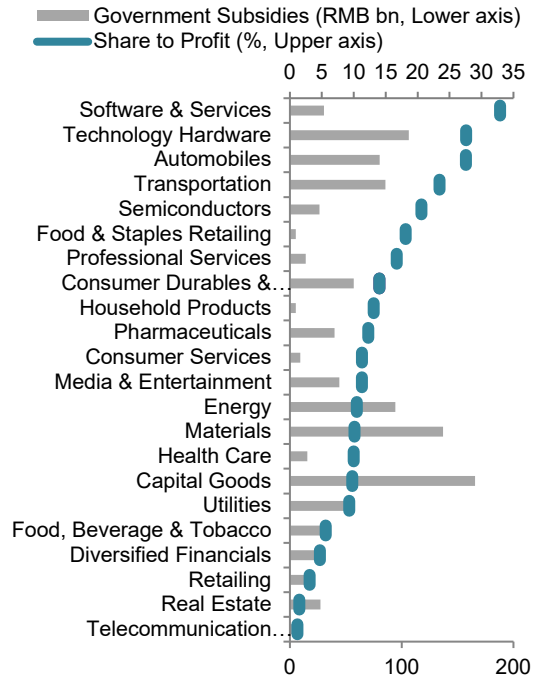
N.B. Listed firms in both onshore and offshore markets included.  
Source: Natixis, Financial Statements, Bloomberg, WIND

**Figure 11**  
**China: Direct Government Subsidies per Sector (2017-2020)**



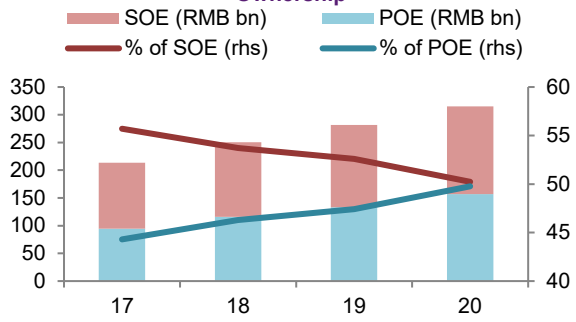
N.B. Listed firms in both onshore and offshore markets included.  
 Source: Natixis, Financial Statements, Bloomberg, WIND

**Figure 12**  
**China: Direct Government Subsidies per Sub-sector (2017-2020)**



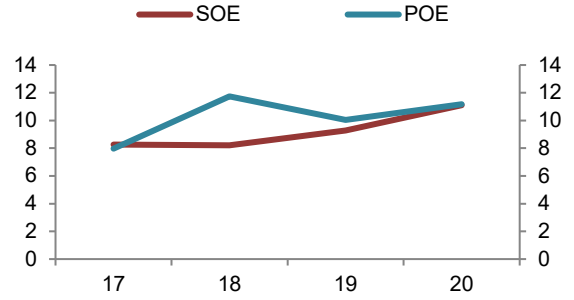
N.B. Listed firms in both onshore and offshore markets included.  
 Source: Natixis, Financial Statements, Bloomberg, WIND

**Figure 13**  
China: Direct Government Subsidies by Ownership



N.B. Listed firms in both onshore and offshore markets included.  
Source: Natixis, Financial Statements, Bloomberg, WIND

**Figure 14**  
China: Share of Government Subsidies to Profit (%)



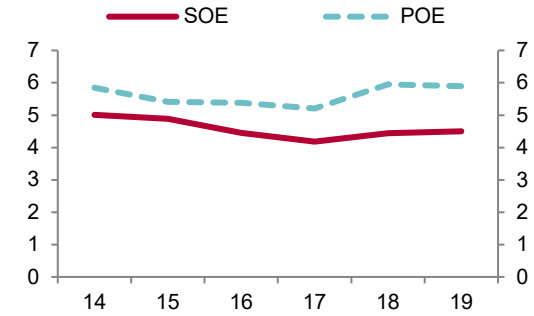
N.B. Listed firms in both onshore and offshore markets included.  
Source: Natixis, Financial Statements, Bloomberg, WIND

**Figure 15**  
Effective Tax Rate (%)



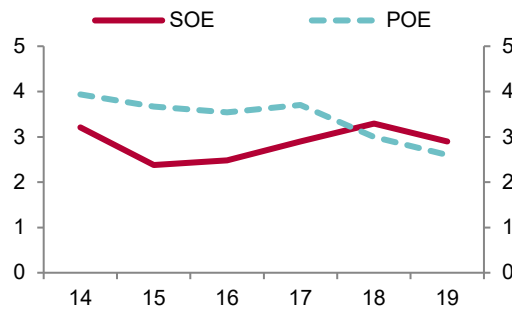
Source: Bruegel, Financial Statements, Bloomberg

**Figure 16**  
Funding Cost (%)



N.B. Funding cost is calculated from interest expense over total debt  
Source: Bruegel, Financial Statements, Bloomberg

**Figure 17**  
Return on Assets (%)



Source: Bruegel, Financial Statements, Bloomberg

Figure 18: Divergence of effective tax rate and interest rate for state-owned and private enterprises in China (Values of POE – SOE, 2019)

