

Kwa, Aileen; Lunenborg, Peter

Research Report

US' Section 301 actions: Why they are illegitimate and misguided

Research Paper, No. 86

Provided in Cooperation with:

South Centre, Geneva

Suggested Citation: Kwa, Aileen; Lunenborg, Peter (2018) : US' Section 301 actions: Why they are illegitimate and misguided, Research Paper, No. 86, South Centre, Geneva

This Version is available at:

<https://hdl.handle.net/10419/232205>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



**SOUTH
CENTRE**

Research
Paper
September 2018

86

US' SECTION 301 ACTIONS: WHY THEY ARE ILLEGITIMATE AND MISGUIDED

Aileen Kwa and Peter Lunenborg



RESEARCH PAPERS

86

US' SECTION 301 ACTIONS: WHY THEY ARE ILLEGITIMATE AND MISGUIDED¹

Aileen Kwa and Peter Lunenborg²

SOUTH CENTRE

SEPTEMBER 2018

¹ The authors are grateful to Carlos Correa, Manuel Montes, LI Yuefen, Yılmaz Akyüz, Nirmalya Syam, Vitor Ido and Viviana Muñoz for substantive and valuable inputs, and to Anna Bernardo for editorial assistance. All errors are the authors' responsibility.

² Aileen Kwa is Coordinator and Peter Lunenborg is Senior Researcher of the Trade for Development Programme (TDP) of the South Centre.

SOUTH CENTRE

In August 1995 the South Centre was established as a permanent inter-governmental organization of developing countries. In pursuing its objectives of promoting South solidarity, South-South cooperation, and coordinated participation by developing countries in international forums, the South Centre has full intellectual independence. It prepares, publishes and distributes information, strategic analyses and recommendations on international economic, social and political matters of concern to the South.

The South Centre enjoys support and cooperation from the governments of the countries of the South and is in regular working contact with the Non-Aligned Movement and the Group of 77 and China. The Centre's studies and position papers are prepared by drawing on the technical and intellectual capacities existing within South governments and institutions and among individuals of the South. Through working group sessions and wide consultations, which involve experts from different parts of the South, and sometimes from the North, common problems of the South are studied and experience and knowledge are shared.

NOTE

Readers are encouraged to quote or reproduce the contents of this Research Paper for their own use, but are requested to grant due acknowledgement to the South Centre and to send a copy of the publication in which such quote or reproduction appears to the South Centre.

The views contained in this paper are attributable to the author/s and do not represent the institutional views of the South Centre or its Member States. Any mistake or omission in this study is the sole responsibility of the author/s.

Any comments on this paper or the content of this paper will be highly appreciated. Please contact:

South Centre
Ch. du Champ d'Anier 17
POB 228, 1211 Geneva 19
Switzerland
Tel. (41) 022 791 80 50
Fax (41) 022 798 85 31
south@southcentre.int
www.southcentre.int

ABSTRACT

This research paper examines the US' Section 301 unilateral actions against China, stemming from the US' concerns over China's ambitious industrial policies and its rapid technological advancements. It outlines the accusations of the US regarding China's conditions for technology transfer and what the US sees as overly intrusive Chinese government involvement in investments. It looks in detail at why the US' actions are in fact illegitimate and misguided. Most of the US' accusations are not framed by WTO rules. Furthermore, the US cannot unilaterally take action that contravenes another WTO Member's rights under WTO agreements without going through the WTO's Dispute Settlement Body. Most strikingly, the US is accusing China of industrial policies and for supporting its companies to move up the technological ladder while it has been the pre-eminent country having its own version of such policies including until today. If these actions continue and expand, the ensuing trade war is likely to delegitimize the WTO and its current functions in regulating trade, lead to economic slow-down, and even possibly financial crises in emerging economies.

Le présent document de recherche analyse les mesures prises unilatéralement par les États-Unis à l'encontre de la Chine au titre de l'article 301 de la loi américaine sur le commerce, face aux préoccupations que suscitent ses politiques industrielles ambitieuses et ses rapides progrès technologiques. Le document présente les accusations formulées par les États-Unis contre les conditions imposées par la Chine en matière de transfert de technologie et contre ce qu'ils considèrent être une intervention excessivement intrusive du gouvernement chinois dans le domaine de l'investissement. Le document examine dans les détails pourquoi les mesures des États-Unis sont en réalité illégitimes et inappropriées. La plupart des accusations lancées par les États-Unis ne trouvent pas de fondement dans les règles de l'Organisation mondiale du commerce (OMC). Qui plus est, les États-Unis ne sont pas autorisés à prendre des mesures unilatérales qui contreviennent aux droits d'un autre membre de l'OMC inscrits dans les accords de l'OMC sans passer par l'Organe de règlement des différends (ORD). Les critiques qu'ils font à l'encontre des politiques industrielles de la Chine et du soutien qu'elle apporte à ses entreprises pour gravir les échelons du développement technologique sont d'autant plus surprenantes qu'ils sont le pays qui a le plus appliqué, et continue même d'appliquer, ses propres politiques en la matière. Si ces mesures se répètent et se généralisent, la guerre commerciale qui en résultera risque de délégitimer l'OMC et ses fonctions en matière de réglementation du commerce, de provoquer un ralentissement économique et même de faire éclater une crise financière dans les économies émergentes.

En este Documento de investigación se analizan las medidas tomadas unilateralmente por los Estados Unidos contra China en virtud de la Sección 301 de la Ley de Comercio, a raíz de la preocupación que suscitan las ambiciosas políticas industriales y el rápido desarrollo tecnológico de China. En el documento se señalan las acusaciones de los Estados Unidos relativas a las condiciones impuestas por China a la transferencia de tecnología y de lo que para los Estados Unidos constituye una interferencia excesiva del Gobierno chino en las inversiones. Se indican en detalle las razones por las que las medidas de los Estados Unidos son en realidad ilegítimas e insensatas. La mayor parte de las acusaciones de los Estados Unidos no están fundadas en las normas de la Organización Mundial del Comercio (OMC). Además, los Estados Unidos no pueden tomar medidas unilaterales que violen los derechos de otro miembro de la OMC en virtud de sus acuerdos sin recurrir al Órgano de Solución de Diferencias (OSD) de la OMC. Lo más sorprendente es que los Estados Unidos critican las políticas industriales de China y acusan a este país de ayudar a sus empresas a ascender en la escala tecnológica cuando han sido el país que más ha aplicado estas políticas según sus propios criterios y lo sigue haciendo hoy en día. Si estas medidas se repiten y se generalizan, la guerra comercial que puede desencadenarse amenazaría con deslegitimar a la OMC y sus funciones en materia de reglamentación del comercio y traería consigo la desaceleración económica e incluso podría desencadenar una crisis financiera en las economías emergentes.

TABLE OF CONTENTS

I. INTRODUCTION	1
II. US' ACCUSATIONS OF CHINA UNDER SECTION 301	4
III. US' CONCERNS REGARDING CHINA'S INDUSTRIAL AND TECHNOLOGICAL POLICIES	5
i. 'Substantial Government Guidance, Resources and Regulatory Support to Industries' ...	5
ii. China's Ambitious Industrial Policy Using 'Indigenous Innovation' and 'Reinnovation'	5
iii. China's Conditions on Foreign Investors.....	6
iv. US Trade Deficit with China	7
v. WTO Rules are Insufficient to Constrain China's Market-Distorting Behaviour	7
IV. ACTIONS TAKEN BY US PURSUANT TO SECTION 301 AND CHINA'S RESPONSES	8
i. Unilateral Tariff Sanctions.....	8
ii. WTO Dispute Settlement: US Pursues Case Against China and Other Members' Responses	9
iii. US Tightens Regulation of Inbound Chinese Investments	10
V. ABOUT SECTION 301 AND ITS HISTORY AT THE GATT/WTO	12
i. What is Section 301?	12
ii. How the Uruguay Round Neutralised Section 301.....	12
iii. EU's Case Against Section 301 in 1999	13
iv. Section 301 and Its Controversies During the Days of the GATT.....	13
VI. WHY ARE US' SECTION 301 ACTIONS ILLEGITIMATE AND MISGUIDED?	15
i. WTO Illegality and the Threat to the Multilateral Trading System.....	15
ii. Most of US' Accusations Are Based on US Standards, Not WTO Standards; Moreover US/ OECD Countries Use Similar Industrialisation Strategies	15
iii. US' Heavy Role in Supporting Industrial and Technological Development – Why Blame China for Doing the Same?	17
iv. US' Trade Deficit Is More Closely Linked to Savings Levels, Exchange Rates and the Dollar as Reserve Currency	24
v. China's Intellectual Property Laws Are Being Strengthened Even Beyond WTO's TRIPS Agreement.....	25
vi. China's Indigenous Efforts in Creating R&D and Innovation Capacity.....	27
VII. CONCLUSIONS.....	29
ANNEX 1: US' UNILATERAL TRADE ACTION ON US\$34 BILLION OF ITS IMPORTS COVERS 6.4% OF ITS TOTAL IMPORTS FROM CHINA	30
ANNEX 2: LISTS 1 AND 2 – US' SECTION 301 TARIFFS AND CHINA'S RESPONSES.....	31
ANNEX 3: DSB ACTIONS TAKEN IN THE WTO ASSOCIATED WITH US' SECTION 301 ACTIONS.....	32

I. INTRODUCTION

From 6 July 2018, the US Administration under its Section 301 Trade Act took unilateral and discriminatory tariffs on US\$34 billion of its imports from China, on grounds of China's unreasonable or discriminatory practices relating to technology transfer, intellectual property and innovation. On 23 August, the list was expanded to include another US\$16 billion of imports.

According to the US President's Memorandum in August 2017 which triggered the investigation: 'China has implemented laws, policies and practices and has taken actions related to intellectual property, innovation and technology that may encourage or require the transfer of American technology and intellectual property to enterprises in China or that may otherwise negatively affect American economic interests'.³

The US' Section 301 law allows the US Administration to unilaterally take retaliatory action even if a policy or practice is not necessarily in violation of, or inconsistent with, the international legal rights of the US, but 'denies national or most-favoured nation treatment to United States goods, service, or investment.'⁴ Indeed, in this case, most of the US' accusations are not framed under the World Trade Organization (WTO)'s rules. The elements that the US thinks contravene the WTO are concurrently being pursued by the US in WTO.

The US is now applying additional tariffs of 25% on a total of \$50 billion of Chinese imports. In response, China on 6th July, and then on 23 August, also retaliated by applying tariffs of 25% on \$34 billion and then \$16 billion of its imports from the US. In addition, Trump has vowed that he may take even further tariff action in response to the Chinese retaliation.

Since the inception of the WTO, the US has not resorted to Section 301 against another WTO Member.⁵ The last time Section 301 measures had been taken against WTO Members or General Agreement on Tariffs and Trade (GATT) Contracting Parties was in the 1980s and early 1990s that is, in the early years of the Uruguay Round. The Uruguay Round rules neutralized Section 301. The US' trade action this year has thus been a shock to the WTO system (alongside US' actions under Section 232 of the Trade Expansion Act of 1962 (19 U.S.C. §1862) on aluminum and steel).

Section II of this paper will address the specific accusations of the US regarding China's technology transfer and innovation policies and practices.

Section III looks into the US' broader concerns regarding China – particularly what the United States Trade Representative (USTR) sees as the Chinese government's ambitious supports to its high technology industries, including its *Made in China 2025* ten-year plan.

³ White House, 'Presidential Memorandum for the United States Trade Representative', 14 August 2018. Available from <https://www.whitehouse.gov/presidential-actions/presidential-memorandum-united-states-trade-representative/>.

⁴ Office of the United States Trade Representative (USTR), 'Findings of the investigation into China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation under Section 301 of the Trade Act of 1974', p. 3.

⁵ Tariffs under section 301 were imposed in December 2001 on Ukraine for metals, footwear, and other imports on grounds that Ukraine had not enacted legislation to enforce copyright in relation to music CDs and their exports. Ukraine was not yet a WTO Member.

Section IV outlines the actions the US has taken pursuant to Section 301 in 2018, and China's responses, including actions taken by WTO Members in the WTO's Dispute Settlement Body (DSB) relating to this case.

Section V provides more details about Section 301, including the reaction it generated during the time of the GATT and the case brought by the European Communities in 1999, where the panel ruled that Section 301 was 'inconsistent with WTO obligations' and 'a serious threat that unilateral determinations (contrary to the WTO's Dispute Settlement Understanding) might be taken'.⁶

Section VI discusses why the US' Section 301 actions are illegitimate and misguided. Chief amongst these reasons include:

- The WTO's panel ruling in 1999 already established that unilateral actions under Section 301 are 'inconsistent with WTO obligations'. Members cannot take action contrary to their WTO obligations unless allowed to retaliate after their case has been heard in the WTO's dispute settlement system. The US' current disregard for rules could lead to very serious systemic implications.
- The US' Section 301 accusations against China on technology transfer through joint ventures or supports to investors are based on the US' own standards, rather than WTO standards. Joint ventures are perfectly legal under the WTO regime and it is commonplace that companies in joint ventures negotiate their terms of engagement including those concerning the use of technology. Furthermore, the US and/or other Organisation for Economic Co-operation and Development (OECD) countries have used or are using similar policy instruments.
- The US itself plays a very heavy activist industrial policy role including in supporting its global conglomerates to be at the technological edge. Why point fingers at China? The many aspects of the US' hidden industrial policies include – supports to innovation programmes such as through its complex state-military-industry nexus; subsidies to industries; its use of venture capital funds to support technology companies; legal requirements in the Buy America government procurement Act; the government's role in reforming companies to prevent their failure; as well as tax breaks. All of these have allowed American companies to enjoy technological and economic dominance for at least the last six decades.
- There are many causes of the US trade deficit beyond competitive exports from China. These include US companies located in China producing for the US market; US' pattern of over-consumption, supported by a strong dollar, as compared to the Chinese who have a much higher savings rate; and the fact that the dollar is the world's reserve currency, allowing the US to enjoy 'debt-driven' growth without paying the price of over-inflation. Blame should not therefore be put on China for these structural issues for which US has reaped benefits, especially its control of the world's leading reserve currency.
- The US' accusations of China's Intellectual Property Protection go beyond the WTO's Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement. Furthermore, big strides are currently being made in China's intellectual property regime, in many areas even going beyond the WTO's own standards. A look back into

⁶ Brackets are the authors' addition. WTO, WT/DS152/R 'United States – Section 301-310 of the Trade Act of 1974 – Report of the Panel', 22 December 1999. Summary provided in https://www.wto.org/english/tratop_e/dispu_e/cases_e/1pagesum_e/ds152sum_e.pdf.

history shows that the US itself had liberally used 'technological imitation' when it was still developing, borrowing liberally from the UK and Germany.

- China has made impressive progress in creating its own indigenous research and development (R&D) and innovation capacities. It is now a top innovator ranking #17 on the Global Innovation Index (2018). Portraying China as a country where innovation is based on 'theft' is far from the reality.

Section VII concludes that the real rationale behind the US' actions under Section 301 is an attempt to slow down or stop China's legitimate policies to advance its industrial development and technological catch up. Trade is not the real target. Ironically, many of the instruments China is using are versions of what the US and other OECD countries themselves have used for decades. If the trade war continues and deepens, this will erode the WTO's legitimacy and its regulation of trade. It could also cause global economic slow down or recession, and spark off a severe financial crisis mainly in emerging economies most exposed to loss of investors' appetite. Furthermore, it could likely cast a heavy grey cloud over multilateral cooperation stretching far beyond the WTO.

II. US' ACCUSATIONS OF CHINA UNDER SECTION 301

On 14 August 2017, President Trump ordered the United States Trade Representative (USTR) to conduct an investigation into China's acts, policies and practices related to technology transfer, intellectual property (IP) and innovation under Section 301 of the Trade Act of 1974.

On 22 March 2018, the USTR published the 200-page report making allegations around four clusters of issues:

- i. China's technology transfer regime forces technology transfer, in particular through joint venture (JV) requirements and foreign equity limitations as well as the use of administrative review and licensing procedures.
- ii. China uses discriminatory licensing conditions for foreign companies. This is contained in the Regulations of the People's Republic of China on the Administration of the Import and Export of Technologies (TIER) and China's joint venture (JV) regulations (applicable to licensing agreements between foreign and domestic entities only). Licensing agreements between domestic entities must comply with China's contract law but not with the additional conditions that might arise from the TIER or JV regulations.
- iii. China makes a wide-ranging and well-funded effort to direct and support systematic investments in and acquisition of U.S. companies and assets to obtain cutting-edge technology, in service of China's industrial policy.
- iv. China sponsors unauthorized intrusions into U.S. commercial computer networks and thefts of intellectual property and sensitive commercial information.

With respect to issues i, iii and iv, the report finds that these alleged acts, policies, and practices of China are 'unreasonable' and presents a 'burden' for US companies. The USTR report does not claim that China violates international obligations on these issues. Allegations under ii are being pursued in the WTO's Dispute Settlement Body (DSB).

After publication of the Section 301 report, President Trump ordered

- The USTR to compile a list of goods for unilateral tariff sanctions on Chinese imports
- The USTR to initiate WTO dispute settlement on a very narrow subset of findings of the Section 301 report – issues in ii above.
- The Secretary of the Treasury to provide advice on how to regulate inbound investment directed or facilitated by China in industries or technologies deemed important to the US.⁷

⁷ White House, 'Presidential Memorandum on the Actions by the United States Related to the Section 301 Investigation', 22 March 2018. Available from <https://www.whitehouse.gov/presidential-actions/presidential-memorandum-actions-united-states-related-section-301-investigation/>.

III. US' CONCERNS REGARDING CHINA'S INDUSTRIAL AND TECHNOLOGICAL POLICIES

Trade is not the real or main target. The US' Section 301 allegations of China regarding technology transfer stem from broader concerns the US has about China's state support to its enterprises. A couple of submissions by the US to the WTO's General Council for discussions which took place on 26 July 2018 demonstrate these concerns.⁸ They include:

i. 'Substantial Government Guidance, Resources and Regulatory Support to Industries'

The USTR '2017 Report to Congress on China's WTO Compliance' (submitted to the WTO's General Council) observes that

'Today, almost two decades after it pledged to support the multilateral trading system of the WTO, the Chinese government pursues a wide array of continually evolving interventionist policies and practices aimed at limiting market access for imported goods and services and foreign manufacturers and services suppliers. At the same time, China offers substantial government guidance, resources and regulatory support to Chinese industries, including through initiatives designed to extract advanced technologies from foreign companies in sectors across the economy. The principal beneficiaries of China's policies and practices are Chinese state-owned enterprises and other significant domestic companies attempting to move up the economic value chain. As a result, markets all over the world are less efficient than they should be'. (WT/GC/W/746, p. 8)

Specifically regarding China's industrial policies, the document WT/GC/W/745 says: 'China's approach is materially different from other WTO Members. China provides massive, market-distorting subsidies and other forms of state support to its domestic industries, which too often leads to severe excess capacity...' (WT/GC/W/745, p. 5)

ii. China's Ambitious Industrial Policy Using 'Indigenous Innovation' and 'Reinnovation'

The US is also specifically concerned about the ambition regarding China's technology policies. In the same report to Congress, the Office of the United States Trade Representative (USTR) says:

'As one example, a number of official publications of the government and the CCP (Chinese Communist Party) set out China's ambitious technology-related industrial policies. The industrial policies reflect a top-down, 'indigenous innovation' and 're-innovation' of foreign technologies, among others. The Chinese government regards technology development as integral to its economic development and seeks to attain domestic dominance and global leadership in a wide range of technologies. In pursuit of this overarching objective, China has issued a large number of industrial policies, including... 'Made in China 2025'.' (WT/GC/W/745, p. 5) (See Box 1.)

⁸ WTO, WT/GC/W/745 'China's Trade-Disruptive Economic Model: Communication from the United States', 16 July 2018; and WTO, WT/GC/W/746 '2017 Report to Congress on China's WTO Compliance: Report of the USTR', 16 July 2018.

Box 1: USTR on ‘Made in China 2025’

‘Made in China 2025’ is a 10-year plan targeting 10 strategic industries. The USTR says that ‘While ostensibly intended simply to raise industrial productivity through more advanced and flexible manufacturing techniques, Made in China 2025 is emblematic of China’s evolving and increasingly sophisticated approach to ‘indigenous innovation’, which is evident in numerous supporting and related industrial plans. Their common, overriding aim is to replace foreign technology with Chinese technology in the China market through any means possible so as to ready Chinese companies for dominating international markets’.

‘Made in China 2025 also differs from industry support pursued by other WTO members by the level of ambition, and perhaps more importantly, by the scale of resources the government is investing in the pursuit of its industrial policy goals. In this regard, even if the Chinese government fails to achieve the industrial policy goals set forth in Made in China 2025, it is still likely to create or exacerbate market distortions and create severe excess capacity in many of the targeted industries’.

The ten strategic industries include

- Advanced information technology – e.g. investments in semiconductors etc.
- Automated machine tools and robotics
- Aviation and spaceflight equipment – aerospace equipment and satellite technology
- Ocean engineering and high tech ships
- Advanced rail transit equipment
- Energy saving and new energy vehicles (NEVs)
- Power equipment – e.g. grid and smart city technology
- New materials – new inventions
- Medicine and medical devices - biopharmaceuticals
- Agricultural machinery

Sources: WTO, WT/GC/W/746 ‘USTR 2017 Report to Congress on China’s WTO Compliance’, 16 July 2018. The list of ten strategic industries is based on the USTR 2017 Report and McKinsey China, ‘China is Betting Big on These 10 Industries’, 27 May 2015.

iii. China’s Conditions on Foreign Investors

The USTR’s report to Congress also raises as problematic China’s investment restrictions:

‘Many aspects of China’s current investment regime, including lack of substantial liberalization, foreign equity caps, joint venture requirements, maintenance of a case-by-case administrative approval system for certain investments, the potential for a new and overly broad national security review, and the impact of China’s Cybersecurity Law and National Security Law... continue to cause foreign investors great concern’ (WT/GC/W/746, p. 15).

‘In addition, foreign enterprises report that Chinese government officials may condition investment approval on a requirement that a foreign enterprise transfer technology, conduct research and development in China, satisfy performance requirements relating to exportation or the use of local content or make valuable, deal-specific commercial concessions. The United States has repeatedly raised concerns with China about its

restrictive investment regime. To date, this sustained bilateral engagement has not led to a significant relaxation of China's investment restrictions...' (WT/GC/W/746, p. 15)

iv. US Trade Deficit with China

The USTR is also concerned about the trade imbalance between the two countries. It notes that since China joined the WTO, 'the US-China trade imbalance has grown exponentially. While various factors can contribute to a trade imbalance, the size and direction of the US-China trade imbalance evidences a trade relationship that is neither natural nor sustainable'. The USTR report highlights the US\$375 billion goods trade deficit with China in 2017. It acknowledges that the US has a trade surplus with China in services, but that this was only US\$38 billion in 2016 (WT/GC/W/746, p. 9). Importantly, what the USTR does not acknowledge is that according to World Bank data, US net receipts for IP royalties from China amounted to US\$80 billion in 2016.⁹

v. WTO Rules are Insufficient to Constrain China's Market-Distorting Behaviour

The USTR's report to Congress notes that 'it is now clear that the WTO rules are not sufficient to constrain China's market-distorting behavior. Whilst some problematic policies and practices being pursued by the Chinese government have been found by WTO panels or the Appellate Body to run afoul of China's WTO obligations, many of the most troubling ones are not directly disciplined by WTO rules...The reality is that the WTO rules are not formulated with a state-led economy in mind...' (WT/GC/W/746, p. 8)

In conclusion, the USTR says that 'China's use of the term 'reform' differs from the type of reform that a country would be pursuing if it were embracing market oriented principles. For China, economic reform means perfecting the government's and the Party's management of the economy and strengthening the state sector, particularly state-owned enterprises. As long as China remains on this path, the implications for this organization (WTO) are decidedly negative' (WT/GC/W/745, p. 8).

⁹ Authors' calculations based on World Bank Development Indicators (net receipts is equal to receipts minus payments for Intellectual Property royalties).

IV. ACTIONS TAKEN BY US PURSUANT TO SECTION 301 AND CHINA'S RESPONSES

i. Unilateral Tariff Sanctions

From 6 July 2018, the US has applied additional duties of 25% on imports from China in 818 tariff lines (List 1). The trade value in 2017 of these tariff lines amounted to about US\$34 billion of imports from China (See Annex 1). From 23 August, an additional 279 tariff lines (List 2) of imports from China were subjected to an additional duty of 25%.^{10 11}

China has responded in kind. As of 6 July, it started applying 25% additional duty on 545 tariff lines of imports from the US (List 1). This covers about US\$33.8 billion of trade. On 23 August, it also started imposing additional duties of 25% on another 333 tariff lines (List 2).¹²

In addition, President Trump has vowed to escalate tariff sanctions. The Administration is considering imposing an additional 25% duty on another US\$200 billion worth of Chinese goods.¹³ In an interview with CNBC aired on 20 July, Trump said that he is 'ready' to put tariffs on all Chinese goods imported to the US¹⁴ (US\$481.2 billion in 2016, and US\$526.2 billion in 2017). Given that China's imports from the US amounted to US\$155 billion in 2017, if China chooses to match the US actions, China would have to increase duties on tariff lines already subject to retaliation or implement other measures that would persuade the US government to cease its unilateral tariff sanctions.

Which products are being hit?

List 1 of the US Section 301 tariffs is concentrated in three HS Chapters – 84 (Machinery and parts thereof), 85 (Electrical machinery and equipment and parts thereof) and 90 (Measuring and medical instruments and apparatus). Overall, the 6 July additional tariffs cover 6.4% of the US' imports from China in 2017. Products registering the highest value include motor vehicles to transport persons (US\$1.5 billion, HS 87032301), hard disks (US\$0.9 billion, HS 84717040) and parts of pumps (US\$0.9 billion, HS 84139190) (see Annexes 1 and 2).

For most of the affected List 1 products (807 out of 818 tariff lines), the imports from China are less than half of the US' total imports. This suggests that for most products, US companies could relatively easily switch to other suppliers. Nonetheless, China is an important supplier, among others, of power generation equipment (Direct Current (DC) generators, DC motors, voltage-current regulators), machine tools operated by ultrasonic processes for working metal, Light-Emitting Diodes (LEDs) for backlighting, parts of printed circuit assemblies for television as well as parts and accessories of copying machines (see Annex 1).

¹⁰ Financial Times, 'US-China Trade Negotiations End with Little Progress', 24 August 2018.

¹¹ See <https://www.cmtradelaw.com/2018/08/ustr-finalizes-list-2-of-section-301-tariffs-on-chinese-products-august-7-2018/>.

¹² Ministry of Commerce of the People's Republic of China (MOFCOM), Announcement on Tariffs on Certain Goods Originating in the United States, 8 August 2018. Available from <http://www.mofcom.gov.cn/article/ae/ai/201808/20180802773926.shtml>.

¹³ Washington Trade Daily, 'More Tariffs on China', Vol. 27, No. 158 (8 August 2018).

¹⁴ See <https://twitter.com/CNBCnow/status/1020251651503017985>.

The US' List 2 of 279 tariff lines includes various plastics, electronic components, specialized manufacturing equipment, tractors, motorcycles and optical fibers.¹⁵

China's List 1 contains 545 tariff lines accounting for USD 33.8 billion. The two main HS Chapters affected are oilseeds (USD 14.3 billion, HS12) and motor vehicles (USD 12.9 billion, HS87). Other products include cotton (USD 1 billion), frozen fish (USD 1 billion) and sorghum (USD 0.9 billion). Overall, the additional tariffs cover 21.8% of total Chinese merchandise imports from the US (measured in 2017 trade values).

ii. WTO Dispute Settlement: US Pursues Case Against China and Other Members' Responses

With respect to China's alleged discriminatory licensing conditions for foreign companies, the Section 301 investigation report of 22 March focuses specifically on four relatively narrow issues:

- a) China's Technology Import and Export Regulations (TIER) assign by default liability to the licensor for any infringement of intellectual property rights or 'another person's lawful rights and interests' which may have been caused by the licensee's use of the transferred technology. In contrast, China's Contract Law permits parties to negotiate liability for infringement claims.
- b) Within the term of a technology contract, the TIER stipulates that an improvement made to the licensed technology that has been imported belongs to the party making the improvement.
- c) China's Foreign Equity Joint Ventures Regulations (JV) limit technology transfer agreements to a duration of generally no longer than ten years. After which, the Chinese joint venture must be granted the right to use the technology continuously.
- d) The JV imposes requirements on the characteristics of transferred technologies, for instance technologies must be advanced enough, such that the joint venture's products generate significant social and economic benefits in the domestic market or are competitive in the international market. According to the US, these requirements provide opportunities for Chinese officials to pressure foreign firms to transfer the latest and most advanced versions of their technologies.

Following the release of the USTR investigation report on 22 March, the USTR initiated consultations with China on 'Certain Measures Concerning the Protection of Intellectual Property' a day later at the WTO (WT/DS542/1).

The case brought by the US is with respect to the first 3 issues highlighted above. The US asserts that the relevant provisions of the TIER and the JV violate the national treatment obligation of the TRIPS Agreement (Article 3¹⁶) as well as patent owners' exclusive rights (Article 28).¹⁷ Thereafter, other Members submitted requests to join in these consultations (Japan, EU, Ukraine, TPKM (Chinese Taipei), Saudi Arabia).

¹⁵ Washington Trade Daily, 'More Tariffs on China', Vol. 27, No. 158 (8 August 2018).

¹⁶ Art. 3 of TRIPS says that each Member shall accord to the nationals of other Members treatment no less favourable than that it accords to its own nationals with regard to the protection of IP, subject to exceptions.

¹⁷ WTO document WT/DS542/1 dated 26 March 2018. Art. 28 of TRIPS says that the owner of a patent has exclusive rights to make, use, sell, import that product or process. However, para. 2 of Art. 28 also states that

In response, the Chinese on 4 April requested consultations with the US concerning the US' tariff action under Section 301 – 'Tariff Measures on Certain Goods from China (WT/DS543/1).

On 6 June, the EU also decided to initiate its own case at the WTO against China. It submitted a request for consultations on 'China - Certain Measures on Technology Transfer' (WT/DS549/1). EU considers that China's administration of its laws, regulations and other measures governing the transfer of technology into China is not impartial or 'reasonable'.¹⁸ It repeats and further expands upon the US claims. It alleges that China violates the following WTO obligations:

- Article 39 TRIPS (protection of undisclosed information / trade secrets),
- Article 33 TRIPS (minimum patent term is 20 years) and
- Article X.3(a) of the GATT 1994 in conjunction with paragraph 2(A)2 of China's WTO Accession Protocol (impartial and reasonable application and administration of laws, regulations and other measures).
- The EU also considers that that the obligation to notify and register licensing agreements with Chinese authorities under the TIER violates Articles 3 (National Treatment), 28 (Rights Conferred to Patent Owners) and 39 (Protection of Undisclosed Information) of the TRIPS Agreement.

A listing of the Section 301-related WTO cases and responses by other Members is provided in Annex 3.

iii. US Tightens Regulation of Inbound Chinese Investments

The Section 301 investigation report argues that Chinese investments are a 'burden' for US companies as Chinese companies are willing to pay much more for US domestic companies compared to other competing (domestic US) firms. Those unable to compete therefore do not have access to the assets and technology of the firms acquired by Chinese companies.

In a statement issued on 27 June 2018, President Trump recommended the adoption of the Foreign Investment Risk Review Modernization Act (FIRRMA), which would give the Committee on Foreign Investment in the US (CFIUS) broader powers to screen incoming investment. He considered that this would address the concerns regarding state-directed investment in critical technologies identified in the Section 301 investigation.¹⁹ At least formally, this Act would not specifically target China.

In the same statement, Trump said US export controls of investment outflows would be assessed with a view to strengthening them to defend national security and technological leadership, the rationale being that export controls would assist in keeping technology within

'patent owners shall also have the right to assign, or transfer by succession, the patent and to conclude licensing contracts'.

¹⁸ WTO, WT/DS549/1 'China – Certain Measures on the Transfer of Technology: Request for Consultations by the European Union', 6 June 2018.

¹⁹ White House, 'Statement by the President Regarding Investment Restrictions', 28 June 2018. Available from <https://www.whitehouse.gov/briefings-statements/statement-president-regarding-investment-restrictions/>.

US borders. Additionally, he stated that the US would engage with allies and partners to support their efforts to combat harmful technology transfer and intellectual property theft.²⁰

²⁰ Ibid.

V. ABOUT SECTION 301 AND ITS HISTORY AT THE GATT/WTO

i. What is Section 301?

Under Section 301 or more precisely Chapter 1 of Title III of the US Trade Act (‘Relief from Unfair Trade Practices’) covering Sections 301 to 310 of that Act, the US can take action when foreign acts, policies or practices violate US’ rights under trade agreements, or when these actions may not violate any trade agreements but are considered ‘unreasonable or discriminatory and that burden or restrict U.S. commerce’.²¹

Under this Trade Act, the US can impose unilateral actions, including:

- Suspension of trade agreements
- Imposition of import duties and other import restrictions, with a preference for import duties
- Imposition of restrictions on services, including access authorization
- Suspension of unilateral trade preferences
- Entering into binding agreements with foreign countries²².

According to Section 301, an ‘unreasonable’ act, policy, or practice is one that ‘while not necessarily in violation of, or inconsistent with, the international legal rights of the United States is otherwise unfair and inequitable’.²³ The statute also provides that in determining if a foreign country’s practices are unreasonable, reciprocal opportunities to those denied U.S. firms ‘shall be taken into account, to the extent appropriate.’²⁴

ii. How the Uruguay Round Neutralised Section 301

The United States was frustrated with the weak dispute settlement system of the GATT. The GATT required positive consensus (i.e. agreement by all Members) to constitute a panel for a dispute; to adopt the panel report; and also to authorize countermeasures against a non-implementing respondent.²⁵ This weak dispute settlement system led Washington to use unilateral sanctions under Section 301.

C. Brown of the Peterson Institute commented in this respect that in the Uruguay Round

‘Washington pushed for a new dispute settlement system that would obviate its need for rogue action under Section 301. Unlike what had been the case under the toothless GATT system that it had abhorred, a US administration would be able to pursue trade dispute against any country it desired.

‘And not only did the new rules cover America’s newly emerging export interests beyond goods, but if the United States won its legal arguments in its offensive cases –

²¹ Trade Act of 1974, 19 U.S.C. 2411(a)-(b)

²² Section 301(c) of the United States Trade Act of 1974, ‘Scope of Authority’, <https://legcounsel.house.gov/Comps/93-618.pdf>.

²³ Section 301(d)(3)(A) of the United States Trade Act of 1974

²⁴ Ibid, Section 301(d)(3)(D).

²⁵ See https://www.wto.org/english/tratop_e/dispu_e/dispu_settlement_cbt_e/c2s1p1_e.htm.

which typically it did over the next 20 years – Washington could be authorised by the WTO to retaliate in order to get trading partners to remove harmful trade barriers.

‘Not surprisingly, Section 301 fell into disuse...’²⁶

In addition, Article 23.1 of the WTO’s Dispute Settlement Understanding (‘Strengthening of the multilateral trading system’) was specifically designed to outlaw the use of unilateral action if such action would encroach on a Member’s benefit under the WTO Agreements. It states that ‘When Members seek the redress of a violation of obligations or other nullification or impairment of benefits under the covered agreements or an impediment to the attainment of any objective of the covered agreements, they shall have recourse to, and abide by, the rules and procedures of this Understanding.’

iii. EU’s Case Against Section 301 in 1999

In 1999, the European Communities (forerunner to the European Union) took the US to the WTO’s Dispute Settlement Body (DSB) for its Section 301 – 310 legislation. The Panel determined that Section 301 was ‘inconsistent with WTO obligations’ and ‘a serious threat that unilateral determinations (contrary to the WTO’s Dispute Settlement Understanding) might be taken’.²⁷ The Panel noted that

- It is for the WTO, through the dispute settlement understanding (DSU) process, and not an individual WTO Member, to determine that a measure is inconsistent with WTO rules.
- Section 301 constitutes a *prima facie* violation of Article 23, by reserving for the USTR the right to make a determination of inconsistency even in cases where the DSU proceedings have not been exhausted.
- The promise not to take certain actions under the DSU is undermined by a law in that same country that accords the right to that Member's officials to take the prohibited actions. However, the USTR convinced the Panel that it had curtailed its discretion through a Statement of Administrative Action (SAA) and through its statements before the Panel. The Panel concluded that if such curtailment be repudiated or in any other way removed by the US Administration or another branch of the US Government, a finding of WTO conformity would no longer be warranted.²⁸

iv. Section 301 and Its Controversies During the Days of the GATT

Economist Jagdish Bhagwati described Section 301 as the piece of legislation that sets out the US policy of ‘aggressive unilateralism’. In other words, this is intimidation. The box below provides some other comments regarding Section 301 in 1990 when the Act was being used.

²⁶ C. Brown, ‘Rogue 301: Trump to Dust Off Another Outdated US Trade Law?’, Peterson Institute for International Economics, 3 August 2017. Available from <https://piie.com/blogs/trade-investment-policy-watch/rogue-301-trump-dust-another-outdated-us-trade-law>.

²⁷ Brackets are the authors’ addition. WTO, WT/DS152/R ‘United States – Section 301-310 of the Trade Act of 1974 – Report of the Panel’, 22 December 1999. Summary provided in https://www.wto.org/english/tratop_e/dispu_e/cases_e/1pagesum_e/ds152sum_e.pdf.

²⁸ Ibid.

Box 2: The Unpopularity of Section 301

C. Hills, USTR 1989-93 (Address to the US Congress during her term):

Hills said that she would employ Section 301 provisions to expand the rules of the trading system and pry open foreign markets. However, she also made clear that ‘the chosen means to achieve U.S. trade policy goals encompass multilateralism, bilateralism, and unilateralism. This approach (Section 301) cannot give, it seems to me, the necessary emphasis where the United States claims she really belongs, i.e., the multilateral level. There is a basic contradiction here’.²⁹

C. Pirzio-Biroli (Deputy Head of the European Commission delegation in Washington DC in 1990):

‘Our American friends have often claimed that the objective of Section 301 is merely to open third markets, and retaliation is only a last resort for exercising leverage. But the reality is quite different: trading partners are given no choice but to negotiate on the basis of an agenda set by the United States, on the basis of U.S. judgements, U.S. perceptions, U.S. timetables, and, indeed, U.S. legislation. All this is a departure from the rule of international law.’

‘World trade problems cannot be solved through forced settlements based on a unilateral determination of unfairness, unilateral time-tables, and the threat of unilateral trade action if no agreement is reached. In particular, this cannot be done with respect to countries that possess substantial retaliatory power. Were the rest of the world to respond with their own 301s, GATT would seriously face collapse and the U.S. Congress would, to be sure, be up in arms’.³⁰

M. Marques Moreira (Brazil’s Ambassador to the US in 1990):

‘The United States is resorting to tools such as threats, crowbars, and sanctions. This approach does not square with respect for the symmetry of rights, fairness in trade, and the spirit of multilateralism. This is a matter of regret’.³¹

R. Hudec (Professor of Law, University of Minnesota, 1990):

Section 301 ‘is probably the most criticized piece of US foreign trade legislation since the Hawley-Smoot Tariff Act of 1930. 40 of the most prominent US economists signed a statement drafted by Professor Bhagwati that condemned Section 301’.³²

Hatano (Japan’s Ambassador in the 1990s):

‘To be judge, jury and executioner at the same time is not acceptable’.³³

²⁹ C. Pirzio-Biroli, ‘A European View of the 1988 U.S. Trade Act and Section 301’, in *Aggressive Unilateralism: America’s 301 Trade Policy and the World Trading System*, Jagdish Bhagwati and Hugh T. Patrick, eds. (University of Michigan Press, 1990).

³⁰ Ibid.

³¹ M. Marques Moreira, ‘The Point of View of an Emerging Trading Nation: Brazil’, in *Aggressive Unilateralism: America’s 301 Trade Policy and the World Trading System*, Jagdish Bhagwati and Hugh T. Patrick, eds. (University of Michigan Press, 1990).

³² R. Hudec, ‘Thinking about the New Section 301: Beyond Good and Evil’, in *Aggressive Unilateralism: America’s 301 Trade Policy and the World Trading System*, Jagdish Bhagwati and Hugh T. Patrick, eds. (University of Michigan Press, 1990).

³³ Holmer and Bello, ‘Promise and Peril’, cited in J. Silverman, ‘Multilateral Resolution Over Unilateral Retaliation: Adjudicating the Use of Section 301 Before the WTO,’ *University of Pennsylvania Journal of International Law* (Spring 1996).

VI. WHY ARE US' SECTION 301 ACTIONS ILLEGITIMATE AND MISGUIDED?

There are several important reasons why the US' arguments regarding China are flawed and its actions pursuant to Section 301 misguided and even illegitimate.

i. WTO Illegality and the Threat to the Multilateral Trading System

The United States' Section 301 trade actions against China are illegal under the WTO for the following reasons:

- They violate the Most Favoured Nation (MFN) treatment under GATT Article I as they only apply to China.
- They are inconsistent with GATT Article II, which applies to US' bound tariff commitments under the GATT.
- They are inconsistent with US obligations under the WTO Dispute Settlement Understanding. Article 23 of the DSU ('Strengthening of the Multilateral System') explicitly prohibits Members from applying unilateral retaliatory measures which are not based on the WTO dispute settlement procedures.

The disregard for WTO rules can have long term and profound implications. During the time of the GATT, the US refused to abide by GATT rules in the agricultural sector e.g. it sought waivers from GATT Art XI on quantitative restrictions relating to some agricultural products. The EU did the same – it did not adopt or did not implement panel reports that threatened elements of its Common Agricultural Policy. The outcome was that other Members did not apply GATT rules to agriculture.

The US' Section 301 actions, together with its tariff actions on steel and aluminum under Section 232, and the retaliations all these actions have sparked, if prolonged and even expanded, could have an extremely damaging impact on the GATT/ WTO's rules that have governed trade fairly smoothly since the second World War.

ii. Most of US' Accusations Are Based on US Standards, Not WTO Standards; Moreover US/ OECD Countries Use Similar Industrialisation Strategies

In the US' Section 301 accusations, the US is using its own standards to judge China, not the WTO's standards. Furthermore, most of the accusations in any case are practices which that OECD countries or the US itself have used or continue to use.

- a. US: China forces technology transfer through Joint Ventures, foreign equity limitations and licensing procedures

The conditions on technology transfer in joint ventures and licensing procedures are contractual matters between private parties. Such conditions are not disciplined by the TRIPS Agreement. TRIPS Art 28.2 says that patent owners have the 'right to assign, or transfer by successions, the patent and to conclude licensing contracts'.

Furthermore, stipulating technology transfer conditions for incoming investors is a strategy OECD countries have used. According to C. Wallace in her comprehensive

assessment of investment strategies by OECD countries, some of these countries have asked foreign investing companies to conduct a proportion of their Research and Development (R&D) locally, or that they ‘transfer or license the most up-to-date technology to domestic firms’.³⁴ China is simply taking a leaf from successful past experiences by more developed countries.

In addition, US companies have voluntarily entered into such arrangements, knowing that they have much to gain entering such a big market.³⁵ They can also negotiate their fees (JV Regulations Art 43.1) as part of the technology contract keeping in mind the conditions in the TIER and JV. In addition, there are no WTO rules on investment stating that such ‘performance requirements’ are not allowed, and the WTO’s General Agreement on Trade in Services (GATS) rules also allow for joint ventures and limits to foreign equity holding.³⁶

b. US: China uses discriminatory licensing conditions for foreign companies – Technology transfer provisions are more stringent for foreign companies than local ones

The US accuses China of lack of national treatment in China’s TIER regulation - where any improvements in imported technology belong to the party making the improvement. According to the US, this is a violation of national treatment in the TRIPS Agreement. However, the TRIPS Agreement is silent on improvements, and therefore China is not violating the Agreement. Furthermore, when interpreting Members’ TRIPS obligations, they must be read in conjunction with TRIPS Articles 7 and 8, that ‘the protection and enforcement of intellectual property rights should contribute to the promotion of technology innovation and to the transfer and dissemination of technology’ (WTO TRIPS Art. 7).

c. US: The Chinese government supports and even funds its companies to acquire US technology companies

There are no investment rules at the WTO stipulating that governments cannot support their companies in acquiring investments. In the same token, there are no rules disallowing the US, for example, to provide venture capital funds to start-ups in the US, and the US government has done this very successfully.

As former Chairman of Morgan Stanley Asia Stephen Roach notes, America has its own ‘highly visible manifestations of industrial policy the American way’. This has led to NASA-related spinoffs such as the Internet, GPS, semiconductors, nuclear power, imaging technology, pharmaceutical innovations and more³⁷.

³⁴ C. Wallace, *The Multilateral Enterprise and Legal Control: Host State Sovereignty in an Era of Economic Globalization* (2002).

³⁵ See opinion piece by S. Roach, ‘America’s Weak Case Against China’, 24 April 2018. Roach is the former Chairman of Morgan Stanley Asia.

³⁶ GATS Art. XVI says that Members can take ‘(e) measures which restrict or require specific types of legal entity or joint venture through which a service supplier may supply a service; and (f) limitations on the participation of foreign capital in terms of maximum percentage limit on foreign shareholding or the total value of individual or aggregate foreign investment’.

³⁷ Roach, op. cit.

d. US: China sponsors intrusions into US computer networks

Over the past years, there have been news reports alleging that both the US and China sponsor intrusions into each other's cyberspace. It is therefore surprising to hear the charges made by the US.

According to the Netherlands Institute of International Relations, under the Obama Administration, 'the US government ma(de) a distinction between intelligence operations for national security purposes and government sponsored cyber-espionage for commercial gain. The United States has (at least implicitly) acknowledged to be doing the first, which it calls legitimate, and has accused China of doing also the second, which it considers illegitimate'.³⁸

However, the distinctions between the two are blurred and artificial.³⁹ At the time of the Snowden revelations in June 2013, Snowden reported that the US National Security Agency (NSA) had been hacking into Chinese cell phone companies to steal millions of text messages and data.⁴⁰ Snowden also exposed the fact that the NSA had hacked into Tsinghua University, one of China's biggest research institutions from where internet data of millions of Chinese citizens can be mined. The South China Morning Post reported in 2013 that Tsinghua University was the country's first internet backbone network and was the world's largest national research hub.⁴¹ Ironically, earlier in that same month of June 2013, Obama was reported to have confronted the Chinese President on the hacking of US networks.⁴²

A recent report by Wired in June 2018 entitled 'China Escalates Hacks Against the US as Trade Tensions Rise' alleged that there are several cases of recent Chinese hacks into US cyberspace. The article, reporting an interview with David Kennedy, Chief Executive Officer (CEO) of the threat tracking firm Binary Defense Systems who formerly worked at NASA and the Marine Corps' signal intelligence unit says that 'China's actually backed off quite a bit on intellectual property theft, but when it comes to military trade secrets, military preparedness, military readiness, satellite communications, anything that involves the US's ability to keep a cyber or military edge, China has been very heavily focused on those targets'. Kennedy also added, 'The US does the same thing, by the way'.⁴³

iii. US' Heavy Role in Supporting Industrial and Technological Development – Why Blame China for Doing the Same?

The United States' complaints against the heavy role of the Chinese government give the impression that it is a laissez-faire state. This is far from the truth.

Robert Wade in his chapter 'The Paradox of US Industrial Policy: The Developmental State in Disguise', says that phrases like 'industrial policy', 'technology policy' and 'innovation policy' are anathema in US policy circles. The US has prided itself to be champions of the free market with no industrial policy. However, he posits that 'the US

³⁸ Clingendael – Netherlands Institute of International Relations, 'US Deterrence against Chinese Cyber Espionage', Policy Brief (September 2015).

³⁹ New York Times, 'With Spy Charges, U.S. Draws a Line that Few Others Recognize', 19 May 2014.

⁴⁰ South China Morning Post, 'US spies on Chinese mobile phone companies, steals SMS data: Edward Snowden', 23 June 2013.

⁴¹ South China Morning Post, 'NSA targeted China's Tsinghua University in extensive hacking attacks, says Snowden', 13 August 2013.

⁴² Business Insider, 'Obama To Confront Chinese President On Hacking Of US Networks', 4 June 2013.

⁴³ Wired, 'China Escalates Hacks Against the US as Trade Tensions Rise' 22 June 2018.

government has in fact undertaken much more industrial policy than this narrative implies, from the founding of the Republic to today, including the promotion of what became major technological innovations'.⁴⁴

He notes that the reason to keep industrial policy programmes 'substantially hidden' has been due to the prevailing power of market-fundamentalist forces. Too much publicity could lead to the closure of such programmes, as did happen for the Advanced Technology Program (ATP) cited below.⁴⁵

The genesis of the US' industrial policy dates back to its independence and Alexander Hamilton, the first Secretary of Treasury, who in 1791 had made recommendations on how to develop the US manufacturing sector. The goals were to catch up with Britain and build the material base for a powerful military. The policies that have been used include tariffs, subsidies, government procurement and public works etc.⁴⁶ C. Stensrud contends that the list of US presidents who have used industrial policy is 'extremely long', and includes economic conservatives and liberals. Even Reagan who had ruled out government intervention in firms changed tack and intervened with a long list of industrial development programmes.⁴⁷

As a result of the 2008 financial crisis, Obama focused government intervention on the financial services sector, but also manufacturing companies, through the Troubled Asset Relief Programme (TARP); provision of US\$2 trillion to enable the federal government to boost bank lending (2009 Financial Stability Plan); and US\$787 billion stimulus via the 2009 American Recovery and Reinvestment Act (ARRA).⁴⁸ In fact, these amounts may be a gross under-estimation. A Huffington Post report alleges that the real cost of the government bailout was a whopping US\$14.85 trillion.⁴⁹

Linda Weiss, in her book *America Inc?* in 2014 characterizes different states' level of involvement in promoting innovation (and thus competitiveness) – from the more passive end of techno-industrial governance e.g. simple expenditure on research, to more active involvement including:

- Procuring new technology
- Providing assured demand for the resulting innovations
- Devising the technology problem sets for industry to work with
- Generating public inventions / intellectual property for private firms to exploit
- Taking equity positions in innovative firms
- Devising with industry new technology standards to outflank foreign competitors etc.⁵⁰

Her conclusions at the time of writing in 2014 are interesting:

- Britain is at the more passive end of state involvement.

⁴⁴ R. Wade, 'The Paradox of US Industrial Policy: The Developmental State in Disguise,' in *Transforming Economies: Making Industrial Policy Work for Growth, Jobs and Development* (UNCTAD and ILO, 2014).

⁴⁵ Ibid.

⁴⁶ C. Stensrud, 'Industrial Policy in the United States', Civitas, October 2016.

⁴⁷ Ibid.

⁴⁸ Ibid.

⁴⁹ J. Talbott, 'TARP Uncovered – The Real Cost of the Government Bailout', *Huffington Post*, 25 May 2011.

⁵⁰ L. Weiss, *America Inc? Innovation and Enterprise in the National Security State* (2014).

- France and South Korea and the emerging markets, Brazil and China are in the middle and beyond (perhaps China's place may have moved up since then).
- US at the 'proactive' end. She concludes that 'of special interest, however, is the more active (or proactive) end of the spectrum – for it is here that we find the United States... the United States is quite possibly the preeminent power in using all these active forms of industrial governance – but often in forms that are decidedly not conventional'.

a. Supporting Innovation Programmes and Policies

The US federal government has been very actively providing research support to industries since the 1970s.⁵¹ This is particularly in the area of what Linda Weiss terms 'pre-competitive funding' i.e. funding for the development of a fledgling industry before it becomes export oriented or before there is import competition.⁵² Examples include the US Defense Department's Defense Advanced Research Projects Agency (DARPA), which according to Weiss, channeled vast amounts of federal funds to Stanford University, the University of California Berkeley, and the Lawrence Livermore National Laboratory in the 1970s. The spin-offs were private firms turning Silicon Valley into the innovation hub that it has become.⁵³

State developed technologies and innovations from government research labs e.g. the US National Institutes of Health (NIH), have also led to key intellectual property for US pharmaceutical companies.⁵⁴

An example of US support to industry is in the biotechnology sector. According to Vallas et al (2011), 'The knowledge economy [in biotech] did not spontaneously emerge from the bottom up, but was prompted by a top-down stealth industrial policy; government and industry leaders simultaneously advocated government intervention to foster the development of the biotechnology industry and argued hypocritically that government should let the free market work'.⁵⁵

Other examples of the US Government's efforts in supporting R&D that eventually supported US firms include the Advanced Technology Program (ATP) mentioned above, created by the National Institute of Standards and Technology (NIST) in 1988. This project was in response to fears of Japanese competition in the high tech industries. According to Wade, it was set up to stimulate the early stages of development of advanced technologies that could not get private funding. The program was eventually closed in 2007 (due to Republican opposition), but not before it had created a range of new products – from small disc drives (paving the way for consumer electronics such as the iPod), to flat panel displays, to biodegradable plastics etc.⁵⁶

⁵¹ Wade, op. cit.

⁵² Linda Weiss, 'Global Governance, National Strategies: How Industrialized States Make Room to Move under the WTO,' *Review of International Political Economy*, Vol. 12, No. 5 (Dec. 2005), pp. 723-749.

⁵³ Ibid.

⁵⁴ Ibid.

⁵⁵ Stephen P. Vallas, Daniel Lee Kleinmann and Dina Biscotti, 'Political Structures and the Making of US Biotechnology', in *State of Innovation: The U.S. Government's Role in Technology Development*, F. Block and M. Keller, eds. (Paradigm Publishers, 2011).

⁵⁶ Wade, op. cit.

An interesting comment by a US official involved in these technology programmes was the following: ‘We definitely see the programs as a de facto industrial policy, but we cannot use that term, so we usually call it R&D policy’.⁵⁷

A particularly strong strand of the US’ industrial policy is through its defense agencies. Linda Weiss traces the birth of innovation governance through what she terms the US’ ‘National Security State’: ‘For half a century and more, the United States has been the uncontested high technology hegemon leading the world in virtually all the major technologies that drive the modern economy and underpin its prosperity.’⁵⁸ What has led to the US’ economic and technological supremacy?

Weiss writes that World War II was a game changer for the US. It drove home the point that technological superiority was critical to military supremacy. Hence the military complex became very mindful of needing to sustain its technological leadership. In order to do so, it has increasingly relied on the private sector. The Department of Defense (DoD) had realized that it could not access the latest technologies unless it directly involved the private sector. As such, it ‘sweetens’ private companies by ensuring that there are also commercialization opportunities when they collaborate with the DoD and other security agencies. ‘Commercialization becomes the *sin qua non* of technological cum military primacy’, Weiss observes. Hence, security and commerce have become closely intertwined.

‘Looking with two eyes rather than one, we see another side to the innovativeness of such celebrated U.S. creations as Apple and Google namely, a medley of technologies that have emerged from costly and sustained state sponsorship. From the GPS to the cell phone, from the mouse to the Siri voice-activated personal assistant application on the new iPhone, or to Google Earth, Google Translate, and indeed Google’s search engine – all have one thing in common. They, like the internet and the IT revolution that precede it, emerged from patient federal investment in high-risk innovation, focused in the main on national security objectives’.⁵⁹

Box 3 below provides concrete examples of how the US government, through its security agencies promotes technological innovation that benefits the private sector.

Box 3: How US’ National Security Agencies Put US High Technology Companies at the Technological Frontier

- Contracts with the private sector to make and buy things that do not yet exist – that is, technology procurement (DoD, NASA, DoE, CIA)⁶⁰
- Provides assured demand for the innovations through acquisition contracts (from semiconductors to renewable energy devices; e.g. DoD, NASA, DoE)
- Devises the problem sets for technology developers in the private sector to work with, often yielding major breakthroughs that establish new industry sectors (ONR, DARPA, DoE, NIH)⁶¹
- Finances development of inventions in national laboratories, universities and the private

⁵⁷ Ibid.

⁵⁸ Weiss (2014), op. cit.

⁵⁹ Ibid.

⁶⁰ Department of Defense (DoD); National Aeronautics and Space Administration (NASA); Department of Energy (DoE); Central Intelligence Agency (CIA)

⁶¹ Office of Naval Research (ONR)

sector (NSF, DoD, DoE, NIH, NASA, CIA)⁶²

- Catalyzes the formation of new companies (all NSS components)⁶³
- Licenses inventions created in the national labs to U.S. industry; granting firms patent rights to publicly financed inventions (NIH, DoD, DoE)
- Establishes the foundational infrastructure for the modern Venture Capital (VC) industry to boost innovation
- Runs VC firms that take equity positions in selected startups and innovative companies (CIA, U.S. Army, DoE, DoD)
- Creates new institution forms that bring NSS-funded inventions to the market (numerous examples, ranging from VC funds to commercialization entities)
- Plugs gaps in innovation networks by providing a public space for matching up actors at different points in the innovation chain – researchers, program managers, venture capitalists, manufacturers, and buyers

Source: L. Weiss, *America Inc? Innovation and Enterprise in the National Security State* (2014).

b. Subsidising Industries

Between 2000 and 2015, the US federal government provided US\$68 billion in grants and tax credits to businesses. Some of these companies and how much they have received include Iberdrola (US\$2.17 billion), NextEra Energy (US\$1.94 billion), NRG Energy (US\$1.73 billion), Southern Company (US\$1.48 billion), Summit Power (US\$1.44 billion) and SCS Energy (US\$1.25 billion). These are six large energy companies.⁶⁴ Between 2013 and 2015, federal subsidies for fossil fuel producers totaled US\$17.2 billion.

The US also supports industries via state and local subsidies. The supports provided by US states to the following manufacturing firms (not including federal supports) are: Boeing (US\$4.4 billion) between 1997 – 2013; Aloca (an aluminum plant) in 2007 is US\$5.6 billion; Ford Motor (US\$2.1 billion) between 2000 and 2010; General Motors (US\$1.9 billion) between 2008 – 2011 etc.⁶⁵

c. Venture Capital (VC) Funds

Another critical way in which OECD governments and especially the US plays an activist role in supporting innovation is through government provision of venture capital funds for high technology start-ups. The role of VC funds in spurring innovation is well acknowledged – it is difficult otherwise for many firms to raise funding for high risk innovation projects.⁶⁶

In 2016, the US' total venture capital investments amounted to USD 66.6 billion or 86% of total venture capital investments in the OECD. For Europe, this came to USD 4.7 billion.⁶⁷ A significant portion of these VC funds have originated from government agencies. In fact,

⁶² National Science Foundation (NSF)

⁶³ National Security state (NSS)

⁶⁴ Stensrud, op. cit.

⁶⁵ P. Mattera and K. Tarczyska with G. LeRoy, 'Megadeals: The Largest Economic Development Subsidy Packages Ever Awarded by State and Local Governments in the United States' (Washington DC, Good Jobs First, 2013). Available from http://www.goodjobsfirst.org/sites/default/files/docs/pdf/megadeals_report.pdf.

⁶⁶ M. Rossi, 'The Contribution of Venture Capital to Innovation.' Available from <https://www.triplehelixassociation.org/helice/volume-3-2014/helice-issue-1/contribution-venture-capital-innovation>.

⁶⁷ OECD, *Entrepreneurship at a Glance* (2017).

the origin of US federal agencies' VC funds was the Central Intelligence Agency (CIA) in 1999.⁶⁸ With an initial US\$28 million, Stensrud says that the CIA invested in the development of commercial technologies that had market potential and could be applied to meet CIA imperatives. Apparently inspired by that success, 'many US federal agencies have set up their own public venture capital initiatives... But unlike private funds, whose aim is to make money, government agencies use these funds to develop, adapt and shape commercially viable technologies for their own needs. The agency does this by taking a hands-on role within the firm, usually via membership in a small firm's board of directors, cooperative prototype testing, or organizational and technical collaboration'.⁶⁹

d. Government Procurement

In developed countries, private citizens' procurement accounts for about 10 – 15 percent of GDP. Government purchases of goods and services can be as much or even double that amount. Hence developed country governments (and not surprisingly also China today), have used government purchases as a policy tool to favour domestic over foreign suppliers.⁷⁰

On paper, the US has pursued open markets in the area of government procurement in trade agreements. At the same time, however, it has had a very protectionist government procurement policy – particularly in terms of its 'Buy American' Act, which has been in existence since 1933. According to Weiss and Thurbon:

'Traditionally, in the US home market, GP (government procurement) has been used to nurture a domestic industry to the point where it achieves an edge over foreign competitors...

'The US – with its legally enshrined Buy American programs – has demonstrated more effectively than other nations the tight nexus between government purchasing and the global growth of national champions: Boeing, IBM, Lockheed, Caterpillar, Motorola...had their roots in government contracting... Long-term procurement contracts together with government R&D provided the launch market essential to the take-off of the US computer industry, for example'.⁷¹

They give the example of IBM where over 50 percent of its revenues in the 1950s came from government contracts. This 'helped to push IBM to the head of the pack'.⁷²

In 2009, Obama inserted a 'Buy American' provision in the American Recovery and Reinvestment Act (ARRA). According to C. Stensrud, 'This imposed a general requirement that any public infrastructure or public works project funded by the ARRA must only use iron, steel and other manufactured goods produced in the US. Its purpose was to ensure that ARRA funds for infrastructure development, which totaled US\$105 billion, would be used to stimulate US producers and manufacturers'.⁷³

⁶⁸ Wade, op. cit.

⁶⁹ Stensrud, op. cit.

⁷⁰ K. Miyagiwa, 'Oligopoly and Discriminatory Government Procurement Policy', *The American Economic Review*, 81 (1991):1320-8; L. Weiss and E. Thurbon, 'The business of buying American: Public procurement as trade strategy in the USA', *Review of International Political Economy* 13:5 (December 2006), pp. 701-724.

⁷¹ Weiss and Thurbon, op. cit.

⁷² Ibid.

⁷³ Stensrud, op. cit.

How has the US managed to be both pursuing open markets and protecting its own GP markets? Whilst many countries do have buy local programmes, a major difference is that in the US, Buy American sets a legal requirement for a number of its federal agencies, not just a preference to buy local. This has curtailed US government procurement of imports.⁷⁴ According to Weiss and Thurbon, US' WTO GPA (Government Procurement Agreement) or FTA (Free Trade Agreement) partners are granted a 'waiver' from Buy American legislation. However, 'the genius lies in the catch: waivers still remain bound by and subject to US laws, administrative decisions not to use open tendering, and regulations (which create new restrictions).'⁷⁵

In February 2017, the US Government Accountability Office noted that government procurement is a significant market for international business. However, they cite the USTR as saying that 'government procurement markets are often closed to foreign competition'.⁷⁶

Box 4: Some of US' Buy America Programmes

The following is a non-exhaustive list of requirements under the US' Buy America Act:

The **2009 American Recovery and Reinvestment Act (ARRA)** mandated that recovery funds for projects for the construction, alteration, maintenance, or repair of a public building or public work must use all of the iron, steel, and manufactured goods produced in the US.

The longstanding Buy American domestic content provisions under the **Federal Aviation Administration (FAA)** require all steel and manufacturing products to be produced in the US. When procuring a facility or equipment under the Airport and Airway Improvement Act of 1982, the cost of components and subcomponents produced in the United States must be more than 60 percent of the cost of all components and the final assembly of the facility or equipment must occur in the United States.

The **Federal Highway Administration (FHWA)** requires that the steel, iron, and manufactured goods used in its procurement process be produced in the United States.

The **Federal Railroad Administration (FRA)** Buy American chapters also require that the steel, iron, and manufactured goods be produced in the United States under its High Speed Rail Program.

Source: Arent Fox, How 'Does a Company Comply with New Buy American Rules?', 2015, <https://www.arentfox.com/perspectives/alerts/how-does-company-comply-new-buy-american-rules>.

e. Reforming Companies - Too Big to Fail

The US also has a history of assisting companies to prevent their failure. An example is its supports to General Motors. In 2009, the US government invested US\$49.5 billion in GM. It even went so far as to reform the company. The CEO was replaced, and the new Board of Directors eliminated product lines, closed plants and reduced the number of dealerships.⁷⁷

⁷⁴ Weiss and Thurbon, op. cit.

⁷⁵ Ibid.

⁷⁶ U.S. Government Accountability Office, 'Government Procurement: US Reported Opening More Opportunities to Foreign Firms Than Other Countries, but Better Data Are Needed' (2017).

⁷⁷ Stensrud, op. cit.

f. Tax Breaks

According to G.P. Pisano's examination of the US tax code, particular industries, activities or businesses are inadvertently or strategically selected for preferential treatment.⁷⁸ Many of these preferential tax policies exist at the state level and states compete with one another to provide the best conditions to attract companies to their territory. Some states have no corporate or income tax. Others have no sales tax. States can also offer tax incentives for specific economic objectives including job creation or increased business environment.⁷⁹

According to C. Stensrud, two of the biggest tax breaks given since 2014 were to Tesla Motors and Intel. In 2014, Tesla Motors received a subsidy package worth approximately US\$1.3 billion from Nevada. In the same year, Oregon gave Intel 30 years worth of property tax breaks which were predicted to save the firm US\$2 billion.⁸⁰

iv. US' Trade Deficit Is More Closely Linked to Savings Levels, Exchange Rates and the Dollar as Reserve Currency

The US has had the world's largest trade deficit for almost half a century⁸¹ and this started long before it had any deficit issues with China. Now, its largest bilateral deficit is with China, amounting to US\$375 billion in 2017. There are more complex and structural reasons behind the US trade deficit beyond tariffs and the policies of China. Imposing tariffs, according to experts, will not resolve the issue. The factors contributing to trade deficits include:

a. Industrial structures and value chain mechanisms

The size of the US' bilateral trade deficit with China must be understood taking into account industrial structures and value chain mechanisms. The US\$375 billion figure includes components that are often overlooked:

- The decentralization strategy of US companies which have located to China, but produce for the US market, exploiting low salaries and a disciplined workforce;
- Exports from other markets that produce intermediate products for the US market, but these products are channeled through China for assembly. This figure is about 35-40% of total Chinese exports to the US.⁸²

b. The level of net savings in an economy

A country's overall trade deficit is related to its spending relative to its income. The US is known for its overspending: consumption and property booms driven by large household debt (hitting US\$13.2 trillion in the first quarter of 2018) and large government budget deficits (\$665 billion in 2017).⁸³ These are closely linked to monetary, financial and fiscal policies. In

⁷⁸ G.P. Pisano, 'It's Manufacturing's Turn for Special Treatment', *Harvard Business Review*, 5 March.

⁷⁹ Stensrud, op. cit.

⁸⁰ Ibid.

⁸¹ A. Chowdhury A and J. Sundaram, 'Will Trump's Trade War Make America Great Again? *Inter Press Service*, July 2018.

⁸² Y. Akyüz and V. Yu, 'The Financial Crisis and the Global South: Impact and Prospects', South Centre Research Paper 76 (2017); S. Jean, P. Martin and A. Sapir, 'International Trade Under Attack: What Strategy for Europe?' French Council for Economic Analysis, Les notes, no. 46, July 2018.

⁸³ Chowdhury and Sundaram, op. cit.

contrast, the Chinese have a low level of household consumption and high savings. The US depends on debt-driven consumption and property booms to maintain its growth. China on the other hand has depended on high savings, exports and investment to drive its growth.⁸⁴

c. Strength of the Dollar

The value of the dollar also has a major impact on trade deficit numbers. A strong dollar leads to increased US imports whilst US exports would also be reduced.

d. The US dollar as the international reserve currency

As the dominant international 'reserve currency', there is always demand for dollars e.g. in the form of US Treasury bonds and bills. This demand for the dollar fuels the US' debt consumption growth because the US can run deficits without much negative impact on the value of the dollar or inflationary pressures as would have happened to other countries. This is a huge advantage for the country holding a reserve currency. According to UNCTAD, 'Having the only reserve currency is like a monopoly, where the monopolist enjoys certain privileges, though it is not without risks... In conventional understanding, deficit countries are in an inferior position to surplus countries, but the reserve-currency country is a privileged exception'.⁸⁵

v. **China's Intellectual Property Laws Are Being Strengthened Even Beyond WTO's TRIPS Agreement**

The US' charges against China regarding intellectual property (IP) protection must also be seen against the backdrop of significant progress that has been made by China in the last two and the half decades.

Since 1991, China has already undergone several rounds of amendments in IP law.

- The first took place as a result of the US and China memorandum for the protection of IP in 1992. As a result, China amended its patent, trademark and unfair competition laws, as well as the protection of trade secrets.
- The second phase of amendments took place as a result of its WTO accession from 1997 – 2001, where patent, copyright, trade market, plant varieties, and other IP laws were improved upon. After this phase, there were still pending issues around enforcement.
- Enforcement issues have led to the current round of amendments from 2008 to the present.⁸⁶ One recent development has been the adoption of the Guidelines on Further Improvement of IPR Protection System in 2016⁸⁷, which is the first set of guidelines ever issued at a high level on IP protection.

⁸⁴ Y. Akyüz, *Playing with Fire: Deepened Financial Integration and Changing Vulnerabilities of the Global South* (Oxford: OUP, 2017); Y. Li, informal communication, 2018.

⁸⁵ J. Priewe, 'What Went Wrong? Alternative Interpretations of the Global Financial Crisis,' in *The Financial and Economic Crisis of 2008-2009 and Developing Countries*, S. Dullien, D. Kotte, A. Marquez and J. Priewe, eds. (UNCTAD, 2010).

⁸⁶ M. Li, 'Intellectual Property Protection: Theory and Practice in China', lecture from the Chinese Academy of Social Sciences, July 2018.

⁸⁷ China releases guidelines on the protection of property rights, published by the official website of the State Council of the People's Republic of China on November 28, 2016. See http://english.gov.cn/news/top_news/2016/11/28/content_281475502537235.htm.

In fact, China's implementation of more stringent IP disciplines compared to some other developing countries, e.g. in the area of data exclusivity, has now raised issues. China's domestic generic drug industry has been stifled and there is now a public outcry regarding the unaffordable costs of cancer and other drugs.⁸⁸

In 2017, President Xi Jinping proclaimed that China 'must step up efforts to punish illegal infringement of intellectual property rights and force infringers to pay a heavy price.'⁸⁹ This is reflected in the current proposed policy change to the Patent Law. Among others, the statutory damages would increase from their current levels, between 10,000 RMB to 1 million RMB (\$1,550 to \$155,000), to between 100,000 RMB and 5 million RMB (\$155,000 to \$775,000). Foreign companies fare just as well in enforcing IP rights in trial as privately-owned Chinese firms. A 2016 study by Love, Helmers, and Eberhardt found that between 2006 and 2011, foreign companies filed over 10 percent of patent infringement cases in China and won over 70 percent of those cases.⁹⁰ 2017 saw a major increase in IP litigation in China. There were a total of 237,242 cases filed and 225,678 cases concluded, with an increase of 33.50% and 31.43%, respectively, compared to 2016.⁹¹ Comparing dockets with the United States, in 2017 United States courts heard 4,057 cases patent cases, 3,781 trademark cases, and 1,019 copyright cases, according to Lex Machina.⁹²

Nevertheless, despite all this, the US takes issue that China has still not introduced a trade secret protection law, and lacks decisive action to curb counterfeiting and piracy. These accusations are questionable. First, there is no obligation on any WTO Member under the TRIPS Agreement to enact any specific law on protection of trade secrets. China has the flexibility under the TRIPS Agreement to determine how to protect trade secrets and is not required to enact a specific trade secret law.⁹³ Second, the TRIPS Agreement requires WTO Members to provide right holders with effective procedures and mechanisms for enforcing their rights, including expeditious remedies to prevent infringements and remedies which constitute a deterrent to further infringements. However, the specific nature of these procedures and remedies are not specified. In addition, a 2009 WTO panel ruling on a dispute between the US and China (China - Measures Affecting the Protection and Enforcement of Intellectual Property Rights) did not find the intellectual property enforcement regime in China relating to customs measures and criminal liability thresholds vis-a-vis trademarks counterfeiting and copyright piracy to be in contravention with China's obligations under the TRIPS Agreement.

Strong IP disciplines at the WTO have been highly controversial due to their development implications. In fact, all developed economies took off by borrowing

⁸⁸ Thepharmaletter, 'Chinese box-office hit movie prompts Sino/Indian action on cancer drug availability', 11 July 2018.

⁸⁹ Sputnik News, 'Chinese Army Pushes for Stronger Defense Tech Intellectual Property Protection', 9 February 2018.

⁹⁰ B. Love, C. Helmers, and M. Eberhardt, 'Patent Litigation in China: Protecting Rights or the Local Economy?' *Vanderbilt Journal of Entertainment & Technology Law*, Vol. 18 (2016), p. 713.

⁹¹ See the annual Supreme People's Court 2017 Report on the Situation Regarding Judicial Enforcement of IPR in China.

⁹² See <https://chinaipr.com/2018/06/19/reviewing-the-2017-spc-report-on-ipr-judicial-protection-the-generalities-and-the-exceptions/>.

⁹³ Article 39.2 of the TRIPS Agreement recognises the right of natural or legal persons to protect information lawfully under their control from being disclosed to third parties without their consent, but does not prescribe how WTO members should facilitate such protection. Many WTO members do not have a specific trade secret law.

technologies from others – the Americans and Germans industrialised copying from the British. Japan copied from the US, and Korea borrowed from the US and Japan. 'However, it seems that what is 'technological diffusion' from the perspective of the late industrializer is 'piracy' from that of the industrial leader.'⁹⁴

As noted by a US Congress advisory body: '[w]hen the United States was still a relatively young and developing country...it refused to respect international intellectual property rights on the grounds that it was freely entitled to foreign works to further its social and economic development.'⁹⁵

China has struggled to keep this balance. Now as an innovator itself, it is implementing IP laws and regulations that increasingly go beyond WTO standards, not just because of international pressures, but also due to its own interests.

vi. China's Indigenous Efforts in Creating R&D and Innovation Capacity

For the first time, the Global Innovation Index (GII) 2018 has ranked China amongst the top twenty countries in terms of its level of innovation. The GII, published annually by Cornell University, INSEAD ("Institut Européen d'Administration des Affaires") and the World Intellectual Property Organization (WIPO) ranked China at number seventeen. The US was number six after Switzerland, the Netherlands, Sweden, the United Kingdom, and Singapore.⁹⁶

China's Research and Development (R&D) expenditures reached 2.1% of total GDP in China in 2017 (approximately USD\$279 billion), with a growth rate in the last few years of around 14%.⁹⁷ China currently contributes 20.8% of global R&D spending, a percentage equivalent to the contribution of all the European countries together, and only 4.7% less than the US.⁹⁸ China has become a global leader in areas like solar photovoltaic technology, high-speed rail and space exploration. Future innovation in several sectors, such as artificial intelligence, advanced manufacturing, renewable energy and big data, are likely to be increasingly dependent on R&D undertaken by Chinese companies.

According to a news report, Tsinghua University, home to China's top engineering and computer science talents, rivals the US' Massachusetts Institute of Technology (MIT) in the number of patents granted in the U.S., an indication of China's strength in 'knowledge output'.⁹⁹

⁹⁴ W. Bello, 'The Iron Cage: The WTO, the Bretton Woods Institutions, and the South', *Focus on Trade* No. 41 (1999).

⁹⁵ U.S. Congress, Office of Technology Assessment, *Intellectual Property Rights in an Age of Electronics and Information*, OTA-CIT-302 (Washington, DC: U.S. Government Printing Office, April 1986).

⁹⁶ WIPO, PR/2018/819 'Global Innovation Index 2018: China Cracks Top 20. Top Rankings: Switzerland, Netherlands, Sweden, UK, Singapore, U.S.', 10 July 2018. Available from http://www.wipo.int/pressroom/en/articles/2018/article_0005.html.

⁹⁷ China Banking News, 'R&D Spending in China Rises 14% in 2017, Equals 2.1% of GDP', 28 February 2018. Available from <http://www.chinabankingnews.com/2018/02/28/rd-spending-china-rises-14-2017-equals-2-1-gdp/>.

⁹⁸ The Industrial Research Institute, '2017 R&D Trends Forecast: Results from the Industrial Research Institute's Annual Survey: Slowing economies slow R&D investments and mute optimism', 19 January 2017.

⁹⁹ W. Suzuki, 'China's AI focus will leave US in the dust, says top university professor: Tsinghua University 'already rivals MIT' in number of US patents granted', *Nikkei Asian Review*, 25 July 2018.

Thus, portraying China as a country where technological progress is merely based on ‘theft’ of IP and imitation is far from the reality.

VII. CONCLUSIONS

The real reasons behind the actions taken by the US Administration under Section 301 are not about trade. Instead, they are the US' attempts to stop China's legitimate policies to advance in industrial development and technological catch-up. In fact, China is simply putting in place its own version of policies and practices that the US and other OECD countries have been doing and still pursue. The US primarily has been very heavily providing support to its high technology companies to maintain their lead in innovation, including through its defense agencies and other programmes.

The US' Section 301 tariffs, coupled also with its actions under Section 232 (additional tariffs on steel and aluminum, possibly autos and other products in the future) are already spurring retaliation. The ensuing trade war has already given rise to economic uncertainty. One scenario could be a slow down for some economies as severe as the 2008-2009 recession.¹⁰⁰ In fact, economies which have big internal markets may be less impacted. Those more exposed may be economies that are more open to international trade e.g. African countries and Least Developed Countries (LDCs) where their level of imports and exports in relation to Gross Domestic Product (GDP) is higher than for developed countries. An economic slowdown, depending on how long it lasts, could mean job losses and a setback in terms of economic and human development. In addition, there could also be a severe financial crisis, mainly in emerging economies most exposed to loss of investors' appetite.¹⁰¹

When faced with all these difficulties, it is unclear how countries may respond. If the US can protect itself with tariffs beyond their WTO commitments, other countries in difficult economic situations could not be blamed for doing the same. Where would this leave the World Trade Organization, since tariff commitments, possibly the pre-eminent rule in the WTO, could be flouted left, right and center? It could, over a prolonged period, severely erode the legitimacy of the WTO's trade regulatory functions, which is fundamentally premised on all Members respecting the rules and their commitments.

In addition, there could be major consequences on multilateralism even beyond the WTO. The ethos of multilateralism, even if far from perfect in practice, is about cooperation. Economics professor John McMillan had characterized multilateralism this way: 'If you help me, I'll help you'. However, under Section 301, it is 'Unless you help me, I'll hurt you'.¹⁰² As we collectively face the economic, environmental, human development and migration challenges of the 21st century, it does not bode well for countries in our interconnected world to be relating to each other in this way.

¹⁰⁰ Simulation by the French Council of Economic Analysis, 'International Trade Under Attack: What Strategy for Europe?', Les notes, no. 46, July 2018.

¹⁰¹ Y. Akyüz, Informal Communication, July 2018.

¹⁰² J. McMillan, 'Strategic Bargaining and Section 301', in *Aggressive Unilateralism: America's 301 Trade Policy and the World Trading System*, Jagdish Bhagwati and Hugh T. Patrick, eds. (University of Michigan Press, 1990).

ANNEX 1: US' UNILATERAL TRADE ACTION ON US\$34 BILLION OF ITS IMPORTS COVERS 6.4% OF ITS TOTAL IMPORTS FROM CHINA

HS Chapter	Description	US imports from China (2017) covered by Section 301 tariffs imposed on 6 July 2018 USD '000	Total US import from China in the HS chapter (2017) USD '000	% of imports covered
84	Machinery, mechanical appliances, nuclear reactors, boilers; parts thereof	16'519'833	112'401'889	14.7%
85	Electrical machinery and equipment and parts thereof	10'163'146	150'029'430	6.8%
90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus	4'562'744	12'315'341	37.0%
87	Vehicles other than railway or tramway rolling stock	1'862'833	15'569'531	12.0%
88	Aircraft, spacecraft, and parts thereof	516'983	517'656	99.9%
86	Railway or tramway locomotives, rolling stock and parts thereof	164'435	606'752	27.1%
28	Inorganic chemicals	3'609	1'458'609	0.2%
89	Ships, boats and floating structures	644	146'422	0.4%
40	Rubber and articles thereof	65	3'750'048	0.0%
Other chapters			229'392'812	0.0%
Total		33'794'292	526'188'490	6.4%

Source: Authors' calculations based on published lists by the US Trade Representative (USTR) and the Ministry of Commerce, People's Republic of China (MOFCOM) and trade data from ITC TradeMap

ANNEX 2: LISTS 1 AND 2 – US' SECTION 301 TARIFFS AND CHINA'S RESPONSES

	US	China
Total bilateral exports (2017)	Exports from US USD 154.83 billion	Exports from China USD 526.2 billion
No. of Lists 1 tariff lines involved in US' Section 301 Action and China's Response (6 July 2018)	818	545
Trade covered by Lists 1 (based on 2017 trade figures)	USD 33.8 billion	USD 33.8 billion
Total exports impacted by List 1 (value)	21.8% of total US goods exports to China	6.4% of total Chinese goods exports to US
Trade covered by Lists 2 implemented on 23 August 2018	USD 16 billion (according to media sources, however, ITC Trade Map figures indicate this is about USD 12.3 billion in 2017 trade).	USD 16 billion (also according to media sources)
Bilateral exports impacted by Lists 1 & 2 (value)	approximately 32.1%	approximately 9.5%

Source: Authors' calculations based on published lists by the US Trade Representative (USTR) and the Ministry of Commerce, People's Republic of China (MOFCOM) and trade data from ITC TradeMap

ANNEX 3: DSB ACTIONS TAKEN IN THE WTO ASSOCIATED WITH US' SECTION 301 ACTIONS

i) **DS542: China – Certain Measures concerning the Protection of Intellectual Property Rights**

Activity	Date of submission	WTO document reference
US request for consultations with China	23 March 2018	WT/DS542/1
Requests to join consultations by TPKM (Chinese Taipei), the European Union, Japan, Saudi Arabia, and Ukraine	Japan – 3 April 2018 EU, Ukraine – 4 April 2018 TPKM, Saudi Arabia – 5 April 2018	WT/DS542/2-6
Acceptance by China of requests of the EU and Japan to join the consultations	Not dated. WTO document date is 16 July 2018	WT/DS542/7

ii) **DS543: United States – Tariff Measures on Certain Goods from China**

Activity	Date of submission	WTO document reference
China's request for consultations with US (refers to proposed list worth USD 50 billion with 25% additional duty)	4 April 2018	WT/DS543/1
Communication from US arguing that China's April 4 letter does not conform to the requirements of DSU Article 4	13 April 2018	WT/DS543/2
Communication from China – response to US communication	25 April 2018	WT/DS543/3
China's request for consultations with US – addendum (refers to additional US tariffs of 25% effective since 6 July)	6 July 2018	WT/DS543/1/Add.1
China's request for consultations with US – 2nd addendum (refers to proposed list of USD 200 billion for 10% additional duty)	16 July 2018	WT/DS543/1/Add.2
Communication from the United States – seeking clarification on China's justification for imposing additional tariffs on US imports as of 6 July 2018	16 July 2018	WT/DS543/4
Communication from the United States – seeking to hear China's justification for their 6 July 2018 additional duties and how China intends to address its trade-distorting policies raised by US	26 July 2018	WT/DS543/5

iii) **DS549: China – Certain Measures on the Transfer of Technology**

Activity	Date of submission	WTO document reference
EU's request for consultations with China	1 June 2018	WT/DS549/1
Requests to join consultations by Japan, US and TPKM	Japan - 8 June 2018; US - 14 June 2018; TPKM - 15 June 2018	WT/DS549/2-4

SOUTH CENTRE RESEARCH PAPERS

No.	Date	Title	Author
1	November 2005	Overview of the Sanitary and Phytosanitary Measures in QUAD Countries on Tropical Fruits and Vegetables Imported from Developing Countries	Ellen Pay
2	November 2005	Remunerating Commodity Producers in Developing Countries: Regulating Concentration in Commodity Markets	Samuel G. Asfaha
3	November 2005	Supply-Side Measures for Raising Low Farm-gate Prices of Tropical Beverage Commodities	Peter Robbins
4	November 2005	The Potential Impacts of Nano-Scale Technologies on Commodity Markets: The Implications for Commodity Dependent Developing Countries	ETC Group
5	March 2006	Rethinking Policy Options for Export Earnings	Jayant Parimal
6	April 2006	Considering Gender and the WTO Services Negotiations	Meg Jones
7	July 2006	Reinventing UNCTAD	Boutros Boutros-Ghali
8	August 2006	IP Rights Under Investment Agreements: The TRIPS-plus Implications for Enforcement and Protection of Public Interest	Ermias Tekeste Biadgleng
9	January 2007	A Development Analysis of the Proposed WIPO Treaty on the Protection of Broadcasting and Cablecasting Organizations	Viviana Munoz Tellez and Andrew Chege Waitara
10	November 2006	Market Power, Price Formation and Primary Commodities	Thomas Lines
11	March 2007	Development at Crossroads: The Economic Partnership Agreement Negotiations with Eastern and Southern African Countries on Trade in Services	Clare Akamanzi
12	June 2007	Changes in the Governance of Global Value Chains of Fresh Fruits and Vegetables: Opportunities and Challenges for Producers in Sub-Saharan Africa	Temu A.E and N.W Marwa
13	August 2007	Towards a Digital Agenda for Developing Countries	Dalindyebo Shabalala
14	December 2007	Analysis of the Role of South-South Cooperation to Promote Governance on Intellectual Property Rights and Development	Ermias Tekeste Biadgleng
15	January 2008	The Changing Structure and Governance of Intellectual Property Enforcement	Ermias Tekeste Biadgleng and Viviana Munoz Tellez
16	January 2008	Liberalization of Trade in Health Services: Balancing Mode 4 Interests with Obligations to Provide Universal Access to	Joy Kategekwa

		Basic Services	
17	July 2008	Unity in Diversity: Governance Adaptation in Multilateral Trade Institutions Through South-South Coalition-Building	Vicente Paolo B. Yu III
18	December 2008	Patent Counts as Indicators of the Geography of Innovation Activities: Problems and Perspectives	Xuan Li
19	December 2008	WCO SECURE: Lessons Learnt from the Abortion of the TRIPS-plus-plus IP Enforcement Initiative	Xuan Li
20	May 2009	Industrialisation and Industrial Policy in Africa: Is it a Policy Priority?	Darlan F. Marti and Ivan Ssenkubuge
21	June 2009	IPR Misuse: The Core Issue in Standards and Patents	Xuan Li and Baisheng An
22	July 2009	Policy Space for Domestic Public Interest Measures Under TRIPS	Henning Grosse Ruse – Khan
23	June 2009	Developing Biotechnology Innovations Through Traditional Knowledge	Sufian Jusoh
24	May 2009	Policy Response to the Global Financial Crisis: Key Issues for Developing Countries	Yılmaz Akyüz
25	October 2009	The Gap Between Commitments and Implementation: Assessing the Compliance by Annex I Parties with their Commitments Under the UNFCCC and its Kyoto Protocol	Vicente Paolo Yu III
26	April 2010	Global Economic Prospects: The Recession May Be Over But Where Next?	Yılmaz Akyüz
27	April 2010	Export Dependence and Sustainability of Growth in China and the East Asian Production Network	Yılmaz Akyüz
28	May 2010	The Impact of the Global Economic Crisis on Industrial Development of Least Developed Countries	Report Prepared by the South Centre
29	May 2010	The Climate and Trade Relation: Some Issues	Martin Khor
30	May 2010	Analysis of the Doha Negotiations and the Functioning of the World Trade Organization	Martin Khor
31	July 2010	Legal Analysis of Services and Investment in the CARIFORUM-EC EPA: Lessons for Other Developing Countries	Jane Kelsey
32	November 2010	Why the IMF and the International Monetary System Need More than Cosmetic Reform	Yılmaz Akyüz
33	November 2010	The Equitable Sharing of Atmospheric and Development Space: Some Critical Aspects	Martin Khor
34	November 2010	Addressing Climate Change through Sustainable Development and the Promotion of Human Rights	Margreet Wewerinke and Vicente Paolo Yu III
35	January 2011	The Right to Health and Medicines: The Case of Recent Negotiations on the Global	Germán Velásquez

		Strategy on Public Health, Innovation and Intellectual Property	
36	March 2011	The Nagoya Protocol on Access and Benefit Sharing of Genetic Resources: Analysis and Implementation Options for Developing Countries	Gurdial Singh Nijar
37	March 2011	Capital Flows to Developing Countries in a Historical Perspective: Will the Current Boom End with a Bust?	Yılmaz Akyüz
38	May 2011	The MDGs Beyond 2015	Deepak Nayyar
39	May 2011	Operationalizing the UNFCCC Finance Mechanism	Matthew Stilwell
40	July 2011	Risks and Uses of the Green Economy Concept in the Context of Sustainable Development, Poverty and Equity	Martin Khor
41	September 2011	Pharmaceutical Innovation, Incremental Patenting and Compulsory Licensing	Carlos M. Correa
42	December 2011	Rethinking Global Health: A Binding Convention for R&D for Pharmaceutical Products	Germán Velásquez and Xavier Seuba
43	March 2012	Mechanisms for International Cooperation in Research and Development: Lessons for the Context of Climate Change	Carlos M. Correa
44	March 2012	The Staggering Rise of the South?	Yılmaz Akyüz
45	April 2012	Climate Change, Technology and Intellectual Property Rights: Context and Recent Negotiations	Martin Khor
46	July 2012	Asian Initiatives at Monetary and Financial Integration: A Critical Review	Mah-Hui (Michael) Lim and Joseph Anthony Y. Lim
47	May 2013	Access to Medicines and Intellectual Property: The Contribution of the World Health Organization	Germán Velásquez
48	June 2013	Waving or Drowning: Developing Countries After the Financial Crisis	Yılmaz Akyüz
49	January 2014	Public-Private Partnerships in Global Health: Putting Business Before Health?	Germán Velásquez
50	February 2014	Crisis Mismanagement in the United States and Europe: Impact on Developing Countries and Longer-term Consequences	Yılmaz Akyüz
51	July 2014	Obstacles to Development in the Global Economic System	Manuel F. Montes
52	August 2014	Tackling the Proliferation of Patents: How to Avoid Undue Limitations to Competition and the Public Domain	Carlos M. Correa
53	September 2014	Regional Pooled Procurement of Medicines in the East African Community	Nirmalya Syam
54	September 2014	Innovative Financing Mechanisms: Potential Sources of Financing the WHO Tobacco Convention	Deborah Ko Sy, Nirmalya Syam and Germán Velásquez

55	October 2014	Patent Protection for Plants: Legal Options for Developing Countries	Carlos M. Correa
56	November 2014	The African Regional Intellectual Property Organization (ARIPO) Protocol on Patents: Implications for Access to Medicines	Sangeeta Shashikant
57	November 2014	Globalization, Export-Led Growth and Inequality: The East Asian Story	Mah-Hui Lim
58	November 2014	Patent Examination and Legal Fictions: How Rights Are Created on Feet of Clay	Carlos M. Correa
59	December 2014	Transition Period for TRIPS Implementation for LDCs: Implications for Local Production of Medicines in the East African Community	Nirmalya Syam
60	January 2015	Internationalization of Finance and Changing Vulnerabilities in Emerging and Developing Economies	Yılmaz Akyüz
61	March 2015	Guidelines on Patentability and Access to Medicines	Germán Velásquez
62	September 2015	Intellectual Property in the Trans-Pacific Partnership: Increasing the Barriers for the Access to Affordable Medicines	Carlos M. Correa
63	October 2015	Foreign Direct Investment, Investment Agreements and Economic Development: Myths and Realities	Yılmaz Akyüz
64	February 2016	Implementing Pro-Competitive Criteria for the Examination of Pharmaceutical Patents	Carlos M. Correa
65	February 2016	The Rise of Investor-State Dispute Settlement in the Extractive Sectors: Challenges and Considerations for African Countries	Kinda Mohamadieh and Daniel Uribe
66	March 2016	The Bolar Exception: Legislative Models And Drafting Options	Carlos M. Correa
67	June 2016	Innovation and Global Intellectual Property Regulatory Regimes: The Tension between Protection and Access in Africa	Nirmalya Syam and Viviana Muñoz Tellez
68	June 2016	Approaches to International Investment Protection: Divergent Approaches between the TPPA and Developing Countries' Model Investment Treaties	Kinda Mohamadieh and Daniel Uribe
69	July 2016	Intellectual Property and Access to Science	Carlos M. Correa
70	August 2016	Innovation and the Global Expansion of Intellectual Property Rights: Unfulfilled Promises	Carlos M. Correa
71	October 2016	Recovering Sovereignty Over Natural Resources: The Cases of Bolivia and Ecuador	Humberto Canpodonico
72	November 2016	Is the Right to Use Trademarks Mandated by the TRIPS Agreement?	Carlos M. Correa
73	February 2017	Inequality, Financialization and Stagnation	Yılmaz Akyüz
74	February 2017	Mitigating the Regulatory Constraints	Carlos M. Correa

		Imposed by Intellectual Property Rules under Free Trade Agreements	
75	March 2017	Implementing Farmers' Rights Relating to Seeds	Carlos M. Correa
76	May 2017	The Financial Crisis and the Global South: Impact and Prospects	Yılmaz Akyüz
77	May 2017	Access to Hepatitis C Treatment: A Global Problem	Germán Velásquez
78	July 2017	Intellectual Property, Public Health and Access to Medicines in International Organizations	Germán Velásquez
79	September 2017	Access to and Benefit-Sharing of Marine Genetic Resources beyond National Jurisdiction: Developing a New Legally Binding Instrument	Carlos M. Correa
80	October 2017	The Commodity-Finance Nexus: Twin Boom and Double Whammy	Yılmaz Akyüz
81	November 2017	Promoting Sustainable Development by Addressing the Impacts of Climate Change Response Measures on Developing Countries	Martin Khor, Manuel F. Montes, Mariama Williams, and Vicente Paolo B. Yu III
82	November 2017	The International Debate on Generic Medicines of Biological Origin	Germán Velásquez
83	November 2017	China's Debt Problem and Rising Systemic Risks: Impact of the global financial crisis and structural problems	Yuefen LI
84	February 2018	Playing with Financial Fire: A South Perspective on the International Financial System	Andrew Cornford
85	Mayo de 2018	Acceso a medicamentos: experiencias con licencias obligatorias y uso gubernamental- el caso de la Hepatitis C	Carlos M. Correa y Germán Velásquez



SOUTH CENTRE

**Chemin du Champ d'Anier 17
PO Box 228, 1211 Geneva 19
Switzerland**

Telephone: (41 22) 791 8050

Fax: (41 22) 798 8531

Email: south@southcentre.int

Website:

<http://www.southcentre.int>

ISSN 1819-6926