# U.S.-China Economic and Security Review Commission

Economics and Trade Bulletin



#### November 5, 2019

# **Highlights of This Month's Edition**

- **Bilateral trade:** U.S. goods deficit with China reached \$96 billion in Q3 2019, down 16.9 percent year-onyear; U.S. agricultural exports surge as China ups purchases; for the first time in the last 15 years, U.S. services exports to China have contracted for three consecutive quarters.
- **Bilateral policy issues:** On October 11, President Donald Trump announced a preliminary Phase One U.S.-China trade deal, with further details and signing still pending; the U.S. Department of Commerce added eight Chinese technology firms to its Entity List due to the firms' role in surveillance of ethnic minorities in Xinjiang; pressure on U.S.-based multinationals to censor speech related to Hong Kong protests draws attention from U.S. lawmakers.
- Quarterly review of China's economy: China's government reports GDP grew 6.0 percent in Q3 2019—the slowest growth rate ever recorded—amid trade tensions, weak domestic demand, and sluggish investment; softening demand has created downward pressure on prices, further threatening growth and financial stability.
- Policy trends in China's economy: At Fourth Plenum, the CCP tabled discussion of the economy and maintained focus on Party leadership over all aspects of society; draft implementation regulations for China's Foreign Investment Law leaves key terms and oversight responsibilities undefined; the World Bank's annual *Doing Business 2020* report finds improvements in China's business environment based on surveys in two cities; General Secretary Xi endorses blockchain in his first in-depth remarks on the technology; China enacts new Cryptography Law, laying the framework for a state-backed national digital currency.

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## **Bilateral Trade**

#### U.S. Goods Exports and Imports Decrease in Q3 2019

The U.S. goods trade deficit with China reached \$96 billion in Q3 2019, a decline of 16.9 percent from Q3 2018 (see Figure 1). Both exports and imports continued to fall, with U.S. exports to China reaching \$26.7 billion (down 8.8 percent year-on-year) and U.S. imports totaling \$122.9 billion (down 15.2 percent year-on-year) amid continuing trade tensions. Year-to-date, the U.S. goods trade deficit was \$263.1 billion, down 12.7 percent from the same period in 2018.



Figure 1: Quarterly Trade with China, Q1 2017 – Q3 2019

#### U.S. Agricultural Product Exports Surge as Other Exports Fall

U.S. exports of agricultural products grew more than 500 percent year-on-year from a very low base in Q3 2018 (see Table 1). The surge in China's agricultural purchases comes as the United States and China reached a tentative "Phase One" agreement in bilateral trade negotiations. All other major export categories saw declines. U.S. imports from China also continued to fall, with electronics—the largest import category—seeing the most significant drop. The only major import to see year-on-year growth was "miscellaneous manufactured commodities."

#### Table 1: U.S. Trade with China: Top Five Exports and Imports, Q3 2019

(US\$ millions)

| U.S. Top-Five Exports to China |                  |          |        | U.S. Top-Five Imports from China   |                  |          |        |
|--------------------------------|------------------|----------|--------|------------------------------------|------------------|----------|--------|
|                                |                  |          | Change |                                    |                  |          | Change |
|                                |                  | Share of | over   |                                    |                  | Share of | over   |
|                                | Exports (in US\$ | total    | Q3'18  |                                    | Imports (in US\$ | total    | Q3'18  |
|                                | millions)        | (%)      | (%)    |                                    | millions)        | (%)      | (%)    |
| Quarter 3 (Jul-Sep'19)         |                  |          |        | Quarter 3 (Jul-Sep'19)             |                  |          |        |
| Transportation Equipment       | \$5,413.95       | 20.2%    | -32.0% | Computer & Electronic Products     | \$36,989.33      | 30.1%    | -25.2% |
| Computer & Electronic          |                  |          |        | Miscellaneous Manufactured         |                  |          |        |
| Products                       | \$4,537.21       | 17.0%    | -0.8%  | Commodities                        | \$14,336.29      | 11.7%    | 9.1%   |
|                                |                  |          |        | Electrical Equipment, Appliances & |                  |          |        |
| Chemicals                      | \$3,794.10       | 14.2%    | -9.2%  | Components                         | \$11,580.31      | 9.4%     | -14.0% |
| Machinery, Except Electrical   | \$2,480.28       | 9.3%     | -16.5% | Apparel & Accessories              | \$9,399.70       | 7.6%     | -4.6%  |
| Agricultural Products          | \$2,472.84       | 9.2%     | 500.3% | Machinery, Except Electrical       | \$8,403.02       | 6.8%     | -10.8% |
| Other                          | \$8,063.64       | 30.1%    |        | Other                              | \$42,208         | 34.3%    |        |
| Total                          | \$26,762         | 100%     |        | Total                              | \$122,916        | 100%     |        |

Source: U.S. Census Bureau, USA Trade Online, November 5, 2019. https://usatrade.census.gov/.

Source: U.S. Census Bureau, Trade in Goods with China, November 5, 2019. https://www.census.gov/foreign-trade/balance/c5700.html.

#### **Advanced Technology Deficit Shrinks Again**

The U.S. trade deficit with China in advanced technology products (ATP) declined by 26.2 percent year-on-year to \$25.8 billion in Q3 2019 (see Table 2). ATP imports totaled \$34.4 billion, down from \$44.2 billion in Q3 2018. U.S. imports of information and communications technology fell by more than 25 percent in the third quarter, with most other ATP import categories also seeing double-digit decreases over last year. In the first nine months of 2019, U.S. exports of electronics to China have increased nearly 40 percent, while exports of biotechnology have more than doubled.

|  |         | (033 111101 | 3)                 |                    |                |
|--|---------|-------------|--------------------|--------------------|----------------|
|  | Exports | Imports     | Balance<br>Q3'2019 | Balance<br>Q3'2018 | Balance<br>YOY |
| TOTAL  | \$8,573 | \$34,358    | -\$25,785          | -\$34,937          | -26.2%         |
| (01) Biotechnology                                       | \$440   | \$61        | \$379              | \$188              | 102.0%         |
| (02) Life Science  | \$956   | \$678       | \$278              | \$416              | -33.1%         |
| (03) Optoelectronics                                     | \$131   | \$1,071     | -\$940             | -\$1,163           | -19.1%         |
| (04) Information &<br>Communications                     | \$797   | \$31,045    | -\$30,248          | -\$40,761          | -25.8%         |
| <ul><li>(05) Electronics</li><li>(06) Flexible</li></ul> | \$2,073 | \$887       | \$1,186            | \$130              | 810.4%         |
| Manufacturing  | \$925   | \$213       | \$712              | \$827              | -14.0%         |
| (07) Advanced Materials                                  | \$70    | \$59        | \$11               | -\$36              | -130.7%        |
| (08) Aerospace   | \$3,145 | \$298       | \$2,847            | \$5,525            | -48.5%         |
| (09) Weapons   | \$0     | \$38        | -\$38              | -\$42              | -9.1%          |
| (10) Nuclear Technology                                  | \$36    | \$8         | \$28               | -\$22              | -227.7%        |

| Table 2: U.S. Trade with China in ATP, Q3 2019 |
|--|
| (US\$ millions)                                |

*Source:* U.S. Census Bureau, U.S. Trade with China in Advanced Technology Products, November 5, 2019. *https://www.census.gov/foreign-trade/statistics/product/atp/2019/06/ctryatp/atp5700.html*.

## **U.S. Services Exports Contract for Three Consecutive Quarters**

The United States continues to run a quarterly surplus in services with China;<sup>\*</sup> however, that surplus has been declining relative to the prior year since Q3 2018 (see Figure 2). Despite decreases in U.S. services exports to China since Q3 2018, services imports from China have consistently grown in recent years.<sup>1</sup>

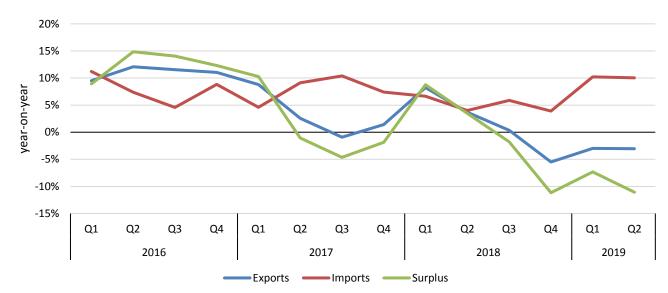
In Q2 2019,<sup>†</sup> U.S. services exports to China declined by 3.1 percent to \$11.7 billion, from \$12.0 billion in Q2 2018.<sup>2</sup> U.S. services exports to China have now been contracting for three consecutive quarters—a phenomenon that has not occurred in the last 15 years.<sup>3</sup> Growth in the four largest U.S. services exports—travel, charges for intellectual property (IP) use,<sup>‡</sup> transport, and financial services—has generally decreased since Q1 2018 (see Figure 3). Together, these four sectors accounted for about 85.9 percent of U.S. services exports to China in Q2 2019.<sup>4</sup> The

<sup>\*</sup> The United States has run a trade surplus in services with China each quarter since Q3 2007.

<sup>&</sup>lt;sup>†</sup> The *Economics and Trade Bulletin* uses nonseasonally adjusted data on trade in services from the U.S. Department of Commerce's Bureau of Economic Analysis. Because of predictable seasonal fluctuations, it is more meaningful to compare the year-on-year change between quarters rather than quarter-on-quarter changes in the services trade balance. U.S. Department of Commerce, Bureau of Economic Analysis, U.S. Trade in Goods and Services by Selected Countries and Areas, 1999–Present, U.S. Department of Commerce, Foreign Trade Division, June 6, 2019; U.S. Department of Commerce, Bureau of Economic Analysis, Seasonal Adjustment of Trade in Goods and Services by Selected Countries and Areas: Frequently Asked Questions, May 2017. https://www.bea.gov/system/files/2017-05/trad\_geo\_FAQs.pdf.

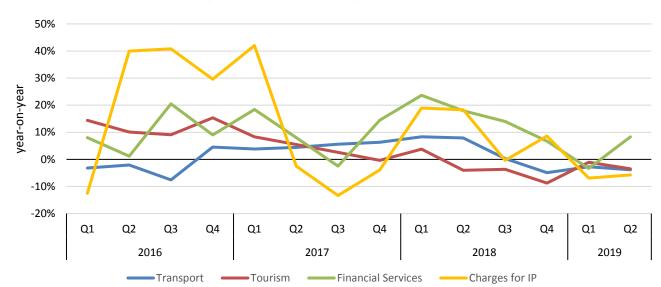
<sup>&</sup>lt;sup>‡</sup> Charges for the use of IP (not included in other categories) include licensing fees for use of patents, trademarks, and copyrights, as well as software, various media, marketing, and prototypes. World Trade Organization, "Goods and Services – What Is Being Traded?" *World Trade Statistical Review 2018*, July 10, 2018, 52–53. *https://www.wto.org/english/res\_e/statis\_e/wts2018\_e/wts2018chapter04\_e.pdf*.

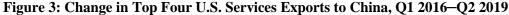
largest sector, tourism (including education), accounted for nearly half of U.S. services exports to China in Q2 2019, yet tourism has declined over the prior year each quarter since Q2 2018.<sup>5</sup>





Source: U.S. Department of Commerce, Bureau of Economic Analysis, Table 1.3 U.S. International Transactions, Expanded Detail by Area and Country, September 19, 2019.





Source: U.S. Department of Commerce, Bureau of Economic Analysis, Table 1.3 U.S. International Transactions, Expanded Detail by Area and Country, September 19, 2019.

In contrast, U.S. imports of Chinese services grew 10 percent to \$5 billion in Q2 2019, from \$4.6 billion in Q2 2018.<sup>6</sup> With the exception of Q2 2014, U.S. imports of Chinese services have increased each quarter since 2010.<sup>7</sup> The largest U.S. services imports from China—transportation and tourism, which together make up about half of U.S. services imports from China—held relatively steady in Q2 2019.<sup>8</sup> Other sectors continued to rise in Q2 2019. U.S. imports of maintenance and repair services, financial services, charges for IP use, and other business services grew over the same period in 2018.<sup>9</sup> The only exception were U.S. imports of telecommunications services from China, which have decreased noticeably for four consecutive quarters.<sup>10</sup>

## **Bilateral Policy Issues**

#### Phase One U.S.-China Trade Agreement Announced, Pending Signatures

On October 11, President Donald Trump announced that U.S. trade negotiators and Chinese negotiators led by Vice Premier Liu He had arrived at a preliminary Phase One U.S.-China trade agreement to be signed at a later date.<sup>11</sup> In the announcement, President Trump stated the deal would cover IP, financial services, currency and foreign exchange, and agricultural purchases.<sup>12</sup>

Chinese concessions to the United States reportedly include agricultural purchases of \$40–\$50 billion and decisions on sanitary and phytosanitary regulations to facilitate U.S. exports to China, increased market access for U.S. financial services in China, an agreement on China's currency and foreign exchange regime, and progress on IP rights and technology transfer to be continued in future discussions.<sup>13</sup> U.S. concessions to China reportedly include a halt to tariff increases on \$250 billion of Chinese imports, which were set to rise from 25 percent to 30 percent in October.<sup>14</sup> Lastly, U.S. Trade Representative (USTR) Robert Lighthizer said the negotiations had made progress in establishing a dispute settlement mechanism.<sup>15</sup>

President Trump indicated the Phase One agreement would cover "about 60 [percent] of the total deal," to be followed by a Phase Two agreement.<sup>16</sup> Details on the deal and when it will be signed are pending following the cancellation of the Asia Pacific Economic Cooperation summit, where President Trump and Chinese President and General Secretary of the Chinese Communist Party (CCP) Xi Jinping originally planned to sign the agreement.<sup>\*</sup> It is expected that the new location would be announced soon.

## **U.S. Department of Commerce Adds Eight Firms to Entity List**

On October 7, the U.S. Department of Commerce's Bureau of Industry and Security (BIS) announced eight Chinese technology firms would be added to its Entity List<sup>†</sup> due to their involvement in "China's campaign of repression, mass arbitrary detention, and high-technology surveillance against Uyghurs, Kazakhs, and other Muslim minority groups in [Xinjiang]."<sup>17</sup> In addition, BIS added the Xinjiang Public Security Bureau, as well as 19 of its affiliated and subordinate organizations, to the Entity List. Firms added to the list include Hikvision and Zhejiang Dahua—which together control about one-third of the global video surveillance market—as well as SenseTime and Megvii, two Alibaba-backed firms that are at the center of China's ambitions to gain dominance in the artificial intelligence (AI) sector.<sup>18</sup>

Companies on the Entity List are prohibited from doing business with U.S. firms without first receiving a government license.<sup>19</sup> For China's surveillance companies, technologies made by U.S. firms, such as computer chips and sensors, serve as critical inputs in their supply chains.<sup>‡</sup> As a result, many Chinese firms have already begun efforts to reduce their reliance on U.S. suppliers.<sup>20</sup>

Several of the companies added to the Entity List are subject to existing restrictions. For instance, in August the U.S. government enacted rules prohibiting federal agencies from purchasing equipment or services from Chinese firms, including Hikvision and Dahua, amid concerns their technology could be used to spy on U.S. citizens.<sup>21</sup> However, the U.S. government is still using equipment from many of the blacklisted firms. Replacing the finished products made by these firms has proven difficult due to the cost and complexity of doing so.<sup>22</sup> According to an

<sup>\*</sup> On October 30, Chile announced it would cancel the Asia Pacific Economic Cooperation meeting due to local protests against inequality, the greatest civil unrest in Chile since the Pinochet regime ended in 1990. Benedict Mander, James Politi, and Leslie Hook, "Chile Protests Derail Asia-Pacific Meeting and U.S.-China Truce Plans," *Financial Times*, October 30, 2019. *https://www.ft.com/content/83c1926a-fb22-11e9-a354-36acbbb0d9b6*.

<sup>&</sup>lt;sup>†</sup> The Entity List (Supplement No. 4 to part 744) identifies entities reasonably believed to be involved—or that pose a significant risk of being or becoming involved—in activities contrary to the national security or foreign policy interests of the United States. U.S. Department of Commerce, Bureau of Industry and Security, *Addition of Certain Entities to the Entity List*, October 7, 2019. *https://s3.amazonaws.com/public-inspection.federalregister.gov/2019-*

 $<sup>22210.</sup>pdf?utm\_medium=email\&utm\_campaign=pi+subscription+mailing+list\&utm\_source=federalregister.gov.$ 

<sup>&</sup>lt;sup>‡</sup> For more on China's surveillance technology market and the importance of U.S. firms to the Chinese market, see U.S. Economic and Security Review Commission, *Economics and Trade Bulletin*, September 10, 2019, 6–11. https://www.uscc.gov/sites/default/files/Research/September%202019%20Trade%20Bulletin\_1.pdf.

October 17 *Wall Street Journal* report, U.S. military bases and other government sites are still using more than 2,700 cameras made by Hikvision, Dahua, and other banned Chinese firms.

#### **Beijing Dials Up Economic Pressure on Firms Supporting Hong Kong Protests**

Beijing exercised economic leverage against firms supporting (or even appearing to support) Hong Kong protests in several notable instances in October. A broad range of U.S. companies and entities came under political pressure from China, including the Houston Rockets and the NBA, Disney, video game maker Blizzard Activision, Apple, Google, Tiffany & Co, and others.

On October 4, manager of the Houston Rockets Daryl Morey wrote a Twitter post saying, "Fight for freedom, stand with Hong Kong."<sup>23</sup> Though the tweet was quickly deleted, Chinese sponsors immediately distanced themselves from the National Basketball Association (NBA).<sup>24</sup> On October 6, NBA spokesman Mike Bass released a statement saying the NBA recognized that Mr. Morey's views had deeply offended fans in China, which he characterized as "regrettable."<sup>25</sup> The Chinese-language version of the statement was much more conciliatory toward China, adding that the NBA was "extremely disappointed" by the "inappropriate" comments and saying that Mr. Morey "severely hurt the feelings of Chinese basketball fans."<sup>26</sup>

Adam Silver, NBA president, said on October 8 that the NBA would not bar managers or players from sharing their personal opinions on political matters.<sup>27</sup> On October 17, after he returned from a series of meetings in China, Mr. Silver told reporters that China's government had instructed him to fire Mr. Morey for the "inappropriate tweet," and Mr. Silver had refused.<sup>28</sup> A spokesperson for China's Foreign Ministry denied that China had requested Mr. Morey's firing.<sup>29</sup> Following Mr. Morey's tweet, television broadcasts of NBA games in China have ceased.<sup>30</sup> Games can still be streamed online, though many are available after a delay instead of being streamed live as they were in the past.<sup>\* 31</sup>

The NBA is one of many entities caught in China's censorship crossfire. On October 22, Disney CEO Bob Iger told an audience in Laguna Beach, California, that while he had spoken publicly on other political topics in the past, he would not take a stance on the Hong Kong protests because doing so would harm the company.<sup>32</sup> On October 8, Blizzard Activision suspended and revoked prize money from an e-sports player who said "liberate Hong Kong" in a post-game interview—a move that garnered pushback from players, investors, employees, and representatives in Congress.<sup>33</sup> Blizzard has since reduced the player's suspension and released the tournament prize money, but have additionally banned three American University students for displaying a sign reading, "Free Hong Kong, Boycott Blizz" during an official competition stream.<sup>34</sup> Apple and Google have both removed from their stores apps dealing with subject matter related to Hong Kong protests.<sup>† 35</sup> All three companies have told reporters the move was not in response to pressure from China.<sup>36</sup> Tiffany & Co. inadvertently became the subject of controversy when an advertisement in China showing a model covering one eye with her hand was interpreted by Chinese internet users as signaling support for the Hong Kong protests, despite the advertisement campaign having been cleared before the protests began.<sup>37</sup> Tiffany quickly apologized and removed the ad.<sup>38</sup>

Chinese economic pressure on U.S. businesses to limit freedom of speech has captured the attention of lawmakers. This topic featured prominently in Vice President Michael Pence's speech at the Wilson Center on October 24.<sup>39</sup> In addition, a bipartisan group of senators and representatives signed a letter addressed to Blizzard asking the company to reconsider its actions, expressing concern for "the Chinese government's growing appetite for pressuring American businesses to help stifle free speech."<sup>40</sup> Senators Cory Gardner (R-CO) and Jeff Merkley (D-OR) introduced a bill on October 30 proposing to create a government task force, dubbed the "China Censorship Monitor

<sup>\*</sup> NBA broadcasting rights in China are exclusively held by CCTV, while streaming rights are exclusively held by Tencent. Since Mr. Morey's original tweet, some NBA game attendees have appeared in stadiums with signs or shirts expressing support for the Hong Kong protests or other politically sensitive topics in China. To comply with Chinese censors, Tencent has delayed streams so as to avoid inadvertently showing politically sensitive content.

<sup>&</sup>lt;sup>†</sup> Apple removed the app HKmap.live, which plotted the locations of protests and police. Google removed a game titled "Revolution of Our Times," in which players participated in a story in the role of a Hong Kong protester.

and Action Group,"\* to publicly document instances of economic or diplomatic coercive measures to limit U.S. free speech.<sup>41</sup>

## **Quarterly Review of China's Economy**

#### China's Gross Domestic Product Growth Sets Another Record Low

In Q3 2019, China posted an official gross domestic product (GDP) growth rate of 6.0 percent, down from 6.3 percent in the first half of the year and bringing annualized growth to 6.2 percent (see Figure 4). Both the quarterly growth rate and its annualized estimate represent the lowest ever recorded since China began publishing quarterly data in 1992.<sup>42</sup> While still within the government's target range for 2019 of between 6.0 and 6.5 percent, the Q3 growth figure brushed against the lower bound of this range.<sup>43</sup> Slowing growth comes as global trade tensions and softening domestic demand weigh on the Chinese economy despite increased hopes of a preliminary trade agreement between Washington and Beijing.

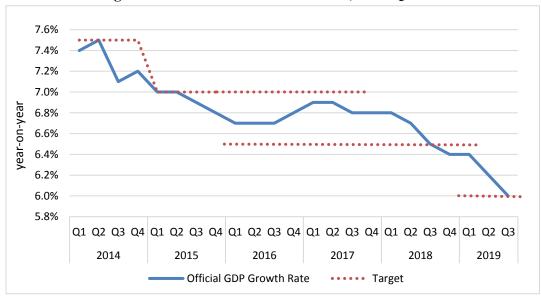


Figure 4: China's Official GDP Growth, 2014–Q3 2019

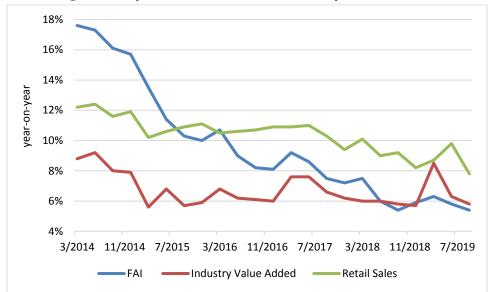
*Note:* In 2016, the target was set at a range of 6.5–7.0 percent GDP growth. In 2019, the target is set at a range of 6.0–6.5 percent. *Source:* China's National Bureau of Statistics via CEIC database.

China's decelerating growth was visible across several key economic indicators in the third quarter of 2019 (see Figure 5). Fixed asset investment (FAI) growth fell to a 12-month low of 5.4 percent year-on-year during the first three quarters of 2019, down from 5.8 percent growth in the first half of the year.<sup>44</sup> Investment in infrastructure remained sluggish—growing only 4.5 percent from January to September—despite Beijing's efforts to bolster local governments' fiscal firepower with additional bond issuances.<sup>45</sup> This is largely due to a dearth of high-quality projects to fund and greater risk aversion among lenders than in the past. As an official from Sichuan told the *Financial Times* in October, "We have plenty of bridges and roads already," and regulators have increased scrutiny of unprofitable infrastructure projects.<sup>46</sup> Local governments' ability to stimulate the economy through public spending will likely weaken further as lending for shantytown redevelopment<sup>†</sup>, which accounted for 22.5 percent of local government bonds in the first three quarters, tapers off at the end of the year.<sup>47</sup>

<sup>\*</sup> The proposed government task force would comprise the U.S. Department of State, Department of Commerce, the U.S. Federal Communications Commission, and the U.S. Agency for Global Media.

<sup>&</sup>lt;sup>†</sup> China's shantytown renovation program, which is supposed to be completed over three years from 2018 to 2020, is part of President Xi Jinping's poverty alleviation campaign and therefore is a political priority for Beijing. Local governments have accordingly used special purpose bonds to fund shantytown redevelopment projects, but already accomplished 94.8 percent of the planned renovations for 2019

Manufacturing FAI growth also slowed to 2.5 percent, the lowest rate ever recorded, as credit conditions for small businesses remained tight and uncertainty about the trade outlook persisted.<sup>48</sup> Only property investment remained strong—growing by 10.5 percent in the first nine months of 2019—as banks continue to lend to real estate developers, flouting Beijing's efforts to limit funding to the sector.<sup>49</sup> Industrial production, meanwhile, grew by 5.8 percent in September, a slight recovery from 4.4 percent year-on-year growth the previous month.<sup>50</sup> Official Chinese statements attributed the growth to eased trade tensions since the summer as well as increased seasonal demand ahead of Christmas holidays as key causes.<sup>51</sup> Retail sales—a broad measure of consumption—also edged up in September but registered the worst quarterly average growth in 20 years.<sup>52</sup>





Source: China's National Bureau of Statistics via CEIC database.

China's manufacturing sector expanded for the third consecutive month in October, according to Chinese financial media firm Caixin's unofficial Purchasing Managers' Index (PMI, see Figure 6).<sup>\* 53</sup> The October reading of 51.7 likely reflects the September 20 decision by the USTR to exempt more than 400 Chinese export categories from previously imposed tariffs as well as the "phase one" trade agreement U.S. and Chinese negotiators have tentatively reached.<sup>54</sup> The Caixin Services PMI reading fell to a seven-month low (the latest data available) of 51.3 in September, largely on the back of increases in labor, fuel and raw material costs.<sup>55</sup> While this reading still indicates expansion, the drop is significant—as services account for more than half of China's GDP—but made a smaller contribution to economic growth in the third quarter of 2019.<sup>56</sup>

during the first three quarters of the year. Therefore shantytown redevelopment is expected to slow in Q4. See *Sina*, "Ministry of Housing and Urban-Rural Development: 2.7 Million Shantytown Apartments Redeveloped in the First 9 Months, Accounting for 94.8% of the Annual Target" (住建部: 1-9 月全国棚改开工 274 万套占年度目标 94.8%), October 15, 2019. *https://finance.sina.com.cn/china/2019-10-15/doc-*

*iicezzrr2318687.shtml?cre=tianyi&mod=pcpager\_focus&loc=22&r=9&rfunc=100&tj=none&tr=9*; Tom Phillips, "China to Move Millions of People from Homes in Anti-Poverty Drive," *The Guardian*, January 7, 2018.

https://www.theguardian.com/world/2018/jan/07/china-move-millions-people-homes-anti-poverty-drive.

<sup>\*</sup> The PMI measures the production level, new orders, inventories, supplier deliveries, and employment level to gauge the economic activity level in the services and manufacturing sector.

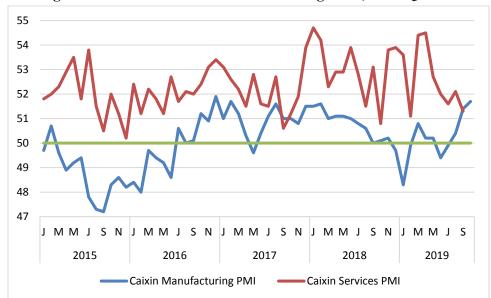


Figure 6: Caixin Services and Manufacturing PMIs, 2014–Q3 2019

Note: A reading above 50 indicates expansion; a reading below 50 shows contraction.

Source: Caixin and IHS Markit, "Caixin China General Manufacturing PMI," Markit Economics, November 1, 2019. https://www.markiteconomics.com/Public/Home/PressRelease/f178e9177fb0498b93590cb7967b893e; Caixin and IHS Markit, "Caixin China General Services PMI," Markit Economics, October 8, 2019. https://www.markiteconomics.com/Public/Home/PressRelease/0414da7c00094259b5503a670848e411.

#### Weak Domestic Demand Highlights Economic Uncertainty, Rising Consumer Debt

China's domestic demand showed signs of significant weakness in the first three quarters of 2019. On the consumer side, retail sales data show only everyday items (such as food, medicine, and cosmetics) posted strong growth numbers, while sales of larger-ticket items (such as furniture, appliances, and jewelry) grew more slowly in comparison.<sup>57</sup> Auto sales have been especially weak this year, falling for 15 of the last 16 months and contracting 0.7 percent to date.<sup>58</sup> The divergence between items of daily consumption and larger purchases indicates low consumer confidence as economic growth slows. Imports continued to contract, falling by 8.5 percent in September and decreasing every month this year except April.<sup>59</sup> While changes in the renminbi (RMB) exchange rate help explain this to some extent as downward pressure on the RMB makes imports more expensive, the main reason is less Chinese demand for commodities and intermediate goods.<sup>60</sup>

Slowing domestic demand has put China's economy under deflationary pressure. The Chinese government's official producer price index (PPI) fell 1.2 percentage points during Q3 2019, the first time it has done so in two years.<sup>61</sup> Aside from pork, consumer prices increases are also slowing, with China's core consumer price index (CPI)<sup>\*</sup> inching downward since the beginning of the year. Deflationary pressure poses significant challenges to Beijing's efforts to stabilize the economy. China's corporate sector is highly indebted, and softening prices will increase real interest rates on existing debt obligations, which will also constrain investment and suppress growth.<sup>62</sup>

Moreover, policymakers have been reluctant to boost demand by deploying large-scale stimulus measures as they continue to prioritize financial stability. In his remarks at the 40th meeting of the International Monetary Fund (IMF) Financial Committee on October 18–19, People's Bank of China (PBOC) Governor Yi Gang clearly indicated the government's thinking, saying that amid "low growth, low interest rates and low inflation, monetary policy space and its effectiveness is limited."<sup>63</sup> He added, "[T]he problem of sluggish growth cannot be addressed by relying on monetary policy alone" and "countries need to pay due attention to the potential negative effects" when using stimulus measures.<sup>64</sup>

<sup>\*</sup> Similar to the CPI, China's core CPI measures changes in a basket of consumer goods, but excludes food and energy products, which have greater price volatility.

Beijing is also concerned about stimulating the property sector, which is the main source of rising consumer debt increasingly a concern for regulators.<sup>65</sup> The China Banking and Insurance Regulatory Commission—China's main banking sector regulator—has taken a number of steps in recent months to tighten oversight of bank loans to consumers. Over the summer it fined several major banks for violations related to consumer lending, and on October 11 issued a requirement for all banks to conduct internal audits and cleanup practices that "infringe on consumer rights."<sup>66</sup> Despite such efforts, China's household debt has continued to rise, and the IMF forecasts it will reach 67.9 percent of GDP by 2024—well above the emerging market average and higher than Japan and the European Union.<sup>67</sup> China's growing consumer debt burden illustrates the challenges facing Beijing in an environment where the property sector is one of the few sources of organic market demand. If policymakers relax the regulatory environment, they risk contributing to a real estate bubble and undermining China's long-term financial stability.

# **Policy Trends in China's Economy**

#### Fourth Plenum Emphasizes Party Leadership, Avoids Discussion of the Economy

The CCP held the Fourth Plenary Session<sup>\*</sup> (Plenum) of the 19th Central Committee on October 28–31. In line with convention, the Fourth Plenum focused on improving governance and ensuring political stability. The communique issued after the Plenum frames improved governance as being possible only through the strengthened and "unified leadership" of the CCP. Repeating the phrase originally uttered by Mao Zedong—and frequently reiterated by the General Secretary of the CCP Xi Jinping—the communique declares: "The government, the military, the people, and the schools, north, south, east, west, and center—the Party leads everything."<sup>68</sup>

According to the communique, CCP leadership is essential due to a "complex situation of increasing challenges at home and abroad."<sup>69</sup> Such language echoes CCP rhetoric over the past year concerning trade frictions with the United States and the domestic economic slowdown. It also buttresses the ongoing campaign by General Secretary Xi to expand the CCP's control over the Chinese government bureaucracy, prioritizing ideology over technocracy.<sup>70</sup> Separately, the communique also proposes the establishment of an "enforcement mechanism to defend national security" in Hong Kong.<sup>71</sup>

Economic policy was scarcely discussed at the Fourth Plenum, highlighting General Secretary Xi's persistent focus on Party building and strengthening his control as opposed to addressing economic challenges. The Plenum's communique makes brief reference to economic policy priorities long espoused by General Secretary Xi, including the importance of "public ownership" as a key feature of the Chinese economy, and notably calls for the "organic combination of a socialist system with the market economy."<sup>72</sup> The emphasis on a continued role for the government in economic management, together with language adulating the "remarkable advantages" afforded by the CCP's comprehensive leadership, indicates prospects for market-oriented economic liberalization in China remain dim.

CCP plenums are closely watched by analysts given the major political developments they have hosted in the past: a plenary session in 1978 launched Deng Xiaoping's economic reforms, and a 2015 session eased China's one-child policy.<sup>73</sup> While plenums are not formally mandated to cover distinct topics, a pattern has emerged in which specific plenums address broad themes. Third plenums, for example, typically cover economic policy, whereas fourth plenums tend to address governance issues.<sup>74</sup>

## Foreign Investment Terms Remain Vague under Draft Implementation Rules

On October 14, 2019, China's government circulated draft implementation regulations for the revised Foreign Investment Law to several foreign business advocacy groups, soliciting feedback.<sup>75</sup> The regulations follow the law's expedited March 2019 passage—a move many interpreted as a conciliatory gesture to ease bilateral tensions with

<sup>\*</sup> Plenums are formal Party meetings organized by the Politburo, the Party's top leadership. Plenums convene members of the Party's Central Committee to review or approve policies proposed by the Politburo. There are typically seven plenary sessions in each Congress of the Party. The current 19th Party Congress, established in October 2017, held its first plenum in October 2017, second plenum in January 2018, and third plenum in February 2018. Jude Blanchette and Mingda Qiu, "Red Flags: Why Was China's Fourth Plenum Delayed?" *Center for Strategic and International Studies*, August 30, 2019. https://www.csis.org/analysis/red-flags-why-was-chinas-fourth-plenumdelayed.

the United States and invite continued investment from other advanced economies.<sup>\*</sup> Chinese laws are often vague, and supplementary regulations from the State Council and other government bodies typically clarify interpretation and provide guidance to implementing agencies.<sup>76</sup> Swift promulgation of supplementary regulations can signal intent from China's government, and Premier Li Keqiang has promised on multiple occasions that the law's supporting regulatory framework would be enacted in 2019.<sup>77</sup>

Responses from foreign business advocacy groups and law firms are mixed on whether the draft regulations work toward following through on this promise. Jörg Wuttke, president of the EU Chamber of Commerce in China, indicated the law exceeded his expectations in accommodating the Chamber's concerns.<sup>78</sup> Mr. Wuttke praised the law's protections of foreign firms' trade secrets and emphasis on limiting technology transfer.

The U.S.-China Business Council (USCBC) was less sanguine in its evaluation, noting the draft regulations left basic terms such as "foreign invested enterprise" undefined and did not clarify which agencies would be in charge of implementing new measures.<sup>79</sup> In detailed written feedback, the USCBC questioned whether provisions promising to protect IP and prohibit forced technology transfer would supersede contradictory regulations and practices, citing as an example existing electric vehicle regulations from the Ministry of Industry Information Technology that require foreign firms to license or transfer technology for market access.<sup>80</sup>

The USCBC also flagged instances where modifications proposed under the regulations could prove ineffectual without broader regulatory changes. For instance, Article 15 of the draft provisions allows foreign firms to participate equally in domestic standards-making bodies—an important channel for technical regulation because Chinese policymakers frequently employ domestic standards as protectionist tools.<sup>81</sup> However, the weight of a firm's vote in standards-making bodies may be determined simply by domestic market share, rather than innovativeness or technological contribution, so foreign firms' participation would remain curtailed if other discriminatory practices limit market access.<sup>82</sup>

WilmerHale, a law firm, warned that without more prescriptive guidelines, Chinese officials will have broad latitude to interpret the Foreign Investment Law in ways unfavorable to foreign firms.<sup>83</sup> It also objected to the draft regulation's silence on key areas of concern for firms' ability to operate independent of government influence. The regulations do not address firms' mandatory establishment of a CCP cell or strict requirements prohibiting transfer of data outside China and allowing government review of sensitive information.<sup>84</sup>

#### World Bank Report Praises China's Business Environment for Improvements in Two Developed Cities

China rose 15 places to 31st place, out of 190 countries, in the World Bank's *Doing Business 2020* report, which compares regulatory impact on business activity across economies. The results are based on a narrow survey of two of China's most developed cities and focus on business concerns of smaller domestic firms, limiting the reports' utility for foreign firms in China.

Within ten component categories<sup>†</sup> that inform the overall score for "ease of doing business," China improved in all areas except "getting credit," for which its rank sank from 73rd to80th globally, according to the report.<sup>85</sup> From 2019, China saw the sharpest gains in "dealing with construction permits," rising from 121st to 33rd place, and protecting minority investors (64th to 28th).<sup>86</sup> Despite moderate improvement, difficulty paying taxes, for which China ranks 105th globally, weighed down its overall score.<sup>87</sup>

<sup>&</sup>lt;sup>\*</sup> The Foreign Investment Law goes into effect on January 1, 2020. For an assessment of the law's contents, see U.S.-China Economic and Security Review Commission, *Economics and Trade Bulletin*, March 6, 2019, 5–7. *https://www.uscc.gov/sites/default/files/Research/April%202019%20Trade%20Bulletin.pdf*.

These categories include starting a business, dealing with construction permits, getting electricity, registering a property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, and resolving insolvency. The data used to determine rankings are current as of May 1, 2019. World Bank Group, Doing Business 2020: Comparing Business Regulation in 190 Economics, October 24, 2019, v. https://openknowledge.worldbank.org/bitstream/handle/10986/32436/9781464814402.pdf; World Bank Profile: 2020, 2019, Group. "Economy China," Doing **Business** October 24. 4 https://www.doingbusiness.org/content/dam/doingBusiness/country/c/china/CHN.pdf.

China's ease of doing business rank has steadily improved from 91st since 2006, when the World Bank began including rankings in its report.<sup>88</sup> The 2020 report comes after China's government launched a campaign in November 2018 to improve the business environment for private firms, following years of a policy-induced corporate credit crunch that disproportionately impacted China's private sector and General Secretary Xi's repeated affirmation of the state sector's primacy.<sup>89</sup>

Importantly, the World Bank's report has "the specific aim of measuring the regulation and red tape relevant to the life cycle of a domestic small to medium-size firm," and its metrics do not reflect the realities of conducting business within China for U.S. firms.<sup>90</sup> Firstly, the survey results that inform the report are drawn only from Shanghai and Beijing.<sup>\* 91</sup> In sampling from China's main financial hub and capital, the survey does not capture the labyrinthine administrative procedures and inconsistent cross-jurisdictional procedures foreign businesses report in dealing with local governments.<sup>92</sup> Secondly, China scores especially well in some categories because definitions are not comparable across economies and legal systems. For instance, according to the survey results, China is the fifthbest economy worldwide for contract enforcement, ahead of the United States, which ranks 17th.<sup>93</sup> Steve Dickinson of the law firm Harris Bricken clarifies that China's high rank reflects efficient procedures for a narrow range of enforceable contracts in China.<sup>94</sup> Such contracts exclude provisions that would be commonplace in U.S. contracts, and Chinese courts struggle to rule on evidence such as emails or oral communications that would routinely be considered in U.S. contract disputes.<sup>95</sup>

#### Xi Endorses Blockchain to Market Fanfare

At a Politburo study session on October 24, General Secretary Xi hailed blockchain<sup>†</sup> as a "core technology" and urged China to accelerate its development.<sup>96</sup> General Secretary Xi said blockchain will play "an important role in the next round of technological innovation and industrial transformation" and called on China to "take the leading position" in blockchain development.<sup>97</sup> To that end, China should "clarify the main direction, increase investment, [and] focus on a number of key technologies."<sup>98</sup> He also highlighted various potential use cases for blockchain technology in China, including supply chain management, food safety, healthcare, and public services.<sup>99</sup>

General Secretary Xi's remarks sparked a brief rally in blockchain-related stocks and cryptocurrency prices. Chinese state media quickly stepped in to warn against the risks of speculative behavior in the blockchain industry. "Blockchain's future is here, but we need to stay rational," the *People's Daily* said in a commentary, adding that "innovation in blockchain technology does not mean we should speculate in virtual currencies."<sup>100</sup>

Despite the Chinese government's hostility to cryptocurrencies,<sup>‡</sup> Beijing has been receptive to the underlying technology. Blockchain was first mentioned in China's 13th Five-Year Plan for Informatization as a "strategic frontier technology" requiring increased research and development.<sup>101</sup> The PBOC has been researching digital currency and blockchain technology since 2014 and has said it is close to launching its own digital currency (for more, see "PBOC 'Close' to Debuting Sovereign Digital Currency").<sup>102</sup> Many local governments have also been active in promoting blockchain development, establishing blockchain-related initiatives and investment funds.<sup>§ 103</sup>

<sup>\*</sup> The World Bank survey extended to 30 cities across China, mostly provincial capitals, in 2008. Most of the other cities surveyed scored much lower across categories, with the exception of Hangzhou, home to Alibaba's headquarters, and Guangzhou, capital of wealthy Guangdong Province. World Bank Group, "East of Doing Business in China." https://www.doingbusiness.org/en/data/exploreeconomies/china.

<sup>&</sup>lt;sup>†</sup> More popularly known as the technology underlying bitcoin and other cryptocurrencies, blockchain is a digital ledger that enables parties to transact without the use of a central authority as a trusted intermediary. For more background on blockchain, see *MIT Technology Review*, "Explainer: What Is a Blockchain?" April 23, 2018. *https://www.technologyreview.com/s/610833/explainer-what-is-a-blockchain/* and Alan McQuinn and Daniel Castro, "A Policymaker's Guide to Blockchain," *Information Technology & Innovation Foundation*, April 30, 2019. *https://itif.org/publications/2019/04/30/policymakers-guide-blockchain*.

<sup>&</sup>lt;sup>‡</sup> For more on China's crackdown on cryptocurrency exchanges and initial coin offerings, see U.S.-China Economic and Security Review Commission, *Economics and Trade Bulletin*, October 5, 2017, 3–6.

https://www.uscc.gov/sites/default/files/Research/October%202017%20Trade%20Bulletin\_0.pdf.

<sup>&</sup>lt;sup>§</sup> Over 20 provinces and municipalities in China have issued blockchain-related policies and there are ten blockchain industrial parks nationwide. Frank Tang and Jun Mai, "Blockchain Endorsement from China's Xi Jinping Could Lead to Fraud and Speculation, Technology Analysts Warn," South China Morning Post, October 31, 2019. https://www.scmp.com/economy/chinaeconomy/article/3035797/blockchain-endorsement-chinas-xi-jinping-could-lead-fraud-and.

According to *Interchain Pulse*, a Chinese blockchain news publication, in the first half of 2019 government applications of blockchain accounted for about one-fifth of all blockchain applications in China.<sup>104</sup>

General Secretary Xi's elevation of blockchain to a "core" technology guarantees greater policy support and state financing for the industry. However, technology analysts note that many blockchain applications are still in their early stages and struggle with efficiency and scalability.<sup>\* 105</sup> A 2018 working paper from PBOC's research bureau warned against "exaggerating or mystifying blockchain capabilities," concluding, "Overall, there are currently very few blockchain projects that produce social benefits. ...At present, there is a pronounced bubble in blockchain investment and finance, and speculation, market manipulation, and even violations of laws and regulations are common, especially for projects involving the public issuance and trading of tokens."<sup>106</sup>

Some analysts worry General Secretary Xi's endorsement may lead companies, investors, and local governments to disregard the nascent nature of blockchain technology and throw money into nonviable projects.<sup>107</sup> Martin Chorzempa of the Peterson Institute for International Economics observes, "[I]f China widely implemented blockchain today, its growth would slow even more rapidly. Blockchains are famously inefficient and only should be used in specific scenarios where the goal is some degree of decentralization."<sup>108</sup>

## China Enacts Cryptography Law, Laying Framework for Sovereign Digital Currency

On October 26, China's National People's Congress passed a new Cryptography Law aimed at facilitating the development of China's cryptography industry while also ensuring cybersecurity.<sup>109</sup> Cryptography is used by blockchain and digital currencies to secure transactions.<sup>110</sup> The law, which will take effect on January 1, 2020, covers "products, technologies, or services that use specific transformations to information to effect encryption protection or security authentication." <sup>111</sup> It outlines three categories of encryption: core, common, and commercial.<sup>112</sup> Core and common encryption are used for the protection of information considered "state secrets,"<sup>†</sup> while commercial encryption is used to protect information that is not considered a state secret.<sup>113</sup>

• *Commercial encryption:* The law states that individuals and organizations can use commercial encryption to protect network and information security. It also allows for the use of foreign commercial encryption products, although such products may be subject to import and export controls, testing and certification requirements, and national security reviews.<sup>114</sup> Critical information infrastructure operators purchasing commercial encryption products and services that may impact national security will be required to undergo a national security review, using the process established under the Cybersecurity Law.<sup>‡ 115</sup>

<sup>\*</sup> According to Avivah Litan, vice president at technology research firm Gartner, "Blockchain technologies have not yet lived up to the hype and most enterprise blockchain projects are stuck in experimentation mode. Blockchain is not yet enabling a digital business revolution across business ecosystems and may not until at least 2028, when Gartner expects blockchain to become fully scalable technically and operationally." Gartner, "Gartner 2019 Hype Cycle Shows Most Blockchain Technologies Are Still Five to 10 Years Away from Transformational Impact," October 8, 2019. https://www.gartner.com/en/newsroom/press-releases/2019-10-08-gartner-2019-hype-cycleshows-most-blockchain-technologies-are-still-five-to-10-years-away-from-transformational-impact.

<sup>&</sup>lt;sup>†</sup> Core and common encryption are also considered state secrets and the law does not clarify how they differ. Yan Luo, Eric Carlson, and Zhijing Yu, "China Enacts Encryption Law," *Covington & Burling LLP*, October 31, 2019. *https://www.insideprivacy.com/data-security/china-enacts-encryption-law/; Xinhua*, "China Focus: China Adopts Law on Cryptography," October 26, 2019. *http://www.xinhuanet.com/english/2019-10/26/c\_138505655.htm*.

<sup>&</sup>lt;sup>\*</sup> The review process is involves a self-assessment from the critical information infrastructure operator of the potential security risks of the purchase and, if certain risks are identified (i.e., the purchased product could lead to "the shutdown of the entire or core parts of the critical information infrastructure; the breach, loss, damage, or crossborder transfer of a large volume of personal information or other important data; supply chain security threats that could compromise the operation, maintenance, technical support, or upgrading of the critical information infrastructure; and other potential risks that may materially harm the security of the critical information infrastructure"), a review conducted by the Cyberspace Administration of China. For more information, see Yan Luo, Zhijing Yu, and Nicholas Shepherd, "China Seeks Public Comments on Draft Regulation on Cybersecurity Review of Network Products and Services," *Covington & Burling LLP*, May 24, 2019. https://www.insideprivacy.com/data-security/cybersecurity/china-seeks-public-comments-on-draft-regulation-on-cybersecurity-review-of-network-products-and-services/ and Samm Sacks, Rogier Creemers, Lorand Laskai, Paul Triolo, and Graham Webster, "China's Cybersecurity Reviews for 'Critical' Systems Add Focus on Supply Chain, Foreign Control [Translation]," *New America*, May 24, 2019. https://www.newamerica.org/cybersecurity-initiative/digichina/blog/chinas-cybersecurity-reviews-critical-systems-add-focus-supply-chain-foreign-control-translation/.

• *Standards setting:* Article 22 of the law states that the State Council's administrative department for standardization and the State Cryptography Administration will be responsible for organizing the development of national standards for commercial encryption. <sup>116</sup> Article 23 encourages China's participation in developing international standards for encryption and promoting the interoperability of Chinese and international standards.<sup>\* 117</sup>

#### PBOC "Close" to Debuting Sovereign Digital Currency

In August 2019, Mu Changchun, the head of the PBOC's research institute on digital currency, said the central bank was "close" to issuing its own digital currency, after five years of development.<sup>118</sup> Unlike decentralized blockchain-based cryptocurrencies, the PBOC's Digital Currency Electronic Payment (DCEP) would afford Beijing greater control over and visibility into its financial system.<sup>† 119</sup> Other central banks—including in Singapore, Canada, Sweden, and the Bahamas—are also in the process of developing their own digital currencies, but the PBOC looks poised to become the first major central bank to issue a digital currency.<sup>120</sup>

DCEP is intended as a banknote replacement and will be implemented in a two-tiered system, with the PBOC first distributing the currency through commercial banks, which in turn will distribute the currency to users through digital wallets accessed on smartphones.<sup>121</sup> Patents filed by the PBOC suggest DCEP will have features that allow the central bank to track transactions.<sup>122</sup> Chinese officials have said the new currency will offer "controllable anonymity," where users have the option to remain anonymous to each other but not to the government.<sup>123</sup>

According to media reports, the PBOC appears to have accelerated its efforts after Facebook unveiled Libra<sup>‡</sup> in June 2019.<sup>124</sup> The PBOC, along with other central banks around the world, views Libra and other private initiatives as a threat to financial stability as well as to the traditional authority of central banks.<sup>125</sup> "If Libra is accepted by everyone and becomes a widely used payment tool, then after some time, it is entirely possible that it will develop into a global, super-sovereign currency.... We need to plan ahead to protect our monetary sovereignty," Mr. Mu said in a recent online lecture.<sup>126</sup> Given that users in developing economies are a major target for Libra, Mr. Mu also warned that Libra adoption could lead users to "shift out of their own currencies, which would put pressure on those currencies to depreciate and may lead to a deterioration in local people's own economic conditions."<sup>127</sup>

Facebook has framed Libra as a U.S. alternative to China's DCEP. In testimony to Congress in October 2019, Facebook CEO Mark Zuckerberg argued, "China is moving quickly to launch similar ideas in the coming months. Libra will be backed mostly by dollars and I believe it will extend America's financial leadership as well as our democratic values and oversight around the world. If America doesn't innovate, our financial leadership is not guaranteed."<sup>128</sup>

<sup>\*</sup> The Chinese government seeks to promote Chinese technology standards internationally. For more on Beijing's efforts to support Chinese firms and associations' international standardization efforts in 5G, see U.S.-China Economic and Security Review Commission, Chapter 4, Section 1, "Next Generation Connectivity," in 2018 Annual Report to Congress, November 2018, 453-455. https://www.uscc.gov/sites/default/files/2019-09/Chapter%204%20Section%201-%20Next%20Generation%20Connectivity\_0.pdf.

<sup>&</sup>lt;sup>†</sup> According to Mr. Mu, DCEP will not use blockchain technology due to scalability challenges. Miranda Wood, "China Central Official Launches Training Course on Libra and Digital Currency," *Ledger Insights*, September 2019. https://www.ledgerinsights.com/china-central-bank-training-course-libra-cbdc/.

<sup>&</sup>lt;sup>‡</sup> Libra is a proposed global digital currency and financial infrastructure powered by blockchain and backed by a reserve of real assets such as bank deposits and short-term government securities. Facebook, "Libra White Paper." *https://libra.org/en-US/white-paper/#introduction*.

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- <sup>3</sup> U.S. Department of Commerce, Bureau of Economic Analysis, *Table 1.3 U.S. International Transactions, Expanded Detail by Area and Country*, September 19, 2019.
- <sup>4</sup> U.S. Department of Commerce, Bureau of Economic Analysis, *Table 1.3 U.S. International Transactions, Expanded Detail by Area and Country*, September 19, 2019.
- <sup>5</sup> U.S. Department of Commerce, Bureau of Economic Analysis, *Table 1.3 U.S. International Transactions, Expanded Detail by Area and Country*, September 19, 2019.
- <sup>6</sup> U.S. Department of Commerce, Bureau of Economic Analysis, *Table 1.3 U.S. International Transactions, Expanded Detail by Area and Country*, September 19, 2019.
- <sup>7</sup> U.S. Department of Commerce, Bureau of Economic Analysis, *Table 1.3 U.S. International Transactions, Expanded Detail by Area and Country*, September 19, 2019.
- <sup>8</sup> U.S. Department of Commerce, Bureau of Economic Analysis, *Table 1.3 U.S. International Transactions, Expanded Detail by Area and Country*, September 19, 2019.
- <sup>9</sup> U.S. Department of Commerce, Bureau of Economic Analysis, *Table 1.3 U.S. International Transactions, Expanded Detail by Area and Country*, September 19, 2019.
- <sup>10</sup> U.S. Department of Commerce, Bureau of Economic Analysis, *Table 1.3 U.S. International Transactions, Expanded Detail by Area and Country*, September 19, 2019.
- <sup>11</sup> White House, "Remarks by President Trump and Vice Premier Liu He of the People's Republic of China in a Meeting," October 11, 2019. https://www.whitehouse.gov/briefings-statements/remarks-president-trump-vice-premier-liu-peoples-republic-china-meeting/.
- <sup>12</sup> White House, "Remarks by President Trump and Vice Premier Liu He of the People's Republic of China in a Meeting," October 11, 2019. https://www.whitehouse.gov/briefings-statements/remarks-president-trump-vice-premier-liu-peoples-republic-china-meeting/.

<sup>13</sup> Bloomberg, "NEC's Kudlow on Jobs Data, China Trade Talks, Tax Cuts," November 1, 2019. https://www.bloomberg.com/news/videos/2019-11-01/nec-s-kudlow-on-jobs-data-china-trade-talks-tax-cuts-video; Shawn Donnan, "What's In (and Not In) Step One of the U.S.-China Trade Deal," Bloomberg, October 28, 2019. https://www.bloomberg.com/news/articles/2019-10-28/trade-war-latest-trump-china-apec-economy-tariffs; White House, "Remarks by President Trump and Vice Premier Liu He of the People's Republic of China in a Meeting," October 11, 2019. https://www.whitehouse.gov/briefings-statements/remarks-president-trump-vice-premier-liu-peoples-republic-china-meeting/.

- <sup>14</sup> Shawn Donnan, "What's In (and Not In) Step One of the U.S.-China Trade Deal," *Bloomberg*, October 28, 2019. *https://www.bloomberg.com/news/articles/2019-10-28/trade-war-latest-trump-china-apec-economy-tariffs*; White House, "Remarks by President Trump and Vice Premier Liu He of the People's Republic of China in a Meeting," October 11, 2019. *https://www.whitehouse.gov/briefings-statements/remarks-president-trump-vice-premier-liu-peoples-republic-china-meeting/*.
- <sup>15</sup> White House, "Remarks by President Trump and Vice Premier Liu He of the People's Republic of China in a Meeting," October 11, 2019. https://www.whitehouse.gov/briefings-statements/remarks-president-trump-vice-premier-liu-peoples-republic-china-meeting/.
- <sup>16</sup> Donald Trump (@realDonaldTrump), "China and the USA are working on selecting a new site for signing of Phase One of Trade Agreement, about 60% of total deal, after APEC in Chile was canceled due to unrelated circumstances. The new location will be announced soon," Twitter, October 31, 2019, 9:24 a.m.; White House, "Remarks by President Trump and Vice Premier Liu He of the People's Republic of China in a Meeting," October 11, 2019. https://www.whitehouse.gov/briefings-statements/remarks-presidenttrump-vice-premier-liu-peoples-republic-china-meeting/.
- <sup>17</sup> U.S. Department of Commerce, Bureau of Industry and Security, *Addition of Certain Entities to the Entity List*, October 7, 2019. https://s3.amazonaws.com/public-inspection.federalregister.gov/2019-
- 22210.pdf?utm\_medium=email&utm\_campaign=pi+subscription+mailing+list&utm\_source=federalregister.gov.
   <sup>18</sup> Shawn Donnan and Jenny Leonard, "U.S. Blacklists Eight Chinese Tech Companies on Rights Violations," *Bloomberg*, October 7, 2019. https://www.bloomberg.com/news/articles/2019-10-07/u-s-blacklists-eight-chinese-companies-including-hikvision-k1gvpq77.

<sup>&</sup>lt;sup>1</sup> U.S. Department of Commerce, Bureau of Economic Analysis, *Table 1.3 U.S. International Transactions, Expanded Detail by Area and Country*, September 19, 2019.

<sup>&</sup>lt;sup>2</sup> U.S. Department of Commerce, Bureau of Economic Analysis, *Table 1.3 U.S. International Transactions, Expanded Detail by Area and Country*, September 19, 2019.

- <sup>19</sup> U.S. Department of Commerce, Bureau of Industry and Security, Addition of Certain Entities to the Entity List, October 7, 2019. https://s3.amazonaws.com/public-inspection.federalregister.gov/2019-22210.pdf?utm medium=email&utm campaign=pi+subscription+mailing+list&utm source=federalregister.gov.
- <sup>20</sup> Catherine Shu, "Eight Chinese Tech Firms Placed on U.S. Entity List for Their Role in Human Rights Violations against Muslim Minority Groups," *Tech Crunch*, October 8, 2019. https://techcrunch.com/2019/10/07/eight-chinese-tech-firms-placed-on-u-s-entity-list-for-their-role-in-human-rights-violations-against-muslim-minority-groups/.
- <sup>21</sup> U.S. Department of Defense, General Services Administration, and National Aeronautics and Space Administration, "Federal Acquisition Regulation: Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment," *Federal Register* 84:156 (August 13, 2019).
- <sup>22</sup> Asa Fitch, "U.S. Government Still Uses Suspect Chinese Cameras," Wall Street Journal, October 19, 2019. https://www.wsj.com/articles/u-s-government-still-uses-suspect-chinese-cameras-11571486400; Olivia Carville, "Banned Chinese Security Cameras Are Almost Impossible to Remove," Bloomberg, July 10, 2019. https://www.bloomberg.com/news/articles/2019-07-10/banned-chinese-security-cameras-are-almost-impossible-to-remove.
- <sup>23</sup> Daniel Victor, "Hong Kong Protests Put N.B.A. on Edge in China," New York Times, October 7, 2019. https://www.nytimes.com/2019/10/07/sports/basketball/nba-china-hong-kong.html.
- <sup>24</sup> Jinshan Hong and Iain Marlow, "NBA Loses More Sponsors as China Flexes Economic Muscle," Bloomberg, October 8, 2019. https://www.bloomberg.com/news/articles/2019-10-09/china-flexes-economic-muscle-again-as-nba-loses-more-sponsors.
- <sup>25</sup> Yanan Wang, "NBA's Reaction to Morey Tweet Differs in English, Chinese," Associated Press, October 7, 2019. https://www.apnews.com/9c3df9a26a464a86990b59f89602b854.
- <sup>26</sup> Jeff Zillgitt, "NBA Statements on Hong Kong Tweet Different in English and Chinese," USA Today, October 7, 2019. https://www.usatoday.com/story/sports/nba/2019/10/07/nba-china-statements-different-english-chinese/3898513002/.
- <sup>27</sup> BBC, "NBA Boss Adam Silver Defends Freedom of Speech amid China Row," October 8, 2019. https://www.bbc.com/news/world-asiachina-49979057.
- <sup>28</sup> Sopan Deb, "NBA Commissioner: China Asked Us to Fire Daryl Morey," New York Times, October 17, 2019. https://www.nytimes.com/2019/10/17/sports/basketball/nba-china-adam-silver.html.
- <sup>29</sup> Sopan Deb, "NBA Commissioner: China Asked Us to Fire Daryl Morey," New York Times, October 17, 2019. https://www.nytimes.com/2019/10/17/sports/basketball/nba-china-adam-silver.html; Huileng Tan, "China State Media: NBA's Silver Will Face 'Retribution' for Saying Beijing Wanted Rockets GM Fired," CNBC, October 21, 2019. https://www.cnbc.com/2019/10/21/china-state-media-on-nba-commissioner-adam-silver-hong-kong-tweet-fallout.html.
- <sup>30</sup> Rebecca Davis, "Blackout of NBA Games as New Season Begins," Variety, October 24, 2019. https://variety.com/2019/tv/news/chinanba-tencent-cctv-shaquille-oneal-censorship-1203381866/.
- <sup>31</sup> Rebecca Davis, "Blackout of NBA Games as New Season Begins," Variety, October 24, 2019. https://variety.com/2019/tv/news/chinanba-tencent-cctv-shaquille-oneal-censorship-1203381866/.
- <sup>32</sup> Christopher Palmeri, "Disney's Iger Staying Silent on Hong Kong Protests after NBA's China Row," *Bloomberg*, October 23, 2019. https://www.bloomberg.com/news/articles/2019-10-23/disney-s-iger-says-he-won-t-take-position-on-hong-kong-protests.
- <sup>33</sup> Blake Montgomery, "Blizzard Sponsor Bailed after 'Free Hong Kong' Gamer Ban," Daily Beast, October 29, 2019. https://www.thedailybeast.com/blizzard-sponsor-mitsubishi-bailed-after-the-company-punished-pro-hong-kong-gamerblitzchung?ref=wrap; Ron Wyden et al., Ron Wyden, Marco Rubio, Alexandria Ocasio-Cortez, Mike Gallagher and Tom Malinowski to Robert A. Kotick, CEO of Activision Blizzard, October 18, 2019. Letter. https://www.wyden.senate.gov/imo/media/doc/101819%20Wyden%20Letter%20to%20Activision%20Blizzard%20RE%20Hong%20Kon g.pdf; Blake Montgomery, "Blizzard Employees Staged a Walkout to Protest Ban of Pro-Hong Kong Gamer," Daily Beast, October 9, 2019. https://www.thedailybeast.com/blizzard-employees-staged-a-walkout-to-protest-banned-pro-hong-kong-gamer; Lauren Strapagiel, "There's a Blizzard Boycott Movement after a 'Hearthstone' Player Was Suspended for Supporting Hong Kong Protesters," BuzzFeed News, October 9, 2019. https://www.buzzfeednews.com/article/laurenstrapagiel/blizzard-boycott-hong-kong; Steve Goldstein, "Blizzard Suspends E-Gamer for Hong Kong Comment," MarketWatch, October 8, 2019. https://www.marketwatch.com/story/activision-blizzard-
- suspends-e-gamer-for-hong-kong-comment-2019-10-08.
   <sup>34</sup> Julia Alexander, "Blizzard Bans Three College Hearthstone Players for Hong Kong Protest Sign," October 16, 2019. https://www.theverge.com/2019/10/16/20917574/blizzard-ban-hearthstone-college-students-grandmaster-china-hong-kong-protests; Blake Montgomery, "Blizzard on Pro-Hong Kong Player's Ban: He Can't Go Unpunished," October 12, 2019. https://www.thedailybeast.com/blizzard-on-pro-hong-kong-players-ban-he-cant-go-unpunished?ref=author.
- <sup>35</sup> Scott Neuman, "After China Objects, Apple Removes App Used by Hong Kong Protesters," October 10, 2019. https://www.npr.org/2019/10/10/768841864/after-china-objects-apple-removes-app-used-by-hong-kong-protesters; Elson Tong, "Revolution of Our Times': Hong Kong Protester Role-Playing Game Suspended from Google Play Store," Hong Kong Free Press, October 10, 2019. https://www.hongkongfp.com/2019/10/10/revolution-times-hong-kong-protester-role-playing-game-suspendedgoogle-play-store/.
- <sup>36</sup> Blake Montgomery, "Blizzard on Pro-Hong Kong Player's Ban: He Can't Go Unpunished," October 12, 2019. https://www.thedailybeast.com/blizzard-on-pro-hong-kong-players-ban-he-cant-go-unpunished?ref=author; Jack Nicas, "Apple Removes App That Helps Hong Kong Protesters Track the Police," New York Times, October 9, 2019. https://www.nytimes.com/2019/10/09/technology/apple-hong-kong-app.html.
- <sup>37</sup> Hong Kong Free Press, "Tiffany Removes Advert over Hong Kong Controversy," October 8, 2019. https://www.hongkongfp.com/2019/10/08/tiffany-removes-advert-hong-kong-controversy/.
- <sup>38</sup> Hong Kong Free Press, "Tiffany Removes Advert over Hong Kong Controversy," October 8, 2019. https://www.hongkongfp.com/2019/10/08/tiffany-removes-advert-hong-kong-controversy/.

<sup>39</sup> Edward Wong, "Pence Says U.S. Companies Leave 'Conscience at the Door' over China," October 24, 2019. https://www.nytimes.com/2019/10/24/us/politics/pence-china-hong-kong-nba.html.

- <sup>40</sup> Ron Wyden et al., Ron Wyden, Marco Rubio, Alexandria Ocasio-Cortez, Mike Gallagher and Tom Malinowski to Robert A. Kotick, CEO of Activision Blizzard, October 18, 2019. Letter. https://www.wyden.senate.gov/imo/media/doc/101819%20Wyden%20Letter%20to%20Activision%20Blizzard%20RE%20Hong%20Kon g.pdf.
- <sup>41</sup> Cory Gardner, Press Release: Gardner, Merkley Introduce Bill to Address China's Intimidation of American Businesses, October 30, 2019. https://www.gardner.senate.gov/newsroom/press-releases/gardner-merkley-introduce-bill-to-address-chinas-intimidation-of-american-businesses.
- <sup>42</sup> Don Weinland, Sun Yu, and Xininng Liu, "Slowing Chinese Growth Delivers Blow to Global Economy," *Financial Times*, October 18, 2019. *https://www.ft.com/content/396e67be-f0b5-11e9-ad1e-4367d8281195*.
- <sup>43</sup> Xinhua, "What Did Premier Li Say at the Two Session Press Conference?" March 15, 2019. https://www.shine.cn/news/nation/1903151234/.
- <sup>44</sup> China's National Bureau of Statistics via CEIC database.
- <sup>45</sup> Xinhua, "Chinese Local Gov'ts Issue Nearly 2.2 Trln Yuan New Bonds in H1," July 20, 2019. *http://www.xinhuanet.com/english/2019-07/20/c\_138243464*; China's National Bureau of Statistics via CEIC database.
- <sup>46</sup> Sun Yu and Tom Mitchel, "Chinese Local Government Funds Run Out of Projects to Back," *Financial Times*, October 16, 2019. *https://www.ft.com/content/6aaa5bfe-efce-11e9-ad1e-4367d8281195?mc\_cid=1ab5122348&mc\_eid=5add0e7e13*; Yu Hairon, Cheng Siwei, and Denise Jia, "In Depth: Can Local Governments Again Come to the Rescue," *Caixin Globa*, September 27, 2019. *https://www.caixinglobal.com/2019-09-27/in-depth-can-local-governments-again-come-to-the-rescue-101467123.html*; Xinhua, "CCP Central Office and State Council Issue Notice on Doing a Good Job Issuing Special Purpose Local Government Bonda and Matching Financing to Projects" (中共中央办公厅 国务院办公厅印发《关于做好地方政府专项债券发行及项目配套融资工作的通知》), June 10, 2019. *http://www.xinhuanet.com/politics/2019-06/10/c\_1124604413.htm*
- <sup>47</sup> China's State Council, Local Government Bond Issuance RMB 4.2 Trillion in the First 9 Months (前 9 月全国发行地方政府债卷 41822 亿元), October 25, 2019. http://www.gov.cn/shuju/2019-10/25/content\_5444631.htm; Sina; Sina, "Ministry of Housing and Urban-Rural Development: 2.7 Million Shantytown Apartments Redeveloped in the First 9 Months, Accounting for 94.8% of the Annual Target" (住 建部:1-9 月全国棚改开工 274万套占年度目标 94.8%), October 15, 2019. https://finance.sina.com.cn/china/2019-10-15/dociicezzrr2318687.shtml?cre=tianyi&mod=pcpager\_focus&loc=22&r=9&rfunc=100&tj=none&tr=9; Reuters, China to Restrict Subsidies for Shantytown Redevelopment Projects," July 12, 2019. https://www.reuters.com/article/us-china-economy-property/chinato-restrict-subsidies-for-shantytown-redevelopment-projects-idUSKBN1K21LG.
- <sup>48</sup> Nathaniel Taplin, "A Controversial Savior for Chinese Small Business," Wall Street Journal, September 24, 2019. https://www.wsj.com/articles/a-controversial-savior-for-chinese-small-business-11569321392; National Bureau of Statistics via CEIC database.
- <sup>49</sup> Logan Wright and Allen Feng, "September/Q3 2019 Macro Data Recap," *Rhodium Group*, October 18, 2019; Max Zenglein and Maximilian Karnfelt, "Q3 2019, China's Economic Slowdown: Negative Effects Trade Conflict Are Increasingly Measurable," *Mercator Institute for China Studies*, October 23, 2019, 10. *https://www.merics.org/sites/default/files/2019-10/191023\_Q3\_Economic%20indicators\_final\_2\_1.pdf*; Liang Hong and Guo Yingzhe, "Banks Told to Control Property Lending as Politburo Speaks," August 1, 2019. *https://www.caixinglobal.com/2019-08-01/banks-told-to-control-property-lending-after-politburo-speaks-101446478.html*.
- <sup>50</sup> China's National Bureau of Statistics via CEIC database.
- <sup>51</sup> Yicai, "Bureau of Industry and Information Technology: Fourth Quarter Industrial Value Added Will Definitely Be Better than the Third Quarter" (工信部:四季度工业运行一定会好于三季度), October 22, 2019. https://www.yicai.com/news/100371805.html; Xinhua, "Smooth Operation of the Economy Is Difficult to Achieve, Solid Development Energy Cannot Be Relaxed" (经济平稳来之不易, 夯实 展动能不可松劲), October 20, 2019. http://www.xinhuanet.com/2019-10/20/c\_1125126926.htm.
- <sup>52</sup> China's National Bureau of Statistics via CEIC database.
- <sup>53</sup> Caixin and IHS Markit, "Caixin China General Manufacturing PMI," Markit Economics, November 1, 2019. https://www.markiteconomics.com/Public/Home/PressRelease/f178e9177fb0498b93590cb7967b893e.
- <sup>54</sup> Liu Jiefei, "China's Manufacturing Sector Expands at Fastest Pace in Nearly Three Years, Caixin PMI Shows," November 1, 2019. https://www.caixinglobal.com/2019-11-01/chinas-manufacturing-sector-expands-at-fastest-pace-in-nearly-three-years-caixin-pmishows-101477542.html; Caixin and IHS Markit, "Caixin China General Manufacturing PMI," Markit Economics, November 1, 2019. https://www.markiteconomics.com/Public/Home/PressRelease/f178e9177fb0498b93590cb7967b893e; Evelyn Cheng, "Trump Grants Tariff Exemptions to Plastic Straws, Dog Leashes and More from China," CNBC, September 20, 2019. https://www.cnbc.com/2019/09/20/china-us-trade-war-400-chinese-products-to-be-exempted-from-tariffs.html.
- <sup>55</sup> China General Services PMI," Markit Economics, October 8, 2019. https://www.markiteconomics.com/Public/Home/PressRelease/0414da7c00094259b5503a670848e411; Reuters, "China Services Sector Growth Falls to Seven-Month Low: Caixin PMI," October 7, 2019. https://www.reuters.com/article/us-china-economy-pmi/chinaservices-sector-growth-falls-to-seven-month-low-caixin-pmi-idUSKBN1WN04A.
- <sup>56</sup> Max Zenglein and Maximilian Karnfelt, "Q3 2019, China's Economic Slowdown: Negative Effects Trade Conflict Are Increasingly Measurable," *Mercator Institute for China Studies*, October 23, 2019, 6. *https://www.merics.org/sites/default/files/2019-10/191023\_Q3\_Economic%20indicators\_final\_2\_1.pdf*; *Reuters*, "China Services Sector Growth Falls to Seven-Month Low: Caixin PMI," October 7, 2019. *https://www.reuters.com/article/us-china-economy-pmi/china-services-sector-growth-falls-to-seven-month-lowcaixin-pmi-idUSKBN1WN04A*.
- <sup>57</sup> China's National Bureau of Statistics via CEIC database.

- <sup>58</sup> Bloomberg, "Record Slump in China's Auto Market Continues in September," October 12, 2019. https://www.bloomberg.com/news/articles/2019-10-12/historic-slump-in-china-car-market-continues-as-sales-drop-6-6; China's National Bureau of Statistics via CEIC database.
- <sup>59</sup> China's General Administration of Customs via CEIC database.
- <sup>60</sup> Logan Wright and Allen Feng, "September/Q3 2019 Macro Data Recap," *Rhodium Group*, October 18, 2019; Max Zenglein and Maximilian Karnfelt, "Q3 2019, China's Economic Slowdown: Negative Effects Trade Conflict Are Increasingly Measurable," *Mercator Institute for China Studies*, October 23, 2019, 8. https://www.merics.org/sites/default/files/2019-10/191023\_Q3\_Economic%20indicators\_final\_2\_1.pdf.
- <sup>61</sup> China's National Bureau of Statistics via CEIC database.
- <sup>62</sup> Logan Wright and Allen Feng, "September/Q3 2019 Macro Data Recap," *Rhodium Group China Markets Research*, October 18, 2019.
- <sup>63</sup> Yi Gang, "IMFC Statement by Yi Gang, Governor, People's Republic of China," *International Monetary Fund*, October 18–19, 2019, 2. *https://meetings.imf.org/~/media/AMSM/Files/AM2019/IMFC/CHN.ashx*.
- <sup>64</sup> Yi Gang, "IMFC Statement by Yi Gang, Governor, People's Republic of China," International Monetary Fund, October 18–19, 2019, 2. https://meetings.imf.org/~/media/AMSM/Files/AM2019/IMFC/CHN.ashx.
- <sup>65</sup> Logan Wright and Allen Feng, "Property Sector Holds PBOC Hostage," *Rhodium China Markets Research*, October 24, 2019.
- <sup>66</sup> Financial News, "Banking and Insurance Regulatory Commission Rectifies Bank and Insurer Practices That Infringe on Consumer Rights" (银保监会整治银行保险机构侵害消费者权益乱象), October 11, 2019. http://www.financialnews.com.cn/jg/dt/201910/t20191011\_169101.html; Liu Jiefei, "Regulator Tightens Oversight of Consumer Lending as Household Debt Booms," Caixin Global, August 16, 2019. https://www.caixinglobal.com/2019-08-16/regulator-tightensoversight-of-consumer-lending-as-household-debt-booms-101451916.html.
- <sup>67</sup> Bank for International Settlements, "Credit to the Non-Financial Sector," September 22, 2019. https://www.bis.org/statistics/totcredit.htm; Mike Bird, "China's Floundering Crackdown on Household Debt," Wall Street Journal, August 16, 2019. https://www.wsj.com/articles/chinas-floundering-crackdown-on-household-debt-11565958922.
- <sup>68</sup> People's Daily, "Fourth Plenary Session of the 19th Party Congress Held in Beijing" (中共十九届四中全会在京举行), November 1, 2019. http://cpc.people.com.cn/n1/2019/1101/c64094-31431860.html.
- <sup>69</sup> People's Daily, "Fourth Plenary Session of the 19th Party Congress Held in Beijing" (中共十九届四中全会在京举行), November 1, 2019. http://cpc.people.com.cn/n1/2019/1101/c64094-31431860.html.

<sup>70</sup> Nis Grünberg, "The CCP's Nerve Center," *Mercator Institute for China Studies*, October 30, 2019. *https://www.merics.org/en/china-mapping/the-ccps-nerve-center*; Xi Jinping, "The Promotion of the New Great Project of Party Building Demands Consistency" (推进党的建设新的伟大工程要一以贯之), *Qiushi*, October 2019. *http://www.qstheory.cn/dukan/qs/2019-10/02/c\_1125068596.htm*; Chris Buckley, "2019 Is a Sensitive Year for China. Xi Is Nervous," *New York Times*, February 25, 2019.

https://www.nytimes.com/2019/02/25/world/asia/china-xi-warnings.html.

- <sup>71</sup> People's Daily, "Fourth Plenary Session of the 19th Party Congress Held in Beijing" (中共十九届四中全会在京举行), November 1, 2019. http://cpc.people.com.cn/n1/2019/1101/c64094-31431860.html.
- <sup>72</sup> People's Daily, "Fourth Plenary Session of the 19th Party Congress Held in Beijing" (中共十九届四中全会在京举行), November 1, 2019. http://cpc.people.com.cn/n1/2019/1101/c64094-31431860.html.
- <sup>73</sup> Dandan Li and Peter Martin, "What to Expect at China's Biggest Meeting of the Year," Bloomberg, October 29, 2019. https://www.bloomberg.com/news/articles/2019-10-29/what-to-expect-at-china-s-biggest-meeting-of-the-year-quicktake-k2bjv1vv.
- <sup>74</sup> Jude Blanchette and Mingda Qiu, "Red Flags: Why Was China's Fourth Plenum Delayed?" Center for Strategic and International Studies, August 30, 2019. https://www.csis.org/analysis/red-flags-why-was-chinas-fourth-plenum-delayed.
- <sup>75</sup> Lester Ross et al., "New Chinese Regulations on Improving the Investment Environment," *WilmerHale Client Alerts*, October 29, 2019. https://www.wilmerhale.com/en/insights/client-alerts/20191029-new-chinese-regulations-on-improving-the-investment-environment.
- <sup>76</sup> Barry Naughton, "Local Debt Restructuring: A Case of Ongoing Authoritarian Reform," *China Leadership Monitor* 47 (Summer 2015). https://www.hoover.org/sites/default/files/research/docs/clm47bn.pdf.
- <sup>77</sup> Zhang Wenyang, "Li Keqiang: China's Foreign Investment Law's Accompanying Regulation Will Be Complete by Year's End (李克强: 外商投资法配套法规规章今年年底会完成)," *Economic Observer*, July 2, 2019. Translation. *https://finance.sina.com.cn/roll/2019-07-02/doc-ihytcerm0834490.shtml*; Chinese Government Web Portal, *Li Keqiang: China Will Quickly Formulate the Foreign Investment*

Law's Accompanying Regulations (李克强:中国将抓紧制定外商投资法配套法规). March 28, 2019. Translation. http://www.gov.cn/guowuyuan/2019-03/28/content\_5377691.htm.

- <sup>78</sup> Evelyn Chang, "EU Chamber Says China's New Foreign Investment Law Is 'Surprisingly Accommodating," CNBC, October 29, 2019. https://www.cnbc.com/2019/10/21/eu-chamber-chinas-foreign-investment-law-is-surprisingly-accommodating.html.
- <sup>79</sup> U.S.-China Business Council, "U.S.-China Business Council's Opinions and Advice on Formulating Implementation Details and Accompanying Regulations for the Foreign Investment Law (美中贸易全国委员会关于制定外商投资法实施细则和配套法规的意见 建议)," 1, 4, 12. Translation.
- https://www.uschina.org/sites/default/files/uscbc\_foreign\_investment\_law\_implementing\_regulations\_comments\_ch.pdf.
   <sup>80</sup> U.S.-China Business Council, "U.S.-China Business Council's Opinions and Advice on Formulating Implementation Details and Accompanying Regulations for the Foreign Investment Law" (美中贸易全国委员会关于制定外商投资法实施细则和配套法规的意见建议), 8–9. Translation.

https://www.uschina.org/sites/default/files/uscbc\_foreign\_investment\_law\_implementing\_regulations\_comments\_ch.pdf; Ministry of Industry and Information Technology of the People's Republic of China, "New Energy Vehicle Manufacturing Enterprise and Product Access Management Regulations" (新能源汽车生产企业及产品准入管理规定), January 17, 2017. Translation.

http://www.miit.gov.cn/n1146295/n1652858/n1652930/n3757018/c5466114/content.html.

<sup>1</sup> U.S.-China Business Council, "U.S.-China Business Council's Opinions and Advice on Formulating Implementation Details and Accompanying Regulations for the Foreign Investment Law" (美中贸易全国委员会关于制定外商投资法实施细则和配套法规的意

见建议), 5–6. Translation; Office of the U.S. Trade Representative, *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*, March 22, 2018, 181. https://ustr.gov/sites/default/files/Section%20301%20FINAL.PDF.

<sup>82</sup> U.S.-China Business Council, "U.S.-China Business Council's Opinions and Advice on Formulating Implementation Details and Accompanying Regulations for the Foreign Investment Law" (美中贸易全国委员会关于制定外商投资法实施细则和配套法规的意

见建议), 5-6. Translation.

- <sup>83</sup> Lester Ross et al., "New Chinese Regulations on Improving the Investment Environment," WilmerHale Client Alerts, October 29, 2019. https://www.wilmerhale.com/en/insights/client-alerts/20191029-new-chinese-regulations-on-improving-the-investment-environment.
- <sup>84</sup> Lester Ross et al., "New Chinese Regulations on Improving the Investment Environment," WilmerHale Client Alerts, October 29, 2019. https://www.wilmerhale.com/en/insights/client-alerts/20191029-new-chinese-regulations-on-improving-the-investment-environment.
- <sup>85</sup> World Bank Group, "Economy Profile: China," Doing Business 2020, October 24, 2019, 4. https://www.doingbusiness.org/content/dam/doingBusiness/country/c/china/CHN.pdf; World Bank Group, Doing Business 2019: Training for Reform, October 31, 2018, 163. https://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2019-report\_web-version.pdf.
- <sup>86</sup> World Bank Group, "Economy Profile: China," Doing Business 2020, October 24, 2019, 4. https://www.doingbusiness.org/content/dam/doingBusiness/country/c/china/CHN.pdf; World Bank Group, Doing Business 2019: Training for Reform, October 31, 2018, 163. https://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2019-report\_web-version.pdf.
- <sup>87</sup> World Bank Group, "Economy Profile: China," *Doing Business 2020*, October 24, 2019, 4. https://www.doingbusiness.org/content/dam/doingBusiness/country/c/china/CHN.pdf.
- <sup>88</sup> World Bank and International Finance Corporation, *Doing Business in 2006: Creating Jobs*, September 13, 2005, 119. *https://www.doingbusiness.org/en/reports/global-reports/doing-business-2006.*
- <sup>89</sup> U.S.-China Economic and Security Review Commission, *Hearing on What Keeps Xi Up at Night: Beijing's Internal and External Challenges*, written testimony of Nicholas Borst, 2, 6–7. https://www.uscc.gov/sites/default/files/Borst\_USCC%20Testimony\_FINAL.pdf; Xinhua, "Xi Jinping Hosts a Symposium on the Private Sector," November 1, 2018. Translation. http://www.gov.cn/xinwen/2018-11/01/content\_5336540.htm; Javier C. Hernández, "For Xi Jinping, Being a Man of the People Means Looking the Part," New York Times, September 28, 2018. https://www.nytimes.com/2018/09/28/world/asia/xi-jinping-china-propaganda.html.
- <sup>90</sup> World Bank Group, "Common Misconceptions about Doing Business." https://www.doingbusiness.org/en/methodology/commonmisconceptions.
- <sup>91</sup> World Bank Group, "Economy Profile: China," Doing Business 2020, October 24, 2019, 4. https://www.doingbusiness.org/content/dam/doingBusiness/country/c/china/CHN.pdf.
- <sup>92</sup> Covington and Burling LLP, "Measure and Practices Restraining Foreign Investment in China" (Prepared for the European Commission Directorate General for Trade), August 10, 2014, 12–13, 32–35, 47. http://www.iberchina.org/files/2017/restrictions\_investment\_china.pdf.
- <sup>93</sup> World Bank Group, "Economy Profile: China," *Doing Business 2020*, October 24, 2019, 4. https://www.doingbusiness.org/content/dam/doingBusiness/country/c/china/CHN.pdf; World Bank Group, "Economy Profile: United States," *Doing Business 2020*, October 24, 2019, 4. https://www.doingbusiness.org/content/dam/doingBusiness/country/u/united-states/USA.pdf.
- <sup>94</sup> Dan Harris, "The Five Keys to a China Contract That Works," China Law Blog, February 18, 2019. https://www.chinalawblog.com/2019/02/the-five-keys-to-a-china-contract-that-works.html; Steve Dickinson, "Enforcing Contracts in China. Way, Way Better than You Think," China Law Blog, July 13, 2009. https://www.chinalawblog.com/2009/07/enforcing\_contracts\_in\_china\_w.html.
- <sup>95</sup> Yusuf Bhana, "Enforcing Contract Law in China," *Translate Media*, December 7, 2015. *https://www.translatemedia.com/us/blog-usa/enforcing-contract-law-in-china/*; Steve Dickinson, "Enforcing Contracts in China. Way, Way Better than You Think," *China Law Blog*, July 13, 2009. *https://www.chinalawblog.com/2009/07/enforcing\_contracts\_in\_china\_w.html*.
- <sup>96</sup> Xinhua, "At a CCP Central Committee Political Bureau Study Session, Xi Jinping Emphasized the Use of Blockchain as an Important Breakthrough for Independent Innovation of Core Technologies and Accelerating the Development of Blockchain Technology and Industrial Innovation" (习近平在中央政治局第十八次集体学习时强调 把区块链作为核心技术自主创新重要突破口 加快推动区块

链技术和产业创新发展), October 25, 2019. http://www.xinhuanet.com/2019-10/25/c\_1125153665.htm; Xinhua, "Xi Stresses Development, Application of Blockchain Technology," October 25, 2019. http://www.xinhuanet.com/english/2019-10/25/c\_138503254.htm.

<sup>97</sup> Xinhua, "At a CCP Central Committee Political Bureau Study Session, Xi Jinping Emphasized the Use of Blockchain as an Important Breakthrough for Independent Innovation of Core Technologies and Accelerating the Development of Blockchain Technology and Industrial Innovation" (习近平在中央政治局第十八次集体学习时强调 把区块链作为核心技术自主创新重要突破口 加快推动区块

链技术和产业创新发展), October 25, 2019. http://www.xinhuanet.com/2019-10/25/c\_1125153665.htm; Xinhua, "Xi Stresses Development, Application of Blockchain Technology," October 25, 2019. http://www.xinhuanet.com/english/2019-10/25/c\_138503254.htm.

<sup>98</sup> Xinhua, "At a CCP Central Committee Political Bureau Study Session, Xi Jinping Emphasized the Use of Blockchain as an Important Breakthrough for Independent Innovation of Core Technologies and Accelerating the Development of Blockchain Technology and Industrial Innovation" (习近平在中央政治局第十八次集体学习时强调 把区块链作为核心技术自主创新重要突破口 加快推动区块

链技术和产业创新发展), October 25, 2019. http://www.xinhuanet.com/2019-10/25/c\_1125153665.htm; Xinhua, "Xi Stresses Development, Application of Blockchain Technology," October 25, 2019. http://www.xinhuanet.com/english/2019-10/25/c\_138503254.htm.

- <sup>99</sup> Nathaniel Taplin, "China's Blockchain Revolution Won't Set Investors Free," Wall Street Journal, October 29, 2019. https://www.wsj.com/articles/chinas-blockchain-revolution-wont-set-investors-free-11572349325.
- <sup>100</sup> Brenda Goh and Cheng Leng, "China State Paper Urges Calm after Blockchain Stocks, Bitcoin Soar," *Reuters*, October 29, 2019. https://www.reuters.com/article/us-china-blockchain/china-state-paper-urges-calm-after-blockchain-stocks-bitcoin-soaridUSKBN1X80MP.
- <sup>101</sup> MIT Technology Review, "China's Leaders Have Embraced Blockchain (Er, Minus the Decentralized Bit)," October 28, 2019. https://www.technologyreview.com/f/614639/chinas-leaders-have-embraced-blockchains-erm-minus-the-decentralized-bit/; Lorand Laskai and Graham Webster, "Translation: Chinese Researchers Take on Blockchain Security," New America, October 16, 2018. https://www.newamerica.org/cybersecurity-initiative/digichina/blog/chinese-researchers-take-blockchain-security-translation/.

<sup>102</sup> Bloomberg, "China's PBOC Says Its Own Cryptocurrency Is 'Close' to Release," August 11, 2019. https://www.bloomberg.com/news/articles/2019-08-12/china-s-pboc-says-its-own-cryptocurrency-is-close-to-release.

 <sup>103</sup> China Banking News, "China's Local Governments Embrace Blockchain Technology for Administrative Affairs," July 28, 2019. http://www.chinabankingnews.com/2019/07/28/chinas-local-governments-embrace-blockchain-technology-for-administrative-affairs/; Kevin C. Desouza, Chen Ye, and Xiaofeng Wang, "How China's Local Governments and Academia Propel Blockchain Business," Brookings Institution, August 1, 2019. https://www.brookings.edu/blog/techtank/2018/08/01/how-chinas-local-governments-andacademia-propel-blockchain-business/.

<sup>104</sup> Jinse Caijing, "In the First Half of 2019: Blockchain Application Projects Totaled 408" (2019 年上半年:区块链应用项目共 408个

10 大领域 金融、政务、溯源稳居前三甲), July 4, 2019. http://gscaijing.com/archives/21500.

<sup>105</sup> Gartner, "Gartner 2019 Hype Cycle Shows Most Blockchain Technologies Are Still Five to 10 Years Away from Transformational Impact," October 8, 2019. https://www.gartner.com/en/newsroom/press-releases/2019-10-08-gartner-2019-hype-cycle-shows-mostblockchain-technologies-are-still-five-to-10-years-away-from-transformational-impact; Alan McQuinn and Daniel Castro, "A Policymaker's Guide to Blockchain," Information Technology & Innovation Foundation, April 30, 2019. https://itif.org/publications/2019/04/30/policymakers-guide-blockchain; Yingzhi Yang, "China's Local Governments Ramp Up Blockchain Projects amid Cryptocurrency Clampdown," South China Morning Post, April 24, 2018. https://www.scmp.com/tech/enterprises/article/2142962/chinas-local-governments-ramp-blockchain-projects-amid.

- <sup>106</sup> Sina, "Central Bank Paper: What Blockchain Can and Cannot Do?" (央行万字论文:区块链能做什么、不能做什么?) October 30, 2019. http://vr.sina.com.cn/news/hot/2019-10-30/doc-iicezzrr6016142.shtml; China Banking News, "Chinese Central Bank Highlights Limitations of Blockchain Technology for Financial Purposes," China Banking News, November 7, 2018. http://www.chinabankingnews.com/2018/11/07/chinese-central-bank-highlights-limitations-blockchain-technology-financial-purposes/.
- <sup>107</sup> Frank Tang and Jun Mai, "Blockchain Endorsement from China's Xi Jinping Could Lead to Fraud and Speculation, Technology Analysts Warn," *South China Morning Post*, October 31, 2019. *https://www.scmp.com/economy/china-*

economy/article/3035797/blockchain-endorsement-chinas-xi-jinping-could-lead-fraud-and.

- <sup>108</sup> Frank Tang and Jun Mai, "Blockchain Endorsement from China's Xi Jinping Could Lead to Fraud and Speculation, Technology Analysts Warn," South China Morning Post, October 31, 2019. https://www.scmp.com/economy/chinaeconomy/article/3035797/blockchain-endorsement-chinas-xi-jinping-could-lead-fraud-and.
- <sup>109</sup> Xinhua, "Cryptography Law of the People's Republic of China" (中华人民共和国密码法), October 26, 2019. http://www.xinhuanet.com/legal/2019-10/26/c\_1125156896.htm; Ben Blanchard, "China Passes Cryptography Law as Gears Up for Digital Currency," Reuters, October 26, 2019. https://www.reuters.com/article/us-china-lawmaking/china-passes-cryptography-law-asgears-up-for-digital-currency-idUSKBN1X600Z.
- <sup>110</sup> World Crypto Index, "How Cryptography Is Used in Cryptocurrencies." https://www.worldcryptoindex.com/how-cryptography-is-usedcryptocurrency/, Binance Academy, "What Makes a Blockchain Secure?" October 28, 2019. https://www.binance.vision/blockchain/what-makes-a-blockchain-secure.
- <sup>111</sup> Xinhua, "Cryptography Law of the People's Republic of China" (中华人民共和国密码法), October 26, 2019. http://www.xinhuanet.com/legal/2019-10/26/c\_1125156896.htm
- <sup>112</sup> Xinhua, "Cryptography Law of the People's Republic of China" (中华人民共和国密码法), October 26, 2019. http://www.xinhuanet.com/legal/2019-10/26/c\_1125156896.htm.
- <sup>113</sup> Xinhua, "Cryptography Law of the People's Republic of China" (中华人民共和国密码法), October 26, 2019. http://www.xinhuanet.com/legal/2019-10/26/c\_1125156896.htm.

<sup>114</sup> Yan Luo, Eric Carlson, and Zhijing Yu, "China Enacts Encryption Law," *Covington & Burling LLP*, October 31, 2019. https://www.insideprivacy.com/data-security/china-enacts-encryption-law/.

<sup>115</sup> Yan Luo, Eric Carlson, and Zhijing Yu, "China Enacts Encryption Law," Covington & Burling LLP, October 31, 2019. https://www.insideprivacy.com/data-security/china-enacts-encryption-law/.

- <sup>116</sup> Zi Yang, "Decoding China's Cryptography Law: A Look at the Security and Commercial Implications of the New Law," *Diplomat*, October 30, 2019. *https://thediplomat.com/2019/10/decoding-chinas-cryptography-law/*.
- <sup>117</sup> Echo Xie, "China Hopes Cryptography Law Will Provide Security and Profitability," *South China Morning Post*, October 28, 2019. *https://www.scmp.com/news/china/politics/article/3034764/china-hopes-cryptography-law-will-provide-security-and*.
- <sup>118</sup> Bloomberg News, "China's PBOC Says Its Own Cryptocurrency Is 'Close' to Release," August 11, 2019. https://www.bloomberg.com/news/articles/2019-08-12/china-s-pboc-says-its-own-cryptocurrency-is-close-to-release.
- <sup>119</sup> Raymond Zhong, "China's Cryptocurrency Plan Has a Powerful Partner: Big Brother," *New York Times*, October 18, 2019. *https://www.nytimes.com/2019/10/18/technology/china-cryptocurrency-facebook-libra.html*.
- <sup>120</sup> Bloomberg, "Why China's Rushing to Mint Its Own Digital Currency," September 11, 2019. https://www.washingtonpost.com/business/why-chinas-rushing-to-mint-its-own-digital-currency/2019/09/10/2b77265a-d427-11e9-8924-1db7dac797fb\_story.html; Kevin Helms, "Central Banks Worldwide Testing Their Own Digital Currencies," Bitcoin News, August 15, 2019. https://news.bitcoin.com/central-banks-testing-digital-currencies/; Claire Jones, "Central Bank Plans to Create Digital Currencies Receive Backing," Financial Times, June 30, 2019. https://www.ft.com/content/428a0b20-99b0-11e9-9573-ee5cbb98ed36.
- <sup>121</sup> Brenda Goh and Samuel Shen, "China's Proposed Digital Currency More about Policing than Progress," *Reuters*, November 1, 2019. https://www.reuters.com/article/us-china-markets-digital-currency/chinas-proposed-digital-currency-more-about-policing-thanprogress-idUSKBN1XB3QP.
- <sup>122</sup> Bloomberg News, "China's PBOC Says Its Own Cryptocurrency Is 'Close' to Release," August 11, 2019. https://www.bloomberg.com/news/articles/2019-08-12/china-s-pboc-says-its-own-cryptocurrency-is-close-to-release.
- <sup>123</sup> Brenda Goh and Samuel Shen, "China's Proposed Digital Currency More about Policing than Progress," *Reuters*, November 1, 2019. https://www.reuters.com/article/us-china-markets-digital-currency/chinas-proposed-digital-currency-more-about-policing-thanprogress-idUSKBN1XB3QP.
- <sup>124</sup> Raymond Zhong, "China's Cryptocurrency Plan Has a Powerful Partner: Big Brother," New York Times, October 18, 2019. https://www.nytimes.com/2019/10/18/technology/china-cryptocurrency-facebook-libra.html.
- <sup>125</sup> Mehreen Khan, Sam Fleming, and Caroline Binham, "Central Bank to Grill Facebook over Libra," *Financial Times*, September 15, 2019. https://www.ft.com/content/11bfda8c-d6fb-11e9-8f9b-77216ebe1f17.
- <sup>126</sup> Raymond Zhong, "China's Cryptocurrency Plan Has a Powerful Partner: Big Brother," New York Times, October 18, 2019. https://www.nytimes.com/2019/10/18/technology/china-cryptocurrency-facebook-libra.html.
- <sup>127</sup> Mu Changchun, "Opinion: Facebook's Libra Needs Central Bank Supervision," *Caixin*, July 9, 2019.
- https://www.caixinglobal.com/2019-07-09/opinion-facebooks-libra-needs-central-bank-supervision-101437334.html.
- <sup>128</sup> U.S. House of Representatives Committee on Financial Services, *Hearing on An Examination of Facebook and Its Impact on Financial Services and Housing Sectors*, written testimony of Mark Zuckerberg, October 23, 2019.

https://financialservices.house.gov/uploadedfiles/hhrg-116-ba00-wstate-zuckerbergm-20191023-u1.pdf.