

# China's Integration into the Global Economy

February 2022

(as of September 16, 2021)

Syllabus

**Dr. Vera Z. Eichenauer**

ETH Zurich, Visiting Researcher at AMSE in the Academic Year 2021-2022

Email: [eichenauer@kof.ethz.ch](mailto:eichenauer@kof.ethz.ch)

[Website](#)

Room: Îlot Bernard Dubois Building, 2.57

Office hours: By appointment

## 1. General information

### 1.1 Course content

Over the last decades, China has experienced an unprecedented economic rise. According to World Bank estimates, more than 850 million people have been lifted out of extreme poverty. Today, China is the world's second largest economy. The country's own global development strategy, the Belt and Road Initiative, intends to connect China with more than 150 countries through a "belt" of infrastructure development and investment projects. China's rise has affected workers, consumers, and producers all over the world and challenges the long-standing dominance of Western providers of international development finance. This has led to significant challenges, both domestically and internationally. We will read and discuss seminal empirical papers and recent (working) papers to better understand the structure and development of Chinese trade and its impacts domestically and globally. We will also look at Chinese investments and development finance, the Belt and Road Initiative and the creation of new development banks.

This PhD seminar intends to shed light onto the international dimensions of China's economic development. The seminar starts with economic research on China's economic rise from a macro and micro perspective. We then turn to the major economic discussions about the impact of Chinese trade on the US and on selected European countries and read about the recent political economy of trade and investment. We also consider the innovation-spurring role of China's trade integration. We continue by studying how China's rise has impacted developing countries through its development finance, including the New Silk Road. In the last seminar session, I propose three chapters among which students will choose together in the first session of

the seminar. I am open to other suggestions of topics and/or articles.

Chapter 1	China's economic growth
Chapter 2	The 'China trade shock'
Chapter 3	Innovation
Chapter 4	Trade policy with China and Chinese investments over the last decade
Chapter 5	Development finance and the Belt and Road initiative

In the first session, we will choose to discuss one of the following topics:

Chapter 6	Domestic effects of Chinese international engagements
Chapter 7	Environment
Chapter 8	Political evaluation

## *1.2 Course goals*

Students learn how to work through cutting-edge empirical research on the effects of China's integration into the world economy; synthesize and critically review scholarly work; present research in front of an academic audience; and manage an academic debate.

## **2. Course overview**

### *2.1 Description of the teaching and learning methods*

With the opportunity to present scholarly work, students practice their ability to present key insights from complex empirical papers as well as defend arguments and empirical approaches from the literature. Through their responsibility for leading the discussion on one topic, they experience the role of a moderator and learn to engage their academic peers in the discussion. Through the engagement in discussions with other students and the teaching staff, they train their ability to reflect on the research papers by scholars and statements by other students. **The course language is English.**

### *2.2 Meetings*

#### *Seminar organization*

- Wednesday, February 2, 17:00-18:00, Room: tba

### Seminar sessions:

- Wednesday, February 9, 16:00-19:00, Room: tba, Reading: Chapters 1-2
- Wednesday, February 16, 16:00-19:00, Room: tba, Reading: Chapters 3-4
- Monday, February 21, 17:00-19:00, Room: tba, Reading: Chapter 5
- Wednesday, February 23, 16:00-19:00, Room: tba, Reading: tbd, short presentations

### 2.3 Examination and grading of the module

The grading consists of four components:

- Presentation of one topic based on the reading + responsibility to lead the discussion in class (in groups: 1-3 people; 1.3 hours)
- Short presentation outlining open research questions including method and main data requirements (5-10 minutes, during the last seminar session)
- Participation in class

### 2.4 Course materials

- The required readings are announced below.
- Supplementary reading is indicated in the appendix and might be updated at the beginning of the course.

### Preliminary reading list:

#### Chapter 1: China's economic growth

Zhu, Xiaodong. 2012. Understanding China's Growth: Past, Present, and Future. *Journal of Economic Perspectives* 26 (4): 103–24. <https://doi.org/10.1257/jep.26.4.103>.

The pace and scale of China's economic transformation have no historical precedent. In 1978, China was one of the poorest countries in the world. The real per capita GDP in China was only one-fortieth of the U.S. level and one-tenth the Brazilian level. Since then, China's real per capita GDP has grown at an average rate exceeding 8 percent per year. As a result, China's real per capita GDP is now almost one-fifth the U.S. level and at the same level as Brazil. This rapid and sustained improvement in average living standard has occurred in a country with more than 20 percent of the world's population so that China is now the second-largest economy in the world. I will begin by discussing briefly China's historical growth performance from 1800 to 1950. I then present growth accounting results for the period from 1952 to 1978 and the period since 1978, decomposing the sources of growth into capital deepening, labor deepening, and productivity growth. But the main

focus of this paper will be to examine the sources of growth since 1978, the year when China started economic reform. Perhaps surprisingly, given China's well-documented sky-high rates of saving and investment, I will argue that China's rapid growth over the last three decades has been driven by productivity growth rather than by capital investment. I also examine the contributions of sector-level productivity growth, and of resource reallocation across sectors and across firms within a sector, to aggregate productivity growth. Overall, gradual and persistent institutional change and policy reforms that have reduced distortions and improved economic incentives are the main reasons for the productivity growth.

Li, Hongbin, Lei Li, Binzhen Wu, and Yanyan Xiong. 2012. The End of Cheap Chinese Labor. *Journal of Economic Perspectives* 26 (4): 57–74. <https://doi.org/10.1257/jep.26.4.57>.

In recent decades, cheap labor has played a central role in the Chinese model, which has relied on expanded participation in world trade as a main driver of growth. At the beginning of China's economic reforms in 1978, the annual wage of a Chinese urban worker was only \$1,004 in U.S. dollars. The Chinese wage was only 3 percent of the average U.S. wage at that time, and it was also significantly lower than the wages in neighboring Asian countries such as the Philippines and Thailand. The Chinese wage was also low relative to productivity. However, wages are now rising in China. In 2010, the annual wage of a Chinese urban worker reached \$5,487 in U.S. dollars, which is similar to wages earned by workers in the Philippines and Thailand and significantly higher than those earned by workers in India and Indonesia. China's wages also increased faster than productivity since the late 1990s, suggesting that Chinese labor is becoming more expensive in this sense as well. The increase in China's wages is not confined to any sector, as wages have increased for both skilled and unskilled workers, for both coastal and inland areas, and for both exporting and nonexporting firms. We benchmark wage growth to productivity growth using both national- and industry-level data, showing that Chinese labor was kept cheap until the late 1990s but the relative cost of labor has increased since then. Finally, we discuss the main forces that are pushing wages up.

### **Further reading for Chapter 1**

Hsieh, Chang-Tai, Ralph Ossa. 2016. A global view of productivity growth in China. *Journal of International Economics* 102: 209-224. <https://doi.org/10.1016/j.jinteco.2016.07.007>.

How does a country's productivity growth affect worldwide real incomes through international trade? In this paper, we take this classic question to the data by measuring the spillover effects of China's productivity growth. Using a quantitative trade model, we first estimate China's productivity growth between 1995 and 2007 and then isolate what would have happened to real incomes around the world if only China's productivity had changed. We find that the spillover effects are small for all countries in our sample, ranging from a cumulative real income loss of at most -0.2% to a cumulative real income gain of at most 0.2%.

## Chapter 2: The 'China trade shock'

Autor, David H., David Dorn, Gordon H. Hanson, and Jae Song. 2014. Trade Adjustment: Worker-Level Evidence. *The Quarterly Journal of Economics* 129 (4): 1799–1860. <https://doi.org/10.1093/qje/qju026>.

We analyze the effect of exposure to international trade on earnings and employment of U.S. workers from 1992 through 2007 by exploiting industry shocks to import competition stemming from China's spectacular rise as a manufacturing exporter paired with longitudinal data on individual earnings by employer spanning close to two decades. Individuals who in 1991 worked in manufacturing industries that experienced high subsequent import growth garner lower cumulative earnings, face elevated risk of obtaining public disability benefits, and spend less time working for their initial employers, less time in their initial two-digit manufacturing industries, and more time working elsewhere in manufacturing and outside of manufacturing. Earnings losses are larger for individuals with low initial wages, low initial tenure, and low attachment to the labor force. Low-wage workers churn primarily among manufacturing sectors, where they are repeatedly exposed to subsequent trade shocks. High-wage workers are better able to move across employers with minimal earnings losses and are more likely to move out of manufacturing conditional on separation. These findings reveal that import shocks impose substantial labor adjustment costs that are highly unevenly distributed across workers according to their skill levels and conditions of employment in the pre-shock period.

Aghion, Philippe, Antonin Bergeaud, Matthieu Lequien, Marc Melitz, and Thomas Zuber. 2021. Opposing firm-level Responses to the China Shock: Horizontal Competition Versus Vertical Relationships? National Bureau of Economic Research Working Paper 29196. <https://doi.org/10.3386/w29196>

We decompose the “China shock” into two components that induce different adjustments for firms exposed to Chinese exports: a horizontal shock affecting firms selling goods that compete with similar imported Chinese goods, and a vertical shock affecting firms using inputs similar to the imported Chinese goods. Combining French accounting, customs, and patent information at the firm-level, we show that the horizontal shock is detrimental to firms' sales, employment, and innovation. Moreover, this negative impact is concentrated on low-productivity firms. By contrast, we find a positive effect - although often not significant - of the vertical shock on firms' sales, employment, and innovation.

Dauth, Wolfgang, Sebastian Findeisen, and Jens Suedekum. 2014. The Rise of the East and the Far East: German Labor Markets and Trade Integration. *Journal of the European Economic Association* 12 (6): 1643-1675. <https://doi.org/10.1111/jeea.12092>

We analyze the effects of the unprecedented rise in trade between Germany and “the East” (China and Eastern Europe) in the period 1988–2008 on German local labor markets. Using detailed administrative data, we exploit the cross-regional variation in initial industry structures and use trade flows of other high-income countries as instruments for regional import and export exposure. We find that the rise of the East in the world economy caused substantial job losses in German regions specialized in import-competing industries, both in manufacturing and beyond. Regions specialized in export-oriented industries, however, experienced even stronger employment gains and lower unemployment. In the aggregate, we estimate that this trade integration has caused some 442,000 additional jobs in the economy and contributed to retaining the manufacturing sector in Germany.

This is almost exclusively driven by the rise of Eastern Europe, not by China. We also conduct an analysis at the individual worker level, and find that trade had a stabilizing overall effect on employment relationships.

### Further reading for Chapter 2

Autor, David H., David Dorn, and Gordon H. Hanson. 2016. The China Shock: Learning from Labor-Market Adjustment to Large Changes in Trade. *Annual Review of Economics* 8: 205-240. <https://doi.org/10.1146/annurev-economics-080315-015041>.

China's emergence as a great economic power has induced an epochal shift in patterns of world trade. Simultaneously, it has challenged much of the received empirical wisdom about how labor markets adjust to trade shocks. Alongside the heralded consumer benefits of expanded trade are substantial adjustment costs and distributional consequences. These impacts are most visible in the local labor markets in which the industries exposed to foreign competition are concentrated. Adjustment in local labor markets is remarkably slow, with wages and labor-force participation rates remaining depressed and unemployment rates remaining elevated for at least a full decade after the China trade shock commences. Exposed workers experience greater job churning and reduced lifetime income. At the national level, employment has fallen in the US industries more exposed to import competition, as expected, but offsetting employment gains in other industries have yet to materialize. Better understanding when and where trade is costly, and how and why it may be beneficial, is a key item on the research agenda for trade and labor economists.

Amiti, Mary, Mi Dai, Robert C. Feenstra, John Romalis. 2020. How did China's WTO entry affect U.S. prices? *Journal of International Economics* 126. <https://doi.org/10.1016/j.jinteco.2020.103339>.

We analyze the effects of China's rapid export expansion following its WTO entry on the U.S. prices of manufacturing goods between 2000 and 2006, exploiting cross-industry variation in trade liberalization. Lower input tariffs in China lowered costs and, in conjunction with reduced U.S. tariff uncertainty, expanded China's export participation. WTO entry therefore led to lower effective prices for Chinese exports, and we find a substantial reduction in the prices of other countries selling to the U.S., too. The largest contribution to the overall price reduction comes from lower inputs tariffs in China, with further price reductions caused by the reduction in tariff uncertainty. Other policy reforms such as the elimination of U.S. quotas under the Multifibre Agreements and of Chinese export controls also reduced prices.

Asquith, Brian, Sanjana Goswami, David Neumark, Antonio Rodriguez-Lopez. 2019. U.S. job flows and the China shock. *Journal of International Economics* 118: 123-137. <https://doi.org/10.1016/j.jinteco.2019.02.002>.

International trade exposure affects job flows along the intensive margin (from expansions and contractions of firms' employment) as well as along the extensive margin (from births and deaths of firms). This paper uses 1992–2011 employment data from U.S. establishments to construct job flows at both the industry and commuting-zone levels, and then estimates the impact of the 'China shock'

on each job-flow type. Using the two most influential measures of Chinese exposure, we find that the China shock affects U.S. employment mainly through deaths of establishments. At the commuting-zone level, we find evidence of large job reallocation from the Chinese-competition exposed sector to the nonexposed sector. Moreover, we demonstrate that the job-flow effects of the China shock are fundamentally different from those of a more general adverse shock affecting the U.S. demand for domestic labor.

Branstetter, Lee G., Brian K. Kovak, Jacqueline Mauro, and Ana Venancio. 2019. The China Shock and Employment in Portuguese Firms. National Bureau of Economic Research Working Paper 26252. <https://doi.org/10.3386/w26252>.

This paper considers the effects of Chinese import competition on firm-level labor market outcomes in Portugal. We examine direct competition in the Portuguese market and indirect competition in Portugal's largest export markets in Western Europe. Using rich employer-employee data matched to firm-level trade transactions, we measure the degree to which different Portuguese firms faced Chinese import competition, based on firm product mix and distribution of sales across countries. We find economically and statistically significant employment declines in firms with more exposure to Chinese competition in European export markets, but minimal effects of direct competition in Portugal. Our findings also suggest a centrally important role for Portugal's stringent labor market regulations in limiting firms' ability to adjust to competitive shocks. In our earlier sample period (1995-2000), firms have limited ability to adjust employment, hours, or wages, and the primary adjustment margin is firm exit. In the later period (2000-2007), when more flexible temporary contracts comprise a larger share of employment, we find employment reductions among more exposed firms. Those employment reductions are entirely accounted for by changes in temporary employment, with no effect on permanent employment. We expect these findings to be informative for other peripheral European countries that had specialized in labor-intensive manufacturing industries operating under inflexible labor market regimes.

Dauth, Wolfgang, Sebastian Findeisen, and Jens Suedekum. 2017. Trade and Manufacturing Jobs in Germany. *American Economic Review*, 107 (5): 337-42. <https://doi.org/10.1257/aer.p20171025>.

The German economy exhibits rising service and declining manufacturing employment, but this decline is much sharper in import-competing than export-oriented branches. We first document the individual-level job transitions behind those trends. They are not driven by manufacturing workers who smoothly switch to services. The observed shifts are entirely due to young entrants and returnees from non-employment. We then investigate if rising trade with China and Eastern Europe causally affected those labor flows. Exploiting variation across industries and regions, we find that globalization did not speed up the manufacturing decline in Germany. It even retained those jobs in the economy.

Feenstra, Robert C., Hong Ma, Yuan Xu. 2019. US exports and employment. *Journal of International Economics*, 120: 46-58. <https://doi.org/10.1016/j.jinteco.2019.05.002>.

We study the employment responses to the expansion of US exports and to the import competition, especially from China. We find that although import competition reduces jobs, export expansion

also creates a substantial number of jobs. At the industry level, job gains due to US export expansion largely offset job losses due to Chinese import competition, resulting in a net gain of 379 thousand jobs over 1991–2011 in our preferred estimate. At the commuting zone level, job gains and losses are roughly balanced, with a slight net loss of 68 thousand jobs and a substantial range around this preferred estimate depending on the specification.

Dustmann, Christian. 2021. Trade, Labor Markets, and the China Shock: What Can Be Learned from the German Experience? Centre for Research and Analysis of Migration, Department of Economics, University College London: [CReAM Discussion Paper Series 2112](#).

A number of recent works have shown that the substantial increase in imports to the United States from China over recent decades led to large but highly concentrated negative labor market outcomes for those workers most exposed to these imports. On the other hand, such substantially negative effects were largely absent in Germany, the world's fourth-largest economy. This paper discusses aspects that likely contribute to explaining these differences: the German industry structure, its nature of industrial relations, as well as the ability to and willingness of workers to retrain. Moreover, with the China shock being in large part over, any future shocks will most likely look quite different. It is unlikely that the economic shocks of the future will affect the same workers, in the same ways, as the China shock did. Therefore, by focusing the policy discussion on trade policy exclusively, we may overlook other looming challenges. Instead, it may be more fruitful to discuss how to design industrial policies, labor market policies, and education and training policies so that modern economies can adapt flexibly to a range of possible shocks.

Handley, Kyle, and Nuno Limão. 2017. Policy Uncertainty, Trade, and Welfare: Theory and Evidence for China and the United States. *American Economic Review* 107 (9): 2731-83. <https://doi.org/10.1257/aer.20141419>

We examine the impact of policy uncertainty on trade, prices, and real income through firm entry investments in general equilibrium. We estimate and quantify the impact of trade policy on China's export boom to the United States following its 2001 WTO accession. We find the accession reduced the US threat of a trade war, which can account for over one-third of that export growth in the period 2000-2005. Reduced policy uncertainty lowered US prices and increased its consumers' income by the equivalent of a 13-percentage-point permanent tariff decrease. These findings provide evidence of large effects of policy uncertainty on economic activity and the importance of agreements for reducing it.

### Chapter 3: Innovation

Autor, David, David Dorn, Gordon H. Hanson, Gary Pisano, and Pian Shu. 2020. Foreign Competition and Domestic Innovation: Evidence from US Patents. *American Economic Review: Insights*, 2 (3): 357-74. <https://doi.org/10.1257/aeri.20180481>.

Manufacturing accounts for more than three-quarters of US corporate patents. The competitive shock to this sector emanating from China's economic ascent could in theory either augment or stifle US innovation. Using three decades of US patents matched to corporate owners, we quantify how foreign competition affects domestic innovation. Rising import exposure intensifies competitive pressure, reducing sales, profitability, and R&D expenditure at US firms. Accounting for confounding sectoral patenting trends, we find that US patent production declines in sectors facing greater import competition. This adverse effect is larger among initially less profitable and less capital-intensive firms.

Wei, Shang-Jin, Zhuan Xie, and Xiaobo Zhang. 2017. From 'Made in China' to 'Innovated in China': Necessity, Prospect, and Challenges. *Journal of Economic Perspectives* 31 (1): 49–70. <https://doi.org/10.1257/jep.31.1.49>.

We analyse the 'explosion' of patent filings by Chinese residents, both domestically and in the USA during the early 2000s, employing a unique data set of 374,000 firms matching patent applications to manufacturing census data. Our analysis reveals that patenting is highly concentrated among a small number of firms, operating in the information and communication technology (ICT) sector. Although increases in patent filings by these companies are partly driven by increased R&D intensity, our analysis suggests that the explosion of patent filings at the Chinese patent office is driven by factors other than underlying innovative behaviour, including government subsidies that encourage patent filings directly.

#### Further reading for Chapter 3

Cheng, Hong, Ruixue Jia, Dandan Li, and Hongbin Li. 2019. The Rise of Robots in China. *Journal of Economic Perspectives*, 33 (2): 71-88. <https://doi.org/10.1257/jep.33.2.71>.

China is the world's largest user of industrial robots. In 2016, sales of industrial robots in China reached 87,000 units, accounting for around 30 percent of the global market. To put this number in perspective, robot sales in all of Europe and the Americas in 2016 reached 97,300 units (according to data from the International Federation of Robotics). Between 2005 and 2016, the operational stock of industrial robots in China increased at an annual average rate of 38 percent. In this paper, we describe the adoption of robots by China's manufacturers using both aggregate industry-level and firm-level data, and we provide possible explanations from both the supply and demand sides for why robot use has risen so quickly in China. A key contribution of this paper is that we have collected some of the world's first data on firms' robot adoption behaviors with our China Employer-Employee Survey (CEES), which contains the first firm-level data that is representative of the entire Chinese manufacturing sector.

Eberhardt, Markus, Christian Helmers, and Zhihong Yu. 2017. What Can Explain the Chinese Patent Explosion? *Oxford Economic Papers* 69 (1): 239–62. <https://doi.org/10.1093/oeq/gpw042>.

After more than three decades of high growth based on its low-wage advantage and relatively

favorable demographics--in combination with market-oriented reforms and openness to the world economy--China is at a crossroads with a much higher wage and a shrinking workforce. Future growth will depend, by necessity, more on the generation of increased productivity, and domestic innovation will play an important part in this. In this paper, we assess the likelihood that China can make the necessary transition. Using data on expenditure on research and development, and patent applications, receipts, and citations, we show that the Chinese economy has become increasingly innovative. We will argue that rising wages and expanding markets are among the important drivers of China's growth in innovation. On the other hand, we find evidence of resource misallocation in the innovation area: while state-owned firms receive more subsidies, private firms exhibit more innovation results. Innovation can presumably progress even faster if resource misallocation can be tackled.

Nicholas Bloom, Mirko Draca, John Van Reenen, Trade Induced Technical Change? 2016. The Impact of Chinese Imports on Innovation, IT and Productivity. *The Review of Economic Studies* 83 (1): 87–117. <https://doi.org/10.1093/restud/rdv039>.

We examine the impact of Chinese import competition on broad measures of technical change—patenting, IT, and TFP—using new panel data across twelve European countries from 1996 to 2007. In particular, we establish that the *absolute* volume of innovation increases within the firms most affected by Chinese imports in their output markets. We correct for endogeneity using the removal of product-specific quotas following China's entry into the World Trade Organization in 2001. Chinese import competition led to increased technical change *within firms* and reallocated employment *between firms* towards more technologically advanced firms. These within and between effects were about equal in magnitude, and account for 14% of European technology upgrading over 2000–7 (and even more when we allow for offshoring to China). Rising Chinese import competition also led to falls in employment and the share of unskilled workers. In contrast to low-wage nations like China, developed countries had no significant effect on innovation.

Utar, Hale, and Luis B. Torres Ruiz. 2013. International competition and industrial evolution: Evidence from the impact of Chinese competition on Mexican maquiladoras. *Journal of Development Economics* 105: 267–87. <https://doi.org/10.1016/j.jdeveco.2013.08.004>.

Effects of the competition between two South locations (Mexico and China) in a Northern market (US) are analyzed. By employing a plant-level data set that covers the universe of Mexican export processing plants (maquiladoras) from 1990 to 2006 and relying on an instrumental variable strategy that exploits exogenous intensification of Chinese imports in the world in conjunction with the WTO accession of China, the empirical analysis reveals a substantial effect of intensified Chinese competition on maquiladoras. In particular, competition from China has a negative and significant impact on employment and plant growth, both through the intensive and the extensive margin. As the negative impact is stronger on the most unskilled labor intensive sectors, it triggers significant sectoral reallocation. Suggestive evidence on industrial upgrading among maquiladoras in response to competition with China is also provided. Overall the results provide additional insight into the way low-wage competition shapes the evolution of industries.

## Chapter 4: Trade policy and Chinese investments over the last decade

Bown, Chad P., Paola Conconi, Aksel, Erbahar, and Lorenzo, Trimarchi. 2020. Trade Protection along Supply Chains. Center for Economic Studies and Ifo Institute, Munich: CESifo Working Paper 8812. <http://hdl.handle.net/10419/232409>.

During the last decades, the United States has applied increasingly high trade protection against China. We combine detailed information on US antidumping (AD) duties — the most widely used trade barrier — with US input-output data to study the effects of trade protection along supply chains. To deal with endogeneity concerns, we propose a new instrument for AD protection, which combines exogenous variation in the political importance of industries with their historical experience in AD proceedings. We find that tariffs have large negative effects on downstream industries, decreasing employment, wages, sales, and investment. Our baseline estimates for 1988-2016 indicate that, due to AD protection against China, around 1.8 million US jobs were lost in downstream industries, with no significant job gains in protected sectors. When we extend the analysis to measures introduced under President Trump, we find that around 500,000 jobs were lost during the first two years of his term. We also provide evidence of the mechanisms behind the negative effects of protection along supply chains: AD duties decrease imports and raise production costs for downstream industries.

Fuchs Andreas, Lennart Kaplan, Krisztina Kis-Katos, Sebastian S. Schmidt, Felix Turbanisch and Feicheng Wang. 2021. Mask Wars: China's Exports of Medical Goods in Times of COVID-19. Center for European, Governance and Economic Development Research Discussion Papers 398, University of Goettingen, Department of Economics. <https://ideas.repec.org/p/zbw/cegedp/398.html>.

The COVID-19 outbreak has cut China's supply of and raised the world's demand for face masks, disinfectants, ventilators, and other critical medical goods. This article studies the economic and political factors that are associated with China's exports of medical equipment during the first two months of the global pandemic. Regression results show that—controlled for demand factors—countries with stronger past economic ties with China import more critical medical goods from China at both the national level and the level of Chinese provinces. Friendly political relations, such as the twinning of provinces, appear to work as a substitute for pre-existing economic ties at the provincial level. These findings imply that, to secure access to medical equipment in crises, countries are well advised to either diversify their sources or to develop closer relations with Beijing and China's provinces.

Fuest, Clemens, Felix Hugger, Samina Sultan, and Jing Xing. 2019. What Drives Chinese Overseas M&A Investment? Evidence from Micro Data. EconPol Working Paper 33, ifo Institute - Leibniz Institute for Economic Research at the University of Munich, Munich. <http://hdl.handle.net/10419/219495>.

In recent years Chinese foreign acquisitions have increased significantly. In Europe and the US, these investments are often criticized. Critics argue that Chinese investors outbid other investors with help from their government, that the acquisitions lead to undesirable technology transfer or that they may have negative consequences for the employees of the target firm. We use a large deal-level dataset on cross-border acquisitions to investigate whether Chinese foreign acquisitions differ from cross-border investment coming from other countries. We find that relative to non-Chinese investors, Chinese acquirers indeed appear to be different in some dimensions. They focus on targets with higher debt levels and lower profitability. At the same time, they don't seem to pay more for targets

with given characteristics, questioning the view that they are subsidized to outbid other investors. Policy initiatives like the Belt and Road Initiative and Made in China 2025 influence state-owned but not private Chinese investors, suggesting that geopolitical or technology interests play a role. In the years after the takeover, target companies acquired by Chinese investors exhibit lower growth in capital productivity but a higher growth of employee compensation.

Garred, Jason. 2018. The persistence of trade policy in China after WTO accession. *Journal of International Economics* 114: 130-142. <https://doi.org/10.1016/j.jinteco.2018.06.001>.

Import tariffs have fallen steeply worldwide over the last several decades, but has trade policy persisted through a rise in the use of other instruments? I study this question in the context of China's 2001 accession to the World Trade Organization, using panel data on Chinese export policies. I find that after its entry into WTO, the distribution of China's export restrictions across industries increasingly resembles the inverse of its pre-WTO import tariff schedule. The evidence suggests that increases in export restrictions are likely to have partly restored China's pre-WTO trade policy.

#### **Further reading for Chapter 4**

Che, Yi, Julan Du, Yi Lu, and Zhigang Tao. 2015. Once an enemy, forever an enemy? The long-run impact of the Japanese invasion of China from 1937 to 1945 on trade and investment. *Journal of International Economics* 96 (1): 182–98. <https://doi.org/10.1016/j.jinteco.2015.01.001>.

In this study, we exploit one of the most important conflicts of the 20th century between what are currently the world's second and third largest economies, that is, the Japanese invasion of China from 1937 to 1945, to investigate the long-term impact of conflicts between countries on cross-border trade and investment. We find that Japanese multinationals are less likely to invest in Chinese regions that suffered greater civilian casualties during the Japanese invasion, and these regions also trade less with Japan. Our study shows that historical animosity still influences international trade and investment, despite the trend toward an increasingly globalized world.

Fisman, Raymond, Yasushi Hamao, and Yongxiang Wang. 2014. Nationalism and Economic Exchange: Evidence from Shocks to Sino-Japanese Relations. *Review of Financial Studies* 27 (9): 2626–60. <https://doi.org/10.1093/rfs/hhu017>.

We study the impact of nationalism and interstate frictions on international economic relations by analyzing market reaction to adverse shocks to Sino-Japanese relations in 2005 and 2010. Japanese companies with high China exposure suffer relative declines during each event window; a symmetric effect is observed for Chinese companies with high Japanese exposure. The effect on Japanese companies is more pronounced for those operating in industries dominated by Chinese state-owned enterprises, whereas firms with high Chinese employment experience lower declines. These results emphasize the role of countries' economic and political institutions in mediating the impact of interstate frictions on firm-level outcomes.

Huang, Yi, Chen Lin, Sibio Liu, and Heiwai Tang. 2020. Trade Networks and Firm Value: Evidence from the US-China Trade War. SSRN Scholarly Paper. Rochester, NY: Social Science Research Network. <http://dx.doi.org/10.2139/ssrn.3227972>.

We study the financial impact of the 2018-2019 U.S.-China trade war on firms engaged in global supply chains. Around the dates when higher tariffs were announced, U.S. firms depending more on exports to and imports from China experienced larger declines in market values. Guided by a model that identifies various direct and indirect trade channels through which tariffs affect firms' profits, we examine the transmission of tariff shocks through firms' suppliers and customers. We confirm our results by exploiting the within-firm variation in product exposure based on two tariff lists and a positive trade negotiation as a reverse experiment.

## Chapter 5: Development finance and The Belt and Road initiative

Horn, Sebastian, Carmen M. Reinhart, and Christoph Trebesch. 2019. China's Overseas Lending. National Bureau of Economic Research Working Paper 26050. <https://doi.org/10.3386/w26050>.

Compared with China's pre-eminent status in world trade, its role in global finance is poorly understood. This paper studies the size, characteristics, and determinants of China's capital exports building a new database of 5000 loans and grants to 152 countries, 1949-2017. We find that 50% of China's lending to developing countries is not reported to the IMF or World Bank. These "hidden debts" distort policy surveillance, risk pricing, and debt sustainability analyses. Since China's overseas lending is almost entirely official (state-controlled), the standard "push" and "pull" drivers of private cross-border flows do not apply in the same way.

Isaksson, Ann-Sofie, and Andreas Kotsadam. 2018. Chinese Aid and Local Corruption. *Journal of Public Economics* 159: 146–59. <https://doi.org/10.1016/j.jpubeco.2018.01.002>.

Considering the mounting criticisms concerning Chinese aid practices, the present paper investigates whether Chinese aid projects fuel local-level corruption in Africa. To this end, we geographically match a new geo-referenced dataset on the subnational allocation of Chinese development finance projects to Africa over the 2000–2012 period with 98,449 respondents from four Afrobarometer survey waves across 29 African countries. By comparing the corruption experiences of individuals who live near a site where a Chinese project is being implemented at the time of the interview to those of individuals living close to a site where a Chinese project will be initiated but where implementation had not yet started at the time of the interview, we control for unobservable time-invariant characteristics that may influence the selection of project sites. The empirical results consistently indicate more widespread local corruption around active Chinese project sites. The effect is seemingly not driven by an increase in economic activity, but rather seems to signify that the Chinese presence impacts norms. Moreover, Chinese aid stands out from World Bank aid in this respect. In particular, whereas the results indicate that Chinese aid projects fuel local corruption but have no observable impact on short term local economic activity, they suggest that World Bank aid projects stimulate local economic activity without any consistent evidence of it fuelling local corruption.

### Further reading for Chapter 5

Barth, Erling, Henning Finseraas, Anders Kjelsrud, and Karl O. Moene. 2020. Hit by the Silk Road: How Wage Coordination in Europe Mitigates the China Shock. IZA Institute for Labor Economics Discussion Paper 13259. <https://ssrn.com/abstract=3602435>.

Coordination in collective wage setting can constrain potential monopoly gains to unions in non-traded-goods industries. Countries with national wage coordination can thus stabilize overall employment against fluctuations and shocks in the world economy. We test this theory by exploring within-country variation in exposure to competition from China in 13 European countries. Our causal estimates demonstrate that in countries with uncoordinated wage setting, regions with higher import exposure from China experienced a marked fall in employment, while countries with wage-coordination experienced no such employment effects. We test our main mechanism against other explanations, and show that our findings are robust to alternative measures of wage coordination, industry classifications, and trade exposure.

Cervellati, Matteo, Elena Esposito, Uwe Sunde, and Song Yuan. 2021. Malaria and Chinese Economic Activities in Africa. Mimeo.

[https://warwick.ac.uk/fac/soc/economics/staff/syuan/cesy\\_malaria\\_chineseactivities.pdf](https://warwick.ac.uk/fac/soc/economics/staff/syuan/cesy_malaria_chineseactivities.pdf) (we will read the most recent version available).

We present novel evidence for the influence of the disease environment, in particular malaria exposure, on the geographic location of Chinese economic activities in Africa. Since Chinese infrastructure project contractors rely on Chinese workers, malaria exposure might constitute an important factor for their employment and productivity. Combining data on Chinese construction projects with geo-localized information about the presence of individuals, the results reveal a lower density of Chinese activities and presence of Chinese workers in areas with a high malaria risk. This effect is mitigated partly through the selection of Chinese workers from regions in China with historically high malaria risk, through the substitution of Chinese workers with local workers with greater immunity, and through the availability of malaria treatment.

De Soyres, François, Alen Mulabdic, Siobhan Murray, and Nadia Rocha, and Michele Ruta. 2019. How Much Will the Belt and Road Initiative Reduce Trade Costs? Policy Research Working Paper No.

8801. Washington, DC: The World Bank.

<http://documents.worldbank.org/curated/en/879031554144957551/pdf/Common-Transport-Infrastructure-A-Quantitative-Model-and-Estimates-from-the-Belt-and-Road-Initiative.pdf>

This paper presents a structural general equilibrium model to analyze the effects on trade, welfare, and gross domestic product of common transport infrastructure. Specifically, the model builds on the framework by Caliendo and Parro (2015)—a Ricardian model with sectoral linkages, trade in intermediate goods and sectoral heterogeneity—to allow for changes in trade costs due to improvements in transportation infrastructure, financed through domestic taxation, connecting multiple countries. The model highlights the trade impact of infrastructure investments through cross-border input-output linkages. This framework is then used to quantify the impact of the Belt and Road Initiative. Using new estimates on the effects on trade costs of transport infrastructure related to the initiative based on Geographic Information System analysis, the model shows that gross

domestic product will increase by up to 3.4 percent for participating countries and by up to 2.9 percent for the world. Because trade gains are not commensurate with projected investments, some countries may experience a negative welfare effect due to the high cost of the infrastructure. The analysis also finds strong complementarity between infrastructure investment and trade policy reforms.

Dreher, Axel, Andreas Fuchs, Roland Hodler, Bradley C. Parks, Paul A. Raschky, Michael J. Tierney. 2019. African leaders and the geography of China's foreign assistance. *Journal of Development Economics* 140: 44-71, <https://doi.org/10.1016/j.jdeveco.2019.04.003>.

We investigate whether foreign aid from China is prone to political capture in aid-receiving countries. Specifically, we examine whether more Chinese aid is allocated to the birth regions of political leaders, controlling for indicators of need and various fixed effects. We collect data on 117 African leaders' birthplaces and geocode 1650 Chinese development projects across 2969 physical locations in Africa from 2000 to 2012. Our econometric results show that political leaders' birth regions receive substantially larger financial flows from China in the years when they hold power compared to what the same region receives at other times. We find evidence that these biases are a consequence of electoral competition: Chinese aid disproportionately benefits politically privileged regions in country-years when incumbents face upcoming elections and when electoral competitiveness is high. We observe no such pattern of favoritism in the spatial distribution of World Bank development projects.

Lefebvre, Kevin, Nadia Rocha, and Michele Ruta. 2021. Containing Chinese State-Owned Enterprises? The Role of Deep Trade Agreements. Policy Research Working Paper No. 9637. World Bank, Washington, DC. <https://openknowledge.worldbank.org/handle/10986/35516>.

Regional trade agreements increasingly include provisions that regulate state-owned enterprises. This paper combines new information on the content of “deep” regional trade agreements and data on Chinese firm-level exports during 2000-11 to analyze the spillover effect of rules on state-owned enterprises on the intensive and extensive margins of Chinese state-owned enterprises' trade. Rather than containing state capitalism, regional trade agreements regulating state-owned enterprises signed by Chinese trading partners with third countries increase exports and entry of Chinese state-owned enterprises as they gain a competitive edge in regulated markets. This spillover effect is robust to several extensions and is even stronger for agreements that include rules on subsidies and competition policy. This finding points to the need for commonly agreed multilateral rules to regulate state owned enterprises.

Hernandez, Diego. 2017. Are ‘New’ Donors Challenging World Bank Conditionality? *World Development* 96: 529–49. <https://doi.org/10.1016/j.worlddev.2017.03.035>.

This paper investigates whether World Bank conditionality is affected by the presence of “new” donors by using panel data for 54 African countries over the 1980–2013 period. Empirical results indicate that the World Bank delivers loans with significantly fewer conditions to recipient countries which are assisted by China. In fact these receive 15% fewer conditions for every percentage-point increase in Chinese aid. Less stringent conditionality is also observed in better off borrowers that are in addition funded by Kuwait and the United Arab Emirates, but this effect vanishes after the start of the new millennium. In contrast, World Bank conditionality is rarely affected by aid inflows from

DAC donors, and when it is, conditionality is revised upward. These findings suggest that new donors might be perceived as an attractive financial option to which the World Bank reacts by offering credits less restrictively in order to remain competitive in the loan-giving market and thereby cope with excesses in the supply of development resources.

Qian, Jing, James Raymond Vreeland, Zetao Wu, and Jianzhi Zhao. 2021. Compete or Complement? How the World Bank Responds to the Establishment of the AIIB. [Paper](#) for the 2021 Conference on the Political Economy of International Organizations.

China's establishment of the Asian Infrastructure Investment Bank (AIIB) underscores the rising super power's ambition to other new sources of funding to developing countries. The prospect of alternative funding does not necessarily imply a shift away from the West's foremost development organization, the World Bank. Experts estimate that the developing world requires trillions of dollars in infrastructure investment. So the AIIB could very well complement World Bank efforts, simply filling funding gaps. Still, the terms of AIIB loans are touted to be less intrusive than World Bank loans, void of policy conditionality. The AIIB option also enables governments to follow new leadership of the global economy under China. This paper thus examines the impact of the AIIB's founding on World Bank lending. Using the generalized synthetic control method, we estimate a decrease in the number of World Bank projects for AIIB founding members, an effect concentrated in infrastructure-intensive projects. Our results suggest that the AIIB represents real competition for Western influence in the developing world.

Zeitz, Alexandra O. 2021. Emulate or differentiate? *Review of International Organizations* 16: 265–292. <https://doi.org/10.1007/s11558-020-09377-y>. [Corrections](#).

Foreign aid relationships are valuable to donors as a means of improving development outcomes and influencing recipient country policy. The emergence of new donors can lead to competition as donors vie for influence over recipient government policy and attention. How does such competition affect the behavior of traditional donors? I draw attention to how the rise of China as a provider of development finance is changing the type of development that traditional donors support. Chinese development finance is particularly targeted at large infrastructure projects, and this focus can exert pressure on traditional donors. I suggest traditional donors can either emulate China's approach to development, i.e. offer projects in infrastructure-intensive sectors, or differentiate themselves and specialize in alternative approaches to development, e.g. focus on governance and social sector interventions. I test this using data on the terms of World Bank and Chinese development finance in over 100 countries. I find the World Bank responds to competitive pressure from China by emulating the Chinese emphasis on infrastructure, allocating a greater share of its development projects in infrastructure-intensive sectors when recipient countries receive more Chinese development finance. Furthermore, subnational data shows that the World Bank also emulates China's approach to development in response to competition at the regional level. China's growing role as a provider of development finance affects traditional donor behavior, shaping the type of development donors support by introducing bottom-up competitive pressure.

In the seminar organization session, students will choose one topic among the following chapters:

### Chapter 6: Domestic effects of Chinese international engagements

Bombardini, Matilde, and Bingjing Li. 2020. Effects of International Integration on China, Trade, Pollution and Mortality in China. *Journal of International Economics* 125. <https://doi.org/10.1016/j.jinteco.2020.103321>.

Did the rapid expansion of Chinese exports between 1990 and 2010 contribute to the country's worsening environmental quality? We exploit variation in local industrial composition to gauge the effect on pollution and health outcomes of export expansion due to the decline in tariffs faced by Chinese exporters. In theory, rising exports can increase pollution and mortality due to increased output, but they may also raise local incomes, which can in turn promote better health and environmental quality. The paper teases out these competing effects by constructing two export shocks at the prefecture level: (i) the pollution content of export expansion and (ii) the export expansion in dollars per worker. We find that the pollution content of exports affects pollution and mortality: a one standard deviation increase in the shock increases infant mortality by 4.1 deaths per thousand live births, which is about 23% of the standard deviation of infant mortality change during the period. The dollar value of export expansion reduces mortality by 1.2 deaths, but the effect is not statistically significant. We show that the channel through which exports affect mortality is pollution concentration. We find a negative, but insignificant effect on pollution of the dollar-value export shocks, a potential “technique” effect whereby higher income drives demand for clean environment. Finally, we find that only infant mortality related to cardio-respiratory conditions responds to exports shocks, while deaths due to accidents and other causes are not affected.

Kim, Sung Eun. 2018. Media Bias against Foreign Firms as a Veiled Trade Barrier: Evidence from Chinese Newspapers. *American Political Science Review* 112 (4): 954–70. <https://doi.org/10.1017/S0003055418000242>.

While the rules of international trade regimes prevent governments from employing protectionist instruments, governments continue to seek out veiled means of supporting their national industries. This article argues that the news media can serve as one channel for governments to favor domestic industries. Focusing on media coverage of auto recalls in China, I reveal a systematic bias against foreign automakers in those newspapers under strict government control. I further analyze subnational reporting patterns, exploiting variation in the level of regional government interest in the automobile industry. The analysis suggests that the media's home bias is driven by the government's protectionist interests but rules out the alternative hypothesis that home bias simply reflects the nationalist sentiment of readers. I show that this home bias in news coverage has meaningful impact on actual consumer behavior, combining automobile sales data and information on recall-related web searches.

Tang, Heiwai, and Yifan Zhang. 2021. Do multinationals transfer culture? Evidence on female employment in China. *Journal of International Economics* 133. <https://doi.org/10.1016/j.jinteco.2021.103518>.

We study the global diffusion of culture through multinationals, focusing on gender norms. Using data on manufacturing firms in China from 2004 to 2007, we find that foreign affiliates from countries

with a more gender-equal culture tend to employ proportionally more women and appoint more female managers. They also generate cultural spillovers, as we find that domestic firms' female labor share increases with the prevalence of foreign affiliates in the same industry or city. Based on a multi-sector model that accounts for firm heterogeneity in productivity, gender bias, and learning, we perform counterfactual exercises. By hypothetically eliminating firms' gender biases, we observe a 5% increase in China's aggregate total factor productivity, 19% of which is due to spillovers from foreign affiliates.

**Further reading for Chapter 6 will be announced**

**Chapter 7: Environment**

Bing Zhang, Chen Xiaolan, and Guo Huanxiu. 2018. Does central supervision enhance local environmental enforcement? Quasi-experimental evidence from China. *Journal of Public Economics* 164: 70-90. <https://doi.org/10.1016/j.jpubeco.2018.05.009>.

This paper draws on a natural experiment generated by the National Specially Monitored Firms (NSMF) program in China to evaluate the effectiveness of central supervision at improving local environmental enforcement. We explore a unique firm-level Chinese Environmental Statistics dataset and utilize a regression discontinuity design to assess the impact of central supervision through the NSMF program on an industrial firm's chemical oxygen demand (COD) emissions. The results suggest that central supervision significantly reduces industrial COD emissions by at least 26.8%. These results highlight the substantial room for improvement in Chinese environmental regulations via central supervision. A more flexible environmental decentralization regime and comprehensive central supervision are thus recommended for future reforms.

Liu, X., Hao, F., Portney, K., & Liu, Y. (2020). Examining Public Concern about Global Warming and Climate Change in China. *The China Quarterly*, 242, 460-486. <https://doi.org/10.1017/S0305741019000845>.

To what degree are Chinese citizens concerned about the seriousness of global warming and climate change (GWCC) and what are the key factors that shape their concern? Drawing theoretical insights from extant literature and using recent data from a national representative public survey (N = 3,748) and provincial environmental and economic statistics, this study, the first of its kind, examines the variations and determinants of Chinese GWCC concern. Our data show that in China, compared to other countries, average public concern about GWCC is relatively low, and concern varies greatly among Chinese citizens, across different provinces and between coastal and inland areas. Statistical analyses reveal that the levels of Chinese GWCC concern are significantly influenced by individual sociodemographic characteristics, personal post-materialist values, and regional economic dependency on carbon-intensive industries. Specifically, women and younger Chinese with greater post-materialist values are more concerned about GWCC than their counterparts, and citizens from provinces with higher economic dependency on carbon-intensive industries tend to be less concerned about GWCC than people from provinces with lower carbon dependency. We discuss key policy implications and make suggestions for future research in the conclusion.

### Further reading for Chapter 7

Ebenstein, Avraham, Maoyong Fan, Michael Greenstone, Guojun He, Peng Yin, and Maigeng Zhou. 2015. Growth, Pollution, and Life Expectancy: China from 1991-2012. *American Economic Review* 105(5): 226–31. <https://doi.org/10.1257/aer.p20151094>.

This paper examines the relationship between income, pollution, and mortality in China from 1991-2012. Using first-difference models, we document a robust positive association between city-level GDP and life expectancy. We also find a negative association between city-level particulate air pollution exposure and life expectancy that is driven by elevated cardiorespiratory mortality rates. The results suggest that while China's unprecedented economic growth over the last two decades is associated with health improvements, pollution has served as a countervailing force.

Hanlon, W. Walker, and Yuan Tian. 2015. Killer Cities: Past and Present. *American Economic Review* 105 (5): 570–75. <https://doi.org/10.1257/aer.p20151071>.

The industrial cities of the 19th century were incredibly unhealthy places to live. How much progress has been made in reducing these negative health effects over the past 150 years? To help answer this question, we compare mortality patterns in 19th century England to those in Chinese urban areas in 2000. We document that substantial improvements have been made in improving health in cities over this period. Unlike historical English cities, large cities in China have lower mortality than less populated areas. However, we also provide evidence that in China a substantial relationship between industrial pollution and mortality remains.

Kahn, Matthew E., Pei Li, and Daxuan Zhao. “Water Pollution Progress at Borders: The Role of Changes in China's Political Promotion Incentives”. *American Economic Journal: Economic Policy* 7, no. 4 (2015): 223–42. <https://doi.org/10.1257/pol.20130367>.

At political boundaries, local leaders have weak incentives to reduce polluting activity because the social costs are borne by downstream neighbors. This paper exploits a natural experiment set in China in which the central government changed the local political promotion criteria and thus incentivized local officials to reduce border pollution along specific criteria. We document evidence of pollution progress with respect to targeted criteria at province boundaries. Heavy metal pollutants, not targeted by the central government, have not decreased in concentration after the regime shift. Using data on the economic geography of key industrial water polluters, we explore possible mechanisms.

Zheng, Siqi, and Matthew E. Kahn. 2017. A New Era of Pollution Progress in Urban China? *Journal of Economic Perspectives* 31 (1): 71-92. <https://doi.org/10.1257/jep.31.1.71>.

Over the last 30 years, China's economy has boomed. This trend has lifted hundreds of millions of Chinese out of poverty but it has also sharply increased local, regional, and global pollution levels. We look at the rise in air pollution over recent decades, and the perhaps surprising finding that in many of China's urban areas, levels of particulates (of less than 10 microns) have been decreasing during the last 10 to 15 years. We then turn to the costs and tradeoffs of air pollution, including costs to human health, reductions in worker productivity, and how people are seeking to reduce their exposure to pollution as shown by compensating differentials in real estate prices and purchases of

masks and air filters. We discuss how rising incomes tend to raise the demand for environmental amenities and thus increase political pressure for environmental protection, and then we turn to the policy tools that China has used to reduce pollution. We conclude by arguing that as China's government is preparing for an additional 300 million people to move to urban areas over the next 30 years, it will have a number of opportunities for China to reduce pollution through a shift from manufacturing to services, along with various steps to improve energy efficiency and resource conservation. Overall, it seems that China is on track to improve its environmental performance in the years ahead.

## Chapter 8: Political evaluation and promotion

Guo, Gang. 2009. China's Local Political Budget Cycles. *American Journal of Political Science* 53, no. 3(2009): 621–32. <https://doi.org/10.1111/j.1540-5907.2009.00390.x>.

This article examines the political budget cycles in Chinese counties. The shift to a more performance-based cadre evaluation and mobility system during the reform era has created an incentive structure for local leaders to increase government spending at strategically important time points during their tenure to enhance the prospect of official promotion. Such expenditures help local leaders to impress their superiors with economic and political achievements, especially those visible and quantifiable large-scale development projects. At the same time, economic and fiscal decentralization increased the capacity of local leaders to influence government budget expenditures as the need rises. The hypothesized curvilinear relationship between a leader's time in office and increased spending was tested using a comprehensive data set of all Chinese counties from 1997 through 2002. The panel data analysis shows that growth in local government spending per capita is the fastest during a leader's third and fourth years in office.

Shi, Xiangyu, and Tianyang Xi. 2018. Race to safety: Political competition, neighborhood effects, and coal mine deaths in China. *Journal of Development Economics* 131: 79–95. <https://doi.org/10.1016/j.jdeveco.2017.10.008>.

When political agents are subject to centralized performance evaluation, their efforts and performances tend to be correlated with one another in the “neighborhood”. Using quarterly data from prefecture-level cities in China, this paper finds evidence of positive neighborhood effects on coal mine deaths: the number of accidental deaths in a city is positively associated with those in its political neighbors. The neighborhood effects are confined by provincial borders, but do not diminish as the geographic scope of the neighborhood increases. Moreover, the effects are amplified by regulatory reforms and political cycles that increase the salience of coal mine safety. The findings of neighborhood effects on coal mine deaths are consistent with the logic of relative performance evaluation (RPE) as a mechanism for shaping policy outcomes.

**Further reading for Chapter 8 will be announced**

**Note: Dates and contents subject to change!**

## Other current debates

### Chapter 8: Political effects on the “West”

Lu, Yi, Xiang Shao, and Zhigang Tao. “Exposure to Chinese imports and media slant: Evidence from 147 U.S. local newspapers over 1998–2012”. *Journal of International Economics* 114 (2018): 316–30. <https://doi.org/10.1016/j.jinteco.2018.07.004>.

Does the recent surge in Chinese imports affect the media slant against China in the United States? Using a data set of 147 U.S. local newspapers over 1998–2012, this paper shows that newspapers whose circulation counties face greater exposure to Chinese imports report more negative news about China, and are more likely to endorse Democrats. The results hold with two identification strategies and three measures of media slant. The paper further shows that, in U.S. House and Senate elections between 2000 and 2012, media slant is associated with increased voting shares for Democrats, who are traditionally champions for the poor and critical of globalization.

Colantone, Italo, and Piero Stanig. 2018. Global Competition and Brexit. *American Political Science Review* 112 (2): 201–18. <https://doi.org/10.1017/S0003055417000685>.

We show that support for the Leave option in the Brexit referendum was systematically higher in regions hit harder by economic globalization. We focus on the shock of surging imports from China over the past three decades as a structural driver of divergence in economic performance across U.K. regions. An IV approach supports a causal interpretation of our finding. We claim that the effect is driven by the displacement determined by globalization in the absence of effective compensation of its losers. Neither overall stocks nor inflows of immigrants in a region are associated with higher support for the Leave option. A positive association only emerges when focusing on immigrants from EU accession countries. The analysis of individual data suggests that voters respond to the import shock in a sociotropic way, as individuals tend to react to the general economic situation of their region, regardless of their specific condition.

### Chapter 10: Corruption

Chen, Ting, and James Kai-sing Kung. 2019. Busting the “Princelings”: The Campaign Against Corruption in China’s Primary Land Market. *Quarterly Journal of Economics* 134 (1): 185–226. <https://doi.org/10.1093/qje/qjy027>.

Using data on over a million land transactions during 2004–2016 where local governments are the sole seller, we find that firms linked to members of China’s supreme political elites—the Politburo—obtained a price discount ranging from 55.4% to 59.9% compared with those without the same connections. These firms also purchased slightly more land. In return, the provincial party secretaries who provided the discount to these “princeling” firms are 23.4% more likely to be promoted to positions of national leadership. To curb corruption, President Xi Jinping stepped up investigations and strengthened personnel control at the province level. Using a spatially matched sample (e.g., within a 500-meter radius), we find a reduction in corruption of between 42.6% and 31.5% in the provinces either targeted by the central inspection teams or whose party secretary was replaced by one appointed by Xi. Accordingly, this crackdown on corruption has also significantly reduced the promotional prospects of those local officials who rely on supplying a discount to get ahead.

Pan, Jennifer, and Kaiping Chen. 2018. Concealing Corruption: How Chinese Officials Distort Upward Reporting of Online Grievances. *American Political Science Review* 112 (3): 602–20. <https://doi.org/10.1017/S0003055418000205>.

A prerequisite for the durability of authoritarian regimes as well as their effective governance is the regime's ability to gather reliable information about the actions of lower-tier officials. Allowing public participation in the form of online complaints is one approach authoritarian regimes have taken to improve monitoring of lower-tier officials. In this paper, we gain rare access to internal communications between a monitoring agency and upper-level officials in China. We show that citizen grievances posted publicly online that contain complaints of corruption are systematically concealed from upper-level authorities when they implicate lower-tier officials or associates connected to lower-tier officials through patronage ties. Information manipulation occurs primarily through omission of wrongdoing rather than censorship or falsification, suggesting that even in the digital age, in a highly determined and capable regime where reports of corruption are actively and publicly voiced, monitoring the behavior of regime agents remains a challenge.

## Chapter 11: Media, propaganda and censorship

Chen, Yuyu, and David Y. Yang. 2019. The Impact of Media Censorship: 1984 or Brave New World? *American Economic Review* 109 (6): 2294–2332. <https://doi.org/10.1257/aer.20171765>.

Media censorship is a hallmark of authoritarian regimes. We conduct a field experiment in China to measure the effects of providing citizens with access to an uncensored internet. We track subjects' media consumption, beliefs regarding the media, economic beliefs, political attitudes, and behaviors over 18 months. We find four main results: (i) free access alone does not induce subjects to acquire politically sensitive information; (ii) temporary encouragement leads to a persistent increase in acquisition, indicating that demand is not permanently low; (iii) acquisition brings broad, substantial, and persistent changes to knowledge, beliefs, attitudes, and intended behaviors; and (iv) social transmission of information is statistically significant but small in magnitude. We calibrate a simple model to show that the combination of low demand for uncensored information and the moderate social transmission means China's censorship apparatus may remain robust to a large number of citizens receiving access to an uncensored internet.

Qin, Bei, David Strömberg, and Yanhui Wu. 2018. Media Bias in China. *American Economic Review* 108 (9): 2442–76. <https://doi.org/10.1257/aer.20170947>.

This paper examines whether and how market competition affected the political bias of government-owned newspapers in China from 1981 to 2011. We measure media bias based on coverage of government mouthpiece content (propaganda) relative to commercial content. We first find that a reform that forced newspaper exits (reduced competition) affected media bias by increasing product specialization, with some papers focusing on propaganda and others on commercial content. Second, lower-level governments produce less-biased content and launch commercial newspapers earlier, eroding higher-level governments' political goals. Third, bottom-up competition intensifies the politico-economic tradeoff, leading to product proliferation and less audience exposure to propaganda.

## Chapter 12: Gender

Almond, Douglas, Hongbin Li, and Shuang Zhang. 2018. Land Reform and Sex Selection in China. *Journal of Political Economy* 127 (2): 560–85. <https://doi.org/10.1086/701030>.

China's land reform in 1978–84 unleashed rapid growth in farm output and household income. In new data on reform timing in 914 counties, we find an immediate trend break in the fraction of male children following the reform. Among second births that followed a firstborn girl, sex ratios increased from 1.1 to 1.3 boys per girl in the 4 years following reform. Larger increases are found among families with more education. The land reform estimate is robust to controlling for the county-level rollout of the One Child Policy. Overall, we estimate land reform accounted for about 1 million missing girls.

Qian, Nancy. 2008. Missing Women and the Price of Tea in China: The Effect of Sex-Specific Earnings on Sex Imbalance. *Quarterly Journal of Economics* 123 (3): 1251–85. <https://doi.org/10.1162/qjec.2008.123.3.1251>.

Economists have long argued that the sex imbalance in developing countries is caused by underlying economic conditions. This paper uses exogenous increases in sex-specific agricultural income caused by post-Mao reforms in China to estimate the effects of total income and sex-specific income on sex-differential survival of children. Increasing female income, holding male income constant, improves survival rates for girls, whereas increasing male income, holding female income constant, worsens survival rates for girls. Increasing female income increases educational attainment of all children, whereas increasing male income decreases educational attainment for girls and has no effect on boys' educational attainment.

## Chapter 13: Hong Kong

Cantoni, Davide, David Y. Yang, Noam Yuchtman, and Y. Jane Zhang. 2019. Protests as Strategic Games: Experimental Evidence from Hong Kong's Antiauthoritarian Movement." *Quarterly Journal of Economics* 134 (2): 1021–77. <https://doi.org/10.1093/qje/qjz002>.

Which fundamental factors are associated with individuals holding democratic, anti-authoritarian ideologies? We conduct a survey eliciting Hong Kong university students' political attitudes and behavior in an ongoing pro-democracy movement. We construct indices measuring students' anti-authoritarianism, and link these to a comprehensive profile of fundamental economic preferences; personalities; cognitive abilities; and family backgrounds. We find that fundamental economic preferences, particularly risk tolerance and pro-social preferences, are the strongest predictors of anti-authoritarian ideology and behavior. We also study simultaneously determined outcomes, arguably both cause and consequence of ideology. Examining these, we find that anti-authoritarians are more pessimistic about Hong Kong's political outlook and about their fellow students' support for the movement; their social networks are more political; they consume different media; and, they are more politically informed than other students. Our extraordinarily rich data suggest that individuals' deep preferences should be considered alongside payoffs and beliefs in explaining political behavior.