

RESEARCH ON TAP
China and the World

Monday, February 27, 2023

bu.edu/research/events



Agenda

- Welcome Remarks
- Presentations
 - Sarah Sklar
 - Cecilia Springer
 - Min Ye
 - William N. Kring
 - Mark C. Storella
 - Ziming Xuan
 - Eugenio Menegon
 - Daryl Ireland
 - April D. Hughes
 - Rui Hua
 - Catherine Yeh
 - Jorge Heine
 - Christos G. Cassandras
- Closing Remarks



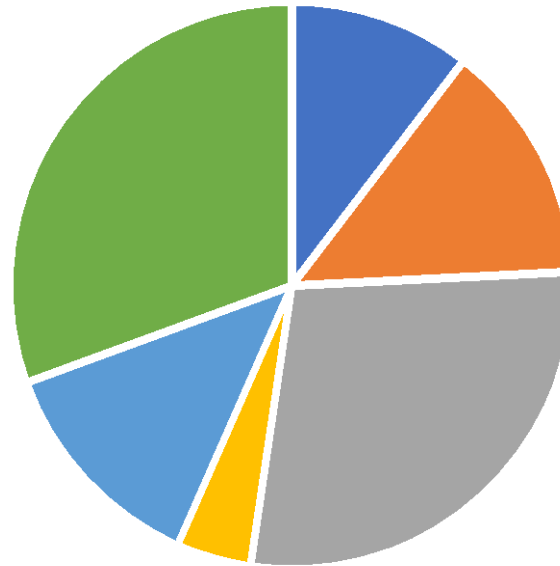
China in the World: Trends in Chinese Global Investment

Sarah Sklar

Global China Pre-doctoral Research Fellow
Global Development Policy Center



Chinese Investment by Region, 2011-2021



- East Asia & Pacific
- Europe & Central Asia
- Latin America & Caribbean
- Middle East & North Africa
- South Asia
- Sub-Saharan Africa

Global Trends

- Differing experiences are not correlated with income or political regime
- Partner nations have considerable control, autonomy, and agency
- Chinese engagement is profit oriented
- Relationships with China are driven by domestic politics and elite preferences
- Institutional capacity impacts a country's ability to negotiate and implement projects

Regional Trends

- Southeast Asia — historical relationships and recurrent games of hedging
- Latin America — economic synergies and domestically driven engagement
- Africa — focus on long term relationships, fewer alternative investors
- Central and South Asia — navigating the politics of regional powers
- Middle East — positive relationships focused on energy, trade, and security

Climate Impacts of China's Overseas Finance

Cecilia Springer

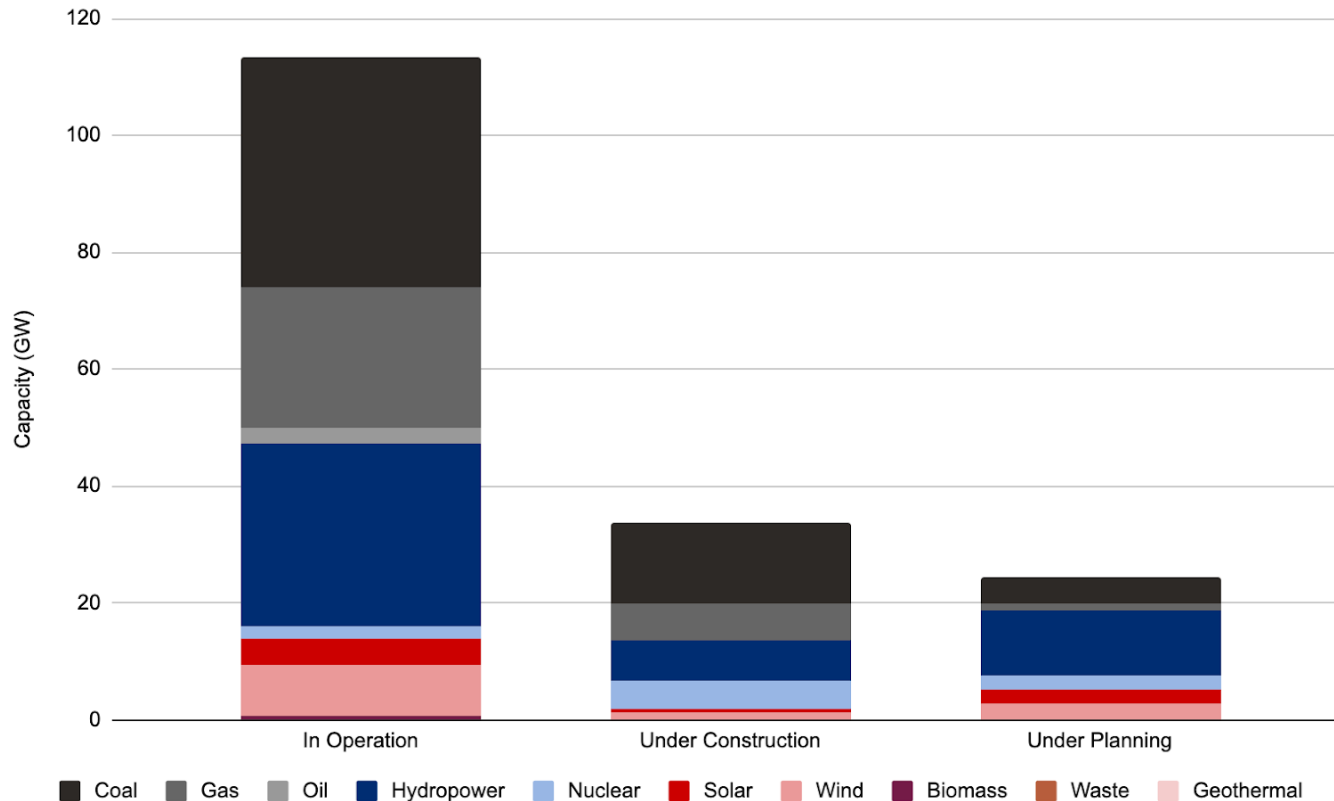
Assistant Director

Global China Initiative, Global Development Policy Center

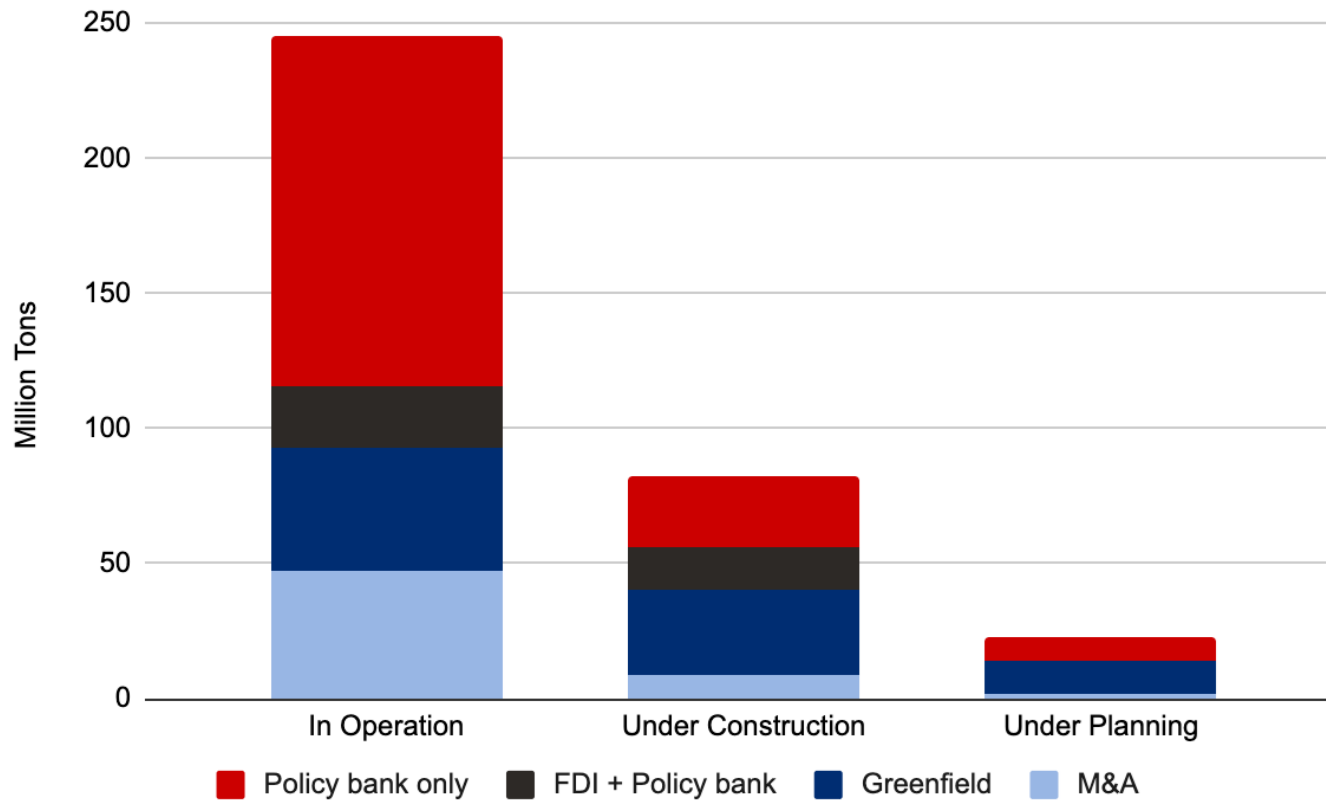


China's Global Power Database:

Coal makes up the largest share of Chinese-financed power generating capacity overseas



Estimated Annual Carbon Dioxide Emissions from Overseas Chinese-Financed Power Plants



Determinants of China’s Overseas Energy Finance

Energy Type	Push Factors	Pull Factors
Coal	Excess coal capacity, “Going Out” strategy, pollution control, etc.	Coal deposits, growing power demand, historical dependence on coal, competitive Chinese finance and EPC suppliers, social and environmental risks
Hydropower	Historical strength of Chinese hydropower sector, overcapacity “Going Out” strategy, etc.	Withdrawal of other hydropower financiers, hydropower development boom, social and environmental risks
Renewable Energy	Policy bank reluctance to support RE, competition in host country markets	Limited host country demand, existence of readily available alternatives
Oil and Gas	Energy security, “Going Out”, national champions policies	Location specific assets, diversifying global market, lack of risk taking by western firms

Ongoing Policy Engagement

1

Unlocking development finance for overseas renewable energy

2

Tracking Chinese leader Xi Jinping's September 2021 pledge to not build new coal plants overseas

3

Mainstreaming climate in discussions on debt relief



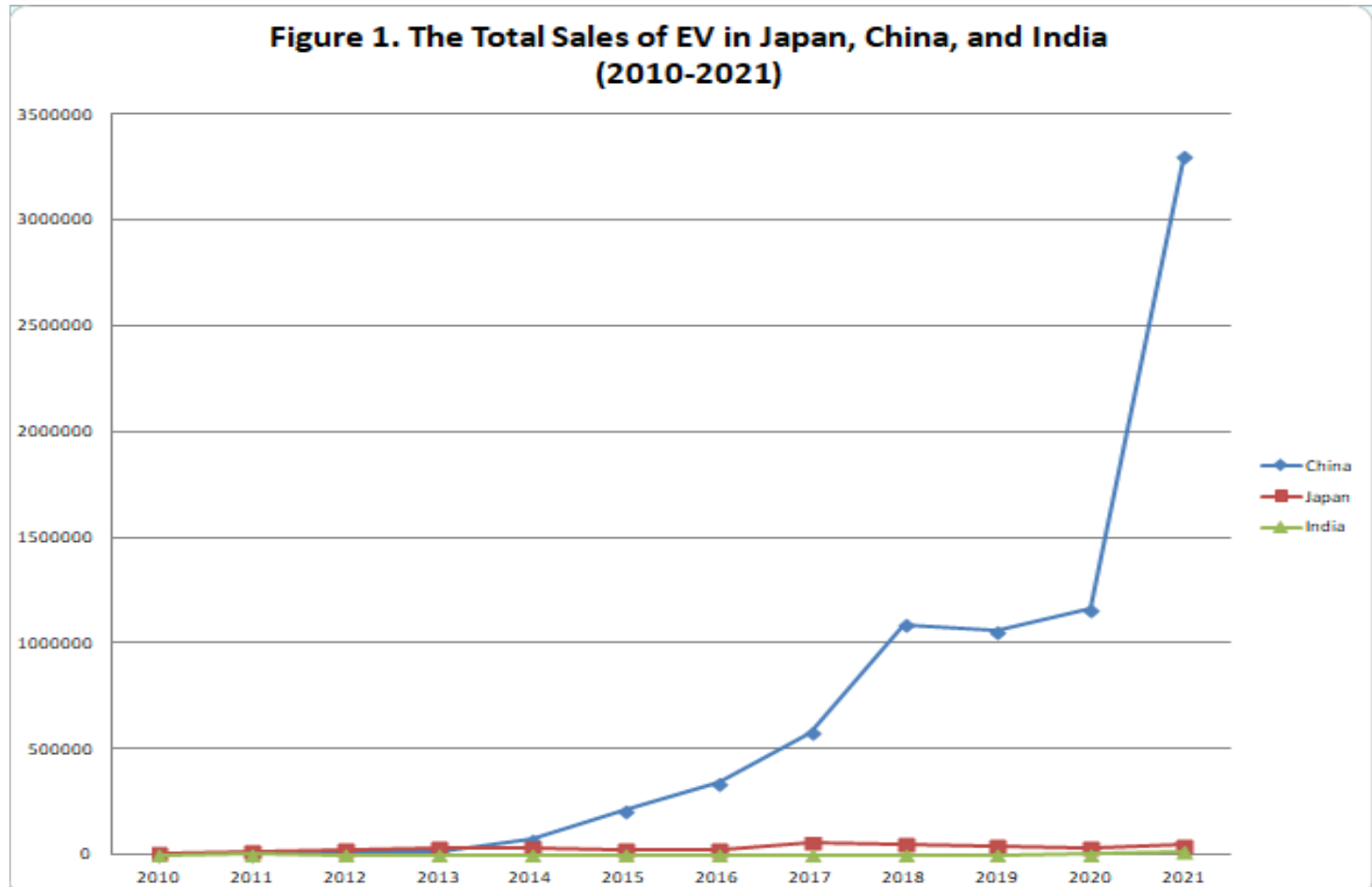
Variety of State Intervention

Industrial Policies in Electric Vehicles in China, Japan, and India

Min Ye

Associate Professor
Pardee School of Global Studies



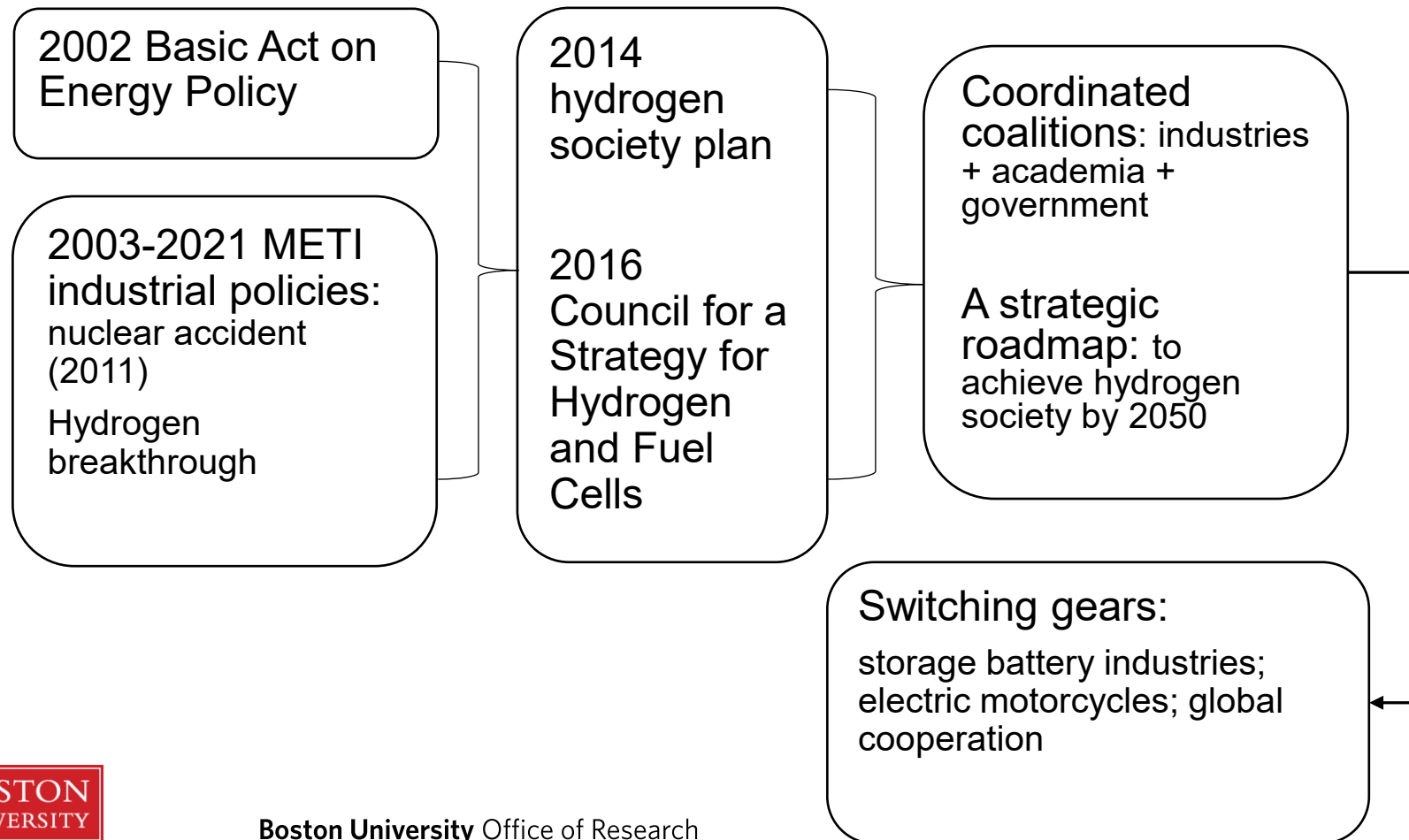


Source: The International Energy Association (IEA), Global EV Data Explorer.

China: Competition-conducive state

- Private players in the lead:
 - BYD: 2003 started EV business (2008 HKSE listing); CATL: 2011 making EV
 - New-comers: Nio, XPENG, Li Auto, WM Motor Technolog, Byton, Enovate, Hozon
 - State EV makers: Geely, SAIC
 - Tech EV players: Alibaba, Tencent, Huawei, Xiaomi
 - Tesla in Shanghai
- Policy lag:
 - 2006 national medium to long-term tech development
 - 2007 MOST industrial policy
 - Local EV policies took over

Japan: Coordinated coalitions



India: Promise amid protectionism

Proactive policies:

- 2013 DHI National Electric Mobility Mission Plan, with fiscal and monetary incentives
- 2015 & 2019: Faster Adoption and Manufacturing of EV (FAME I and FAME II), subsidizing costs and creating demands
- 2019: Five-Year Phased Manufacturing Program & National Mission on Transformative Mobility and Battery Storage
- 2021: Amendments of FAME II; Production-Linked Incentive Scheme (PLI)
- 2022: Ministry of Power, charging stations

Protectionist businesses:

- Global sweet spot
- “Make in (and by) India”

China and the International Economic Order

William N. Kring, Ph.D.

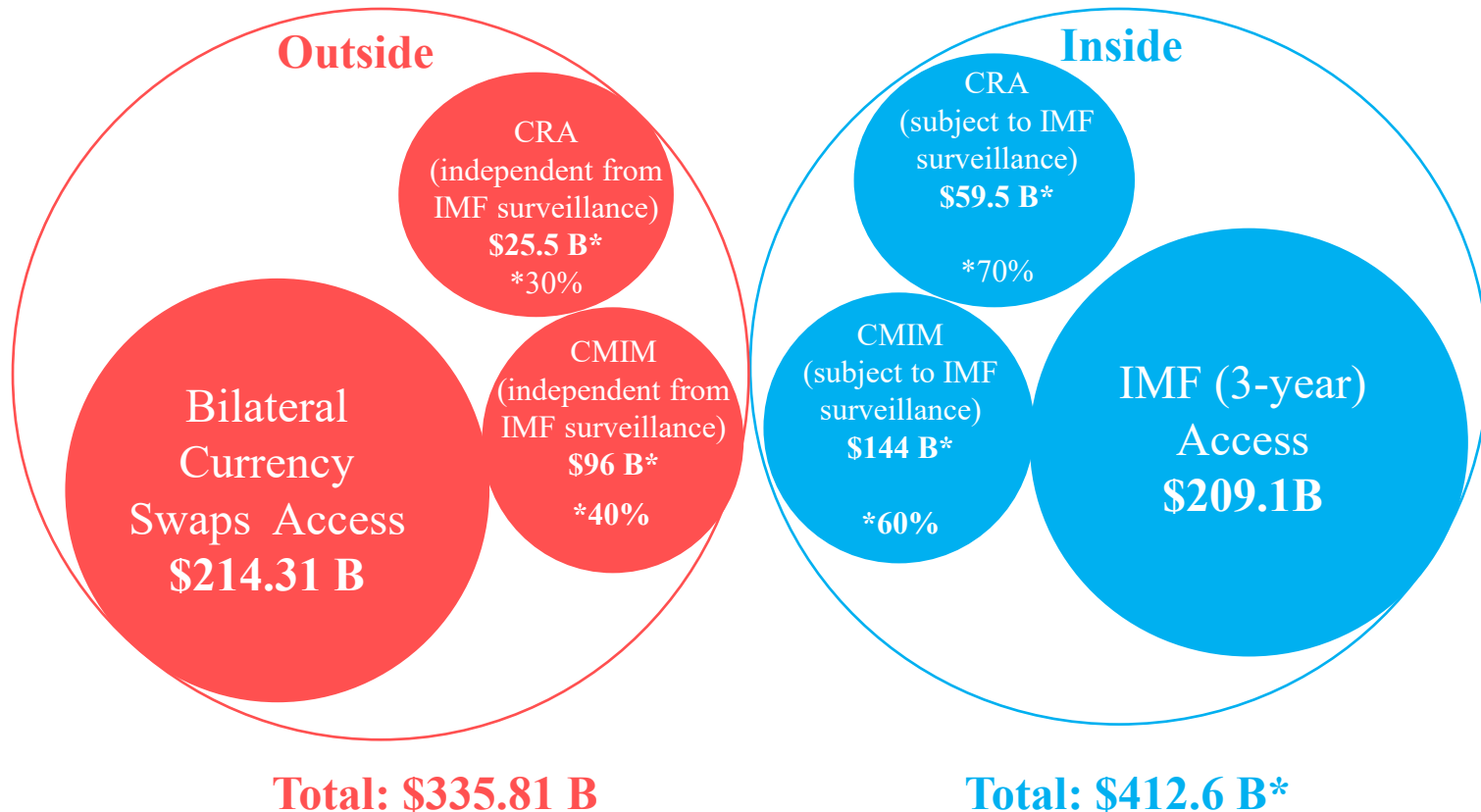
Executive Director
Global Development Policy Center



China in the International Economic Order

- Deploy an empirical approach to studying China's engagement with the key pillars of the Bretton Woods System (BWS): trade, international finance, and development finance
- To what extent is China engaged in the three pillars of the BWS constructed by the West and to what extent has China created or joined institutions that perform parallel functions in the world economy?
- To what extent does China's movement in each pillar over time impact the ability of these institutions to provide the public goods they were designed to provide?

China and the Global Financial Safety Net

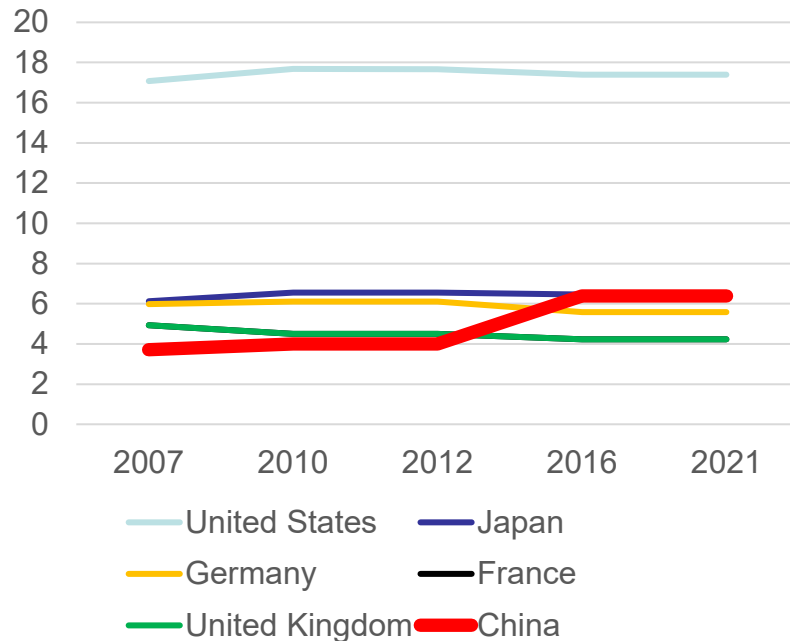


■ Beyond the BWS ■ Within the BWS

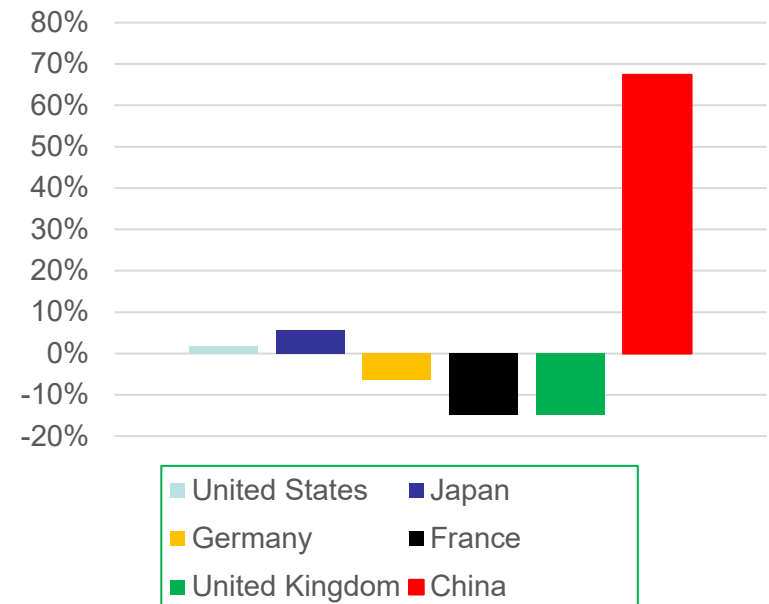
* Does not include FED swaps which are unlimited.

Voice and Representation: China's Role at the International Monetary Fund

IMF Quota trend over 2007-2021 in %

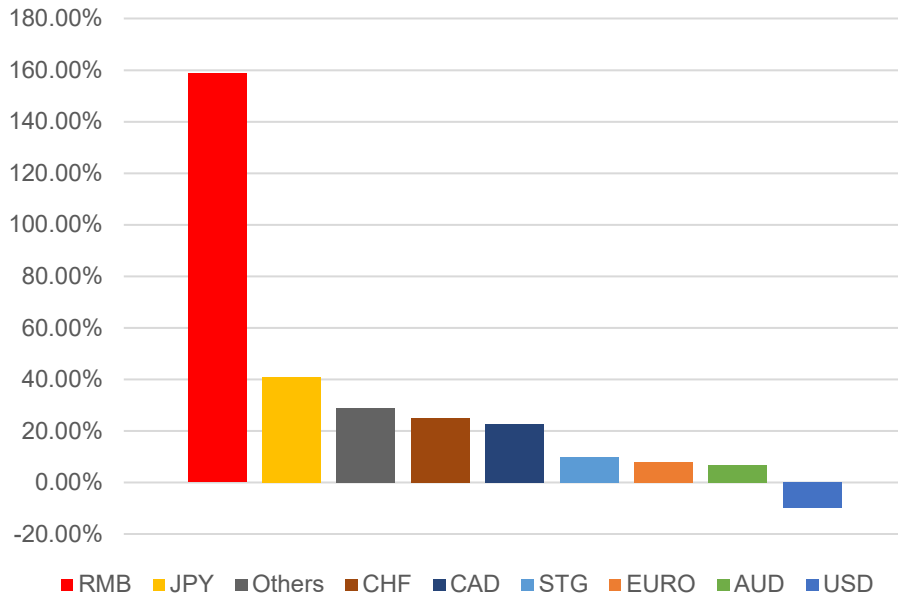


Aggregate IMF Quota change over 2007-2021 in %

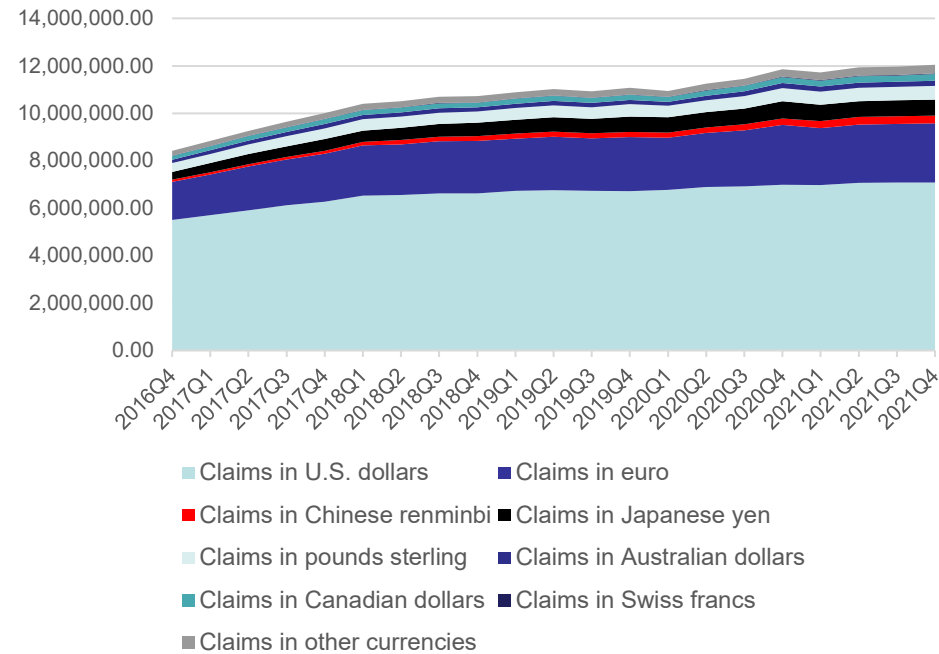


RMB and other currencies in terms of Composition of Official Foreign Exchange Reserves (COFER), 2016Q4-2021Q4

Percentage change in total share of COFER
between 2016Q4 and 2021Q4



World COFER in millions
(2016Q4~2021Q4)



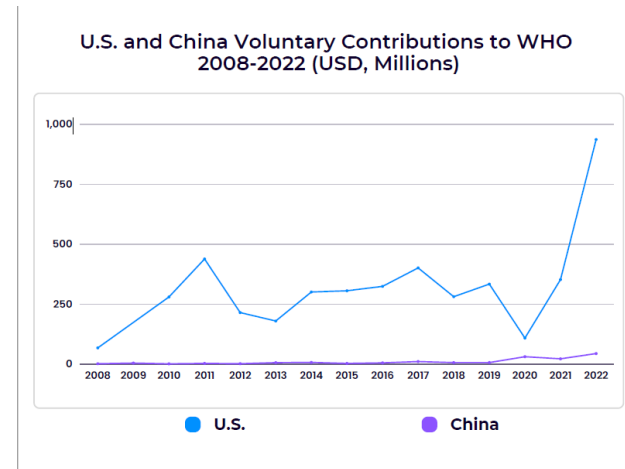
China's Role in Global Health after COVID

Mark C. Storella

Professor of the Practice of Diplomacy
Pardee School of Global Studies



Modest Beginnings: Bilateral Health Assistance, Low Profile



Chinese hospital heals sore spot in Zambia

Medical staff from both countries mingle at first general hospital in Lusaka, which helps focus attention on positive Chinese ties



■ Lusaka general hospital, which opened nearly two years ago, sports a plaque with gold lettering: "China Zambia Friendship Hospital". Photograph: Meng Qing/Xinhua

SARS and China's New Approach to Global Health



COVID in a Time of Disruption

Global Health as a Field of Great Power Conflict



HEALTH AND SCIENCE

China reports huge rise in Covid deaths after WHO criticized Beijing for heavily undercounting

PUBLISHED SAT, JAN 14 2023, 11:29 AM EST

REUTERS

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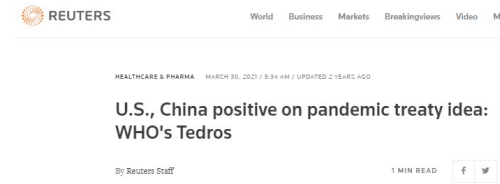
China's Choices and the Future of Global Health

Multilateral or Bilateral?

Transparency or
Sovereignty?

Collaboration or
Competition?

Culture and Governance?



Chinese FM Inaugurates CDC HQ in Addis Ababa Jan. 2023

Alcohol Policies in China: A Public Health Perspective

Ziming Xuan

Professor

Department of Community Health Sciences

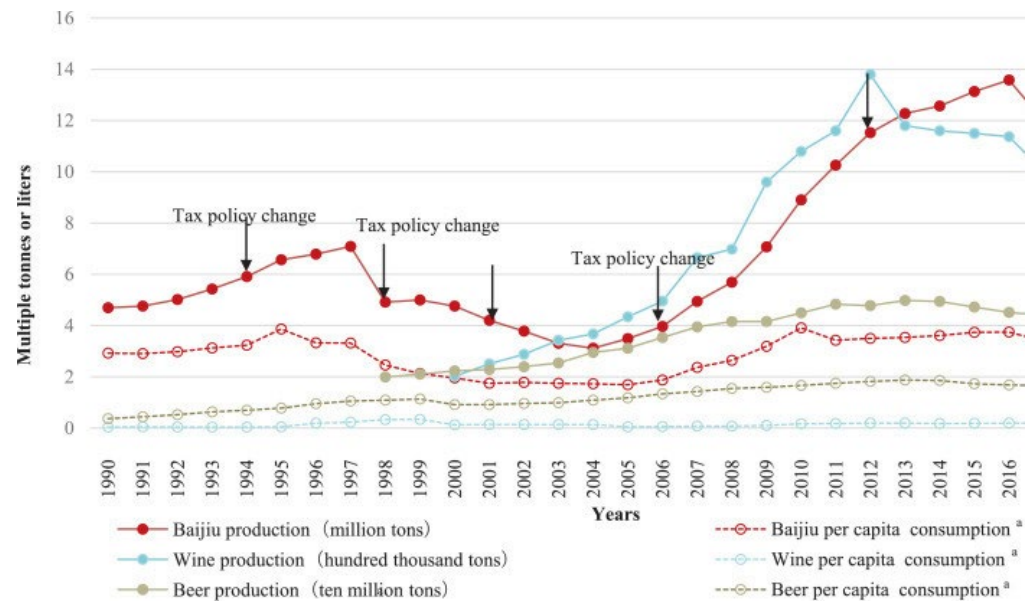
Department of Epidemiology

Boston University School of Public Health



Alcohol Epidemiology in China

- 7.2 liters per capita in 2016 (4.1 liters in 2005)
- 23% binge drinking
- 5.1% alcohol-induced mental disorders
- 8.4% male drinkers with alcohol use disorder
- 8.7% drinkers with alcohol liver disease
- Drinking and driving
- Youth use
- 310,000 deaths and 13.8m DALY among men annually



^a Recorded Per capita annual consumption of pure alcohol (liters).

Source: National Bureau of Statistics, 2021; World Health Organization, 2021

What contributed to the rise of alcohol use in China?

- Historically and culturally ingrained (**Acceptability**)
- Rapid economic development (**Affordability**)
- Urbanization (**Availability**)
- Globalization and marketing (**Appeal**)

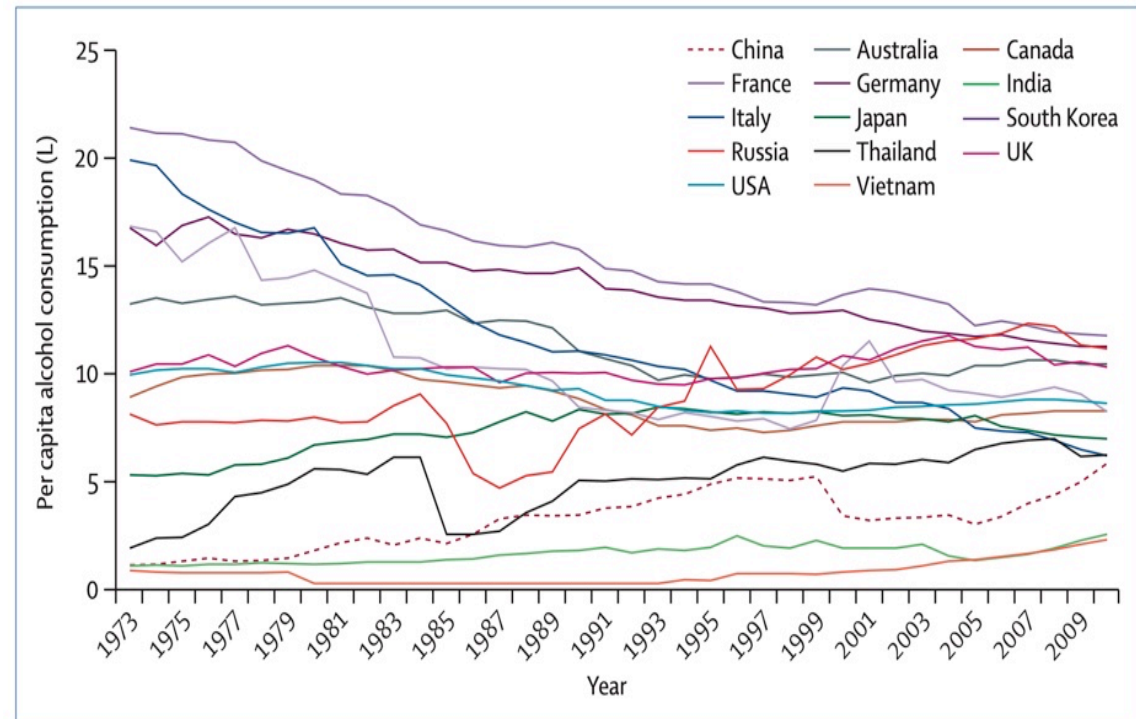


Figure: Trends in recorded alcohol consumption (age ≥ 15 years) in China and 13 other countries, 1973–2010
 These figures do not include unrecorded consumption (ie, alcohol that is not taxed and is outside the usual system of governmental control); in 2010, unrecorded per capita alcohol consumption was 1.7 L per year in China, compared with 0.5–1.8 L per year in the UK, the USA, and Australia.⁴

Alcohol control policies in China

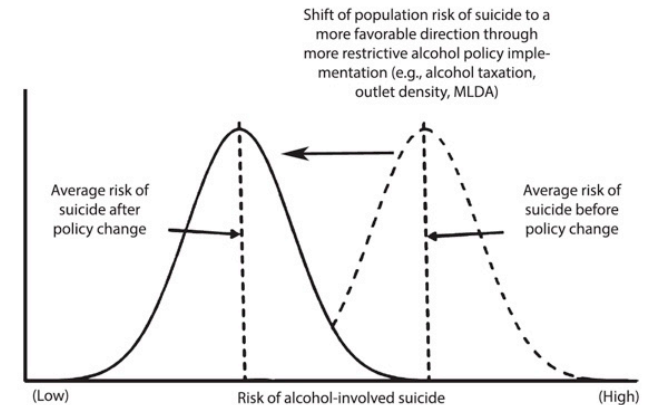
- Government monopolization ended to allow expansion of production
- Alcohol taxation for trade or revenue purpose
- Almost no alcohol control policies to regulate licensing on outlets, hours of sales or service
- Alcohol sponsorship, sales promotion and marketing
- Limited enforcement (e.g., underage drinking)



Alcohol control through a public health perspective

- Alcohol: No Ordinary Commodity
- National monitoring and surveillance system
- Public-health-oriented agency to advance the science and promote effective population policies to reduce harms of alcohol use
- World Health Organization's "Best Buys" policies including increasing price, limiting alcohol availability, and restricting on alcohol advertising.
- Policy enforcement

ALCOHOL POLICIES AND SUICIDE





‘The Future of Chinese-American Relations Is in Its Past.’

The *China Historical Christian Database (CHCD)* & the Roots of Our Common Story

Eugenio Menegon

Associate Professor
Department of History, CAS





MAPPING CHINA'S CHRISTIAN PAST

The China Historical Christian Database is a new digital tool for the study of Chinese Christianity from 1550 to 1950.

ABOUT



中國基督教歷史資料庫



中国基督教历史资料库

VISUALIZING CHINA'S CHRISTIAN PAST

The China Historical Christian Database is a new digital tool for the study of Chinese Christianity from 1550 to 1950.

ABOUT THE PROJECT

DOCUMENTATION

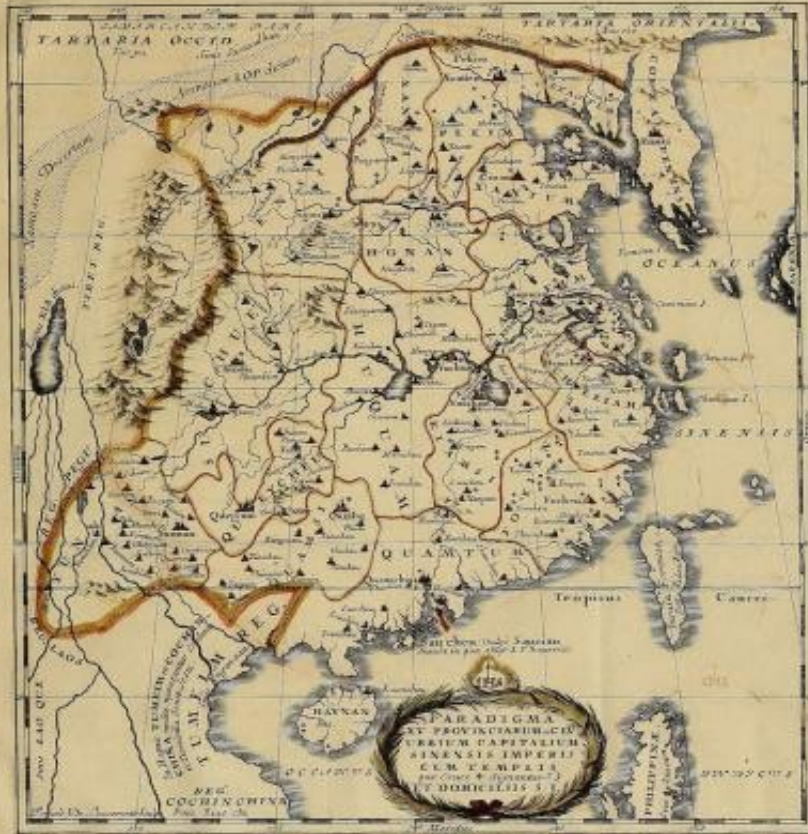
DOWNLOAD DATA

PROJECT PARTNERS



<https://chcdatabase.com/>
<https://data.chcdatabase.com/>

Boston University Office of Research



AIMS - 目标



CHINA HISTORICAL
CHRISTIAN DATABASE

Center for
Global
Christianity
Mission

- Geographical & chronological visualizations / 地理与年的可视化
- Family 家庭
- Nationality 国籍
- Age 年龄
- Mobility 行程
- Institutions 机构 (hospitals, schools, universities, museums, scientific labs etc.)
- Events 事件
- Social Networks 社交网络: in China & globally, within the church and in society

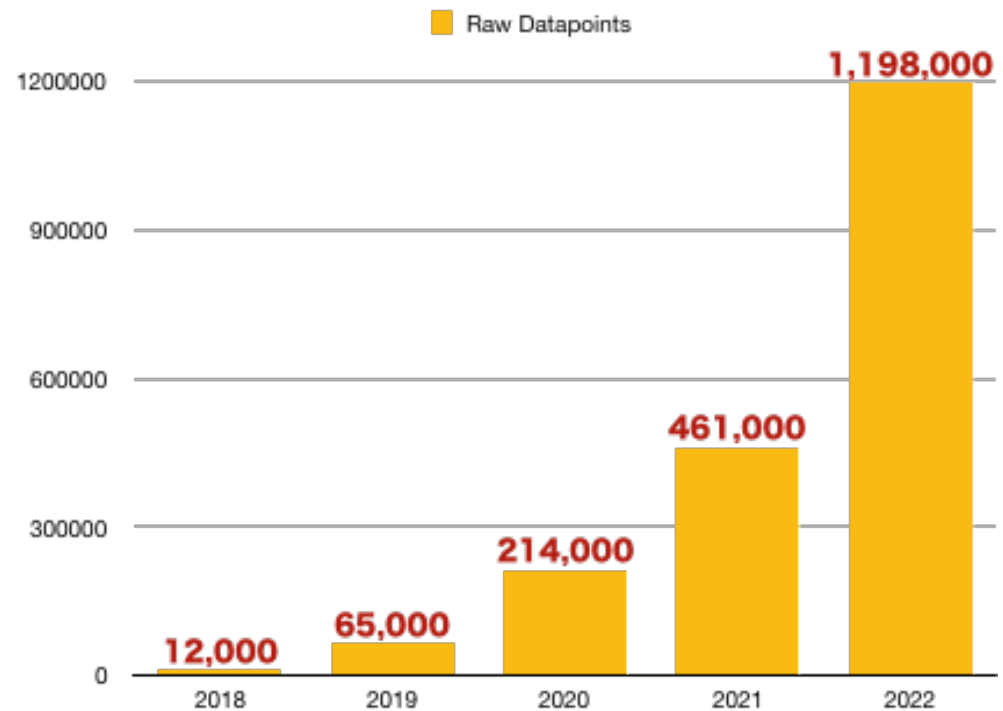
Current Data Status

Added Data from September to December 2022:

10314 new people
6246 new relationships
5074 new corporations
4024 new institutions

Summer Team
- 6 people, 950 hours, 140 pages done

Fall Team
- 3 people, 250 hours, 150 pages done



Community & Commitment : Fall 2022 & Spring 2023 Student Teams

CHCD Manager: **Yiyi Zhang**

Faculty Co-investigators:

- **Daryl Ireland** (CGCM, School of Theology)
- **Eugenio Menegon** (History, CAS)



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FALL 2022 | ISSUE 04

CHCD STUDENTS AT BU SYMPOSIUM

The Undergraduate Research Opportunities Program (UROP) is a competitive program for funded research internships at Boston University. Three of our CHCD students received this grant and presented the fruits of their researches during the annual Research Symposium. We are proud of them! Please find two students' reflections below.

"This summer was my second summer spent working with the CHCD, and this summer I was occupied with data entry on Christian schools. For my Symposium project, I decided to use one source's unusual level of geographical specificity (providing street addresses within large cities) to create a map of Christian schools in Shanghai in 1920, indicating interesting trends in location. This year with the CHCD helped me hone my skills in research with primary sources, reconstructing geographical locations, and even navigating the Chinese-language internet as someone who doesn't speak the language. The Database project has been a great fit for me as someone who is majoring in history, plans to have a career in the field, and is particularly interested in Asian history, and I hope to continue to work on it next summer."

- Nicholas Speranza

"During the summer, I collected information on more than 1000 Christian leaders who joined the Three-Self Movement in 1950. By using the digital method, I found the organizational and geographical characteristics of the people who joined the movement. I cultivated the ability to collect data from primary sources, convert information into digital form and digitally analyze historical documents. In the future, I would like to research the logic and story behind the Three-Self Movement by combining digital scholarships and other forms of history."

-Haoyu Liu



From Left to Right: Yiyi Zhang, Haoyu Liu, Dr. Eugenio Menegon, Nickolas Speranza, Zupeli Li

<https://chcdatabase.com/#news>

Chinese Christian Propaganda Posters

Daryl Ireland

Research Assistant Professor
School of Theology



宣傳基督新革中國

今日我國民被囚於侵略殘暴之罪惡權壓之下
與屠屠未解之下非發大覺悟大願力不能挽救



是我們心中的紅太陽

定價每張百張售洋四元

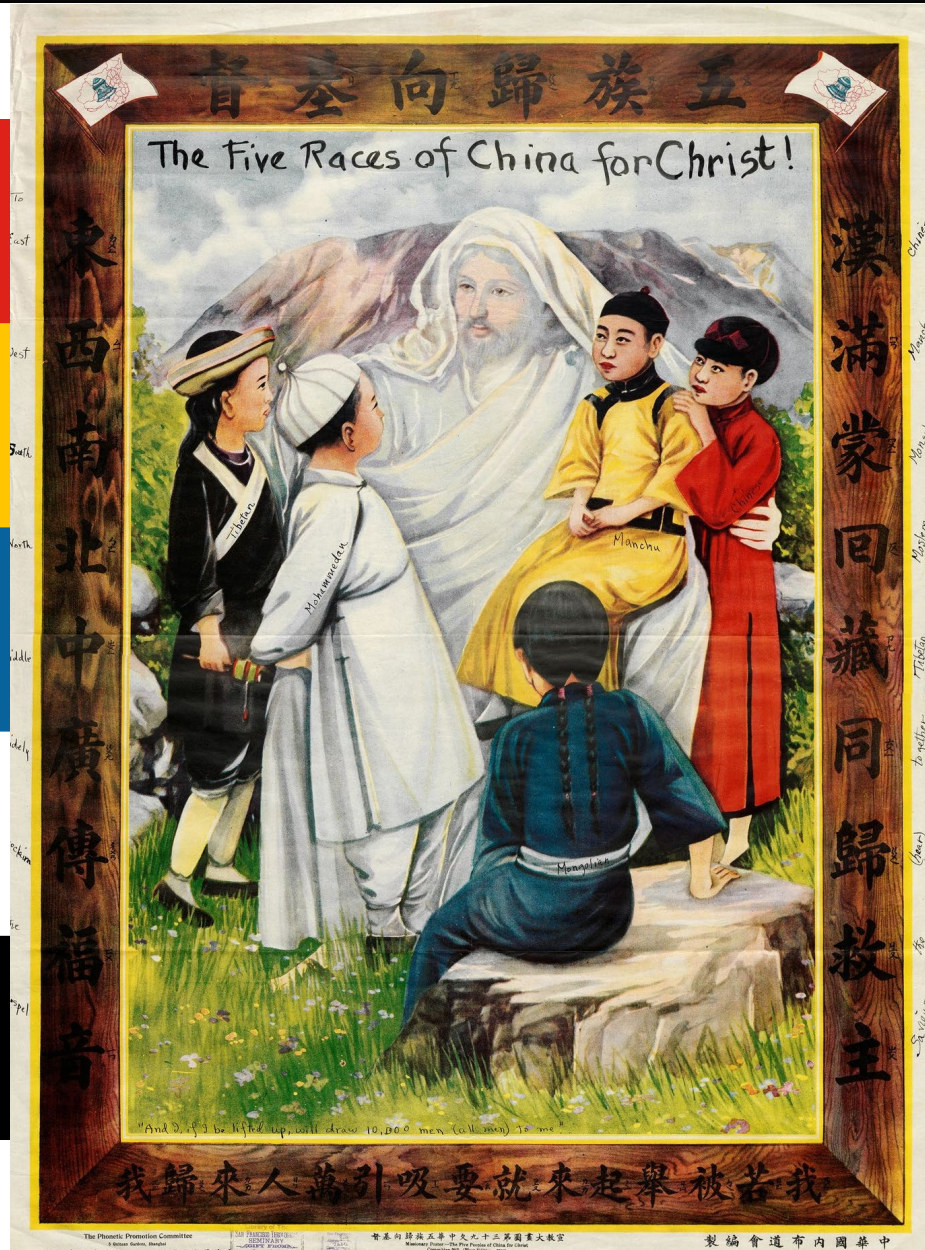
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ccposters.com



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耶穌基督是生命的根基

看哪！兄弟
和睦同居
是何等的
善阿蒙的
美

詩一三三



好家庭運動



所以你們要
去使萬民作
我的信徒

太廿四

佈道工作

康健的人用不
看醫生有病的
人纔用得着

太九



醫生藥生



信心若沒
有行為就
是死的

雅二

基督教教育

若有人不肯
做工就不
與飯

帖後三



勞互福利

本會推行五一經



勞動的餐
夫理當先
得糧食

帖後三

鄉村服務

中華基督教會中區協會會長樂區會製

一九三九年一月

Religion and Politics in Medieval China

April D. Hughes

Associate Professor
Department of Religion, College of Arts and Sciences



“You might be done with religion, but religion is not done with you.”

Keeping It 101: A Killjoy's Introduction to Religion Podcast

March 24, 2020, Season 1 Episode 106





**WORLDLY SAVIORS AND
IMPERIAL AUTHORITY IN
MEDIEVAL CHINESE BUDDHISM**

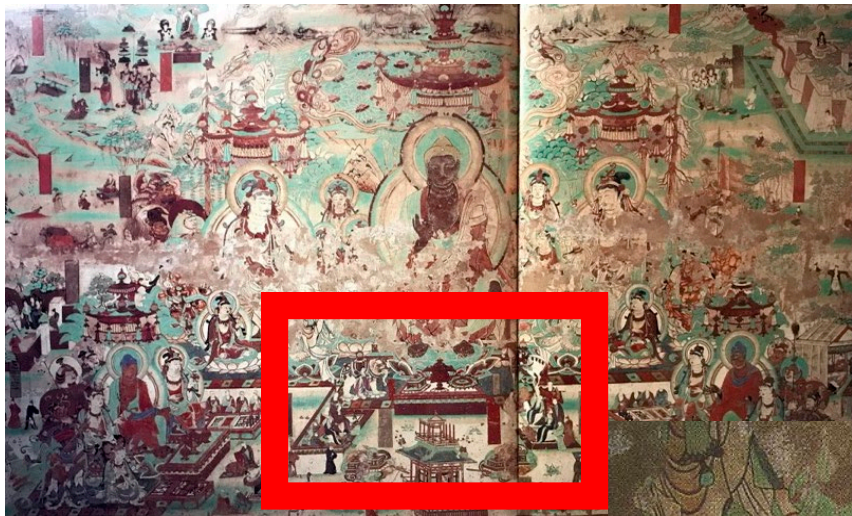


APRIL D. HUGHES



Emperor Wu Zhao (r. 690-705CE)





Peasants Versus Empires: Vernacular “International Law” in Manchuria, 1900-1931

Rui Hua

Assistant Professor
History



Mr. Pan of Manchuria

- An insignificant farmer from nowhere
- A troublemaker for empires everywhere



Mr. Pan goes to St. Petersburg 1908



Front: Mr. Pan, having reinvented himself as a peasant lawyer with new clothing and forged documents
Back: an American consular document about "international law" in the Manchurian countryside



A Transnational History of Law in Manchuria, 1900-1945

- Russian Legal Pluralism, 1900-1917
- Chinese Legal Modernization, 1906-1932
- Japanese Legal Colonialism, 1906-1945
- Manchurian Peasants' "Cosmopolitan Law," 1900-1945

Dance Comes to Peking Opera: Transcultural Engagement in 20th Century Chinese Performing Arts

Catherine Yeh

Professor

World Languages and Literatures, College of Arts and Sciences





《天女散花》梅兰芳扮天女
Mei Lanfang as the Heavenly Maid in
《The Heavenly Maid Showering Flowers》







Global Development Policy Center and the Center for the Study of Asia

Jorge Heine

Research Professor & Interim Director

Frederick S. Pardee Center for the Study of the Longer-Range Future

Former Ambassador of Chile to China (2014-2017), to India (2003-2007) and to South Africa (1994-1999)

Twitter @jorgeheinel





The Dragon and the Jaguar: What pulls China and Latin America together?

Farthest region from China anywhere
in the world, very different cultures,
and yet...

In 2021, China was South America's
#1 trading partner, and overall trade
with LA reached US\$ 451 billion.



The Silver Way and the Manila Galleon

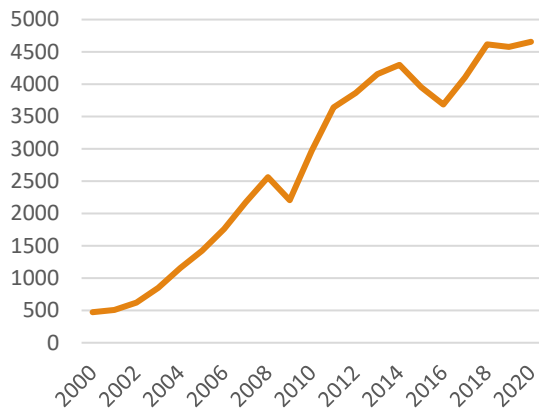
Globalization really started within the Spanish Empire, with a regular shipping line doing Manila-Acapulco, and then on to Europe, 1565-1815.

Andrés de Urdaneta and his discovery of the “tornaviaje”, the return trip from the Americas to Asia made it possible.

Gigantic, 2000-ton ships that went laden with Chinese silk, porcelain and many other fineries, and returned with silver.

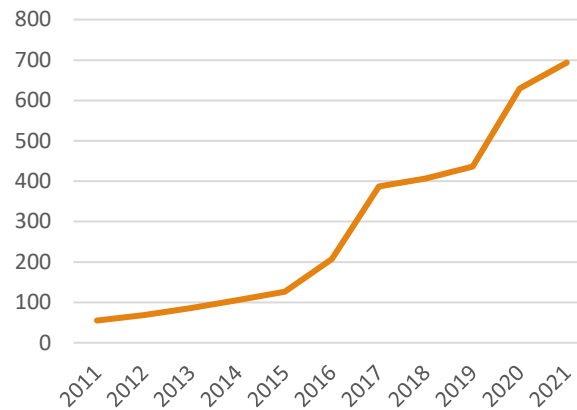
Chinese Economic Activity in Latin America

China-Latin America Trade, 2000-2020 (in US\$ millions)



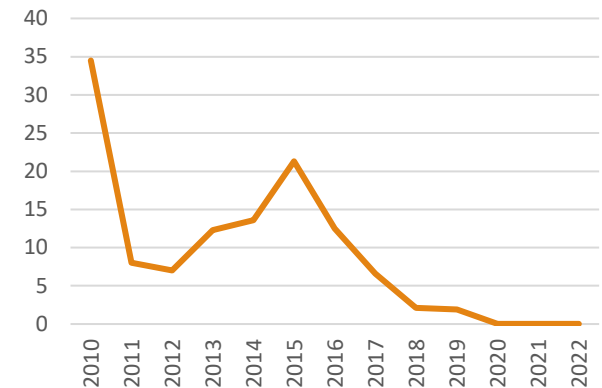
Source: wits.worldbank.org

Chinese FDI to Latin America, 2011-2021 (in US\$ billions)



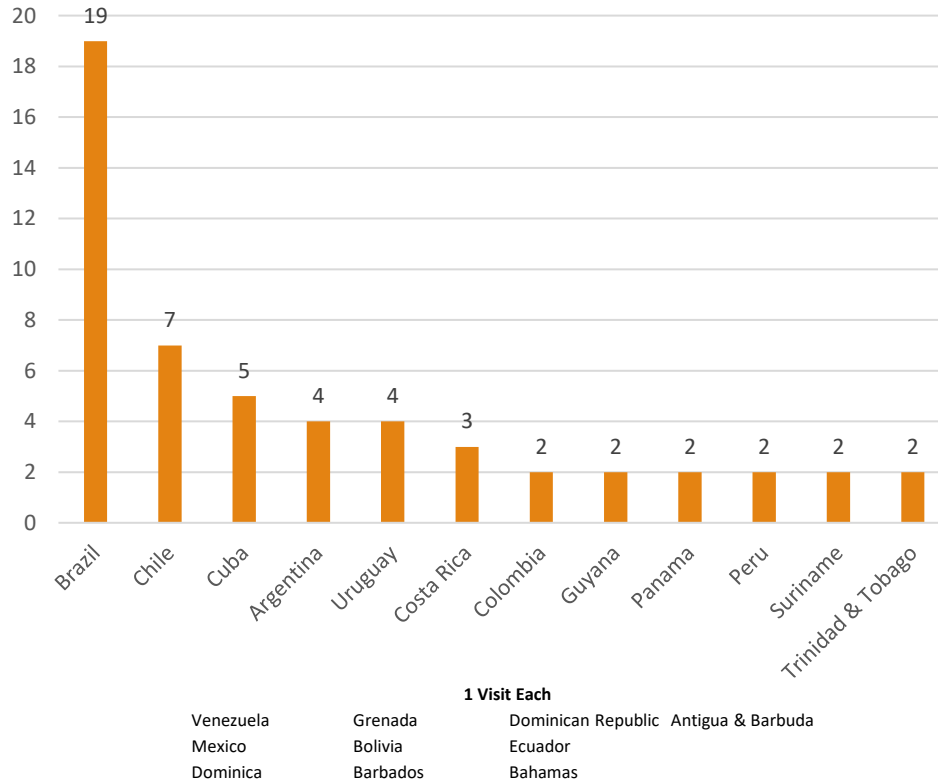
Source: [Statista](https://www.statista.com)

Chinese Policy Bank Loans to Latin America, 2010-2022 (in US\$ billions)



Source: Gallagher, Kevin P. and Margaret Myers (2022) "China-Latin America Finance Database," Washington: Inter-American Dialogue.

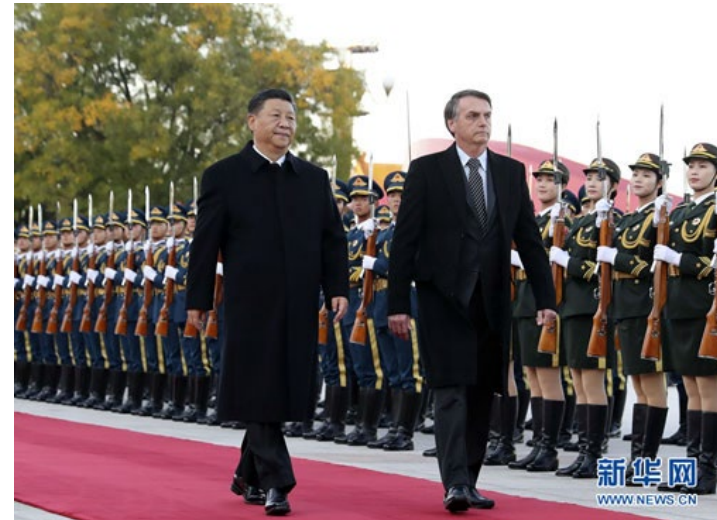




High-Level Chinese state visits to LA 2010-2019

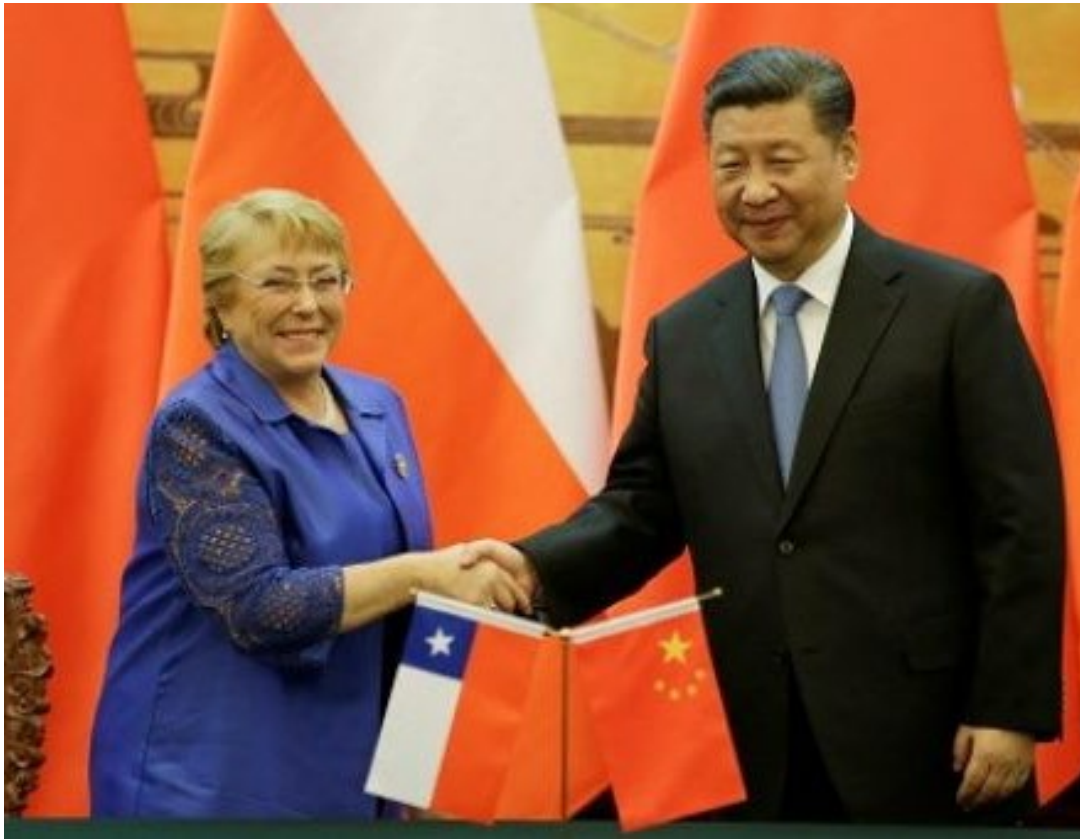
Source: *Communicating Influence: China's Messaging in Latin America and the Caribbean*, Center for Latin American & Latino Studies American University

Chinese Diplomatic Activity in Latin America



© Ministry of Foreign Affairs of the People's Republic of China, 2019





© Reuters, 2017

The Belt and Road Initiative (BRI) in LA

From retracing Marco Polo's footsteps and attempting to recreate Eurasia, to reaching across the Pacific.

21 countries have signed MOUs on the BRI with China.

Two Latin American presidents at I BRI International Cooperation Forum (Argentina and Chile) Beijing, May 2017.

One Latin American president at II BRI International Cooperation Forum (Chile), Beijing, April 2019.

STEM Research In China: Personal Observations

Christos G. Cassandras

<https://christosgcassandras.org/>

Distinguished Professor of Engineering
Head, Division of Systems Engineering
Professor of Electrical and Computer Engineering
Center for Information and Systems Engineering



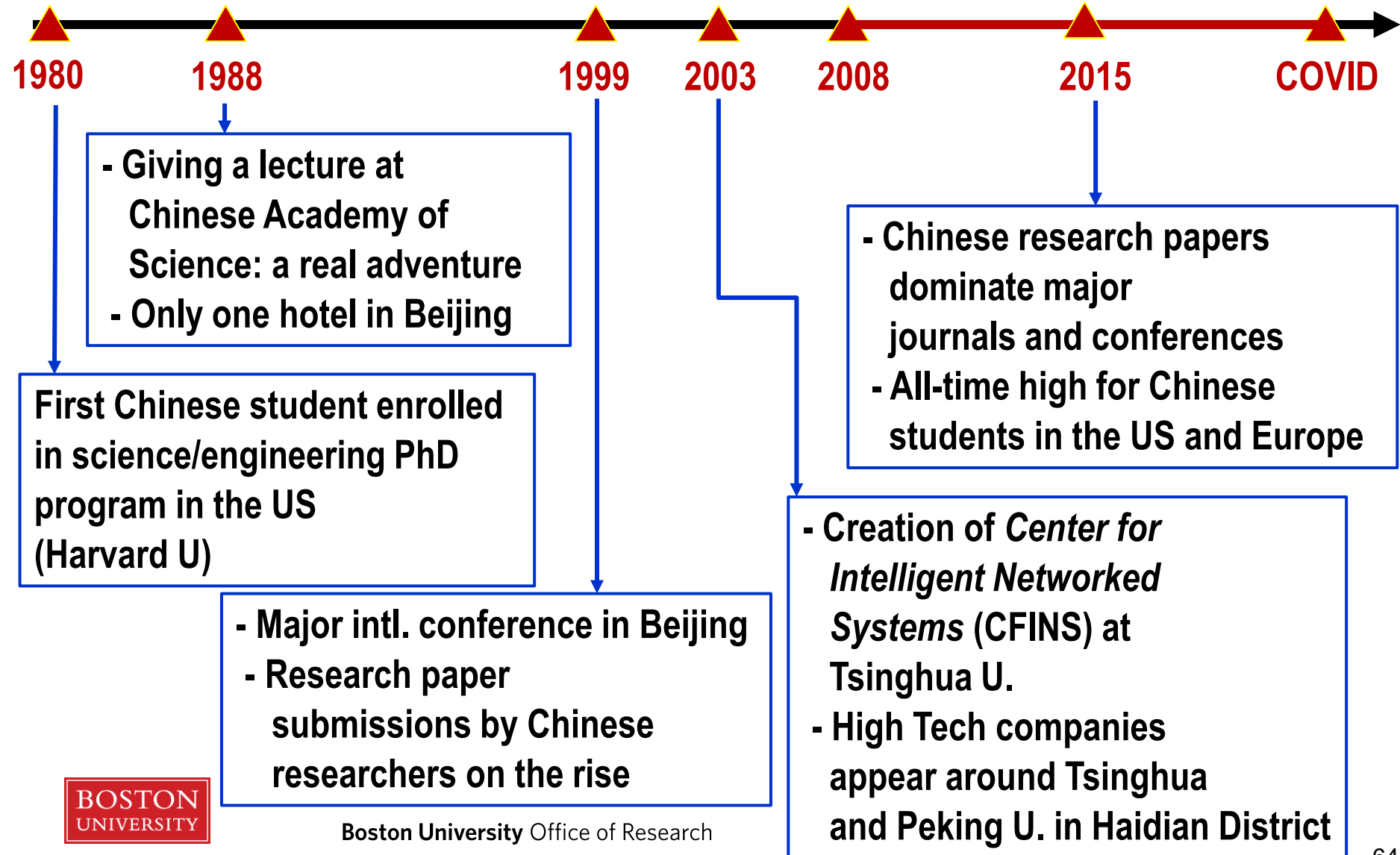
MY CONNECTIONS TO CHINA AND CHINESE UNIVERSITIES



- **Chair Professor, Tsinghua University**
- **Honorary Professor:** - Huazhong University of Science and Technology
- Wuhan Inst. of Technology
- **Frequent visits, seminars, short courses:**
Chinese Academy of Science,
Southeast U., Zhejiang U.,
Xian Jiao Tong U. et al.
- **BU-Tsinghua U joint MS program
in Systems Engineering
+ Visit exchanges**



MY CONNECTIONS TO CHINA AND CHINESE UNIVERSITIES



CHINESE STUDENTS IN THE US

Table 1. Number of Chinese Students Enrolled at U.S. Universities by Degree and Field, 2018/19

	Number of Chinese Undergraduate Students	Number of Chinese Graduate Students		
		Overall	Master's (<i>est.</i>)	Ph.D. (<i>est.</i>)
Agricultural Sciences	1,390	1,400	511	889
Biological Sciences	4,120	5,980	1,585	4,395
Computer Sciences	11,710	16,990	13,600	3,390
Engineering	12,890	31,450	16,447	15,003
Mathematics and Statistics	12,090	12,740	7,436	5,304
Physical Sciences	3,520	7,500	894	6,606
Total STEM	45,720	76,060	40,473	35,587
Total	143,320	129,440	<i>not estimated</i>	<i>not estimated</i>

estimated

Source: Science and Engineering Indicators; National Center for Science and Engineering Statistics Survey of Graduate Students and Postdoctorates in Science and Engineering. CSET calculated Master's and Ph.D. student estimates. See Appendix A for details.

STEM Grad: 16-25%
STEM Ugrad: 2-15%



OBSERVATIONS (INFORMAL) ABOUT STEM RESEARCH IN CHINESE INSTITUTIONS

- **Obsession with RANKINGS**
- **Obsession with BIBLIOMETRICS**
- **Financial compensation coupled to publishing accomplishments**
- **STEM education highly prized, tremendous talent pool**
- **Spectacular STEM funding opportunities**
- **Tendency to study extensions of known results rather than innovate and explore new frontiers**
- **Cultural differences regarding “intellectual property”**
- **“Reserved openness” about sharing knowledge**
- **STEM researchers seem largely apolitical**

THANK YOU!



UPCOMING EVENTS

Learn more & RSVP: bu.edu/research/events
Topic ideas & feedback: bu.edu/research/topic-ideas

RESEARCH ON TAP

Safety, Justice, and Health in US
Cities

Wednesday, March 15, 2023 | 4-6 pm

Environmental Cultures, Power,
and Equity

Wednesday, March 22, 2023 | 4-6 pm

RESEARCH HOW-TO

Find a Collaborator: Tools for
Making Research Connections at
Boston University

Tuesday, March 14, 2023 | 1-2:30 pm

Finding Funding in the Sciences:
Meet the Pew Charitable Trusts
Wednesday, April 5, 2023 | 12-1 pm

