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RESEARCH ARTICLE

China's Internet sector reforms and the rise of ESG in the state techno-nationalist agenda

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Abstract

From 2020 onward, sweeping reforms were implemented in China's domestic Internet sector that stirred debate about its future. Analyzing all Chinese government policies and penalties issued on domestic Internet enterprises from 2020 to 2022, this article provides the first systematic account of the authoritative themes that guided the design of the policy reforms. Latent Dirichlet Association topic modeling and qualitative content analyses reveal that policy reforms are guided by a state techno-nationalist agenda shifting closer to a framework of environmental, social, and governance concerns (ESG). The results show that the new policies restructured Internet firm operations, capital allocation decisions, and accountability mechanisms with local government collaborators to ultimately push firms toward improving ESG adherence: social wellbeing, corporate governance, and environmental sustainability. This article theorizes that these changes reposition the Internet sector in a new techno-nationalist agenda, shifting it from a vehicle of unfettered economic growth to an incubator for social wellbeing and sustainable finance.

KEYWORDS

China; corporate regulation; development; environmental, social, and governance (ESG); Internet sector; policy reforms; social; sustainable finance

INTRODUCTION

The Internet sector has become ubiquitous in economic and social life in China. It has been a significant vehicle for the nation's economic growth. Its productivity contributed ¥45.5 trillion (US$6.5 trillion) to the nation's GDP, comprising nearly 40% of total economic output and placing it second after the digital economy in the United States (China Academy of Information and Communications Technology [CAICT], 2022). The overwhelming majority of consumer transactions transpires through e-payments systems run by private Internet companies, such as Alibaba's Alipay and Tencent's WeChat pay, both of which report nearly 1.24 billion and 1.035 billion users, respectively (De Best, 2021).

Moreover, government bureaus, news broadcasters, companies, workers, and individuals alike have taken to digital platforms to share news, engage in political communication, and participate in social exchanges—trends that have since been exacerbated by the onset of the COVID-19 pandemic (Au, 2021, 2022; Forbush & Foucault-Welles, 2016; Ni et al., 2020; Nie et al., 2017; Qin et al., 2017).

Much of the staggering proliferation of the Internet sector, however, has depended on lax government regulations over privatization in the sector (King et al., 2017). Tracing the scope of tax deductions offered to domestic Internet companies, for instance, Li and Yang (2021) identify that a significant proportion of the operating profit margins in Chinese Internet companies was because of preferential tax policies offered by the government.

Against this backdrop, what themes animated the storied policy reforms to sweep through the Internet sector from 2020 onward, a salient departure from this trajectory of preferential treatment? From 2020 onward, close to 150 administrative penalties were announced for dozens of companies in the Internet sector, the largest of any multiyear period. Focusing on the speed and severity of the fines, pundits, investors, and policymakers around the world have described it as the most expansive reforms in China in decades. Some painted them as a political maneuver for asserting control over the economy, while others argued that they pose a threat to the future of the Internet sector and economic growth itself (Dou & Wu, 2022; Kharpal, 2022; Klyman, 2022; Shen, 2021).

This article theorizes that the latest reforms represent a turning point in China's techno-nationalist agenda and the position of the Internet sector within this agenda, expanding from economic growth to environmental, social, and corporate governance (ESG) needs and responsibility. This policy shift in China's regulation strategy toward techno-regulation for ESG goals is theoretically and practically important, because it sets the tone for the capital allocation and governance models to be used by local institutions.

The last major shift in China's regulation strategy of the private sector, for instance, was to include capitalists in the Chinese Communist Party (Pearson et al., 2021; Tsai, 2006). This rippled out to shape governments, institutions, and private enterprises in the nation. It gave license to a new model of capital allocation and governance decision-making focused on economic growth and profit alone. That is, institutions began investing and collaborating more with locally based private enterprises to create more jobs, attract foreign investment, and claim additional tax revenues (Tsai, 2006). In the technology sector, the present policy shift means there may be yet another new model of capital allocation for private enterprises and local governments alike. For instance, the Internet sector now accounts for over 25% of all jobs and 40% of total economic output in China (China Academy of Information and Communications Technology, 2022).

A policy shift to ESG goals thus offers an important window into (a) the sustainability of a significant portion of the nation's economy and jobs, (b) how digital platforms that dominate social and economic life will operate (and by extension, how small and medium enterprises will participate in the economy and how consumers will consume), and (c) the future of capital allocation in private enterprises and governments as they strive to meet ESG objectives rather than economic growth and profit alone, as with the previous policy shift.

To this end, this article examines the themes that motivated Internet sector policy reforms using a novel multilevel data set of all Internet sector policies in China collected from 2020 to 2022. In the first systematic and comprehensive analysis on the Internet sector reforms in China, this article interrogates the themes that guide the design of new policies and argues the Chinese Internet sector is being repositioned within a shifting state techno-nationalist agenda, moving away from economic growth at all costs toward a framework of ESG values.

Theorizing China's techno-nationalist agenda and Internet sector reforms: Toward ESG

This article argues that the role of the Internet sector in Chinese socioeconomic development is being repositioned in the nation's techno-nationalist agenda, shifting from an engine of unfettered economic growth to a vehicle for social development.

To begin with, digital platforms as a whole have been theorized as an apparatus for enacting China's techno-nationalist agenda, which is an expression of the central government's constructions of China as a modernized and developed state (Lee, 2019; Liang et al., 2018; Plantin & De Seta, 2019).

Interviewing government bureaucrats and officials in China, Lei (2021) recently identifies the how this techno-nationalist agenda or sociotechnical imaginary is expressed in "state-capital-talent-technology" relations in the nation. Within this rendering of China's techno-nationalist agenda, digital platforms, and their native Internet sector are taken to be proxies as much as vehicles for economic growth in China. Indeed, the overarching objective offered to the Internet sector has simply been to grow enough to rival the technology giants risen in the West, such as Facebook (now Meta) and Alphabet.

In interviews with state bureaucrats and government officials, Lei (2021) corroborates this theorization by identifying that these state actors directly work with enterprises to allocate human capital for the express purpose of developing technology. This theorization is further buttressed by observations of prominent digital platforms like Tencent and Baidu as active collaborators with the state in administering a wide-reaching credit system. Digital platforms integrated surveillance camera network data into troves of existing user data and incorporated new methodologies of measuring social credit such as with user ratings systems, which have been used by the state to introduce a new social credit system that aims to identify honest workers and filter out dishonest ones from the workplace (Wong & Dobson, 2019; see also Shaw & Zhang, 2018; Xu, 2018).

To abet the goal of growth, Internet enterprises were further offered generous tax rebates by the state. Trawling annual reports of all companies ever indexed in the Hang Seng Internet & Information Technology Index between 2015 and 2021 (an index of the most prominent Internet companies in China run by the Hong Kong Stock Exchange), this article identifies that roughly a third of all companies (25 out of 78) received tax refunds. These ranged from several million Yuan (ASM Pacific Technology, a semiconductor assembly company) to a staggering 7.8 billion Yuan (ZTE Corporation, a telecommunications company). Even Tencent, the largest publicly-listed company in China in market capitalization, received tax refunds that gradually increased from 254 million Yuan in 2015 to 1.29 billion Yuan by 2021. Relentless pursuit of economic growth, in sum, was the only overarching objective for the Internet sector under China's techno-nationalist agenda for the past decade, since the sector's inception.

In conversation with this literature, this article theorizes that the latest reforms express a turning point in China's techno-nationalist agenda and the position of the Internet sector within this agenda, expanding from economic growth to ESG needs and responsibility.

ESG is characterized as a framework for values-driven investing. Although it is not uniform in its manifestation (e.g., what investors choose to do with information about the negative externalities of a company captured by ESG), ESG consists of a bedrock of values about improving social wellbeing and equality, environmental sustainability, and equitable corporate governance that enables these values (Eccles et al., 2017, 2020). More recent research shows that the rapid rise of ESG ratings is coming to inform not only business behaviors but governmental behaviors in addressing concerns of their stakeholders (Baker et al., 2021; Crifo et al., 2017). As a result, a recent report by Pricewaterhouse Coopers (2022) has identified increasing attention in ESG as a framework for capital allocation and investment decisions over the past 25 years, with investments of an estimated US$18.4 trillion in assets under management (AUM) worldwide being linked to ESG data, projected to rise to US$33.9 trillion in AUM and over 20% of all professionally managed assets worldwide.

ESG is also argued to emerge as a framework for the Chinese Internet reforms. Policy reforms thus gravitate toward three ideal types (to which the state had hitherto turned a blind eye): (a) improving corporate governance: antitrust initiatives to liberalize transactions, removing e-commerce restrictions that digital platforms had placed on vendors and purchasers, concerning market entry, transfer costs, and cross-border competition (Antitrust Committee of the State Council [ACSC], 2021; Ding, 2021; Wang, 2021, 2022); (b) improving social wellbeing: safeguards to protect user wellbeing and privacy, and accountability mechanisms; and (c) improving environmental and social contributions: constraining capital allocation by directing investment toward key sectors in the economy, namely, agricultural development, as well as dampening merger and acquisition activity.

The reasons for this turn in the Chinese techno-nationalist agenda to ESG are rooted in the growing inequality documented nationwide, especially across the rural and urban divide. Despite a decline in the absolute poverty rate (set at the World Bank standard of an income of US$2 per day) since Deng Xiaoping's market-oriented reforms in 1978, measuring the poverty rate in China using OECD standards on a relative basis (e.g., classification as poor if income falls below 60% of median income) finds that the poverty rate would rise to around 20% (Walker & Yang, 2021).

Although inequality and poverty have been longstanding issues in the nation, the pandemic exacerbated them further. Data from the National Bureau of Statistics of China (2022) has identified a clear gap in economic means between urban and rural households amid the pandemic: in 2022, urban households experienced a real change of −0.2% in total per capita expenditure nationwide in 2022, but rural households experienced a real change of 4.3%. The stark difference between urban deflation and rural inflation is a political flashpoint that comes off the heels of a rift in welfare, government-provided social services, working eligibility, and wellbeing standards at large that sees rural households lag their urban counterparts (Lui, 2017; Song & Smith, 2019, 2021).

Much evidence has documented the political destabilizing effects of rising inequality (and rural poverty) that are accentuated in developed nondemocratic nations like China. In such nondemocratic settings, inequality energizes political dissent and challenges to state authority that threaten financial stability when the state's capacity to maintain investor protection institutions fails, collapsing already-brittle investor trust (Roe & Siegel, 2011; see also Duckett, 2020).

In *The Dragon Roars Back*, Zhao (2022) recently offers a comprehensive theoretical explanation for why inequality and poverty have animated strong policy responses from the government *now* despite their long history. The height of the crackdown period of 2020 to

2022 coincided with a lead-up period to the latest 20th National Congress of the Chinese Communist Party that was the most significant Congress for President Xi Jinping in particular and for Chinese governance in general in over half a century.

From 2020 to 2022, it was proposed—and eventually decided—to abolish term limits for the presidency, elevating Xi Jinping to become what Zhao calls a transformational leader. Characterized by absolute personal power and official authority, this ideal type of leader in modern Chinese history has only appeared twice prior in Mao Zedong and Deng Xiaoping. But each round of transformational leadership comes replete with challenges to legitimacy, especially when new policy directions are as drastic as the abolishment of term limits. As such, the state saw the need to reverse inequality and poverty, as well as ameliorate outright challenges to the state like with Jack Ma's speech at the Shanghai Bund, to shore up its legitimacy and alleviate potential sources of dissatisfaction to the new regime by the populace.

Zhao's account gains credence from the timing of the crackdowns, beginning after Alibaba founder Jack Ma's speech in October 2020 at the Shanghai Bund. In his speech, Ma critiqued the Chinese financial system for having no checks and balances and stifling innovation (McGregor, 2022). Six months after, Alibaba was fined US$2.8 billion, the largest fine in China's history, by the SAMR (Bloomberg News, 2021). Trawling all administrative penalties across time, this article identifies that penalties were only issued starting from late 2020 onward, surging astronomically to a record-high of over 100 in 2021. Thus, the first domino that set into motion the broader crackdowns on the sector was Ma's challenge to state legitimacy, which was simultaneously used as an opportunity to address inequality and poverty at large.

Thus, in response to potential threats to political stability and legitimacy of China's techno-nationalist agenda, policies that were implemented under the latest Internet sector reforms promote social wellbeing. They also expand their roster of stakeholders from the traditional trinity of state, human capital, and technological innovation—to include the interests of grassroots agents like consumers, users, and employees.[1] In this way, this new techno-nationalist agenda draws closer to counterpart techno-nationalist agendas in the United States and the United Kingdom by foregrounding social values like equality and labor protections (Chan, 2021; Ernst, 2018; Miao et al., 2021; Sharif & Huang, 2019).

The contribution of such reforms in the Internet sector to correcting inequality and rural poverty, though untested, gains credence in light of the fact that over a quarter of all jobs in China are in the field of digital economy that is largely overseen by the Internet enterprises being reformed (China Academy of Information and Communications Technology, 2022).

Data and methods

The data set was constructed from trawling all Chinese government policies and administrative penalties related to Internet enterprises at local, provincial, and national government sites (including China's State Administration for Market Regulation (SAMR), widely known as China's antitrust watchdog) between 2020 and 2022. The final data set recorded 153 policies ($n = 153$). One hundred and two were national, and 51 were provincial. Data were recorded about the title of the policy, the content of the policy, the date it was issued, the date it was implemented, the level of government at which it was issued, the issue code (if available), issuing institution, and area of issuance.

Themes motivating the policy reforms were examined using a mix of quantitative and qualitative content analysis. To offer an overview of the policy corpus, a word cloud is presented in Figure 1 in Chinese and translated in English. The size of the words is proportional to their frequency in the corpus.

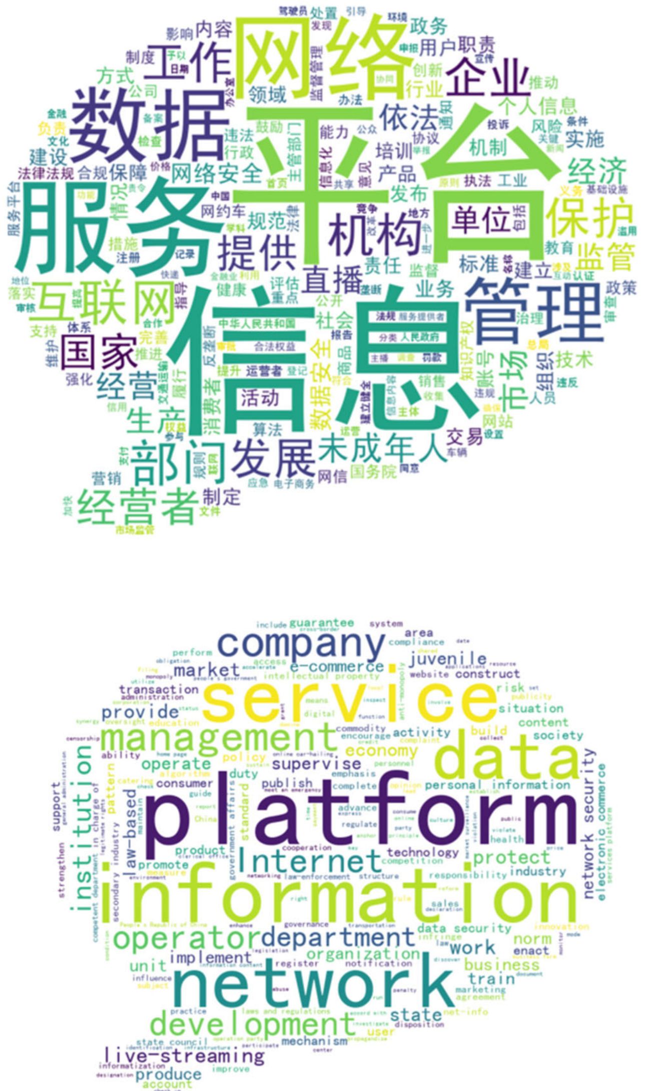

FIGURE 1 Word clouds of the corpus (in Chinese and English).

To quantitatively examine the context in which words in the policies were used, topic modeling was conducted on the corpus. Topic modeling is a process of identifying the hidden thematic structure of a document with a hierarchical Bayesian analysis based on the co-occurrence of words (Onan et al., 2016). In other words, topic modeling "clusters words around topics, and by analysing what those clusters of words represent, we can reveal the themes within the texts" (Ho, 2022, p. 1253).

Topic modeling was conducted with Latent Dirichlet Association (LDA). LDA is a probabilistic model that assumes each document is a random distribution of latent topics, taken to be organizing themes of the textual content, and identifies within the corpus a hidden topic structure. Three topics were identified to be the most theoretically salient: Internet environment and digital ecology, corporate compliance and market competition, and national economy and industrial development. The LDA was supplemented with qualitative content analysis to investigate the contexts of each top word.

To identify the optimal number of topics for the corpus and top words for each topic, the LDA was conducted using relevance metric λ. λ is a weighting parameter with values between 0 and 1 that the researcher toggles to produce different orderings of the top words of a topic. The ideal top words and topics are then screened based on their theoretical interpretability to the researcher. In connection with Sievert and Shirley, who conducted experiments to determine a λ value of 0.6 as yielding the best interpretability (Sievert & Shirley, 2014), the λ was set to 0.8, which yielded the most theoretically salient themes related to Chinese market reforms. The optimal number of topics was separately verified with a perplexity analysis, which determined three topics to be ideal.

To supplement and corroborate these topics or themes, qualitative content analysis was further conducted as a theoretically flexible approach to explore themes in textual data and compare codes across these themes (Attride-Stirling, 2001). In the first phase of open coding, data was sorted to inductively identify and label any recurrent themes. In the second phase of focused coding, commonalities were identified within these codes to develop higher-level abstractions, simultaneously using the most salient to recursively filter the data to "determine the adequacy" of these codes (Charmaz, 2006, p. 57). Finally, axial coding was conducted to reconstruct broader theorizations about themes in policy design by "[linking] categories with subcategories, and [asking] how they are related" (Charmaz, 2006, p. 61). In so doing, data were subject to analytical induction (Katz, 2001), comparing the most evocative policies within the same theme and across different themes to inductively and systematically capture the influence of ESG on policy design.

Though any qualitative research method is necessarily subjective, the veracity of these themes and intercoder reliability were ascertained by involving multiple coders who independently coded the content of the policies. Coders identified similar themes pertinent to ESG concerns in their design and implementation (Craig et al., 2021). This ultimately improves the transparency and congruence of the coded variables (Trein et al., 2019).

Improving social wellbeing: Internet environment and digital ecology

The full LDA models are presented in Figures 2, 3, and 5. The red bar indicates the prevalence of the keyword in a given document as a proportion of its total appearances in the entire corpus. The blue bar indicates the prevalence of the keyword in the entire corpus.

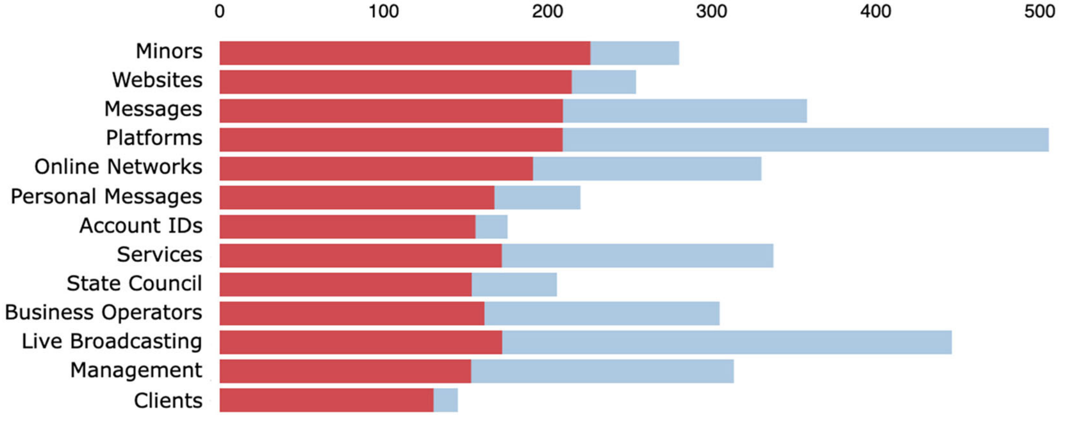

FIGURE 2 Topic 1: Internet environment and digital ecology.

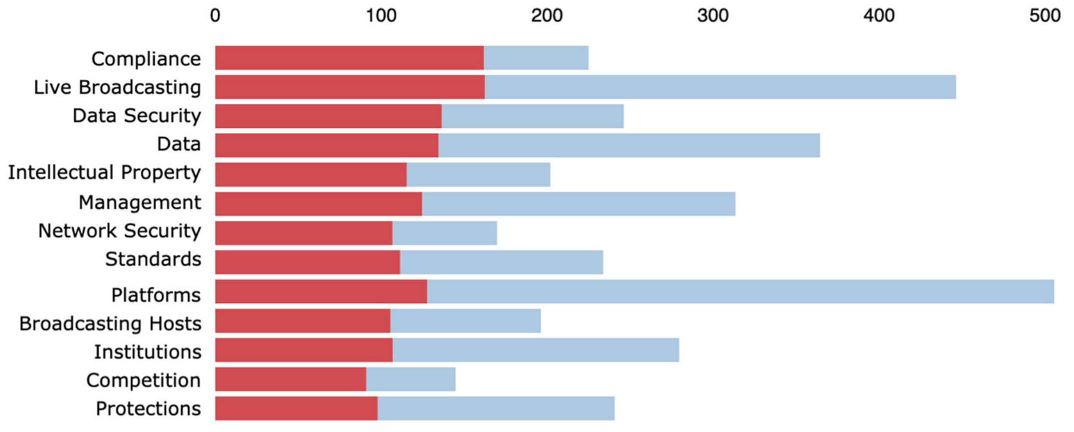

FIGURE 3 Topic 2: Corporate compliance and market competition.

The topic models capture the top words in terms of both measures to identify the most salient words.

Figure 2 presents Topic 1, which concerns Internet environment and digital ecology. This Topic was the largest, accounting for 43.1% of keywords in the corpus. The keywords identified in this topic were related in the concerted effort to improve the social wellbeing of users: recognizing that minors are making up an increasing proportion of the user base on digital platforms ("minors," "clients," "platforms," "online networks"), new policies from the State Council were introduced to mandate platforms to better verify the identities of users to reduce minor use on gaming platforms like those by Tencent or outright prevent minors from falsifying their personal information to access platforms where minor restrictions are in place ("State Council," "management," "account IDs").

These policies also sought to protect the health and wellbeing of minors, vulnerable populations, and users in general by instructing platforms to regulate the services and goods advertised by business operators. The most prominent forms of this kind of aggressive advertising being curbed by the policies include (a) algorithms responsible for targeting/connecting users with vendors who market and sell their products on digital platforms ("business operators," "services") and (b) live broadcasting featuring e-commerce influencers, popular Internet figures who are hired by companies to sell their products in real-time using the broadcasting feature available on digital platforms like *Douyin* ("live broadcasting"), a trend that quickly gained traction during the pandemic lockdowns.

The latter is akin to traditional shopping network programs that are broadcasted on syndicated television channels to sell goods to viewers but additionally gamifies the viewership and purchasing experience with virtual special effects on the live stream. Examples include video filters that enhance the appearance of hosts or the ability for viewers to purchase digital tokens using real money that are gifted to hosts of their choice. Furthermore, where traditional shopping networks rely on the same small roster of anchors or hosts who appear for every product sold, live broadcasting sales on digital platforms appeal to a broader audience by hiring a wider range of e-commerce influencers who each specialize in a specific genre of products.

Additionally, to encourage social wellbeing within online communities themselves, new policies pressed digital platforms to regulate not only the messages that users, especially minors, receive from companies or pages that they follow, but the personal messages they receive that may be tantamount to harassment or cyberbullying ("messages," "personal messages").

To illustrate, the policy of Guidelines on Strengthening the Comprehensive Governance of Internet Information Service Algorithms on September 17, 2021 imposed new basic requirements on "governing algorithms" which highlighted:

> "(1) Improving the governance mechanism of algorithm security; (2) Constructing the supervision system of algorithm security; (3) Promoting the normative development of algorithm ecology."

In particular, "techno ethics, security awareness and bottom-line thinking" were stressed to prevent algorithm abuse, such as "using algorithms to interfere with social opinion, suppress competitors and violate the rights of internet users." These new requirements on algorithms resonate exemplify the broader themes of the topic at large. By "bottom-line thinking," the policy meant to stress that grassroots opinions should "naturally" emerge from the public and should not be manipulated by algorithms that attempt to circulate information for the purpose of stimulating user interaction on the platform. This offers a partial corrective for algorithms that customize news exposure based on inferences of user preferences, identified in Western and Chinese digital platforms alike (Thorson et al., 2021).

It is known, for instance, that echo chambers typically form on digital platforms in no small part because of their algorithms themselves. These algorithms are designed not only to identify a user's social values and political orientations but to repeatedly show them content that similarly identifies these values and orientations to retain their interest in using the platform. What results is an echo chamber, where users lean into their beliefs, become less tolerant of differing opinions, unwilling to compromise, and network only with other users of identical beliefs (Cinelli et al., 2021).

As the algorithms are revised, the policy stresses, they should be done to ensure that all content circulated is filtered by the platforms to ensure they do not "violate the rights of internet users," namely, they should not promote material that amounts to harassment of any stakeholder.

The design and enforcement of policies also embodied a new form of state multilateralism. The policy of Guidelines on Strengthening the Comprehensive Governance of Internet Information Service Algorithms, for instance, was jointly developed by nine ministries as the State Internet Information Office of China, the Central Propaganda Department, the Ministry of Education, the Ministry of Science and Technology, the Ministry of Industry and Information Technology, the Ministry of Public Security, the Ministry of Culture and Tourism, the SAMR, and the State Administration of Radio and Television. Hearkening to this multilateralism, the policy stressed collaboration between provincial governments, enterprises, and users in upholding its principles and stipulations.

These guidelines on anti-trust, produced by the State Council's Antimonopoly Commission, specifies the responsibilities of "antimonopoly law enforcement agencies," which are mainly held by the SAMR and its subordinate departments. Thus, reforms in the Internet sector were generally accompanied by an institutional rise of the SAMR's status as a key force in reshaping China's regulatory landscape. The SAMR's supervisory role was meant to stimulate online transactions as a driver of the digital economy's growth, while preserving the rights of parties involved in online transactions, namely, clients and juveniles who were most susceptible populations to misleading marketing practices.

Improving corporate governance and environmental sustainability: Corporate compliance and market competition

Figure 3 presents Topic 2, which concerns corporate compliance and market competition. This Topic accounted for 29.3% of keywords in the corpus. Consistent with Topic 1, policies here focused on user protections, but went further to stress improving corporate governance: namely, restructuring firms to encourage (rather than stifle) market competition in the Internet industry and, relatedly, to protect consumers and merchants on digital platforms.

Themes in this Topic emphasized the necessity for Internet companies to comply with guidelines and the spirit of market competition enshrined in China's developmental model since Deng Xiaoping's seminal Open-Door reforms, which would be enforced by state-run institutions ("compliance," "competition," "institutions"). Within this scope, new policies lionized the need for platforms to maintain competition in the sector by: (a) protecting innovation and inventors by clamping down on intellectual property violations, such as banning sales of counterfeit goods or goods sold by vendors and live-streamers infringing on patent protections ("standards," "live broadcasting," "management," "broadcasting hosts," "protections"); (b) protecting users by revising data management standards to increase data security and user privacy from the platforms themselves, such as permitting users to opt out of certain data collection items required by platforms, and to increase network security, such as protecting platform's data from external, third-party threats ("data security," "data," "standards," "management," "network security," "protections"); and (c) improving corporate governance of payment and reward systems for live streamers (an emergent category of work responsible for platform user engagement and generating product sales) to ensure compliance with tax laws and environmental sustainability ("broadcasting hosts," "compliance," "protections," "management").

This genre of policies thus sought to offer a corrective for what appears to have been a growing impulse among Internet companies to generate revenue even at the expense of innovation, competition, tax laws, and user wellbeing. Indeed, the new wave of policies under Topic 2 stressed the reverse: that this trinity of ideals itself was not only indispensable but should be the objective of the Internet sector itself. This wave of reforms finds resonance with a developmental logic identified in Chinese state investments in African development, when Chinese state investors offered flexible loan terms to Zambian copper and mining industries and instructed partners to focus on sustainable, long-term development, rather than short-term profits (Lee, 2018).

A representative policy of this Topic is the Antitrust Guidelines for the Platform Economy. Issued on February 7, 2021, this policy regarded antitrust regulation as one of the keys to protecting fair competition and safeguarding the legitimate interests of consumers in the platform area. It defined four chapters of antimonopoly guidelines.

First, the prohibition of monopoly agreements. This chapter bans, regardless of whether written or oral, agreements that propose horizontal monopolies or vertical monopolies. Horizontal monopolies refer to restricting production (sales), restricting new products, boycotting transactions, or fixing prices, such as through the use of algorithms. Vertical monopolies refer to using platform rules to limit prices, trading conditions for competitors, or precluding competitors.

Second, the abuse of dominant market positions. Defining (dominant) market position based on the size of an enterprise's assets, transaction amounts, transaction volume, sales volume, number of clicks, and number of active users, this chapter prohibit platforms from exerting any advantages gleaned from its market position such as to reduce the competitiveness of smaller companies or companies that depend on them (e.g., companies that sell goods on platforms hosted by Alibaba) by undercutting their prices (e.g., selling below cost of production).

Third, the concentration of business operators. This chapter refers to the expansion of enterprises' market influence through mergers and (total or partial) acquisitions, resulting in the concentration of market share, control, and data in select enterprises.

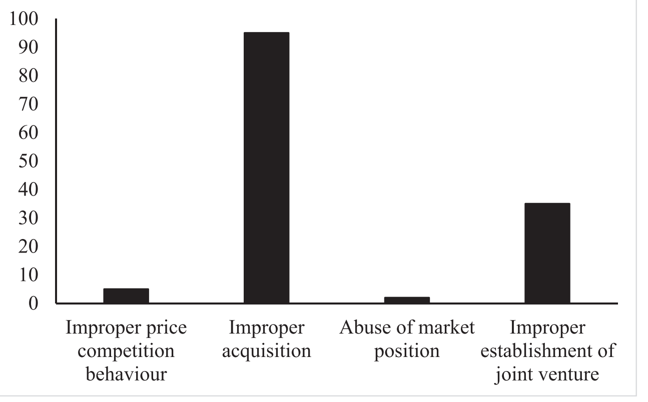

FIGURE 4 Types of administrative penalties.

Fourth, the abuse of administrative power to exclude and restrict competition. This chapter prohibits enterprises to stipulate discriminatory rules for firms hosting on their platforms. This might typically include forcing consumers to purchase or use commodities designated by the host enterprises or prohibiting foreign or nonlocal companies from local bidding or be subject to software licenses that block their access to the local markets.

These four chapters were not merely rhetoric, but operationalized in the scale and type of penalties issued. 137 administrative penalties were issued during this period. Disaggregating these penalties by type (Figure 4), it is observed that majority of offenses (95 out of 137) were for improper public acquisitions, followed by improper establishment of joint ventures (35 out of 137). Typically, these cases concern mergers and acquisitions of smaller Internet enterprises by larger ones without reporting to relevant state authorities, namely, the SAMR. Acquisitions need not have been total acquisitions, but partial and purchased through public markets, such as Tencent purchasing a 12% stake in Snapchat in 2017.

While the market value of the merger or acquisition is a key concern in these cases, as is commonly referenced by popular opinion, a deeper concern of state regulators observed here is the general level of acquisition *activity* by larger enterprises. This is reflected in new policies governing mergers and acquisitions, which went beyond simply setting thresholds (past which the enterprises involved would be required to report to the SAMR) for the market value of enterprises acquired. Now, "turnover" thresholds are in place that trigger mandatory filings when the market value of *all* acquisition activity by a Chinese enterprise in a given year exceeds ¥12 billion, including acquiree and merging firms both within China and internationally (Latham & Watkins, 2022).

Thus, reforms sought to curb the cross-border expansion of anticompetitive practices by enterprises that included not only the firm-to-firm (or business-to-business) front, but extended to firm-to-client practices (or business-to-consumer). To illustrate, qualitative content analyses identified the Measures for the Supervision and Administration of Online Transactions issued on March 15, 2021 under Topic 2, which lionized stronger protections were implemented for concerning "misleading consumers" that focused on:

> "(1) fictitious transactions and user evaluations; (2) Adopting misleading displays, etc., putting positive reviews in the front and bad reviews in the back, or not distinguishing the evaluations of different products or services, etc.; (3) Conducting false marketing by falsely claiming to be in stock, making false reservations, or falsely snapping up purchases; (4) Fictitious traffic data such as

clicks, attention, and transaction interaction data such as fictitious likes and rewards."

The overarching theme of these reforms, as with the rest of the policy, was responsibility. Though amorphously stated upfront as "assuming responsibility and accepting supervision," themes in the reforms and stated principles of the policy added clarity to responsibility as assuming obligations to public order, inclusive innovation, and following instructions from the Chinese government's SAMR that was "responsible for organizing and guiding the supervision and administration of online transactions nationwide."

Improving corporate governance not only focused on restructuring firm oversight of platform sales and marketing strategies but mandated closer scrutiny of reward programs for the budding number of hosts who facilitated live stream sales on digital platforms. In another policy, the Notice on Launching the Special Action of "Clean and Bright, Correcting Chaos in the Field of Online Live Streaming and Short Video" issued on April 15, 2022, Internet platforms were mandated to rein in the payment system for broadcasting work, with particular attention to price fraud, tax evasion, and false profiles.

Additionally, policies seeking to improve corporate governance also sought to improve firm commitment to environmental protections. As Eccles et al. (2020) theorize, the individual categories of ESG are not necessarily separate islands, but interrelated criteria that factor into investors' ratings of a firm's commitment to sustainable finance.

Qualitative content analyses identified policies that sought to curb excessive consumption in the budding food delivery market as a category of digital platforms, such as Alibaba's *Eleme* and Meituan. This constitutes an important break from the pre-reform era of the past decade that saw about unfettered permission for firms to sell goods and grow (and even generous tax rebates to incentivize this). To illustrate, the Anti-Food Waste Law of the People's Republic of China issued on April 29, 2021 decried digital platforms' dissemination of programs that promoted "excessive consumption of food, overeating, and other food waste." However, this call was not targeted at Internet enterprises alone, but to "governments at all levels," who were tasked with overseeing food waste and management, and, most innovatively, to consumers themselves to admonish against overeating, ordering excessive amounts of food, and using one-time-use cutlery.

Improving environmental sustainability, social wellbeing, and corporate governance: National economy and industrial development

Figure 5 presents Topic 3, which concerns the national economy and industrial development. This Topic accounted for 27.5% of keywords in the corpus. The range of policies captured under this topic are the broadest, tapping into themes about environmental sustainability, social wellbeing, and corporate governance, all of which discursively reposition the Internet sector within a techno-nationalist agenda that conceptualizes the purpose of digital development as a contributor to industrial innovation and society as a whole.

This Topic reconceptualized the role of the Internet sector itself in the overall trajectory of national economic development. To begin with, policies here recognized the indispensable role that the sector would continue to play in the economy and the development of China ("economy," "development"). To that effect, policies drew light to the expansion of digital platforms into myriad sectors of the economy to facilitate e-commerce and catalyze production, such as by allowing farmers in rural areas to sell produce direct to consumers and suppliers on digital platforms or enabling retailers to sell higher volumes of goods

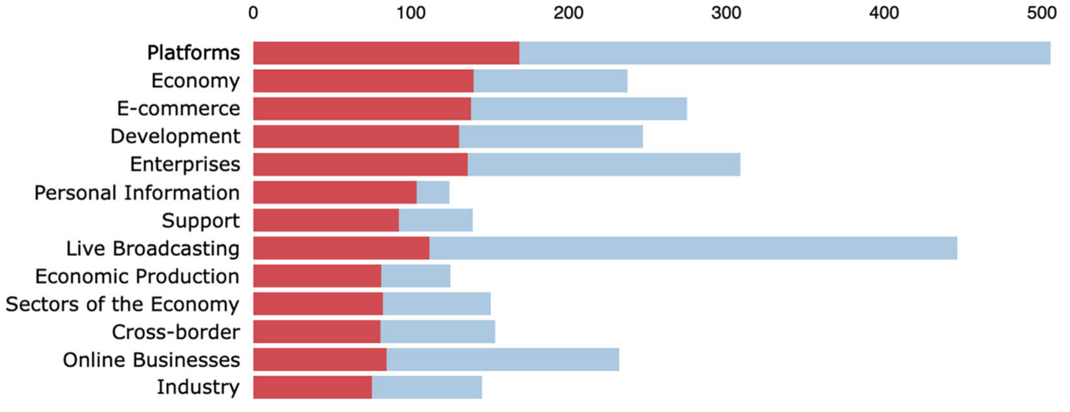

FIGURE 5 Topic 3: National economy and industrial development.

through live streaming ("economic production," "sectors of the economy," "e-commerce," "online businesses," "live broadcasting").

Qualitative content analyses of the policies captured under this Topic by the LDA identified nuances in the Internet sector reforms not immediately visible in Figure 5. The mass transition to online businesses across the economy, this Topic observes, portends the growing dependence of producers, consumers, and workers alike on digital platforms as an economic marketplace to purchase and sell goods and services. As a response, policies sought, (a) by way of corporate governance and social wellbeing, to offer support to users and workers by reining in exploitative practices that sought to derail employee rights and privacy amid unbridled expansion across provincial and national borders ("support," "personal information," "cross-border") and (b) by way of corporate governance and environmental sustainability, push Internet enterprises to catalyze production across underdeveloped sectors like agriculture and contribute to a techno-nationalist agenda of sustainable and inclusive development ("industry," "development," "economy," "economic production"), given the prevalence of digital platforms in economic activity across multiple sectors.

Three industries offer poignant illustrations of objectives (a) and (b): the information technology industry including e-commerce and cloud companies like Alibaba and Tencent, the car-ride hailing industry that relies on unique app platforms like Didi, and the agricultural industry that has received greater state attention in recent years under its ambitions for rural revitalization and poverty alleviation.

First, in the information technology industry, the Ministry of Transport, Central Propaganda Department, Internet Information Office, Development and Reform Commission, Ministry of Public Security, Ministry of Human Resources and Social Security, Ministry of Market Supervision, General Administration of Market Supervision, and the All-China Federation of Trade Unions coproduced the Opinions on Strengthening the Protection of the Rights and Interests of Employees in New Transportation Formats, which was issued on November 17, 2021. This was one of the most comprehensive and authoritative policy reforms to come out of the Internet sector reforms that urged the improvement of corporate governance and social wellbeing for employees.

In it, strong consumer and employment law reforms were forwarded in the information technology industry that covered 10 areas: (1) a better incentive distribution mechanism for consumers, passengers, drivers, and employees of mobile Internet companies; (2) supporting employees to receive social insurance; (3) ensuring proper employee compensation; (4) mandates for employee rest periods; (5) improving working environment guidelines; (6) establishing more reward systems and providing greater care to employees; (7) improving legal compliance; (8) maintaining fair competition and market order; (9) building new channels for complaints and reports by employees and consumers; and (10) expanding the protection role of trade union representatives, such as to promote union enrollment.

In addition to encouraging competition, a great number of stipulations lionized employee and consumer rights. The policy went further to mandate compliance mechanisms with regular meetings with various ministries and state regulators as well as invigorating the power of trade unions and industry associations at multiple levels, such as to conduct routine checks of firms.

Like Topics 1 and 2, a coherent theme running through policies in Topic 3 was the multilateralism inherent in their proposed policy objectives. To sustain this renewed attention to consumers and employees, for instance, policies proposed a system of institutional safeguards, such as to incorporate a network of ministries, unions, and regulatory departments in the supervision of enterprises and adjudication of penalties.

Second, car-ride-hailing platforms have grown salient not only as a form of transportation, but as a source of employment, urging once more the improvement of corporate governance and social wellbeing for employees and consumers alike. Here, another multidepartment network, comprised of the General Office of the Ministry of Transport, General Office of the Ministry of Industry and Information Technology, General Office of the Ministry of Public Security, General Office of the Ministry of Human Resources and Social Security, General Office of the People's Bank of China, General Office of the State Administration of Taxation, the SAMR, and Secretariat of the Cyberspace Administration of China (CAC), banded together to issue on February 7, 2022 a host of policy reforms on “strengthening the joint supervision of the entire chain of the online taxi booking industry.”

This policy foregrounded offenses that car-hailing platforms have conducted concerning employees and consumers, namely, poor working conditions that hurt employees and opaque pricing mechanisms that hurt consumers, which were cross-border in regional geography and across jurisdiction, much like the rest of the Internet sector. Taking stock of the porousness of these boundaries, the policy responded with a multilateral approach: multiple departments across provincial lines and units of the State Council would be involved in joint interviews with offender companies, after which recommendations would be submitted to the SAMR.

Moreover, many of these policies were filtered through to the provincial level, where provincial governments such as Tianjin, Zhejiang, Heilongjiang, Liaoning, and Shanxi and municipal governments like Shanghai, Beijing, and Chongqing all issued separate policy papers with similar iterations of guidelines.

Third, the agricultural sector has received renewed attention from the state as a frontier for rejuvenating the rural economy, tapping into themes of improving corporate governance and environmental sustainability. As a frontier for poverty alleviation, a cornerstone of the Chinese Communist Party's centenary goals, the revitalization of a rural economy predominantly represented in sectors with lower product complexity like agriculture has become an apparatus for Internet policy reforms. Content analyses identified the emergence of sustainable agricultural development as a guiding framework and objective that Internet enterprises have been mandated to contribute to.

To illustrate, one representative policy identified in this Topic was the Implementation Opinions of the General Office of the People's Government of Liaoning Province on Promoting the Healthy and Sustainable Development of the Platform Economy issued on July 7, 2021. There, it was noted that the Internet sector was to “extend the industrial chain, and develop new formats such as creative agriculture, adoption agriculture, tourism agriculture, and urban agriculture… [and for] Internet companies to go deep into rural areas and explore new production and operation models and new rural lifestyles." As with policies issued under Topics 1 and 2, policies issued at the central state level were trailed by provincial level iterations (in this case, Heilongjiang, Shandong, Jiangsu, Guangxi, Zhejiang, and others) or policies at the provincial level that pledged similar reforms and additional oversight from a given provincial government.

This set of policies refers to the expansion of digital platforms into rural villages to help support trade with urban centers. To illustrate, enterprises like Alibaba and JD.com have begun integrating both consumer-facing and logistical digital platforms into rural villages to support e-commerce. This has included the construction of warehouses close to rural villages for deliveries and pickups, as well as the establishment of e-commerce terminals within villages where villagers are then able to purchase and sell products using traditional print Yuan before their later transition to digital payments (Couture et al., 2018). Under reforms stipulated by policies under Topic 3, e-commerce programs initiated by digital platforms would expand their welfare benefits to villagers to become more broad-based, as well as catalyze the flow of capital into rural regions to invest in agricultural science.

CONCLUSION

This article offers the first evidence-based systematic account of the post-2020 Internet sector policy reforms. Moving beyond truistic accounts of the reforms as political control, this article contributes to the study of Chinese policy and development by finding that new policies signal a turning point in China's techno-nationalist agenda and the position of the Internet sector within it.

The legal infrastructure for these policy reforms was originally laid down as early as 2016 with the Cybersecurity Law that sought to introduce user data protections for national security purposes. However, the policy reform period saw about the introduction of two new Chinese laws (the Data Security Law and the Personal Information Protection Law) in 2021 that essentially superseded and extended the Cybersecurity Law with broader reach into issues of data management by technology companies. More specifically, these new reforms mandated the local storage of data, the downstream handling of data, restrictions on overseas transfers of personal data, and elevated penalties for infringements (Junck et al., 2021).

In documenting the expansion and creation of new Internet sector policies, this article contributes to the literatures it draws upon theoretically by identifying an evolution of the state's regulatory stance toward Internet firms. This stance is theorized to move from noninterference to strong oversight, guided by an agenda shifting closer to a framework of ESG. To this end, policies restructured Internet firm operations, capital allocation decisions, and accountability mechanisms with local government collaborators to invigorate social wellbeing (equal market access for vendors, labor protections for workers, transparent pricing mechanisms for prices paid by consumers, privacy protections and usage regulation for users, especially minors), corporate governance (through corporate compliance with competitive market practices, and clampdowns on fraudulent sales, intellectual property violations, and tax evasion practices), and environmental sustainability (waste reduction and investment in agricultural development).

Implicated is a marked expansion in the state's conception of the Internet sector as an unfettered driver of economic growth (which had been its only obligation hitherto) into an incubator of social development in China. The sector possesses obligations to various stakeholders that expand upon the traditional tripartite of stakeholders (state actors, skilled workers, and technological innovation in firms) to now include users, consumers, employees, and vendors. This has been further institutionalized in the ongoing reforms with accountability mechanisms, namely, channels for regular communication with multilateral networks of newly empowered state institutions like the SAMR and provincial governments.

The implications of this study are significant for practical reasons. This study contributes to nascent literatures on ESG by demonstrating that interest in ESG is not only proliferating among corporations but by governments also. While much attention has been dedicated to scrutinizing the specific principles that make up the ESG agenda in corporations, this article offers a rare account of the ESG agenda in the Chinese government, such as a unique focus on rural development and agricultural science. In an age of rising ESG concerns, ESG is vital for governments because it determines their ability to secure investments and collaborations with private enterprises and other governments themselves. Among OECD countries, for instance, ESG ratings for governments affect their sovereign borrowing costs, such that a better ESG rating decreases their yield spread and so lowers their borrowing costs (Crifo et al., 2017).

There are limitations to this study that serve as grounds for future research. First, as with any documentary analysis, this study only focuses on policy design and implementation. Further research is required to analyze first-hand experiences of policymakers in the relevant Chinese bureaus for a more fine-grained account of how these policies are developed. As Vogel (2011) classically points out, state policies are the result of constant negotiation and even debate by political leaders and government agents within bureaus themselves. In similar fashion, more research is required to parse out how ESG is conceptualized and operationalized within these bureaus, especially in response to a global rise of interest in ESG.

Finally, future research is to examine how the policies identified in this study are *enforced*. As Tsai (2006) illustrates, the enforcement of policies presents a different set of challenges than designing them to begin with. Often, wide-reaching formal institutional changes presented by policies like those in this study inspire local institutions to attempt to evade such restrictions. In the process, their efforts may end up changing central government policies themselves, such as the legalization of private enterprise and admission of capitalists in the Chinese Communist Party in the past several decades.

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CONFLICT OF INTEREST STATEMENT

The author declares no conflict of interest.

DATA AVAILABILITY STATEMENT

Data is available upon request.

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ENDNOTE

[1] Lee's (2018) recent *Specter of Global China*, based on ethnographies of the copper mining and construction industries in Zambia, offers additional evidence of this ongoing shift in China's techno-nationalist agenda in another area of the economy (foreign investment). In her account, she notes that "Chinese state capital, rather

than being more dominant and influential, has made more compromises to accommodate Zambian state and labor demands than global private capital has" (p.28). Indeed, investment decisions by the Chinese state have come to be much less speculative and less focused on short-term profits than global private capital in liberal market economies like the United States and United Kingdom—instead focused on stable physical production and sustainable mining practices.

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