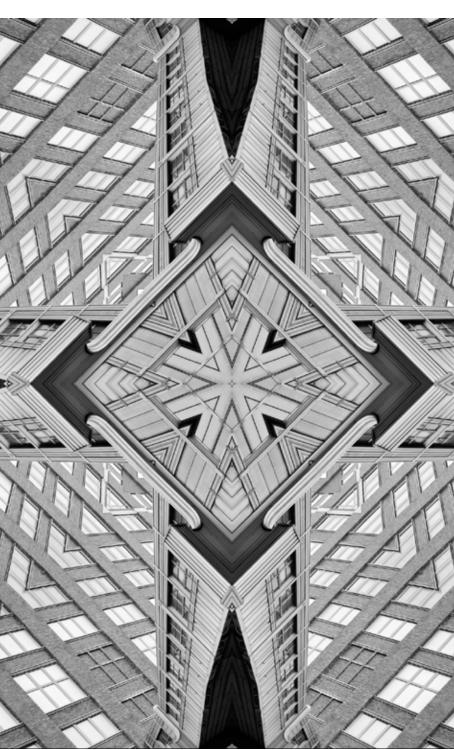


Issue Brief

ISSUE NO. 450 MARCH 2021



© 2021 Observer Research Foundation. All rights reserved. No part of this publication may be reproduced, copied, archived, retained or transmitted through print, speech or electronic media without prior written approval from ORF.



Exploring the Promises and Perils of Chinese Investments in Tech Startups: The Case of Germany

Sabrina Korreck

Abstract

China's tech giants and venture capital funds are making increasing amounts of investment in startups abroad. Startups, being key drivers of digital innovation, are attractive investment targets; the capital can in turn help them grow and scale. These Chinese investments, however, are also the subject of increasing concern, amidst heightening global competition around digital technologies. Investments can lead to a sell-out of technology, an integration into Chinese tech ecoystems, pressure to use Chinese tech solutions, and a negative impact on competition. This brief investigates the scope of Chinese venture capital investments in German startups, analyses associated opportunities and risks, and outlines Germany's policy responses so far.

Attribution: Sabrina Korreck, "Exploring the Promises and Perils of Chinese Investments in Tech Startups: The Case of Germany," ORF Issue Brief No. 450, March 2021, Observer Research Foundation.



ermany is China's most popular investment destination in Europe. From nearly zero in 2016, the amount of Chinese venture capital^a (VC) invested in German startups has risen to 300 million Euro by 2018—compared to a sum of 990 million Euro coming from the US and Canada. Tencent—best known for its WeChat app has already become the fifth largest investor in Germany, and has invested 305 million Euro since 2015. b,2 Other potential Chinese investors are keeping an eye on the German startup scene: Ant Financial, which has developed the payment system Alipay, is preparing the setup of a fund of US\$ 100 million (82 million Euro), which will be located in Berlin and will invest in startups working in the fintech and blockchain fields.³ The conglomerate Fosun has established its Innovation Hub in Frankfurt and provides venture capital to the local fintech startup scene.⁴ Telecom equipment provider Huawei is scouting for startups in Europe and has visited startups and VC firms in Germany.⁵ Moreover, although no reference has specifically been made to startup-related activities, other Chinese tech giants, including search engine operator Baidu,6 e-commerce company JD.com,7 and smartphone manufacturer Xiaomi,8 have announced plans to enter the German and European market.

When Chinese investors participate in financial rounds as part of investor groups—which consist of local and/or international investors—the amount of capital they provide is often not determinable. Moreover, Chinese investors often make investments through their subsidiaries or companies in which they already own a stake (sometimes undisclosed). 10 Despite these shortcomings, nine investments of 10 million Euro or more each were identified through extensive desk research (See Table 1). Among the investors are the giants such as Alibaba, Tencent, Fosun and Ping An, as well as VC firms. Although the focus of this brief is on VC investments, the table includes three acquisitions that have all been made by Alibaba. Alibaba has arranged one further VC investment, while Tencent has participated in three VC deals—this means that the two tech giants alone were involved in more than half of the identified transactions. Most transactions occurred in the fin-/ insurtech sector^c (N26, Finleap, Wefox Group, Clark and Naga Group), while others are in the field of mobility/transportation (Lilium, Omio and Konux), e-commerce (Lazada and Darasz), and data processing technologies (Data Artisans, Sicoya). Investments include those made in four of Germany's currently 15 unicorns, i.e. N26, Wefox Group, Lilium and Omio. 11

a Venture capital is a form of private equity financing; typically, venture capital is provided to technology-oriented startups with high growth potential.

b Behind Japanese Softbank with 970 million Euro, Singaporean Temasek with 713 million Euro, US Insight Venture Partners with 681 million Euro, and Singaporean GIC with 427 million Euro.

c Fintech startups use technology to provide financial services; insurtech startups are one type of fintech that focus on insurance services.



Table 1: Chinese Investments in and Acquisitions of German Startups (as of January 2021)¹²

Date	Startup	Investor	Deal Volume
April 2016	Lazada (of Rocket Internet company builder) E-commerce platform caters to markets in South East Asia	Alibaba	243 million Euro (acquisition)
March 2017	The Naga Group Parent company of SwipeStox, a social network for stock traders	Fosun	12.35 million Euro
September 2017, March 2019	Lilium Mobility startup develops electric aircraft taxi service	Tencent (among other investors)	US\$ 90 and 202 million (76 and 202 million Euro)
May 2018	Daraz (of Rocket Internet company builder) E-commerce platform caters to markets in South Asia	Alibaba	Not disclosed (acquisition)
Spring 2018	Sicoya Startup develops optical methods for faster and cheaper transfer of data	SPC (among other investors)	12.5 million Euro
November 2018	Finleap Company builder for fintech startups	Ping An	41.5 million Euro
March 2018, January 2019 (expanded in July 2019 and May 2020)	N26 Fintech startup leverages AI to create a smart banking experience	Tencent (among other investors)	US\$ 160 plus 570 million (135 plus 480 million Euro)
October 2018	Go Euro (later renamed <i>Omio</i>) Mobility startup develops search tool for different travel modes (rail, air, bus, car)	Hillhouse Capital Group (among other investors)	136 million Euro
January 2019	Data Artisans Startup develops technology for large-scale data processing in real time	Alibaba	90 million Euro (acquisition)
March 2019	WeFox Group Insurtech applies advanced data analytics to develop all- in-one insurance platform	CreditEase (among other investors)	US\$ 125 million (103 million Euro)
April 2018 (expanded in February 2019)	Konux IoT startup builds analytical platform for rail insights	Alibaba (among other investors)	18 plus 11.5 million Euro
January 2021	Clark Insurtech startup builds digital insurance broker for consumers	Tencent (among other investors)	69 million Euro



Promoting the Growth of Startups

It is not a huge challenge for early-stage German startups that show a certain promise to raise smaller amounts of capital. However, finding investors that provide larger sums (20-30 million Euro or above) is significantly more difficult. This is due to a funding gap for startups in the later stages; i.e. the time when they plan their market entry and the next stages of growth, and typically focus on activities such as building up a professional organisation, establishing distribution structures and getting their product or service known in the market.¹³ Investments in German startups have increased, but foreign investments have grown twice as fast as domestic ones and in 2019, larger rounds were predominantly funded by foreign investors.¹⁴

Startups welcome foreign investors as the provided capital allows them to scale their operations. For instance, the fintech startup N26 announced it would double down on everything it has been doing so far in terms of expansions, partnerships, features and engineers; the startup is setting aggressive goals to win more customers, process bigger transaction volumes, and roll out its product in the UK and US. d.15 Similarly, insurtech startup Clark plans to use the fresh capital to grow faster, increase the number of customers and brand awareness, while bearing in mind their medium-term goal to become Europe's largest in its field. 16 Another example is the mobility startup Lilium, which plans to deploy the new funding to continue developing its prototype (2017 funding round), and to start building manufacturing facilities to produce more aircraft for an expected launch date in 2025 (2019 funding round).¹⁷

While Chinese investors become more active in Germany, the Chinese market is also attractive for German startups, especially due to its large number of potential users. However, the Chinese market is difficult to access, if at all, due to the language barrier, differences in (business) cultures in which relationships play a key role, and complex political regulations. 18 Against this background, some startups expect to benefit from the contacts and local expertise of Chinese investors that can help them build bridges in order to access the Chinese, or even global markets. For instance, Fosun supports fintech startups in their business development and in finding suitable joint venture partners in China. 19 Alibaba will likely help Konux with business contacts in the Chinese market, which is the largest and fastest growing market for rail traffic worldwide, and as such crucial for the success of the startup, which announced its plans to expand there.²⁰ In addition, Chinese investors may not only know the Chinese market, but also bring in a global perspective as well as deep domain expertise and knowledge of the technologies themselves. An example is Finleap, which hopes that its investor

No expansion in Asia is being planned as of yet.



Ping An would not only help them conquer the Chinese market, but also provide expertise in artificial intelligence (AI) and blockchain technology.²¹ Leveraging such know-how can therefore help startups gain competitive advantage.

Moreover, the engagement of Chinese investors (and foreign investors in general) can indirectly benefit Germany as a business location. By facilitating the growth of startups, their investments potentially contribute to the creation of jobs and increase in tax revenues.

The Flip Side

VC investments can also pose risks. In general, in exchange for provided capital, startup founders give up some of their ownership in the company

to the investors: the former lose some control, and the latter gain influence on corporate activities. Depending on the value of their stakes, investors may join the board of directors and become involved in steering strategic and operational decisions of their portfolio startups. For instance, Ping An does not see itself as merely a financial backer, but engages strategically by dispensing advice to the Finleap management and appointing the CEO of Ping An's investment fund as chair of the startup's advisory board.²² If a

While Chinese investors become more active in Germany, the massive Chinese market is also attractive for German startups.

startup decides for a wrong investor, the risk is that its room for manoeuvre becomes limited and it may be led to a direction that founders do not agree to or that is not in the best interest of the company.

Besides risks for individual startups, a broader perspective must also be considered in light of the current political environment, which is increasingly being shaped by the global competition around innovative digital technologies. While the United States is still the market leader in many digital technologies, China is challenging the status quo and aspiring to become a global tech leader by 2025. This struggle for power in the global digital order does not only occur between powerful states but is largely shaped by digital non-state actors that



are no longer restricted by physical borders. Giant tech companies – such as China's Alibaba and Tencent – play key roles, and as growth rates in their home market slow down, they seek to expand to markets abroad and disseminate their technologies globally. Their ambitions are high, and for instance, Alibaba's founder and former executive chairman Jack Ma has made it known that he sees Alibaba not as a Chinese, but global company that should have 2 billion customers by 2036.²³

Such expansion plans also have the support of the Chinese government. It is encouraging tech companies to go out into the world and support the creation of a "Digital Silk Road"—²⁴ a pillar of China's flagship Belt and Road Initiative (BRI) which is a long-term strategy to reinvigorate trade routes of the ancient "Silk Road". While the BRI initially focused on three pillars—i.e., rail, maritime, and road infrastructure projects—in 2019, President Xi Jinping spoke of cooperation in the digital economy and innovation-driven development as new priority areas for the initiative.²⁵ The scope of the Digital Silk Road has expanded beyond its early focus on fibre-optic cables and space industry-related projects and now also covers infrastructure (i.e. cables and network equipment, including 5G), data and research centres, smart city projects, and large e-commerce and mobile payment deals.²⁶

Against this background, the following paragraphs outline the potential risks posed by Chinese investments in German startups.

1. Sell-out and Loss of Technology

Two of every three companies that have been funded with foreign capital are later sold to a foreign investor or go public outside of Germany.²⁷ China is aware that it has huge requirements for know-how to become a global tech leader, and investments and acquisitions of foreign firms are part of the strategy to improve their technical capabilities. For instance, analysts say the acquisition of the startup Data Artisans allows Alibaba to pick up technical knowledge.²⁸ Germany considers China as both a partner in climate protection and other future issues, as well as a competitor in trade and technology, and systemic rival.²⁹ Therefore, Chinese investments could empower the country to gain an upper hand in the technology competition in which Germany itself aims to maintain a leading role.

Beyond 'making', and 'transacting' as means to obtain new technology, China has been accused of 'taking', e.g. through forced technology transfer, IP theft and espionage.³⁰ In 2018, the then-head of Germany's domestic intelligence agency pointed to a drop in Chinese cyber-espionage activities, as Beijing had turned to using legal tools to gain access to German know-how, and therefore

urged vigilance about increased moves by Chinese companies to invest in and acquire high-tech German companies.³¹ Furthermore, in the startup scene, "copycat" startups—those that imitate the business models of already existing companies—have become a key issue. In China itself, startups that remain in midfield, are copied unscrupulously and then pushed out of the market by the big players.³² Accordingly, a risk is that Chinese investors could use their presence and activities in Germany's startup scene to scout for innovative ideas, which could then be implemented by Chinese companies.

2. Integration into Chinese Tech Ecosystems

Chinese tech giants aim to develop ecosystems and invest, collaborate, acquire and incubate ventures in sectors that can be digitally connected to their core platforms.³³ For instance, while Alibaba started as a platform that linked buyers and sellers of goods, its ecosystem grew as more business functions associated with retail moved online.³⁴ Today Alibaba is a data-driven network of sellers, marketers, service providers, logistics companies, and manufacturers, which does what Amazon, eBay, PayPal, Google, FedEx, and other companies do in the US.³⁵ Similarly, Tencent has developed its mega app, WeChat, which now combines functions from messaging and social networking to mobile payment, wealth management, and even public services (e.g. paying public utility fees or applying for travel visas).³⁶

The described German startups are active in the fields of fin-/insurtech, mobility/transportation, e-commerce, and data processing technologies—this means that their business models clearly relate to the ecosystems of Chinese tech giants that either invested in them or altogether acquired them. Thus, startups will likely find themselves tied closer into Chinese tech ecosystems. For instance, Fosun's Innovation Hub seeks to connect with innovative tech startups to integrate them into its "Global Happiness Ecosystem". Its aim is to include a whole range of technologies and sectors, whereas the hub's CEO stresses the creation of synergies and that the survival rate of a startup is higher within an ecosystem. However, by creating ecosystems of interconnected players and making the norms and standards that govern them, Chinese tech giants act as gatekeepers. In this way, they hold immense power, which they could utilise to exert further influence on the startups.

3. Data Security Concerns

Alibaba and Tencent "datafy" every customer interaction and through AI machines make most operational decisions—this makes their ecosystems vastly more economically efficient and customer-centric than traditional industries.³⁸



Cloud computing provides the foundation for such analytic capabilities and extraction of data intelligence, and both companies have started to promote their cloud services in Europe. Tencent plans to invest US\$ 10 billion (8 billion Euro) in Europe, around one-third of which in Germany,³⁹ while Alibaba has announced plans to invest 26 billion Euro in its data services business via the cloud, including the increase of computing centres in more countries and an expansion of AI technologies.⁴⁰ The company already operates a computer centre in Frankfurt, which is part of the global infrastructure of Alibaba Cloud.⁴¹

Alibaba's and Tencent's offerings can provide an alternative to the cloud services of American tech giants (such as Microsoft, Amazon and IBM) and might be particularly attractive for startups, whose business models are strongly data-driven. Tencent, for example, advertises its cloud services by highlighting that companies can directly contact the 1 billion WeChat users and create mini programs in the app, through which they can sell their products and learn more about their customers' preferences. Moreover, both Tencent and Alibaba can use their influence on startups in their investment portfolio and ecoysystem to promote the use of their cloud solutions. Indeed, Tencent seeks synergies across its investments as part of a strategy to expand cloud services and encourages portfolio companies, including Lilium, to use its cloud services.

Chinese cloud providers assure the security of their customers' data, as it is processed in Germany and no exchange with China takes place. 44 Yet data security risks remain. This becomes even more pressing in the context of growing European concerns around China's intrusive surveillance state: in their home market, Chinese tech companies do not only collect data for limited business purposes, but for large-scale monitoring of citizens. If startups lose control over their data, their trustworthiness and integrity may no longer be ensured, and intelligence gathered through data can pave the way for targeted influence and manipulation. Such risks are not unseen. For example, German venture capital investor Klaus Hommels has pointed out that the biggest risk of increased financial involvement—which puts the Chinese in charge of corporate governance and decision-making—is to "lose sovereignty over the truth." 45

4. Impact on Competition

Chinese tech giants have a strong position in their home market and enter the German market as players with massive financial strength, sometimes supported by additional government subsidies. This allows them to acquire



smaller existing or potential rivals. For instance, there has been speculation about a possible acquisition of Germany's fashion e-commerce startup Zalando by Alibaba,⁴⁶ and JD.com has also not excluded acquisitions of local retailing companies.⁴⁷ Acquisitions have also been a common strategy among US tech giants, which mainly acquire the firm's assets (functionality, technology, talent or IP) to integrate them in their ecosystem.⁴⁸ While the Zalando deal has not materialised, Alibaba has taken this approach with Lazada in Southeast Asia and later broadened the e-commerce platform's product range.⁴⁹

The entry of new market participants is desirable—especially to challenge the quasi-monopoly positions of some US tech giants. However, the risk is that small and medium companies get run over and that Chinese tech giants become even more powerful than incumbents. For instance, in e-commerce, Alibaba had already recorded in 2019 a trade volume of US\$ 853 billion (705 billion Euro), which is around three times as much as that of Amazon and more than a hundredfold of Zalando's. 50 Alibaba's plan is to establish an electronic World Trade Platform (eWTP) to connect producers and customers globally; the tech giant has a budget of 13 billion Euro to invest, which might be used for the takeover of companies in logistics or other fields. 51 In case mergers and acquisitions occur, future competition may be inhibited.

Chinese tech giants aim to develop ecosystems and invest in ventures in sectors that can be digitally connected to their core platforms.



verall, Germany aims to keep the economy open for foreign investments instead of resorting to protectionism. However, such openness is not unconditional. To maintain key competencies and technologies in certain sectors, Germany approved amendments to its foreign trade law in April 2020.⁵² The reformed legislation allows for a more comprehensive and proactive screening of foreign investments and gives authorities veto power to block investments if they pose a threat to strategic interests. Furthermore, the Federal Ministry for Economy Affairs and Energy is establishing structures to facilitate exchange of information and coordinated cooperation between EU member states and the European Commission, which will increase transparency and provide protection against the takeover of critical companies.⁵⁸ A reform of the competition law is also underway, whereby market-dominating digital companies will be subject to stricter abuse control, and the Federal Cartel Office can react more quickly with interim measures.⁵⁴ On the EU level, a legislative framework is being adopted in a similar direction. It is complemented by new rules on data governance and the GAIA-X platform, which provides an alternative to cloud offerings of foreign providers and is based on European security standards.

Beyond these policy measures, the political imperative is to make more capital available for homegrown startups with promising business models and to support them so that they can join the ranks of the world's best. Some German funds are gradually starting to emerge, which can support later-stage investing.⁵⁵ On top of capital which the government already provided to startups, the Ministry of Economic Affairs substantially extended funding. It launched a so-called 10 billion Euro 'future funds', which in particular provides capital for the scaling up phase, and seeks to mobilise at least 30 billion Euro along with further private and public partners.⁵⁶ During the COVID-19 pandemic, startups benefitted from a 2-billion Euro relief package as well as various programmes on the federal state level. Moreover, the ministry, together with the state-owned KfW bank, initiated a venture debt program as a new financing instrument, whereby the bank provides 50 million Euro annually along with private capital providers, and the Federation covers 95 percent of the risks within the first five years.⁵⁷

The provision of capital is complemented by efforts to support the internationalisation of German startups. For instance, the German Accelerator is a programme which aims to empower German startups to access the US and Southeast Asian markets. It offers customised mentoring and individual support, access to a network of potential partners, customers, investors as well as current and former participants, free office space, and further benefits.⁵⁸ The accelerator also powers the "Next Step" market discovery programme, which helps German startups explore new markets in Asia and includes locations in India, Japan, Singapore and South Korea.⁵⁹ The German Indian Startup Exchange Program (GINSEP) and the AsiaBerlin initiative are two other platforms that are promoting exchange between startup ecosystems.



n recent years, Chinese investors have increasingly engaged in venture capital funding globally, including in Germany. Startups can benefit, because the provided capital can help them grow, and knowledge and contacts of investors can give them the wherewithal to expand into the Chinese and global markets. In addition, startups can get access to hundreds of millions of Chinese customers through Tencent's WeChat app or Alibaba's digital trade platform. The opportunities, however, must be weighed against potential risks not only for individual startups but for Germany, overall, as a (digital) business location in the medium- to long-term. In particular, investments have to be considered in the context of the current global competition around digital technologies, where activities of Chinese tech giants are increasingly perceived to be associated with the strategy of the country's leadership.⁶⁰ The German government has responded to the identified risks by applying more scrutiny to investments, improving information exchange and coordination with other EU member states, and passing reforms of the competition law. Beyond that, the overall focus is to remain open to foreign investments and support German startups in their efforts to grow globally.

As China has long-term strategies, some foresight exercise can guide long-termpolicyaction. While German startups see many opportunities in China's market and want to join the "gold-rush atmosphere", one key question is whether—and under which conditions—German startups will have a fair chance to make it big in the Chinese market, let alone become global players. Independent of whether they are physically present in China, or use digital platforms or apps as digital distribution channels to reach Chinese customers, startups rely on being part of the ecosystems of tech giants like Alibaba or Tencent, or support from local partners such

To mitigate risks,
Germany is applying
more scrutiny
to investments,
improving
information
exchange with
other EU states,
and reforming its
competition law.

as investors or their contacts. Therefore, startups need to adapt to the rules set by Chinese gatekeepers, and to the political conditions in the country in general. Eventually, startups are confronted with difficult questions, for instance

Sabrina Korreck is a Senior Fellow at ORF.

Conclusion



whether they will censor online content, or disclose data of their users on request by Chinese authorities. As a consequence, German startups are likely to have similar experiences as US tech companies, which have struggled to comply with values that are fundamentally at odds and came to realise that they can no longer be politically neutral.⁶¹

In contrast, Chinese tech giants quickly and aggressively expand into German and European markets. There is a long way to go for them to conquer international markets and what is visible is only the beginning of the international journey of Chinese digital giants.⁶² This raises another set of key questions: How much market power could they attain in the medium to long term? And while Chinese tech giants expand their market presence, will they play by German rules? Or will they try to pursue their own interests, knowing that they have the Chinese government's support and the possiblity to disrupt market access for German companies as a means of pressure?

Not unlike what is visible in other industry sectors, there is no level playing field in the startup economy. And the competition is not purely of economic nature, but also about political power and the ability to influence the discourse and norms regarding digital technologies. With their growing international reach, Chinese tech companies can shape the economic affairs of many states and businesses like their US counterparts have done previously. However, Chinese values and norms permeating their technology are largely incompatible with those of German and European societies. The stakes are high, and the question must be addressed whether access to the Chinese market is worth the risks in the long term. ©RF

(The author thanks the anonymous reviewer for their valuable comments, and Vinia Datinguinoo Mukherjee for her excellent editing.)

13



- Stephan Scheuer and Miriam Schröder, "Alibaba aquires German data startup in new stage of European expansion," Handelsblatt, January 9, 2019, https://www.handelsblatt.com/today/companies/data-artisans-alibaba-acquires-german-data-startup-in-new-stage-of-european-expansion/23843754.html?ticket=ST-9522174-dtinXObLQUNYWfisvFHw-ap4.
- The data includes only funding rounds with disclosed investors. dealroom.co, "Shortage of later stage venture capital in Germany: more acute due to Corona crisis," March 2020, https://blog.dealroom.co/wp-content/uploads/2020/03/Berlin-Capital-FINAL.pdf.
- 3 Caspar Tobias Schlenk, "Ant Financial plant Europa-Expansion," Capital, January 18, 2021, https://www.capital.de/wirtschaft-politik/ant-financial-plant-europa-expansion.
- 4 IT Finanzmagazin, "Chinesisches Venture Capital für Startup-Szene in Europa Interview mit Hub-CEO Patt," August 24, 2020, https://www.it-finanzmagazin.de/fosun-europe-innovation-hub-china-110359/.
- Helene Fouquet and Giles Turner, "Huawei scouts Europe for tech startups to secure supply chain," Bloomberg, January 31, 2020, https://www.bloomberg.com/news/articles/2020-01-31/huawei-scouts-europe-for-tech-startups-to-secure-supply-chain.
- Stephan Scheuer and Miriam Schröder, "Alibaba aquires German data startup in new stage of European expansion," Handelsblatt, January 9, 2019, https://www.handelsblatt.com/today/companies/data-artisans-alibaba-acquires-german-data-startup-in-new-stage-of-european-expansion/23843754.html?ticket=ST-9522174-dtinXObLQUNYWfisvFHw-ap4.
- Tobias Weidemann, "Konkurrenz aus China kommt: JD.com und Alibaba greifen den deutschen Onlinehandel an," t3n, July 24, 2018, https://t3n.de/news/konkurrenz-aus-china-kommt-jd-com-und-alibaba-greifen-den-deutschen-onlinehandel-an-1096712/.
- 8 Stephan Scheuer, "Xiaomi plant Europazentrale mit Hunderten Mitarbeitern in Deutschland," Handelsblatt, February 17, 2021, https://www.handelsblatt.com/technik/it-internet/smartphone-marke-xiaomi-plant-europazentrale-mit-hunderten-mitarbeitern-in-deutschland/26898500.html .
- 9 E&Y, "Chinesische Unternehmenskäufe in Europa: Eine Analyse von M&A-Deals 2006-2019," February 2020, https://assets.ey.com/content/dam/ey-sites/ey-com/de_de/news/2020/02/ey-china-ma1-februar-2020.pdf.
- Paolo Cervini, Mark J. Greeven, "Digital China is coming to Europe," LSE Business Review, April 24, 2018, https://blogs.lse.ac.uk/businessreview/2018/04/24/digital-china-is-coming-to-europe/.
- 11 CB Insights, "The complete list of Unicorn Companies," as of January 24, 2021, https://www.cbinsights.com/research-unicorn-companies.
- Sources: Wirtschaftswoche, "Swipestox: Hohes Investment für Hamburger Fintech," March 31, 2017, https://gruender.wiwo.de/swipestox-chinesischer-investor-setzt-auf-steigende-kurse/; Johannes Steger, "Was hinter der Verkaufstour von Rocket Internet steckt," Handelsblatt, May 9, 2018, https://www.handelsblatt.com/unternehmen/it-medien/daraz-



deal-mit-alibaba-was-hinter-der-verkaufstour-von-rocket-internet-steckt/21256336.html ; Marie Mawad, "Tencent backs German startup's high-speed flying jet taxi," Bloomberg Quint, September 5, 2017, https://www.bloombergquint.com/technology/tencent-backs-germanstartup-behind-high-speed-flying-jet-taxi; Ingrid Lunden, "Lilium raises another \$240M to design, test and run an electric aircraft taxi service," TechCrunch, March 23, 2020, https:// techcrunch.com/2020/03/22/lilium-raises-another-240m-to-design-test-and-and-run-anelectric-aircraft-taxi-service/; Karsten Seibel, "Deutsche Start-ups brauchen China," Welt, November 7, 2018, https://www.welt.de/print/welt kompakt/webwelt/article183415780/ Deutsche-Start-ups-brauchen-China.html ; Carla Neuhaus, "Chinesen kaufen sich in Berliner Fintech-Szene ein," Tagesspiegel, November 19, 2018, https://www.tagesspiegel. de/wirtschaft/ping-an-beteiligt-sich-an-finleap-chinesen-kaufen-sich-in-berliner-fintechszene-ein/23654460.html; t3n, "Neobank sammelt weitere 92 Millionen Euro ein," May 8, 2020, https://t3n.de/news/neobank-n26-sammelt-92-millionen-1276092/; Romain Dillet, "N26 raises \$160 million from Tencent and Allianz," TechCrunch, March 20, 2018, https:// techcrunch.com/2018/03/20/n26-raises-160-million-from-tencent-and-allianz/; Romain Dillet, "GoEuro raises \$150 million for its travel aggregator," TechCrunch, October 2018, https://techcrunch.com/2018/10/23/goeuro-raises-150-million-for-its-travel-aggregator/ Stephan Scheuer and Miriam Schröder, "Alibaba aquires German data startup in new stage of European expansion," Handelsblatt, January 9, 2019, https://www.handelsblatt.com/today/ companies/data-artisans-alibaba-acquires-german-data-startup-in-new-stage-of-europeanexpansion/23843754.html?ticket=ST-9522174-dtinXObLQUNYWfisvFHw-ap4 ; Steve O'Hear, "Wefox Group, the Berlin-based insurance tech startup, raises \$125M Series B led by Mubadala," TechCrunch, March 5, 2019, https://techcrunch.com/2019/03/05/wefoxgroup-the-berlin-based-insurance-tech-startup-raises-125m-series-b-led-by-mubadala/ Pauline Schnor, "Alibabas überraschendes Millioneninvestment in Konux aus München," Gründerszene, February 13, 2019, https://www.gruenderszene.de/automotive-mobility/ alibaba-investment-konux?interstitial click ; Susanne Schier, "Versicherungsmanager Clark sammelt 69 Millionen Euro Kapital ein - Tencent steigt ein," Handelsblatt, January https://www.handelsblatt.com/finanzen/banken-versicherungen/insurtech-11, 2021, versicherungsmanager-clark-sammelt-69-millionen-euro-kapital-ein-tencent-steigtein/26772488.html?ticket=ST-9486050-blmMc4DauECrrvqCqe7I-ap2.

- German Private Equity and Venture Capital Association, Internet Economy Foundation and Roland Berger GmbH, "Venture capital, fueling innovation and economic growth," June 2018, https://www.bvkap.de/sites/default/files/page/rb_pub_18_019_cop_ief_bvk_online_en_with_publication_date.pdf.
- 14 dealroom.co, "Shortage of later stage venture capital in Germany: more acute due to Corona crisis," March 2020, https://blog.dealroom.co/wp-content/uploads/2020/03/Berlin-Capital-FINAL.pdf.
- Romain Dillet, "N26 raises \$160 million from Tencent and Allianz," TechCrunch, March 20, 2018, https://techcrunch.com/2018/03/20/n26-raises-160-million-from-tencent-and-allianz/.
- Susanne Schier, "Versicherungsmanager Clark sammelt 69 Millionen Euro Kapital ein Tencent steigt ein," Handelsblatt, January 11, 2021, https://www.handelsblatt.com/finanzen/banken-versicherungen/insurtech-versicherungsmanager-clark-sammelt-69-millionen-euro-kapital-ein-tencent-steigt-ein/26772488.html?ticket=ST-9486050-blmMc4DauECrrvqCqe7I-ap2.



- Marie Mawad, "Tencent backs German startup's high-speed flying jet taxi," Bloomberg Quint, September 5, 2017, https://www.bloombergquint.com/technology/tencent-backs-german-startup-behind-high-speed-flying-jet-taxi; Ingrid Lunden, "Lilium raises another \$240M to design, test and run an electric aircraft taxi service," TechCrunch, March 23, 2020, https://techcrunch.com/2020/03/22/lilium-raises-another-240m-to-design-test-and-and-run-an-electric-aircraft-taxi-service/.
- Lisa Hegemann, "Startups in China: Wie deutsche Unternehmer Fernost erobern," t3n, September 28, 2017, https://t3n.de/magazin/deutsche-startups-china-242762/; Bundesverband Deutsche Startups, "China: Mission des deutschen Startup-Verbands," https://deutschestartups.org/community/internationale-beziehungen/china/.
- 19 IT Finanzmagazin, "Chinesisches Venture Capital für Startup-Szene in Europa Interview mit Hub-CEO Patt," August 24, 2020, https://www.it-finanzmagazin.de/fosun-europe-innovation-hub-china-110359/.
- 20 Pauline Schnor, "Alibabas überraschendes Millioneninvestment in Konux aus München," Gründerszene, February 13, 2019, https://www.gruenderszene.de/automotive-mobility/alibaba-investment-konux?interstitial click.
- 21 Carla Neuhaus, "Chinesen kaufen sich in Berliner Fintech-Szene ein," Tagesspiegel, November 19, 2018, https://www.tagesspiegel.de/wirtschaft/ping-an-beteiligt-sich-anfinleap-chinesen-kaufen-sich-in-berliner-fintech-szene-ein/23654460.html .
- 22 Carla Neuhaus, "Chinesen kaufen sich in Berliner Fintech-Szene ein," Tagesspiegel, November 19, 2018, https://www.tagesspiegel.de/wirtschaft/ping-an-beteiligt-sich-anfinleap-chinesen-kaufen-sich-in-berliner-fintech-szene-ein/23654460.html .
- 23 Florian Kolf and Stephan Scheuer, "Alibaba plant den Angriff auf Amazon," Handelsblatt, May 15, 2019, https://www.handelsblatt.com/unternehmen/handel-konsumgueter/online-haendler-alibaba-plant-den-angriff-auf-amazon/24344346.html?ticket=ST-2308697-RyggspbncDNmVxNLWs5U-ap3.
- 24 Kristin Shi-Kupfer and Mareike Ohlberg, "China's digital rise: Challenges for Europe," Mercator Institute for China Studies, April 2019, https://merics.org/sites/default/files/2020-06/MPOC_No.7_ChinasDigitalRise_web_final_2.pdf.
- Thomas S. Eder, Rebecca Arcesati and Jacob Mardell, "Networking the "Belt and Road" The future is digital," Mercator Institute for China Studies, August 28, 2019, https://merics.org/de/analyse/networking-belt-and-road-future-digital.
- Thomas S. Eder, Rebecca Arcesati and Jacob Mardell, "Networking the "Belt and Road" The future is digital," Mercator Institute for China Studies, August 28, 2019, https://merics.org/de/analyse/networking-belt-and-road-future-digital.
- 27 Frank Specht, "Angst vor dem Ausverkauf: Deutschen Techfirmen droht Übernahme aus dem Ausland," Handelsblatt, March 27, 2019, https://www.handelsblatt.com/technik/thespark/finanzierung-angst-vor-dem-ausverkauf-deutschen-techfirmen-droht-uebernahme-ausdem-ausland/24149658.html?ticket=ST-6151817-WflkCBXDHlRUdA9abJAn-ap3.
- Felix Lee, "Zur Kooperation gezwungen," taz, February 26, 2019, https://taz.de/Kommentar-Alibaba-expandiert/!5576722/.



- 29 The Federal Government of Germany, "In parallel, in opposition, in partnership?" Ocotber 1, 2020, https://www.bundesregierung.de/breg-en/news/eu-china-relations-1795092.
- Manoj Joshi, "Invest, acquire, dominate: The rise and rise of China tech," Observer Research Foundation, November 2019, Occassional Paper No. 223, https://www.orfonline.org/wp-content/uploads/2019/11/OP223.pdf
- Andrea Shalal, "Germany risks losing key technology in Chinese takeovers," Reuters, April 11, 2018, https://www.reuters.com/article/us-germany-security-china/germany-risks-losing-key-technology-in-chinese-takeovers-spy-chief-idUSKBN1HI2IS.
- 32 Phillipp Mattheis, "Reich werden im Kommunismus," Handelsblatt, October 26, 2014, https://www.handelsblatt.com/unternehmen/mittelstand/special-existenzgruendung/start-ups-in-china-reich-werden-im-kommunismus/10363070.html?ticket=ST-6567924-Wzz0jLLZkohjv0nJrgLo-ap4.
- Paolo Cervini, Mark J. Greeven, "Digital China is coming to Europe," LSE Business Review, April 24, 2018, https://blogs.lse.ac.uk/businessreview/2018/04/24/digital-china-is-coming-to-europe/.
- Ming Zeng, "Alibaba and the Future of Business: Lessons from China's innovative digital giant," Harvard Business Review, September-October 2018, https://hbr.org/2018/09/alibaba-and-the-future-of-business.
- Ming Zeng, "Alibaba and the Future of Business: Lessons from China's innovative digital giant," Harvard Business Review, September-October 2018, https://hbr.org/2018/09/alibaba-and-the-future-of-business.
- Hong Shen, "China's tech giants: Baidu, Alibaba, Tencent," Konrad Adenauer Stiftung (Ed.): "Digital Asia: Insights into Asian and European Affairs," pp.33-41, February 27, 2019, https://www.kas.de/en/web/politikdialog-asien/single-title/-/content/digital-asia-8.
- 37 IT Finanzmagazin, "Chinesisches Venture Capital für Startup-Szene in Europa Interview mit Hub-CEO Patt," August 24, 2020, https://www.it-finanzmagazin.de/fosun-europe-innovation-hub-china-110359/.
- Ming Zeng, "Alibaba and the Future of Business: Lessons from China's innovative digital giant," Harvard Business Review, September-October 2018, https://hbr.org/2018/09/alibaba-and-the-future-of-business.
- Stephan Scheuer, Effy Zhang, "Tencent will in Europa zehn Millarden Dollar investieren Fokus auf deutsche Hightech," Handelsblatt, December, 23, 2019, https://www.handelsblatt.com/technik/it-internet/tech-gigant-tencent-will-in-europa-zehn-milliarden-dollar-investieren-fokus-auf-deutsche-hightech/25355810.html?ticket=ST-10089947-qghNfUjdTOD5vr5lVogK-ap2.
- 40 Manager Magazin, "Alibaba investiert 26 Milliarden in Cloud-Sparte," April 20, 2020, https://www.manager-magazin.de/digitales/it/alibaba-steckt-mehr-als-26-milliarden-euro-in-cloud-sparte-a-1306386.html .
- 41 Alibaba Cloud, "Die globale Infrastruktur von Alibaba Cloud," https://www.alibabagroup.com/en/ir/pdf/160614/15.pdf.



- 42 Stephan Scheuer, Effy, Zhang, "Tencent-Topmanager: Deutschland ist der wichtigste Markt außerhalb Chinas," Handelsblatt, December 22, 2019, https://www.handelsblatt.com/technik/it-internet/li-shiwei-im-interview-tencent-topmanager-deutschland-ist-derwichtigste-markt-ausserhalb-chinas/25355818.html.
- Peggy Hollinger, "Flying taxi start-up raises \$240m from existing investors led by Tencent," Financial Times, March 23, 2020, https://www.ft.com/content/9eb5fcfe-6bda-11ea-89df-41bea055720b.
- 44 Stephan Scheuer, Effy, Zhang, "Tencent-Topmanager: "Deutschland ist der wichtigste Markt außerhalb Chinas," Handelsblatt, December 22, 2019, https://www.handelsblatt.com/technik/it-internet/li-shiwei-im-interview-tencent-topmanager-deutschland-ist-derwichtigste-markt-ausserhalb-chinas/25355818.html.
- Stephan Scheuer and Miriam Schröder, "Alibaba aquires German data startup in new stage of European expansion," Handelsblatt, January 09, 2019, https://www.handelsblatt.com/today/companies/data-artisans-alibaba-acquires-german-data-startup-in-new-stage-of-european-expansion/23843754.html?ticket=ST-9522174-dtinXObLQUNYWfisvFHw-ap4.
- 46 See, for instance: Wirtschaftswoche, "Übernahmefantasien treiben Aktien von Zalando in die Höhe," January 3, 2019, https://www.wiwo.de/unternehmen/handel/alibaba-uebernahmefantasien-treiben-aktien-von-zalando-in-die-hoehe/23823854.html .
- 47 Tobias Weidemann, "Konkurrenz aus China kommt: JD.com und Alibaba greifen den deutschen Onlinehandel an," t3n, July 24, 2018, https://t3n.de/news/konkurrenz-aus-china-kommt-jd-com-und-alibaba-greifen-den-deutschen-onlinehandel-an-1096712/.
- 48 Axel Gautier and Joe Lamesch, "Mergers in the Digital Economy," CESifo Working Paper No. 8056, 2020, https://www.econstor.eu/bitstream/10419/215058/1/cesifo1_wp8056.pdf.
- 49 Katharina Grimm, "Angriff auf Amazon übernimmt Chinas Handelsgigant Alibaba Zalando?" Stern, December 12, 2019, https://www.stern.de/wirtschaft/news/angriff-auf-amazon---uebernimmt-alibaba-den-modehaendler-zalando--9039584.html .
- 50 Florian Kolf and Stephan Scheuer, "Alibaba plant den Angriff auf Amazon," Handelsblatt, May 15, 2019, https://www.handelsblatt.com/unternehmen/handel-konsumgueter/online-haendler-alibaba-plant-den-angriff-auf-amazon/24344346.html?ticket=ST-2308697-RyggspbncDNmVxNLWs5U-ap3.
- 51 Focus, "Alibabas Pläne für den europäischen Markt Steht Zalando vor der Übernahme?", March 12, 2019, https://www.focus.de/finanzen/boerse/chinesischeramazon-konkurrent-das-sind-alibabas-plaene-fuer-den-europaeischen-markt-zalando-alsuebernahmekandidat_id_10441082.html .
- 52 Federal Ministry for Economic Affairs and Energy, "Minister Altmaier: More comprehensive and proactive screening of investments in security-sensitive sectors," press release, April 8, 2020, https://www.bmwi.de/Redaktion/EN/Pressemitteilungen/2020/20200408-minister-altmaier-more-comprehensive-and-proactive-screening-of-investments-in-security-sensitive-sectors.html .
- 53 Federal Ministry for Economic Affairs and Energy, "Minister Altmaier: More comprehensive



- and proactive screening of investments in security-sensitive sectors," press release, April 8, 2020, https://www.bmwi.de/Redaktion/EN/Pressemitteilungen/2020/20200408-minister-altmaier-more-comprehensive-and-proactive-screening-of-investments-in-security-sensitive-sectors.html.
- 54 Federal Ministry of Economic Affairs and Energy, "Altmaier: Mit dem GWB-Digitalisierungsgesetz schaffen wir neue Wettbewerbsregeln für große Internetunternehmen und entlasten den Mittelstand," press release, September 9, 2020, https://www.bmwi.de/Redaktion/DE/Pressemitteilungen/2020/09/20200909-altmaier-mit-dem-gwb-digitalisierungsgesetz-schaffen-wir-neue-wettbewerbsregeln.html.
- dealroom.co, "Shortage of later stage venture capital in Germany: more acute due to Corona crisis," March 2020, https://blog.dealroom.co/wp-content/uploads/2020/03/Berlin-Capital-FINAL.pdf.
- Federal Ministry for Economic Affairs and Energy, "Zukunftsfonds startet mit 10 Mrd. Euro: "Setzen damit den Benchmark in Europa"," press release, https://www.bmwi.de/Redaktion/DE/Pressemitteilungen/2020/12/20201211-zukunftsfonds-startet-mit-10-milliarden-euro-setzen-damit-benchmark-in-europa.html .
- 57 Federal Ministry for Economic Affairs and Energy, "Gründungsoffensive: KfW und Bund starten Venture Debt-Finanzierung für innovative Unternehmen in der Wachstumsphase," press release, March 27, 2019, https://www.bmwi.de/Redaktion/DE/Pressemitteilungen/2019/20190327-gruendungsoffensive-kfw-und-bund-starten-venture-debt-finanzierung-fuer-innovative-unternehmen-in-der-wachstumsphase.html .
- 58 German Accelerator, "Who we are", https://www.germanaccelerator.com/about-us/ .
- Next Step, "Ready to expand your business in Asia?", https://nextstepasia.de .
- 60 Stephan Scheuer, Effy Zhang, "Tencent will in Europa zehn Millarden Dollar investieren Fokus auf deutsche Hightech," Handelsblatt, December, 23, 2019, https://www.handelsblatt.com/technik/it-internet/tech-gigant-tencent-will-in-europa-zehn-milliarden-dollar-investieren-fokus-auf-deutsche-hightech/25355810.html?ticket=ST-10089947-qghNfUjdTOD5vr5lVogK-ap2.
- Jacob Helberg, "Silicon Valley can't be neutral in the U.S.-China cold war," Foreign Policy, June 22, 2020.
- 62 Hong Shen, "China's tech giants: Baidu, Alibaba, Tencent," Konrad Adenauer Stiftung (Ed.): "Digital Asia: Insights into Asian and European Affairs," pp.33-41, February 27, 2019, https://www.kas.de/en/web/politikdialog-asien/single-title/-/content/digital-asia-8; Paolo Cervini, Mark J. Greeven, "Digital China is coming to Europe," LSE Business Review, April 24, 2018, https://blogs.lse.ac.uk/businessreview/2018/04/24/digital-china-is-coming-to-europe/.

