



A “global tech cold war” was Top Risk #3 last year. Over the course of 2018, technology competition grew extremely political. This is the year investors and markets will start paying the price. We’re heading for a global innovation winter—a politically driven reduction in the financial and human capital available to drive the next generation of emerging technologies. The shortfall will have important consequences.

Three political drivers are behind this global technological mayhem: Security concerns are leading states to reduce their exposure to foreign suppliers in areas critical to national security; privacy concerns are leading governments to more tightly regulate how their citizens' data can be used; and economic concerns are leading countries to put up barriers to protect their emerging tech champions against established market leaders from abroad.

The most immediate source of trouble is the US-China relationship. Tensions will inhibit synergies, to put it mildly, between US and Chinese policies that have been key to developing advanced technologies. Tariffs are already forcing US firms to shift portions of their supply chains out of China—to Southeast Asia, Latin America, and in some cases back to the US. The decoupling will accelerate as political and financial pressures drive more US production, including potentially complex final assembly, to politically safer markets.

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The countries are parting ways. Equally important, US efforts to increase scrutiny of Chinese STEM students and workers, and to limit or reject their US visa terms and applications, will reduce the flow of creative talent into the US. Likewise, it will limit the flow back to China of engineers and entrepreneurs with US experience. This trend will disrupt the innovation talent pipeline, with unforeseen ripple effects in key technology sectors.

The problem goes beyond US-China relations. The EU and Japan are likely to follow the US in imposing new restrictions. Then there's the "tech-lash": Digital regulation is mushrooming around the world as governments—facing a public backlash over privacy and concerned about foreign influence operations waged over social media—slap taxes on Big Tech and restrict the flow of sensitive information across borders. Brazil, India, and even California have all adopted or are considering legislation that draws on, or in some cases goes beyond, Europe's tough data protection rules. Data localization is already firmly entrenched in Russia and China, though for different reasons. Heavy regulation impairs collaboration and innovation.

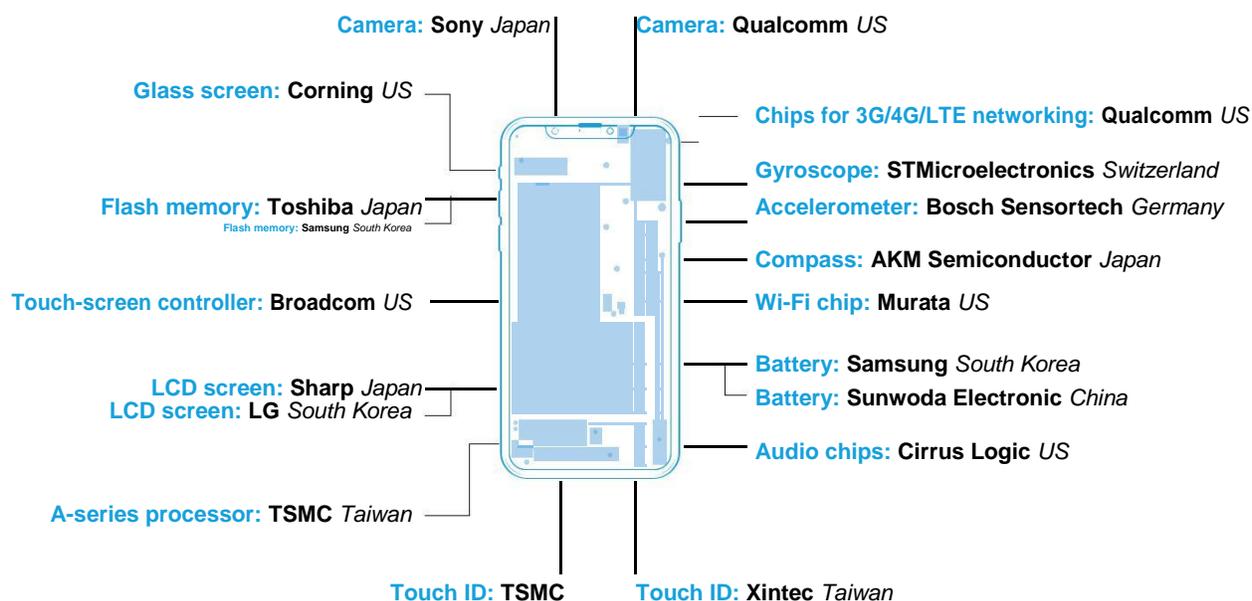
This US-China technology divorce will create specific problems for companies and markets, which will drain capital from the sector. As US-China tensions persist, firms will have to spend money to relocate assembly lines and warehouses to countries that don't

have the same base of highly skilled labor and finely tuned logistics that have been built up in China over decades. And this is all happening as countries around the world speed toward the rollout of next-generation 5G data networks, a project that will take more than a decade and be one of the most expensive technology build-outs ever. But a major push by the US and like-minded countries to exclude Chinese 5G equipment-makers from their next-generation networks means the process will be more expensive and take longer than it might have. The Chinese government, meanwhile, will require that major Belt and Road investment recipients use Chinese 5G suppliers to the exclusion of others. 5G starts rolling out next year; the political fight will start now.

More broadly, products become more expensive if you can't source from the most cost-effective suppliers; profits shrink if you can't sell users' data to advertisers; costs increase if you can't transfer data across borders and you have to hire more content moderators and lawyers; and dynamism suffers if you can't hire the best people because of the name of the country on their passports.

Markets may recognize these trends in isolation, but they're underestimating how they will come together to cast a pall over global innovation—and call into question lofty tech industry share prices—in 2019.

## iPhone is poster boy for the tech globalization now under threat



Source: Eurasia Group

