

# BLOC BY BLOC WORLD IS COMING INTO FOCUS

By Steven Weber

What does it mean in 2022 to be a global enterprise, and what will it mean as we approach the middle of the decade?

This same question wasn't hard to answer a decade ago, during the heyday of early 21st century globalization. The conceptual foundation for the global enterprise then was straightforward: maximize scale and reach as many markets as possible — essentially without regard to political boundaries — by locating the firm's functions wherever they can be done most efficiently and most cheaply.

It wasn't always easy to execute on this concept, but the direction was clear and the formula for winning well understood. It was particularly so for tech firms whose core products were concentrated in software, which could be written and tested almost anywhere and sold everywhere at nearly zero marginal cost. This logic was sometimes seen as more like a fact of nature than a moment in time, so much so that sophisticated observers expanded on the old dictum '[information wants to be free](#)' to talk about '[what technology wants](#)', as if technology had an innate will (rather than simply economic incentives in a particular setting) to be global.

What it means to be a global enterprise is not nearly so simple in 2022 because of an increasingly tense intersection of politics and technology that now defines global economic geography. The notion that a firm can go forward and operate on a global basis, with a global supply chain, to address a unified global market that enables global data flows, and do all this under a coherent regulatory regime, is now obsolete.

In a 2019 book [Bloc By Bloc: How to Build a Global Enterprise for the New Regional Order](#)

I posed a deceptively simply question about how the new economic geography would impact corporate strategy: 'if a leader today asks where to store her firm's data, where to seek a legal foundation for its intellectual property, where its people should live and work, and where its robots should do the same, there is no coherent conceptual framework to guide her'. I tried to offer a fresh conceptual framework for strategy in this newly emerging regional order that built off two core propositions.

First, that [positive return economics of machine learning](#) would create large incentives to collect and control data everywhere along a firm's value chain. Put simply: the more data you collect, the faster your products improve; and those better products would then be used more frequently and by more customers, in turn creating yet more data, generating a positive feedback loop where winners take most if not all, and second-best is never good enough because the leaders are accelerating away from everyone else. Firms would respond to this loop by re-organizing for greater vertical integration — a reversal of the outsourcing and offshoring trend of the last decades — in order to 'own' the flow of data throughout the life cycle of their products.

Second, that national governments would continue to raise regulatory and legal boundaries that impede data flows across borders. The intention was to support or in some cases incubate national champions, feeding off a primordial techno-nationalist instinct that was reinforced by

the acute supply chain disruptions and shortages of the pandemic period. It is equally driven by fundamental cultural and political differences that underpin technology rules and standards that in turn shape data flows. Concretely, the [EU is now set](#) on building European cloud providers and AI firms that emphasize privacy and consumer data rights, rather than importing those products and services from US based firms — even if those firms are compelled to operate under EU data privacy and security standards in the European market. China is intentionally and publicly taking precisely the same [approach](#), with the added ingredient of open geopolitical rivalry across the Pacific putting an even greater emphasis on data management and ‘data sovereignty’ for national security reasons.

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I argued in 2019 that global firms would have to re-organize themselves for this new regional landscape in profound ways. The key was to recognize that the concept of an economic region was no longer delineated by physical geography features like mountains and oceans that had shaped the flow of goods for centuries. The new regions were defined instead by technology rules and standards which shape the flow of data (which is why I called them ‘logical’ regions, borrowing language from the [logical layer](#) of the internet stack).

And so, to operate as a global enterprise in the 2020s, the new global firm would have to develop three or possibly four full copies of itself that would function substantially on their own in each logical region. The global enterprise would be less centralized, while cultural fit and government relations would matter more than they have for decades. Design, production, and distribution would be largely segmented and confined to each regional unit; the role of the global firm would be to synthesize the knowledge flow from this ‘[scale-free network](#)’ and translate what is learned back into the individual regional systems. Apple, for example, in 2030 would no longer design in California, manufacture in China, and ship around the world; but would instead have to create largely separate design-manufacture-market clusters set up in the US, in Europe, and in East Asia.

It was a controversial hypothesis in 2019, to say the least. But the Bloc by Bloc world is now coming into focus much more clearly and, to be honest, more quickly than I had expected. The pandemic acted as an accelerant, but many of the underlying driving forces have moved faster than I imagined they would even absent the pandemic.

Machine learning technologies are advancing and spreading at an extraordinary rate, which enhances the positive feedback loop between data, product quality, and technology that is driving vertical integration of value chains. Just consider some of the recent advancements in very large language models like [GPT-3](#) and popular image generation models like [Dall-E](#). And keep in mind that these news-making breakthroughs are only a

small slice of the much larger and much more significant advances taking place in narrow AI applications across manufacturing and service sectors. DeepMinds’ recent [breakthrough in a protein folding model](#) is a powerful example of general purpose technology innovation that can drive massive value across the entire health care system. This kind of AI/ML rarely makes sustained headlines, but it — along with seemingly mundane systems that [optimize](#) maintenance, labor deployment, energy usage, and more — is what really transforms economies and societies.

A second key force is China pushing forward and in some areas getting out ahead of the US in a number of strategic technologies. Both Washington and Brussels have now taken note. It’s important to recognize that it took too long for many Western analysts to see this, in part because a generation (my generation, to be honest) of political economists came to believe almost as matter of theology that it would be impossible to create and sustain technology innovation at the horizon and at scale under a non-democratic, authoritarian regime. The assumption was either that authoritarianism would crack under the pressure of digital technology, or that authoritarianism would constrain a country’s firms to being copycats and fast followers but never leaders in technology. We now have multiple demonstration proofs, in areas like [quantum](#) technologies for example, that these



assumptions and the accompanying theology were wrong. US policy, at least, is responding by copying at least some elements of the Chinese approach to industrial strategy rather than the other way around (such as with the [CHIPS act](#)).

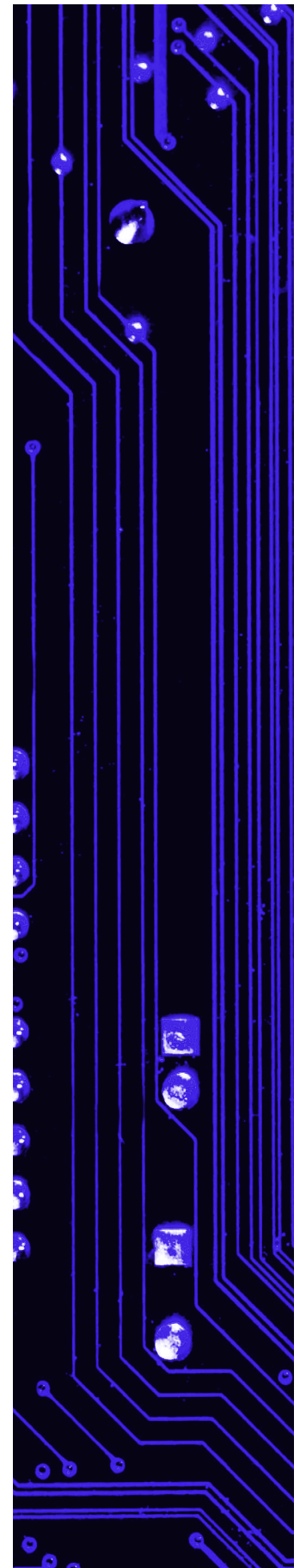
The driving forces in politics have accelerated as well. It's clear in 2022 that not only has digital authoritarianism proved sustainable as a form of modern governance, it is increasingly perceived in the US in particular as an acute national security threat that requires a whole-of-society response. This means restricting not only the flow of [advanced technologies](#) across the Pacific, but also the flow of sensitive data, which could be almost anything given the possible inferences from combined large data sets over time in connection with data that is already available — whether the source is [TikTok](#), open data sets, or cybersecurity failures like the [data breach at OPM](#). Even the outward flow of capital from American investors to Chinese companies is coming under pressure, and though a 'reverse CFIUS' concept that would have put restrictions on some outward capital flows was removed from legislation this year, the idea retains bipartisan support and could very well become law in the next legislative session.

It's become commonplace in the last year or so to talk about a '[splinternet](#)' or a 'balkanized internet', but that is only one aspect and really more of a symptom of what Bloc By Bloc World means. The deeper diagnosis signals the end for what Sam Palmisano in 2006 called '[The Globally Integrated Enterprise](#)'. The irony really is that many firms had only recently adjusted their thinking and some of their operations to take account of what Palmisano mapped out and what IBM was striving for in the mid 2000s. Today, that era is over and a new one calls for a different approach aimed at maintaining as many of the benefits of globalization as possible on this new regional landscape.

There are several general approaches to this problem that we can see emerging (and probably more to be discovered). I won't try here to explain the choices particular companies are making, or evaluate them for strategic coherence, value-alignment, ethics, or anything else. Fact is, it's too soon to say what will be most successful in such a dynamic environment (though I obviously do have an inclination about what will work and even more so what simply cannot work).

Some firms may choose to try to maintain as much global reach as possible without changing their basic organization and structure, which will mean in practice choosing sides and withdrawing from deep participation in certain logical reasons. This is essentially what [Google has chosen to do](#) with regard to China. The opportunity costs of doing so are substantial, and it's not just the loss of large markets and the data-generating potential of users in those markets. It's also the loss of access to a pool of talent and — perhaps imminently — partial loss of access to [capital](#) as well.

Some firms may move toward my scale-free network model of semi-autonomous copies operating largely independently in different regions. I used the example of an imaginary Apple re-organization above and while it may sound like a stretch, this basic topography is not so far removed from where the semiconductor industry is now heading. Tesla as well, given its gigafactories in Berlin and Shanghai and much more importantly its autonomous driving [data localization](#) in China at present (is the same for the EU far off?) The increasingly segmented relationship between [TikTok](#) and





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its parent company ByteDance is becoming a [case study](#) of how a Chinese firm that aspired to global reach is re-organizing for the bloc by bloc era.

Here is what is not going to be possible: to remain in what is now a dated global enterprise structure, and try to solve for the problem with communications or messaging that talks about aspirations for a different and more globally auspicious digital political and governance landscape than is realistic in the 2020s. The days where a firm headquartered in Seattle could source software code and other supply chain inputs seamlessly around the world as if political borders were irrelevant; offer a global product in the same configuration across the Pacific and across the Atlantic; and call for political concord around technology rules and standards that would facilitate both, are over. [Microsoft](#) seems to be focused on this approach, but I doubt it can be sustained. More likely is that firms that try to do this, no matter how eloquent and nuanced they are in their communications and public affairs, are going to get hurt seriously by grinding in the friction of bloc by bloc world. And they will make enemies of their stakeholders on multiple fronts along the way.

The last chapter of my 2019 book put forward a few big hypotheses about how global firms' reorganization for these new logical regions would impact (as well as be impacted by) the 'high' geopolitics issues of prosperity, peace, and war. At this moment, the most relevant hypothesis seems to be that tensions and stress would accumulate in places where physical geography and the new map of logical regions start to grind against each other. That is, in

places like Ukraine and Taiwan which locate in one geographic region but a different logical region. I argued that Bloc by Bloc world would see a higher rate of growth and innovation due to the greater diversity of experimentation which multiple copies of a global firm operating separately in several logical regions could support; but that these positives would be counter-balanced by an overall decline in geopolitical stability between and among the regions.

At the moment, the second and more negative part of that hypothesis seems to be gaining more evidence and momentum behind it than the first and more hopeful part. If that rebalances toward experimentation, growth, and innovation — and I expect it will — the global economy will be facing a very dynamic and exciting decade. As long as politics can get things just right enough to keep the major security dynamics under control.

That's important first and foremost because managing the greater risk of conflict between logical regions so as to avoid war is so obviously crucial to future human welfare. It's also important because the world really needs these logical regions to compete against each other — energetically — to create better outcomes. Most Americans still tend to hold to a doctrinaire point of view that a logical bloc centered around a relatively liberal and business-friendly democracy will outperform a logical bloc centered around an authoritarian regime — even if the latter will likely have greater access to larger data sets unrestricted by most privacy concerns and other such constraints.

But that point of view hasn't been tested in historical evidence; to some extent it is simply a fall-back assumption that is convenient to hold once the 'China can't innovate at the technology





horizon' narrative has been retired. And the Chinese elite today appear to be quite [confident](#) about the opposite narrative — that a logical bloc centered around a liberal democracy is condemned to incoherence, infighting, and undisciplined investment driven by cronyism and the vagaries of the moment rather than a long term strategic plan.

The fact is, no one knows right now who wins this rivalry (or for that matter if an EU or Indian-centered logical bloc can and will rise to the same level of robust competition). There's really only one way to find out, and it will take some time — a decade or more most likely — to see the results.

In the interim, the news for those who aspire to cooperation on global account issues like climate science and disease surveillance, or even toward more ambitious holistic planetary governance, doesn't have to be entirely bad. Multiple parallel experiments in economic growth and governance can learn from each other's successes and failures at an accelerated rate, if eyes and ears stay open and relatively unbiased. Basic science and pre-competitive research and development collaborations can be maintained and even expanded, if political authorities are surgically precise in narrowly delimiting a small number of key technologies that are 'strategic' and don't indulge the much less effective and more disruptive view that almost anything — like a Chinese consumer-grade security device installed, for example, in an American corner grocery store — should be treated as a national security threat because it is impossible to prove that it isn't.

And for Americans in particular there is this important piece of news: wiping away the last vestiges of defense for the idea of a 'liberal world order' which a generation of academics and many policy makers have wasted enormous energy trying to 'protect' or 'extend'. There [never was such a liberal world order](#) in a meaningful way to begin with, and there certainly isn't one [today](#). The stark visibility of that fact will put in sharp relief what is the real project for the first half of this century, which is to build a world order from the ground up rather than defend a self-indulgent fantasy. It's a big task, but seeing it for what it is rather than wasting time on comforting illusions is surely a good first step.