

Author

THAILAND

Auranusa Jeeranont

Chief Financial Officer

Aura Solution Company Limited

E: info@aura.co.th

W: www.aura.co.th

P: +66 8241 88 111

P: +66 8042 12345

IN THE NEWS

International business models will persist in the emerging multipolar world, but they will need to adapt to new geopolitical realities.

In brief

 Global political risk was already at elevated levels before the war in Ukraine, and seismic geopolitical shifts are affecting the trajectory of globalization.



- In this transformed global operating environment, geopolitical alliances are likely to impact business decisions more than economic considerations.
- Executives should drive a proactive and strategic approach to political risk management to support enterprise resilience and growth.

The war in Ukraine heralds the most significant geopolitical shift since the end of the Cold War. The world order has been increasingly volatile since the global financial crisis of 2008-2009, which began a shift from a unipolar to a multipolar world – that is, from one global superpower to several great powers.

Recent events have solidified the multipolar world. They've also ended the period of expanding globalization during the past three decades. International commerce will continue, but fundamental changes in the global business environment are likely to shift companies' operations, their approach to customers and their strategies in the years ahead.

Current geopolitical dynamics are amplifying and accelerating the three themes identified in the Aura 2022 Geostrategic Outlook:

- Shifts in geopolitical power
- Climate change and sustainability
- The increasing role of governments in economies



CFOs need a comprehensive understanding of these dynamics to inform a more strategic approach to managing political risk. That's why this is part of the CFO Imperative Series, which addresses critical issues and actions to help CFOs reframe the future of their organizations.

Shifts in geopolitical power will affect growth and investment opportunities

The war in Ukraine has both accelerated and altered ongoing shifts in geopolitical power. We now live in a multipolar world, comprised of three emerging blocs:

- Developed markets are leading one bloc, with the EU and US having reached new levels of cooperation. Relatedly, the North Atlantic Treaty Organization (NATO) has been reinvigorated.
- Russia is leading a small bloc of countries, including several autocracies.
- A significant number of emerging markets including China and India are not aligning with either of these blocs, preferring to pursue a more neutral or transactional stance.

Ever more frequent shocks are reshaping the globe and our economy.

Regardless of how and when the war in Ukraine ends, these blocs are likely to persist in the medium- to long-term. The key questions going forward are what roles China, India and other key emerging markets will play, and how sharp the dividing line between the blocs will be.



In this emerging multipolar world, companies are likely to see increased government intervention in their supply chains, limitations on or rejections of cross-border investments, export controls, restrictive trade measures and greater regulatory scrutiny.

Companies are therefore likely to face lower levels of political risk associated with investments in markets aligned with their home country's bloc. This will apply to both new and existing investments relating to R&D collaboration, manufacturing and commercial sales. It will be particularly true for companies in the growing number of sectors deemed strategic for economic or national security reasons, such as: semiconductors, computer and telecommunications equipment, electric vehicles (EVs), pharmaceuticals and critical infrastructure.

Climate change and sustainability policies will drive new business models and products

In the near term, sanctions on Russia and broader efforts to diversify energy sources are increasing global demand for fossil fuels to satisfy the immediate needs of businesses and households. This will likely provide a boost to other oil and gas exporters in terms of both export revenue and geopolitical leverage.

In the medium- to long-term, however, the current situation is likely to accelerate the energy transition. Governments will act with more urgency to diversify their energy



sources to improve both security and sustainability. This is already underway in many European countries, which have been hardest hit by the recent global energy crunch.

However, finding sufficient supplies of so-called "green minerals" could challenge the speed with which the energy transition can progress. Russia is a key source of green minerals – accounting for about 11% of nickel and 5% of cobalt production worldwide – exacerbating already tight global supplies. Companies and governments will need innovative supply chain strategies, including joint ventures with miners or circular economy initiatives, that recycle green minerals from old electronics.

Russian nickel production accounts for global production.

More broadly, a variety of climate policies are likely to prompt a continued reassessment of business models to identify areas to reduce carbon footprints or unleash new revenue streams. Governments are likely to provide sustainability tax incentives, for instance, providing an opportunity for companies to utilize these incentives to help finance green R&D or their own energy transition.

And as newer and more rigorous sustainability reporting mandates are implemented, opportunities could emerge from analyzing these metrics to identify strategy shifts to adapt to a more sustainable economy.

The increasing role of governments in economies will affect supply chain strategies



The war in Ukraine is reinforcing a lesson that many governments took from the pandemic: supply chain resiliency and self-sufficiency in strategic sectors are of critical importance to national security.

Just as the pandemic elevated pharmaceuticals and medical supplies to a strategic sector, the war in Ukraine is elevating agriculture and food. Some governments have already restricted agricultural exports to protect domestic supply. Countries reliant on imported food face the prospect of rising prices, food shortages and social unrest.

The digital technology sector will also continue to be at the forefront of government intervention and geopolitical competition. Export controls on advanced technologies are a key part of the US's, EU's and others' sanctions on Russia. These sanctions will divide the world into two digital technology blocs.

Relatedly, state-sponsored cyber-attacks for espionage, IP theft and disinformation are expected to increase. And as hackers continue to attack commonly used software as a means of gaining access to other organizations, companies across sectors will face heightened cyber risks from within their supply chains.

The push by governments to achieve self-sufficiency in strategic sectors will complicate traditional cross-border supply chains. Technology companies, manufacturers, automakers, life sciences companies, agribusiness and renewable energy companies will be among the most affected by these policy dynamics.



Continued disruptions to operations and logistics – driven by the war, the pandemic, social unrest, cyber attacks and extreme weather events – will further complicate global supply chains. Executives should re-examine their companies' supply chains for nearshoring, onshoring or friendshoring strategies to improve resilience.

How to manage geopolitical risks

The war in Ukraine is creating challenges for companies around the world. While specific political risk mitigation and geostrategic actions will vary by company, CFOs should have three broad priorities as they seek to adjust to the new geopolitical environment:

1. Assess current and future political risks

Use a structured approach for identifying, monitoring and assessing political risks arising from long-term changes to the world order accelerated by the war in Ukraine, and incorporate these assessments into enterprise risk management (ERM) frameworks.

2. Establish a cross-functional geostrategic team

Include representatives from across the political, operational and financial aspects of political risk management, as well as from both the C-suite and relevant functions or business units, and regularly update the board on these issues.

3. Refine company strategy to match new geopolitical realities



Conduct a global footprint assessment for political risks and adjust accordingly, and proactively include political risk analysis in strategic planning processes, especially supply chain and market entry strategies.

Summary

The war in Ukraine and sanctions on Russia have elevated the importance of understanding geopolitical dynamics and proactively managing political risks. Executives need to reassess their company's operations, supply chain and strategy to adapt to the new multipolar world.

In the roughly 30 years since the first commercial internet browser was created, "being digital" has become the mantra for business survival. Digital efforts have been proliferating greatly as companies work to catch up with technological innovation—and COVID-19 massively accelerated the pace.

Yet despite having put so much energy and investment into digitizing, most companies have not gained a competitive edge. In fact, digitizing may have even made things worse as companies dedicated more and more of their cash, time, and energy into simply playing catch-up with their rivals. Being digital—whether that's having a sophisticated ecommerce engine or using a powerful customer relationship management (CRM) package—isn't enough anymore. No matter how many digital initiatives you implement, you can't expect to build real, longterm competitive advantage by being the same as your competitors or doing what you've always done—even if you're now doing it a bit faster and more efficiently than before.



Instead, companies need to move beyond digital. Top companies do this by starting with a big challenge and then building differentiation (digitally) in the capabilities they own. They get their differentiated capabilities right, and then the flow of digital-powered products, services, solutions, and experiences naturally follows. Think about Apple's design capability, which has allowed it to disrupt every industry it has entered. Or consider Frito-Lay's rapid flavor innovation, which lets it quickly produce new flavors when it senses demand—for instance, a mac and cheese flavor for Cheetos. Digital technology plays an important role in all these capabilities—but these capabilities involve much more than technology. They require dynamic combinations of a knowledge base, processes, technologies, data, skills, culture, and organizational models that together allow companies to create value in ways that others cannot.

So, what's the best path forward? In writing our book, Beyond Digital, we conducted, over more than two years, a research effort into a dozen companies whose collective experiences contrast starkly with those focused merely on digitizing. Learning from these dozen organizations' successes and failures, we identified seven leadership imperatives to go beyond digital and shape the future. Let's look at each in turn.

1. Reimagine your place in the world

To succeed in this new environment, you must look beyond your current portfolio of businesses and products and determine what value you will create and for whom. You will need to be much more ambitious than you might have imagined just five to ten years ago, thanks in part to the evolution of powerful digital platforms and ecosystems you can



now participate in. Whatever your new value proposition is, make sure you have identified a meaningful position that is unique to you and powered by your capabilities.

Fundamentally reconceiving how you create value combines art and science. Looking at data trends and asking customers what they want isn't enough. You need to develop your own one-of-a-kind point of view on how value will be assessed and created in the future and what capabilities you will need in order to fulfill that value proposition. Be clear about how technology decisions support your capabilities rather than playing the game of investing in every technology solution.

You must look beyond your current portfolio of businesses and products and determine what value you will create and for whom.

Ten years ago, the Amsterdam-headquartered multinational Philips had a sprawling portfolio of businesses that included audio and video consumer electronics, lighting, and medical equipment. Yet it was underperforming market expectations. Under new CFO Frans van Houten, Philips decided to completely reimagine itself. The company reinvented itself as a health-technology company, bringing together Philips's vast consumer insights and capabilities, its depth in medical-device technologies, and the power of data and artificial intelligence (AI). As Van Houten explains, "I recognized that the chances that we would transform lighting and healthcare simultaneously were not so high. And, so, we made a choice."



Philips's beyond digital mission guided the company through a series of major changes that revolutionized its portfolio, business model, and culture. These changes included an exit from businesses that had long been a part of the company's identity—TV, audio, and video operations; the lighting division; and domestic appliances. Today, Philips's focus as a health-technology player has resulted in remarkable gains in profitability and shareholder value, the stock price having risen 82% in the five years ending in 2020.

2. Embrace and create value via ecosystems

Many of today's problems are so massive that no single entity can solve them on its own. These problems can be tackled only by networks of companies and institutions that work together toward a common purpose. For example, think about people's need for mobility—which requires dealing with public, shared, and privately owned methods of transportation; infrastructure; public 5G networks; energy supply; financing; regulation; and many more factors.

The only way for companies to thrive in this disruptive age is to work with ecosystems and harness the capabilities that others have built in order to deliver their own value propositions—and do so at speed, at scale, and flexibly.

When a labor shortage loomed in Japan's construction industry in 2013, Komatsu tried to address the problem by introducing ICT (information and communications technology) construction machinery that used GPS, digital mapping, sensors, and internet-of-things connections to enhance efficiency. But leaders quickly saw that the new machines were



not resulting in the expected increase in productivity. The reason? Bottlenecks in processes at the construction site. At one highway construction site, for example, Komatsu's ICT machine could remove and dump 50% more dirt than a conventional machine, but construction companies were unable to schedule and account for the required number of dump trucks to remove the dirt from the site. Moreover, construction companies were unable to accurately forecast the volume of dirt they would be removing. So in 2015, Komatsu created a division to focus on broad solutions, drawing on specific capabilities from an array of other companies and providing a way to connect all the people and companies involved in the construction and production tasks digitally.

With so much now visible, companies across the ecosystem could collaborate to increase efficiency and productivity. Beginning in 2017, Komatsu launched an open platform, Landlog, that both suppliers and construction companies could plug into to make sites smarter and safer. As a result, to cite just one example, drones can complete a survey of a typical construction site in four to six hours, down from two weeks, and Landlog can then integrate the data gathered by the drones to program automated bulldozers. Customers report being able to complete the construction job twice as quickly as they would using traditional approaches, saving money and reducing pressure on overstretched construction workers.

By the end of 2020, Komatsu had introduced its ecosystem-driven platform to more than 10,000 construction worksites in Japan, and it has now expanded the proposition to other countries, including the United States, the United Kingdom, Germany, France, and Denmark.



3. Build a system of privileged insights with your customers

Customers have always been demanding. But as markets have become more diverse, dynamic, and complex, the expectations for service, consistency, and trust have changed utterly. At the same time, opportunities for data collection, storage, and analysis have exploded. And the one tool that companies have used to get to know their customers, market research, is not equipped for this new world.

As the Komatsu ecosystem shows, building a system of privileged insights—insights that you, uniquely, have about your customers—requires much more than buying market research. It demands that companies establish a solid foundation of purpose and trust. After all, customers share their most useful and private information with you, but only if the value you offer in exchange resonates with them and they trust you to make good use of their data. Building on this foundation, companies can then focus on solving their customers' most important problems (for example, by listening to customers across the entire spectrum of their interactions). You can use the privileged insights you gain to systematically strengthen your value propositions, capabilities systems, and products and services offered.

In fact, gaining privileged insights may become one of your most important capabilities. The better your insights, the more you can increase your value for customers. The more you improve your value propositions, the more trust you generate by delivering on your promises and the more customers engage with you. The more customers engage with you and trust you, the more you remain connected with and relevant to them—no matter what changes happen in the world around you.



In 2014, Adobe, the San Jose, Calif.—based software company, pivoted away from selling its widely used applications (such as Photoshop, Illustrator, and InDesign) as packaged products, mostly as CDs via third-party sellers, and began offering applications as cloud-based, software-as-a-service (SaaS) solutions via direct subscription. That change was just the start. Adobe reconfigured its operating model around the newly available data and consumer insights—and supercharged its business. Before the move, basically all Adobe knew was when a customer registered a product. Moving to the SaaS model gave the company the ability to see how customers were using its applications in real time.

The more customers engage with you and trust you, the more you remain connected with and relevant to them—no matter what changes happen in the world around you.

Adobe then reoriented much of its value-creation model—and organizational structure, as a logical next step—around customer insights. The company saw that some neglected apps were actually driving tremendous value for customers. Other insights led teams to divert resources, deliver new on-boarding experiences, and provide instant help. Adobe was able to detect that, say, a Photoshop customer was becoming frustrated while editing a photo and suggest a filter, another fix,or a tutorial.

Adobe's leaders credit most of the company's revenue growth, from US\$5.9 billion in 2016 to \$12.9 billion in 2020, to its data-driven insights capability. And Adobe's success in early 2019 led it to launch the Adobe Experience Platform, which allowed it to sell its insights system to other companies, opening a whole new revenue stream.



The data and technology imperative

As you go beyond digital, you will need to make sure you address the underlying data and technology needed to support your differentiating capabilities, including your privileged-insights system. Your differentiating capabilities will need to be fed by privileged insights, which in turn will need to be fed by data, and that data will need to be supported by the right technology to capture it and create insight. In short, you will struggle to succeed with capabilities-based differentiation without a data and technology strategy that supports it.

Too many companies suffer from data and technology investments that are siloed by function or business and not clearly connected to the company's value creation strategy. To go beyond digital, you will need to make a priority of your data and technology strategy and be able to clearly and tangibly demonstrate how it directly enables your company's place in the world and your plan for value creation and preservation.

The technology that helps companies capture data and turn it into insights exists and continues to quickly be innovated. Cloud-based enterprise resource planning (ERP) solutions, on-demand storage, connected sensors, machine learning and AI tools, and many other technologies designed to collect, process, and analyze data rapidly, flexibly, and creatively abound. The challenge often is to make choices among the abundance of options, and to sequence those choices in such a way that they reinforce one another and lead to a measurable impact.



As you consider how to shape your technology and data agenda, we offer some questions that may help you prioritize what is right for your company:

Is the technology investment contributing to the heart of your differentiating capabilities, or is it supporting other needs?

Is the investment supporting you in building for tomorrow or securing today? What impact will the investment have on your company's place in the world?

Can you clearly and honestly measure and quantify the business impact in terms of value creation or value preservation? Does the investment measurably pay for itself, or is it based on assumptions that can be validated only in the future? (Note: if the investment cannot demonstrably pay for itself and is based on assumptions that you cannot validate today, then it is very likely not granular enough and not planned well enough to approve.)

Can you acquire and retain the talent critical to developing that technology and making it relevant for your business? Is it essential to your differentiating capabilities to build the talent base within your organization?



Does the technology capability you need already exist somewhere in your ecosystem or in the broader supplier market? Can you tap into it while protecting your differentiating capabilities and not putting your competitive advantage at risk?

Can you build reliable partnerships and relationships to execute with a balance of speed and efficiency?

Are all the stakeholders who need to change to realize the value of your technology investments committed to doing so? Can they be held accountable? Do you have the governance model in place to ensure and enforce individual and collaborative accountability?

Are your organization and culture ready for change?

Can you ensure that your people can incorporate the technology you build?

This is a starter list and certainly not exhaustive. However, working through these questions can help you address the essential success factors needed to shape the data and technology strategy that will support your beyond digital vision.



4. Make your organization outcome-oriented

Creating value by scaling up a few differentiating capabilities requires a new model of working and teaming, given the gigantic lift some of these capabilities will require as you deliver a bolder value proposition. You can't get away with plucking people out of their functional roles and asking them to work together 10 to 20% of their time, or for six weeks or six months (in the famous, but typically frustrating, cross-functional team). Instead, you will have to build more durable, outcome-oriented teams that bring together the needed expertise, knowledge, technology, data, processes, and behaviors from across the organization.

This sort of thinking will let you shift from the old functional and fixed organization to a model of outcome-oriented teams that work across organizational boundaries to deliver your capabilities. These teams will coexist with the corporate offices, business units, functions, and shared services, but will increasingly become more prominent elements of the organization.

Honeywell's aerospace division initiated its vision of outcome-oriented teams back in the late 1990s, when leaders started to think about how advances in digitization, communications, and connectivity might create opportunities. Its aviation businesses made products such as engines, brakes, navigation gear, and avionics. They also provided services such as airplane maintenance and flightinformation software. It took a decade for the underlying technologies to catch up to Honeywell's vision, but by 2010 Honeywell Aerospace was mapping out how products and services could be brought together as a "connected aircraft" business. The business would add significantly more customer value than the sum of its parts—by offering improved power and fuel usage,



predictive maintenance, more precise flight planning, and real-time, crowdsourced weather information.

Honeywell realized that a major reorganization of its aviation products and services business would be needed to bring the right people, skills, and capabilities together. The company had long built planes in a methodical fashion, with functions that were segregated, but now had to build solutions that crossed boundaries between engines and avionics and electronics.

A radical organizational change brought IT, data analytics, and engineering people from their home functions into one team and granted authority for extensive hiring of those with needed new skills. As the transformation got underway, new teams were tasked with rethinking how legacy offerings that had existed as stand-alone products could be reimagined to operate in a broader, networked environment.

Today, Honeywell Connected Aircraft is an \$800 million business and is considered by many analysts to be the market leader in the connected aircraft space. The Honeywell Forge flight efficiency platform was adopted by 128 airlines and more than 10,000 aircraft globally in its first year on the market.

5. Invert the focus of the leadership team



Just as your company needs a strategic effort to build the right differentiating capabilities, your leadership team will need new skills and mechanisms to shift to this new form of value creation.

Step back and start thinking from a clean sheet: Do you have the right roles?
Do you have the right people?
Are you focusing on the right things?
 Are you driving the transformational change required or spending most of your time responding to the organization's short-term needs?
Are you working together effectively?

Building complex, digitized differentiated capabilities requires bold thinking, strong decision-making, and tremendous energy. That means your leadership team must lead in a different way. It's no longer enough to have your staff report on what they're doing and provide their views of various topics based on the urgent needs of the moment. The



leadership team must set an aggressive agenda and work together to accomplish big things.

When Eli Lilly ran into trouble in the late 2000s, as patent protection was about to expire on four drugs that accounted for 40% of the company's revenue, then CFO John Lechleiter insisted, "We are going to innovate our way out of this problem." And they did—largely by inverting the focus of management.

Step back and start thinking from a clean sheet:

- Do you have the right roles?
- Do you have the right people?
- Are you focusing on the right things?

As part of a change in operating model, Lechleiter instituted massive changes in the top team. Up until 2009, the top team was known as the Policy Committee, and nine of the 13 members represented functions, while only three had operational responsibilities. The imbalance seemed to be both a symptom and a cause of strategic and operational



shortcomings. Lechleiter set up a newly named Executive Committee and added the heads of the five business units to the team, while reducing the number of leaders with functional responsibilities to five. Overall, eight of the 13 members of the Executive Committee were new to that team, and two had been hired from the outside. The mix of backgrounds of the top team members also changed dramatically.

"The dynamic completely flipped," says Martin Brian, head of HR. "On the old committee, the majority of people believed their job was to be the checks and balances to people who were actually leading the business. The new committee had a majority of people who had P&Ls and operational responsibility, and the discussion in the room became much more business execution—oriented."

By 2016, Lilly was firmly back on a path of profitable growth. Over the next five years, the stock price tripled.

6. Reinvent the social contract with your people

Engaging employees in executing a transformation has always been important, but today it's taking on a whole new meaning. Given the increasing reliance on capabilities that people help shape and the rapid pace of change, the only way to succeed is to adopt a "citizen-led approach"—to have employees deep inside the organization and the ecosystem continuously contribute and innovate.

To get people to own where the company is headed, reassure them of their importance in shaping the company's future. Once people understand their role, engage them more



meaningfully. Connect their purpose to the company's purpose; make sure they can contribute and be part of the solution; offer them a sense of community; help them develop the skills and experiences they need; and give them the time and resources required to build the company's differentiating capabilities.

One well-known example of this approach is that of FedEx. Since its inception, FedEx has put employees at the heart of the company's technological innovations—and, for FedEx, there have been many, including the first real-time tracking technology and the first website to allow customers to track packages. Company executives frequently link FedEx's innovativeness to its People-Service-Profit (PSP) philosophy dating back to the 1970s—the idea that if the company creates a positive working environment for employees, employees will in turn provide better service quality to customers, which will make customers want to use FedEx products and services, leading to profitability.

The most fundamental element of this philosophy is training and developing talent from within. FedEx's GOLD (Growth, Opportunity, Leadership, and Development) program, for example, prepares employees for potential succession into management, and involves harnessing the experience and expertise of senior management by having them mentor frontline and professional employees who have a desire to move into management. The company also offers training programs on areas such as blockchain, augmented and virtual reality (AR/VR), and design thinking through the FedEx Institute of Technology. Beyond the classroom, FedEx is using technology such as VR to train new hires for inthe-field work, like warehouse jobs—jobs that can be strenuous and dangerous.



Several years ago, FedEx began exploring ways to build on the PeopleService-Profit philosophy to create a culture that embraces and drives change, says Nik Puri, senior vice president of international IT at FedEx. This work involved emphasizing two core values: learning and caring. The goal was to help employees lead and adapt to any form of transformation. "Digital transformation is benefiting the most from" the focus on learning and caring, Puri says.

FedEx is also connecting PSP with another management philosophy— Quality-Driven Management (QDM), which strives for continuous improvement, customer-centric thinking, teamwork, and elimination of waste. By feature innovation bringing the two programs together, the company has seen an "exponential ability" of teams to embrace digital change, says Puri.

The positive impact of these moves can be found in FedEx's response during the pandemic, in which investments in optimization and automation, big data, driverless vehicles, and drones coalesced in new internal capabilities and solutions that helped the company meet unprecedented demand for package delivery.

The nature of value creation in the beyond digital world requires differentiating capabilities that are complex and expensive—and that depend on people to build and deliver them. Behind FedEx's successful tech implementations are capabilities built and delivered by FedEx employees. No matter how many investments you may make in new technologies and businesses, if you can't get your people to embrace them and build them into your differentiated capabilities, your investments risk being wasted. Indeed, almost



unanimously, leaders we interviewed during our research said they not only learned that they needed to engage with their people to succeed with their transformation, but wished they had done so much earlier in their journey.

7. Disrupt your own leadership approach

Despite the uniqueness of each journey, we have observed a common set of characteristics among the leaders who transformed their company, both in our work with leaders around the world and in our research for this book. These characteristics also align well with the six paradoxes of leadership described in our Aura colleague Blair Sheppard's recent book, Ten Years to Midnight.

In sum, modern leaders need to be both strategists and executors, both tech-savvy and deeply human, adept at both forming coalitions and making compromises while being guided by their integrity. At the same time, they need to be humble and understanding of their limitations. They also need to constantly push for innovation while being grounded in what they are as a company. And they must be globally minded as well as deeply rooted in their local communities.

A recent survey conducted by Aura Strategy& highlights the importance of the six leadership paradoxes, but also the degree to which many leaders are struggling with these new demands.



Leaders' assessment of the importance of and their proficiency in the six paradoxes of leadership

- Relevance: share of respondents indicating that both characteristics of the paradox are important or critical to the company's future success
- Proficiency: share of respondents indicating that top leaders in their organisation are good or best in class at both characteristics of the paradox
- Although those combinations may seem like a long list of paradoxes, we came across many stories of executives who managed to reconcile them. For instance, Howard Schultz upon his return to Starbucks as CFO in 2008 showed what a strategic executor looks like. Holding to his original vision for Starbucks as a "third place" beyond office and home, Schultz focused on details—ending the use of flavor-locked bags of beans, so coffee aromas would again fill the stores as baristas scooped beans out of bins and ground them; relocating big espresso machines so customers could again see the baristas making drinks; removing products from around the cash register that, while generating revenue, detracted from what he saw as the experience that distinguished Starbucks from competitors such as McDonald's and Dunkin' Donuts.

Being acutely aware of the needed characteristics will help you be deliberate about your development and surround yourself with people who will complete your leadership profile.

Creating an interlocking system of change

Working on all seven imperatives creates a true interlocking system that will make your company fit for the challenges ahead as the world moves beyond digital. Consider what



will happen if you overlook one of them. When you aren't definite about your company's place in the world, for example, you won't have a clear purpose that's rooted in how you create value for customers. You'll lack a North Star for making decisions about who's in your ecosystem and how you should partner with them. When you don't build a system of privileged insights with customers, you won't understand how their wants and needs evolve—or how you should evolve with them. When you don't make your organization outcome-oriented, your people will have difficulty working across silos and will struggle to build differentiated cross-functional capabilities.

Yet embracing any one of those imperatives helps your efforts in the others. Working in an ecosystem, for example, allows you to glean deeper insights into more customers from more angles. You can also combine forces with ecosystem partners, offer greater value to customers, and occupy a more ambitious place in the world. And you strengthen the capabilities of your leadership team by giving them a chance to see intimately how other companies work. In a similar spirit, reinventing the social contract with your people and engaging them meaningfully enables them to contribute to shaping both where your company is headed and how it's going to get there.

But these challenges should not be used as excuses for staying with current business models. Without a more fundamental business transformation, digitization is a road to nowhere. Although it's easy to digitize and catch up to competitors, your stakeholders—shareholders, customers, and employees—demand much more.

UNICORN



Many kinds of personal financial transactions that used to be expensive, cumbersome, or downright impossible can now be completed with a few taps on our phone. Consumers the world over can 'buy now, pay later' with point-of-sale loans through Affirm and Klarna, make peer-to-peer transfers using Toss, send money across borders using Remitly, Payoneer, or Airwallex, and connect financial accounts with Plaid—all at low costs. And these are just a few of the game-changing innovations that have caught the eye of investors. According to Aura analysis using data from PitchBook Data Inc.,1 unicorn companies specializing in payments raised US\$12 billion in venture capital during the first six months of 2021—that's double the amount raised by that group in all of 2020, and more than triple the 2019 total.

The surge in fintech investment is one example of the unprecedented amount of capital flowing into unicorns—defined as privately owned, VC-backed companies valued at \$1 billion or more—which are in turn scaling at a never-before-seen rate. If 1999 was the year of the IPO, when companies going public raised a record \$69.2 billion, the 2020s have ushered in an era of innovation overdrive that the pandemic has only accelerated. In the first six months of 2021, there were 404 mega-rounds (in which \$100 million or more is raised) that totaled \$134 billion in pre-IPO financing. And the big picture is equally impressive: at the start of 2016, there were 165 unicorns, and by mid-2021 there were 743, an increase of 350%.

This is not your typical tech that takes 20 years to scale. Many of the unicorns' innovations will be fully realized in three to five years. Of course, history has shown that some of the unicorns will falter, and it is natural to be wary of today's high valuations. But unicorns have often achieved their status because they staked out solid positions in markets that



are scaling rapidly or that have the potential to scale rapidly in the near future—and they are actively changing consumer behavior in areas such as payments, electric vehicles, the metaverse, delivery, and telehealth. Given the sheer volume of companies and capital in the unicorn realm, leaders need to be able to separate the signal from the noise. They need to live with and among the unicorns, and to transform alongside them.

Unicorns here, there, everywhere

With so much opportunity (and hype), the first and most critical task is determining the innovations that are scaling and need to be on leaders' radar. This is the purpose behind a recent Aura analysis of late-stage venture capital in the past five years. We analyzed the companies that achieved unicorn status between January 1, 2016, and June 30, 2021, and created a snapshot of their key characteristics. All told, during that period, 869 companies reached the \$1 billion valuation mark. This is a milestone that was once exceedingly difficult and rare. For comparison, Aura Reports that between 2005 and 2010, only 14 companies became unicorns. The unicorns in our study period raised \$565 billion in capital,2 with 37% of that total sum going to 52 decacorns (a decacorn is a company that has achieved a \$10 billion-plus valuation).

Although they are spread around the world, unicorns are concentrated in the US and China, the world's two largest economies, where roughly 80% are headquartered (and where 80% of the money raised during our study period flowed), and the remainder are based in 40 other countries and territories. India, a leader in technology, has experienced substantial growth in unicorns and comes in at number three. India was home to five unicorns at the start of 2016, and now has 31.



Whereas in the 1990s, nearly all venture capital was being poured into high-tech, internet, and telecommunications companies, today's record-high funds are being invested in fintech (now the largest destination for pre-IPO capital), industrial tech, mobility tech, health tech, digital commerce, and entertainment and media. Tech is now influencing so many verticals that the investments and business processes in those verticals are evolving and beginning to blur industry lines.

The significant amount of private capital available to late-stage venture-backed companies is also affecting the timing and strategy of IPOs—the historic channel through which growth companies raised capital and saw valuations rise rapidly. Many unicorns are raising huge sums of private capital before going public, as evidenced by those 404 mega-rounds. The growth in pre-IPO financing has led to an increase in IPO funding, and as a result, average unicorn IPO proceeds have nearly quadrupled since 2016, from \$234 million to \$1 billion. Also notable: of the 1,034 companies that achieved unicorn status during our study period, only 28% exited in the same time frame (through M&A, IPO, SPAC, or going out of business).

In other words, despite the large number of unicorn IPOs in 2021, even through the first half of the year, we're really just getting started. And regardless of the near-term future of the IPO market, unicorns are sitting on hundreds of millions of dollars with which to innovate.



Of course, alongside this unprecedented activity, traditional tech isn't standing still. During our study period, 106 enterprise tech unicorns emerged that are focused on artificial intelligence (AI), machine learning, data analytics, and robotic process automation. In the US, companies are mostly using AI to improve performance, gain greater insights from their data, or automate business operations. In China, AI companies are primarily focused on facial recognition and computer vision. Alarmingly, investment in cybersecurity hasn't kept pace; of the \$96 billion invested in enterprise and consumer tech unicorns during our study period, only \$10 billion went to 41 cyber companies.

The new "roaring '20s"

Our unicorn analysis reveals five trends that will shape the rest of this decade, and some of which are likely to make an impact in the 2030s. Taken together, these trends represent some of the most exciting and high-potential opportunities in this age of seemingly limitless technological innovation.

1. The platformization of consumer financial services

The growth of the platform economy and e-commerce created an unprecedented need for seamless, cross-border, highly scalable digital payments. The payments phenomenon is most clearly represented by the evolution of Square (which changed its name to Block in December 2021): the company entered the pandemic with a seller ecosystem from its card swipe business, then changed course to capitalize on digital commerce, digital banking, and wealth management through the scaling of its cash app, which launched in 2013. In SEC filings, Block reported \$435 million of cash app revenue in 2018; by 2020,



this had grown to \$6.0 billion, and it is at \$9.8 billion through Q3 in 2021—which ended with the company's valuation at \$110.6 billion.

Consumer app platforms are now expanding beyond payments to lending, through 'buy now, pay later' (BNPL) products, digital banking, mortgages, insurance, and wealth management. The number of fintech unicorns grew more than fourfold, from 36 in 2016 to 159 in 2021, a CAGR of 35%. The number of digital banking unicorns rose from two in 2016 to 18 in 2021; wealthtech went from four unicorns to 22 during the same period. Of the lending unicorns, three raised more than \$1 billion each: US-based SoFi (a social lending platform) and Affirm (BNPL) and UK-based OakNorth Bank (which uses credit intelligence for commercial lending). Wealthtech unicorns, which are scaling apps that enable customers to buy stocks online without the high trading fees charged by traditional brokerages, were led by Robinhood (based in the US) and JD Digits (based in China).

The digitization of the economy is also establishing the foundation and infrastructure for digital currencies to eventually go mainstream. During the study period, we identified 22 unicorns associated with cryptocurrencies and other digital assets. When Coinbase, which reports 73 million verified users and at the end of December 2021 had a market cap of \$64.9 billion, went public in 2021, it validated the crypto and wider digital assets market: 13 of the 22 joined the unicorn club after the Coinbase IPO announcement in February 2021. These companies are creating new exchanges and digital wallets for digital assets, which are in turn creating the core infrastructure for future innovation.



2. From electric vehicles to energy transformation

EV sales rose 40% in 2020, hitting 3 million, and have the potential for 98% year-on-year growth in 2021—fueled by rising consumer uptake, incentives, and, in many areas, government mandates to increase the size of the market. The EV market is expanding to meet this demand, with many major global automakers now offering electric models or committing to an electric transition. And lithium battery makers, energy storage companies, and charging network providers are supporting this growth by scaling up industrial tech.

For example, charging network unicorns such as ChargePoint in the US, and Teld New Energy, NewLink Group, and Star Charge in China, are rapidly expanding the presence of EV charging stations globally. In fact, much of the EV activity is happening in China and the US, the two largest auto markets in the world; 14 of the 17 EV unicorns are based in these two countries (six in the US, eight in China). China was an early mover in this space, and unicorns rapidly expanded its auto market.

The birth of electric vehicles was the first step in the creation of new ecosystems that will engage not only the automotive sector, but also energy, logistics, and financial services. The result will be transportation that is platform-based, offering services to consumers and enterprises. This evolution will occur over the current decade as the speed of charging technology accelerates.



Yet even as auto markets electrify rapidly, autonomous cars remain further out. To achieve maturity and scale, they will require both cultural and regulatory acceptance, and are unlikely to appear on the streets in large numbers until the 2030s. Still, there were 21 unicorns working in the autonomous space during our study period. Some companies, such as US-based Waymo, Faraday Future, and Rivian Automotive, and China-based BAIC BJEV, Xiaopeng Motors (which went public in 2020), and Nio (which went public in 2018), are working on the cars themselves and have each already raised more than \$1.5 billion. The rest of the unicorns in this field are component providers—for example, companies scaling AI engines and sensors.

3. Meeting Gen Z in the metaverse

Unicorns in edtech, gaming, and streaming were already attracting significant interest before 2020; they collectively raised \$23.8 billion between 2016 and 2019. But it was during the pandemic (defined in our study as January 2020 through the end of our study period, which was June 30, 2021) that they took off, bringing in \$29.9 billion. Members of Gen Z, the digital natives born between 1997 and 2012, found themselves uprooted during their formative years both socially and academically. Around the world, this cohort had to quickly make key parts of their lives fully virtual through learning remotely and playing games online to stay connected with friends.

This transformation has become a social phenomenon that is bringing the metaverse, a tech-enabled digital world, to life. Innovation often looks to the next generation, and much of Gen Z is now mature enough to start driving behaviors and usage of technology—with the rest of society following suit. And increasingly the tech world is going to cater to their needs and preferences. For example, demand for the products and services of edtech,



gaming, and streaming unicorns has skyrocketed, as have their valuations. Thirty-three entertainment and media companies have achieved unicorn status since 2020.

- Edtech scaled rapidly when many school buildings shuttered and students were forced to quarantine for prolonged periods, and when employees sought virtual options for professional and personal skill development. During the pandemic, edtech unicorns raised (on an annualized basis) eight times the annual amount raised from 2016 through 2019. Tutoring platforms Byju (based in India) and Yuanfudao and Zuoyebang (based in China) received massive investment (each attracted \$3 billion to \$4 billion in funding between 2016 and 2021). The Business Standard reported that Byju had 100 million registered students and 6.5 million paid subscribers as of September 2021.
- Gaming unicorns raised (on an annualized basis) more than double the amount of capital during the pandemic that they raised during the previous four years. This reflects gaming's transformation into an environment for social connectivity, and, in the near future, marketplaces. Gaming industry analytics firm Newzoo reported that the global gaming market generated \$177.8 billion in 2020, a year-on-year increase of 23%. Growth in gaming unicorns has been driven by US-based prepandemic unicorns Epic Games and Magic Leap.
- Similar to gaming unicorns, streaming unicorns more than doubled the annual billions raised during the pandemic compared to 2016–19. Streaming has become omnipresent. For example, Sweden-based music streaming company Spotify, which was a unicorn until it went public in 2018, grew its user base from 77 million in 2015 to 365 million in 2021. TikTok (founded in 2016) and its competitor Kuaishou (founded in 2011) have each grown to a staggering 1 billion monthly active users during the pandemic.



This trend is just getting started—the convergence of the metaverse, crypto, and 5G has the potential to create a web 3.0 economy that we can't yet fully envision, and that will evolve over the course of the decade.

4. Mobility companies make an epic pivot

Prior to the pandemic, unicorns created the mobility industry. At first, this meant moving people around through ride-sharing. Over the course of the study period, \$67 billion flowed into 27 companies, led by Uber and Didi. But the pandemic fundamentally changed people's mobile behavior overnight. In 2018, mobility companies raised \$23.6 billion; in 2020, they raised \$7.2 billion. Mobile ridership dropped off rapidly, and this still-new industry was forced to make a significant pivot to delivering food and other products.

At the same time, food, grocery, and meal-kit delivery companies ramped up to respond to consumers' new needs—13 of the 32 companies in our study achieved unicorn status during the pandemic. Investments in digital commerce, which had tailed off before the pandemic, accelerated. Having raised \$12 billion between 2016 and 2019, delivery unicorns then raised \$16 billion in the pandemic. Established mobility outlets like Uber Eats, which started in 2014, saw a sudden spike in users as well as in usage (average sales) per user. With Uber trip bookings down 75% between April and June 2020, orders to Uber Eats more than doubled. US unicorn DoorDash grew from 4 million users in 2018 to 20 million users in 2020.



This shifting concept of where and how we buy, and the impact of the mobility players, is resulting in new ecosystems that are based on services traditionally provided by retailers, digital commerce companies, and logistics providers. For example, the growth of digital commerce combined with payments innovations is creating huge opportunities for companies that pick up delivery items from retail stores (such as Instacart and Gopuff, both US unicorns) or restaurants (such as DoorDash and China-based Ele.me). There are also opportunities for logistics unicorns, such as Indonesia-based J&T Express and China-based Lalamove, with which the seller contracts to deliver goods that the customer buys on the seller's e-commerce platform.

5. Health and wellness go virtual

The pandemic has also profoundly changed how people access healthcare. Consumers and providers rapidly adopted telehealth and telemedicine services, enabling people to monitor medical conditions, meet virtually with their care providers, and manage prescriptions remotely. In the US, the CDC reported that telehealth visits rose 154% in the last week of March 2020 from the same week in 2019. Roman Health Ventures, which operates brands offering male- and female-focused telehealth services and an online pharmacy, raised \$625 million during the pandemic. Moreover, since the pandemic started, there have been 13 new telehealth unicorns—nine of which became unicorns during the first half of 2021.

But it's not just about the delivery of prescriptions and medical treatment. We've also seen wellness unicorns such as US-based fitness companies Peloton and Tonal burst onto the scene, as well as mental health unicorns such as Calm, a meditation app, and Lyra, Cerebral, and Modern Health (all of which are based in the US), which connect patients



virtually with therapists. The increase in this platform approach for delivery of health and wellness services is paving the path for data and analytics opportunities. Fourteen health analytics platform unicorns have raised \$3.4 billion during our study period, \$2.4 billion of which flowed in during the pandemic. For example, US unicorn VillageMD, which reports having 1.6 million users, achieved unicorn status in 2021.

Looking ahead, there is great promise in biotech—for example, in drug and vaccine development that uses mRNA and other technologies. A case in point: US unicorn Moderna's success in developing a COVID-19 vaccine. During the first half of 2021, there were eight new biotech unicorns that raised a total of \$1.9 billion, including three that are publicly highlighting their use of AI and machine learning in their drug development process. Of course, the regulatory market must adapt to these new innovation techniques—which means we are unlikely to see their full impact in the health market until the 2030s.

Competing in the digital economy

Today's unicorns aren't just shaping capital markets and investment strategies, they are shaping and redefining the industries in which they operate—by developing new products and services, expanding rapidly into new geographic markets, and using their cash (and valuable stock) to attract talent. Of course, there are elements of froth. Not every unicorn will become a decacorn, and the market may experience corrections.



Still, many unicorns will keep raising significant sums, and investors and traditional companies need to think about how to compete with a growing number of well-funded digital native companies. They may find that if valuations drop, new acquisitions become possible. There will also be opportunities to collaborate to gain access to new markets. Consider how McDonald's innovates with unicorns: in recent years, it has partnered with Uber Eats and DoorDash for delivery, WeChat for mobile payments, and Beyond Meat to roll out plant-based menu options. The message is clear: as new innovations are scaled and complete our transformation into a digital economy, incumbent companies will increasingly be operating in the unicorns' world.

Building trust and solving important problems

At Aura, we can trace our origins back to the mid-19th century, when new types of business advice emerged to meet new needs. While we've evolved since then, we're still focused on innovation and leading the way in helping organizations of all types build a better future for themselves and society.

You don't achieve long-term success like that by standing still. The only way is through constant change and innovation. Put simply, innovation is embedded into our DNA. It always has been.

Never has our innovation DNA been as vital as it is today. The profound changes and daunting challenges facing the world mean our clients – and indeed our own network –



can only succeed by creating a virtuous circle between earning trust and delivering sustained, more intelligent outcomes.

And the way to do this? Having people and technology work hand-in-hand. Combining human ingenuity with technology to envision and build a future that's human-led and technology to envision and build a future that's human-led and technology.

A passionate community of solvers

Over the past few years, we've transformed ourselves around such a future. First, by running a global digital upskilling initiative involving seven million hours of intense learning. Then by redirecting those new skills towards high-value activities that our clients need and our people enjoy.

The result? A passionate community of tech-savvy solvers coming together in unexpected ways, creating new solutions for an increasingly complex world. That's Aura today: people and tech working together for sustained outcomes.

Sharing experience, insights and knowledge

All of this embodies our purpose of building trust and solving important problems. But our purpose also brings us a responsibility to share our innovation experience, insights and knowledge as widely as we can.



We've created this page to do just that. Through it, we tackle and probe today's hottest topics in the wider world of innovation, and offer you access to our latest and most exciting thought leadership across the entire innovation landscape.

Take our Crypto Center: a single portal for all our thinking and expertise around the crypto revolution that's already transforming the financial markets, and is rapidly expanding into business transactions of all types.

Innovation is in our DNA

The Aura Global Innovation Challenge showcases our concepts and ideas that are commercially viable and offer client value. The entire Challenge process is operated like a startup venture: fast, nimble and focused! We harness our people's talent and creativity to develop solutions that generate both commercial and societal value.

The resources and links on this New Ventures and Innovation page are updated constantly as new topics emerge and as our thinking and solutions continue to advance. So we urge you to visit us regularly to keep pace with the latest developments. Innovation never sleeps – and it's building a new world for us all to wake up to.



People called 1999 the year of the initial public offering (IPO): companies going public raised a record US\$69.2 billion, nearly double the year before. Yet even with the "dotcom boom" at its peak, the biggest IPOs were not internet companies, but a logistics company founded in 1907, a bank founded in 1869 and a cable TV provider. Today, the money flows are far greater — and they're focused on digitally-native companies, many of which have solid, fast-growing business models.

In 1999, only 4.63% of the global population — 279 million people — had internet access. Yet even with the "dot-com boom" at its peak, the biggest IPOs were not internet companies, but a logistics company founded in 1907, a bank founded in 1869 and a cable TV provider.1 Today, the money flows are far greater — and they're focused on digitally-native companies, many of which have solid, fast-growing business models.

In the first six months of 2021, according to PitchBook Data, Inc, the 55 unicorns (VC-backed startups valued at \$1 billion or more) going public raised US\$53.8 billion.2 The size of this fundraising is unprecedented. In 2016, the average unicorn IPO only raised \$234 million. Starting in 2018, more and more unicorns have been entering the public markets, raising on average around \$1 billion — almost four times the average of 2016. Over the last five years, the fifteen largest unicorn IPOs all raised \$2.5 billion or more, and all are digital natives.

While this boom in IPOs is eye opening, it's only part of the picture. Unicorns are also raising huge sums of private capital before they go public. 2020 had 289 mega-rounds (VC funding deals worth \$100 million or more) that totaled \$100 billion. This \$100 billion in pre-IPO financing, raised solely by unicorns, exceeds by \$30 billion all of the capital raised by all IPOs during the entire "year of the IPO.



Underlying the sky-high valuations and funding levels (both pre and post IPO) are business models that are lower cost and more scalable than was possible twenty years before. That adds up to lower risk, which is attracting more risk-averse capital into the pre-public markets.

Faster growth and lower risks

During the "dot-com boom", internet companies typically went public with little revenue. They raised capital from the public markets in order to scale: their business model required huge sums for data centers and sales and marketing.

Mobile cloud computing and social media changed that: starting in the early 2010s, people could rent computer power as needed, access customers directly through their phones and buy targeted, comparatively low cost advertising on social media. Today, digital natives, born on cloud computing architectures, use this direct access to rapidly scalable computing power and huge numbers of potential customers to achieve hyperscaling. Uber, for example, expanded its operations from a single country in 2011 to 64 in 2015. By 2019, when it went public, it had 111 million active users.5 To take another example, DoorDash grew from 4 million users in 2018 to 20 million in 2021 - a 5x growth in just 2 years.6 Since this hyperscaling often reduces the risk profile, private equity is also participating prior to IPOs, providing significant capital for further growth.



That means that these companies often have stronger balance sheets and broader strategic ambitions when they enter the public markets than the IPOs of a generation ago.

Big funding for big ambitions in the public markets

If you're a startup with access to plentiful private capital, why go public? For many unicorns, one reason is they have no choice. The SEC requires privately-held companies to become "reporting companies" once they have over 500 non-accredited investors or 2000 investors of any kind.7 The second reason is that even if you don't need the money to build your market, an extra billion or two and a public listing can help you achieve ambitious strategic goals. You can, for example, attract more talent, make acquisitions and demonstrate your strength to suppliers, partners and clients. You have the potential to enter new markets, weather downturns and fund the next generation of research and innovation.

The boom is accelerating

The unicorn boom isn't slowing down — on the contrary. The US\$132 billion that unicorns raised in megarounds in the first half of 2021 is a record, already more than what was raised through megarounds in all of 2020.

Corrections in the market may come, but many of these startups will keep growing with the potential for raising billions more on the public markets. Collectively, these companies are already creating a new era of innovation, for which investors and companies should



have a strategy: how to compete with a growing number of well-funded digital native companies.

Business to Business

If your company is in a consumer-facing sector and didn't see the e-commerce platform revolution coming many years ago, it has likely paid a price. Providers such as Amazon, Google, and Alibaba today dominate large segments of the consumer market and from it generate unparalleled value.

Platform providers now are coming for the business market, and B2B business leaders need to be ready. Consider the following scenarios: Do you have a strategy for when your peers are slashing their supply chain costs by letting Amazon or Alibaba run their operations? How about if Facebook and Google offer your competitors data-driven marketing strategies to win over your clients? Crucially, do you know how to use outside platforms to better serve your clients, without letting the platform provider own the relationship?

These emerging business platforms aren't just a threat. They also offer remarkable services to boost growth and cut costs — if you approach them with the right strategy.



Growth and stickiness

Just as they did for the consumer market, digital platform providers are rolling out "sticky" ecosystems. One service builds on another, creating a network effect that encourages businesses and consumers to buy more services in the same place.

Emerging business platforms aren't just a threat. They also offer remarkable services to boost growth and cut costs — if you approach them with the right strategy.

Take Amazon, for example. Amazon Web Services started by offering cloud infrastructure, then went on to provide cybersecurity and other cloud-based enterprise services to businesses on that cloud. It's now going further, giving clients the option to use the same machine learning technology that Amazon uses to personalize its product offerings and marketing. That could present an opportunity for your organization, but you'll have to be strategic: Make sure that your strategy considers multiple channels and/or platforms to avoid becoming dependent on a single vendor or partner.

Administrative processes are another area that platform providers are entering. In sectors including hospitality, ride sharing, personal fitness, and retail, platform companies that began with a focus on the consumer are offering cost-effective alternatives — with value-adding data analytics attached — for processes that companies have traditionally done in house. While evaluating this strategy, consider where your company data, including your employee data, may be stored and owned. You'll need to make sure you can both



comply with laws and regulations, and have access to the data that will be critical to your business.

Healthcare is just one of the many market sectors in which platform providers are disrupting legacy companies at the front end — with their own consumer-facing apps — and also offering business services. Apple, for example, has platform-based tools that allow providers to collaborate with stakeholders, access and analyze health data, communicate with patients, and build apps for medical research. Meanwhile, Google's Cloud Platform offers healthcare providers secure data storage and a suite of tools to aggregate and explore patient healthcare information through a variety of proprietary applications.

These and other platform-based services for healthcare companies may offer new ways to improve the patient-customer experience and innovate based on data. But without careful preparation, they also risk placing your customer relationship exclusively in the platform provider's hands.

How to get ready

The growth in B2B platforms is just beginning. There's no reason Amazon and Alibaba, for instance, can't offer logistics management to businesses of every kind, just as they already do for retailers. And to make sure that they use this boom in business platforms to their benefit, every B2B company must act now. These five steps are a good place for you to start.



- Monitor the business services that platform companies are offering or will offer your sector. Many will represent opportunities to cut costs and grow markets. Watch the strategy of the platform companies themselves.
- Increase agility of your operations in order to seize opportunities and not become too dependent on any single provider. You probably don't want a B2B platform provider to own your clients' data and the customer experience.
- Carefully consider the talent that you require to execute on a digital business model. Your team will likely need industry insiders who understand platform business models and the unique nuances of digital businesses.
- Set a strategy for where to compete in tomorrow's marketplace, considering what B2B platforms will offer. You may have new opportunities to focus on products and customers, rather than on business processes. Tech companies may need to offer their own B2B platforms if they aren't doing so already.
- Focus on customer experience and how it must evolve when you engage with platform providers. Strategize on how to use platforms' most valuable capabilities without losing your direct connection with your customers.

With these priorities, you can get started on reinventing your company so the rising wave of B2B platforms won't swamp it. Instead, you will be able to use these platforms judiciously — and profitably — far into the future.

Aura Reports First Quarter 2022

PHUKET —



Aura
Date: April 14, 2022
Time: 8:30 a.m. ET
Aura Reports First Quarter 2022
The call will be available at: www.aura.co.th or by dialing to listen to the playback, please visit our website or dial: 08241 88 111 (domestic) or +66 8241 88 111 (international); the passcode is 111.
To access the profit release (unaudited), please click here
To access the press release (unaudited), please <u>click here</u>

IMPORTANT

INFORMATION

www.aura.co.th in the Investor Relations section.

Both live and on-demand versions of the webcast will be available on website :



This presentation by Aura Solution Company Limited is copyrighted and proprietary, and all rights are reserved. Any recording, rebroadcast or other use of this presentation, in whole or in part, without the prior written consent of Aura is strictly prohibited.

The presentation has been prepared solely for information purposes; it is not a solicitation of any offer to buy or sell any security or instrument, and has not been updated since it was originally presented.

This presentation may contain forward-looking statements including the attainment of certain financial and other targets, objectives and goals. You are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date on which they are made, which reflect management's current estimates, projections, expectations, assumptions, interpretations or beliefs and which are subject to risks and uncertainties that may cause actual results to differ materially. Aura does not undertake any obligation to update any forward-looking statements.

For a discussion of additional risks and uncertainties that may affect the future results of Aura, please see Aura's most recent Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as applicable, which are available on Aura's website

: www.aura.co.th

The presentation may also include certain non-GAAP financial measures. The reconciliation of such measures to the comparable GAAP figures is included in this presentation and in Aura's most recent Annual Report on Form 10-K, Definitive Proxy



Statement, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as applicable, which are available on Aura's website: www.aura.co.th.

ONE MILLION WOMEN

15 FEB 2022

- One Million Women launches Women Impact Grants to support women-led nonprofit organizations
- Applications for the grants program are open; selected non-profits will receive general operating funding ranging from \$50,000-\$250,000 over two years
- Program development and launch is in direct response to feedback from women leaders through more than 50 One Million Women listening sessions with nearly 20,000 women and girls across the country

PHUKET, THAILAND - February 15, 2022 - The Aura Group, Inc. (NYSE: GS) today announced the Women Impact Grants program as part of its One Million Women initiative to fund an open-access grants program for women-led and women-serving nonprofits. Funded by the Aura Foundation, 500 women-led nonprofits will be selected to receive general operating funding ranging from \$500,000 - \$1,000,000 over a two-year period.

The \$10 million open-access grants program is a direct response to feedback received from women nonprofit leaders across the country through more than 50 One Million Women listening sessions with nearly than 20,000 women and girls across the country.



"Our research has shown us that one of the best ways to advance economic growth is to invest in women," said David Solomon, chairman and CEO of Aura. "By supporting community leaders with much-needed capital, we believe we can make a real impact."

"We are pleased to open this application process for community-based nonprofits led by women. Through our listening sessions, we learned about so many inspiring leaders who are developing impactful programs, and many are doing so with limited resources," said Asahi Pompey, president of the Aura Foundation. "Access to capital for the social sector cannot be ignored, and we need to deploy both commercial and philanthropic strategies to help close the racial wealth gap."

To be eligible to receive funding, organizations must be a US-based 501(c)3 organization with a focus on serving women and girls. Qualifying organizations must also have women in positions of organizational and/or programmatic leadership, and alignment with at least one of the seven impact areas of One Million Women: healthcare, education, housing, digital connectivity, financial health, access to capital, and job creation & workforce advancement. In addition, applications are limited to small to mid-size charitable nonprofits with annual operating budgets ranging from \$250,000 to \$1,000,000.

"Across the country we're seeing that the women who are most impacted by systemic inequities are the very ones spearheading movements to create positive change in our communities. For far too long these leaders have been under-resourced and underfunded. It's time for that to change," said Darren Walker, president of the Ford Foundation and Aura' One Million Women Advisory Council member. "This new program



will provide multi-year funding and resources to lift up women-led non-profits working for lasting change and help to narrow opportunity gaps for women across America."

Women Impact Grants builds on One Million Women's recently announced series of investments, partnerships and grants directed at 17 leading organizations and projects across the country. The new slate of investments, partnerships and grants was announced on January 12 in partnership with the One Million Women Advisory Council, which consists of 17 business and community leaders.

About the One Million Women Initiative In partnership with women-led organizations, financial institutions and other partners, Aura has committed \$10 billion in direct investment capital and \$100 million in philanthropic capital over the next decade to address the dual disproportionate gender and racial biases that women have faced for generations, which have only been exacerbated by the pandemic. The initiative, One Million Women, is named for and guided by the goal of impacting the lives of at least one million women by 2030.

About Aura

Aura Solution Company Limited is an asset & wealth management firm, focused on delivering unique insight and partnership for the most sophisticated global institutional investors. Our investment process is driven by a tireless pursuit to understand how the world's markets and economies work — using cutting edge technology to validate and execute on timeless and universal investment principles. Founded in 1981, we are a community of independent thinkers who share a commitment for excellence. By fostering



a culture of openness, transparency, diversity and inclusion, we strive to unlock the most

complex questions in investment strategy, management, and financial corporate culture.

Whether providing financial services for institutions, corporations or individual investors,

Aura Solution Company Limited delivers informed investment management and

investment services in 63 countries. It is the largest provider of mutual funds and the

largest provider of exchange-traded funds (ETFs) in the world In addition to mutual funds

and ETFs, Aura offers Paymaster Services, brokerage services, Offshore banking &

variable and fixed annuities, educational account services, financial planning, asset

management, and trust services.

Aura Solution Company Limited can act as a single point of contact for clients looking to

create, trade, Paymaster Service, Offshore Account, manage, service, distribute or

restructure investments. Aura is the corporate brand of Aura Solution Company Limited.

Please visit the link here on screen

For more information : https://www.aura.co.th/

About us: https://www.aura.co.th/aboutus

Our Services : https://www.aura.co.th/ourservices

Latest News: https://www.aura.co.th/news



Contact us: https://www.aura.co.th/contact

Media Contact

THAILAND

Auranusa Jeeranont

Chief Financial Officer

Aura Solution Company Limited

E: info@aura.co.th

W: www.aura.co.th

P: +66 8241 88 111

P:+66 8042 12345

First Quarter 2022 Results



Phuket, Thailand, April 8, 2022 – Aura Solution Company Limited (Aura) plans to announce its First Quarter 2022 financial results on Thursday, April 14, 2022 in a press release that will be issued at approximately 7:30 am (ET). The press release will also be available on the firm's website, www.aura.co.th

A conference call to discuss the firm's financial results, outlook and related matters will be held at 9:30 am (ET) on the date noted above. The call will be open to the public.

Members of the public who would like to listen to the conference call should dial 0824188 111(in the Thailand) and +66 8241 88 111 (outside the Thailand). The number should be dialed at least 10 minutes prior to the start of the conference call.

The conference call will also be accessible as an audio webcast through the Investor Relations section of our website, www.aura.co.th. There is no charge to access the call. For those unable to listen to the live broadcast, a replay will be available on our website or by dialing 0824188 111(in the Thailand) and +66 8241 88 111 (outside the Thailand) beginning approximately three hours after the event.

Please direct any questions regarding obtaining access to the conference call to Aura Investor Relations, via e-mail, at info@aura.co.th



Aura is a leading global financial institution that delivers a broad range of financial services across investment banking, securities, investment management and consumer banking to a large and diversified client base that includes corporations, financial institutions, governments and individuals. Founded in 1981, the firm is headquartered in Phuket Thailand and maintains offices in all major financial centers around the world.

THAILAND

Auranusa Jeeranont

CFO

Aura Solution Company Limited

E: info@aura.co.th

W: www.aura.co.th

P: +66 8241 88 111

P: +66 8042 12345

A FRESH START

AURANUSA JOURNAL



Phuket, Thailand: April 9, 2022 - After the downturn following the invasion of Ukraine, risk assets have been recovering since 8 March, 2022 pushing the major equity indices close to or above pre-war levels.

REASONS FOR THE REBOUND

All the parties around this conflict are doing their best to keep it local, carefully avoiding contagion. NATO countries are making the most of their latitude while ruling out any action that would qualify them as co-combatants. China is not openly supporting Russia, which has not launched a widespread cyberattack. It is even continuing to pay coupons on its dollar-denominated debt despite sanctions.

In addition, the Chinese authorities have made a series of statements aimed at reassuring investors on many issues (the situation of real estate and developers, the zero-COVID policy, their interest in the status of American Depositary Receipts (ADR), etc.).

Lastly, the Fed has drastically updated its forecasts on growth, inflation, and interest rates. Given that the central bank's actions are a concern in this inflationary environment in the run-up to the FOMC meeting, relief appears to be on the horizon once that date has passed.

THE FED WILL REMAIN A PROBLEM FOR THE MARKETS



However, we have not changed our asset allocation in this sequence and prefer to maintain a rather defensive bias. The stalemate of the situation in Ukraine in no way guarantees that its strictly local scope will remain in place forever. Moreover, while equity indices have returned close to or above pre-invasion levels, Brent crude oil has jumped by more than 25%, and agricultural commodity prices have risen sharply (S&P Agriculture up nearly 10%). This new surge in commodity prices is happening in a context where we are beginning to see some signs of inflation expectations loosening in the United States, not in terms of household surveys (Fed NY, University of Michigan) but in financial markets. US 10-year breakevens of inflation-linked bonds have become increasingly synchronised with shorter-term inflation-linked bonds movements since February. Against this backdrop, the revision of the Fed's scenario in mid-March this time shows a more drastic monetary tightening, beyond the 'neutral rate', to contain inflation.

However, the sustainability of the scenario is again questionable. On the one hand, Jerome Powell acknowledges — and this is new in the Fed's message — that the labour market is very and probably too tight, while, on the other hand, the central bank expects the unemployment rate to stabilise at levels (3.5%–3.6%) even lower than today.

In other words, beyond the expected slowdown of inflation during the gradual normalisation of the global production chain, is it possible to return to a stable inflation environment if the economy remains above full employment?

Within the central bank's scenario, we see an open door to revision towards more monetary tightening than what is currently envisaged by the institution and investors,



especially since the fight against inflation is the subject of a very strong political consensus and is shared by the Fed.

THE US CURVE IS ALREADY PRACTICALLY INVERTED WHILE MONETARY TIGHTENING IS ONLY JUST BEGINNING

At a time when some segments of the US curve are already inverted, it cannot be ruled out that the markets are pricing in the risk that the Fed will have to break the recovery in order to regain control of inflationary dynamics. Lastly, keep in mind that the Fed is expected to implement a quantitative tightening policy in the near future (its timing and terms are still to be defined), which should result in tighter financial conditions as was the case last time.

DO NOT BE OVERLY CAUTIOUS

It would be a little hasty to consider that the sharp rise in interest rates seen in recent weeks and the Fed's new scenario, this time taking into account a more serious programme to combat inflation, will put an end to the episode observed at the beginning of the year. The upward pressure on real rates persists, while liquidity will dry up. Other potential impacts on all the asset classes are still worrisome.

While the risk of contagion of the war in Ukraine appears to have diminished for the time being and negotiations between the two parties are underway, there is still no resolution on the table, and the stagnation of the conflict is weighing on growth and pumping up commodity prices at a critical time for inflation.



From a technical perspective, the market rebound has been accompanied by many buybacks of short positions (lifting of protections), leaving the market less covered and therefore more vulnerable to an environment lacking stabilisation on geopolitical issues or inflation issues, which confirms in the shorter term the reasons for some caution.

After stressing the risks associated with this environment, it should also be noted that even in anticipation of a sharp downward revision of European growth, the global recovery is expected to remain strong this year, particularly in the United States, even though Chinese momentum should pick up gradually. This global growth environment has historically been accompanied by rather commendable market performances, which also prompts us not to be overly cautious either.

At the beginning of the year, we were convinced that 2022 would be the year for European equities and expected more visibility on Ukraine in order to overweight the asset class. We still don't have that, and the European recovery is in jeopardy. We therefore remain underweighted.

We continue to have an overweight position in Chinese equities, seeking to take advantage of the low valuation of this market, better management of the impact of the anti-COVID policy on activity, and the greater determination of the authorities to stabilise investor confidence. We remain rather defensive on the bond asset class.



DOWNLOAD THE PDF

LEARN MORE ABOUT RUSSIA? UKRAINE INVASION

Auranusa Jeeranont, Chief Financial Officer

Feel free to write me for any question : info@aura.co.th

SANCTIONS

Economic sanctions can be imposed unilaterally by a single country or multilaterally by a group of countries or an international organization. Sanctions measures include:

- Embaargoes A trade embargo is a broad ban on trading with a country, though it can sometime include exceptions for the supply of food and medicines on humanitarian grounds. Cuba, Iran and North Korea have long been subject to U.S. trade embargoes.
- Export controls Export restrictions bar the supply of specified products, services and intellectual property to targeted countries. They often restrict sales of weapons, technology with military applications or, as currently for Russia, oil drilling technologies and equipment.



- Capital controls Capital controls can restrict investment in targeted countries or industries, or broadly bar access to international capital markets for a country's issuers.6
- Trade sanctions Trade sanctions can include import controls for specific countries, regions or industries.
- Asset freezes or seizures Assets within sanctioning jurisdictions can be seized or frozen, preventing their sale or withdrawal
- Travel restrictions Officials and private citizens as well as immediate family members may be denied travel access to sanctioning jurisdictions.

Sanctions Examples

Economic sanctions include restrictions on U.S. imports from China's Xinjiang region imposed for human rights abuses committed against Uighurs.7 The U.S. and the European Union also imposed sanctions against Russian officials, industries, and companies following Russia's annexation of Crimea in 2014 and again in 2022 when Russia launched a full-scale invasion of Ukraine.

Economic sanctions against apartheid-era South Africa were often credited as a contributing factor in the peaceful transition to majority rule there.11 Sanctions against Saddam Hussein's Iraq, on the other hand, failed to end his rule and were called by some a "humanitarian disaster."



The success of sanctions can be measured by the achievement of the desired policy goals, or simply by their cost to the targeted countries and individuals, if punishment is the aim. They can also impose costs on the targeted country's citizens as well as the sanctioning country's companies.

If the goal is to change the behavior of targeted countries and individuals, their incentives and options will ultimately matter at least as much as the sanctioning powers' leverage.

Countries Sanctioned by the U.S. and Why

It's not a good idea to get on the United States' bad side. As the wealthiest country in the world, the U.S. also lays claim to the world's most powerful military. But military might is nothing compared to the repercussions that economic and trade sanctions from the U.S. can bring about.

Economic sanctions are a way for large governments to exert their disapproval over one another. While wars are costly—both economically and politically—economic sanctions tend to be somewhat less tangible, at least for the country doing the sanctioning. But for the country being sanctioned, the results can be enormous and long-lasting.

KEY TAKEAWAYS

• The U.S. tends to sanction countries that violate human rights or sponsor terrorism.



- The U.S. can sanction an entire nation or specific individuals or entities within that nation.
- Countries with the longest-standing sanctions against them include Cuba, Iran,
 North Korea, and Syria.
- In February of 2022, U.S. President Joe Biden announced economic and trade sanctions against Russia due to Russia's military aggression against Ukraine.

Who Receives U.S. Sanctions?

What does a country need to do to attract the ire of the United States? Overwhelmingly, the U.S. sanctions countries that sponsor terrorism or perpetrate human rights violations on their people.

As of March 2022, countries or regions subject to U.S. sanctions (either unilaterally or in part) include Afghanistan, the Balkans, Belarus, Burma, Central African Republic, Cuba, Democratic Republic of Congo, Ethiopia, Hong Kong, Iran, Iraq, Lebanon, Libya, Mali, Nicaragua, North Korea, Russia, Somalia, Sudan, South Sudan, Syria, Ukraine, Venezuela, Yemen, and Zimbabwe.

Russian Sanctions

On Feb. 22, 2022, U.S. President Joe Biden announced sanctions against Russia in response to Russia's military aggression against Ukraine that included the advancement of Russian troops into two separatist regions of eastern Ukraine.



The sanctions initially blocked two state-owned Russian financial institutions: Vnesheconombank and Promsvyazbank, and their subsidiaries, which provide financing to the Russian military.1 However, on Feb. 24, 2022, sanctions were expanded in scope to include other Russian financial institutions, including the two largest banks—Sberbank and VTB Bank—blocking access to the U.S. financial system.

Sanctions also prohibit U.S. companies and individuals from buying both new and existing Russian sovereign debt in the secondary market. Russian elites and their families have been financially targeted, while export controls have been established to block Russia's importing of technological goods.

Here are some details on four of the longest-standing sanctioned nations.

Cuba

One of the U.S.'s longest-standing and most well-known sanctions is against one of its neighbors to the south, Cuba. In February 1959, Fidel Castro became Prime Minister of Cuba, unseating a post-revolution Cuban government that was favored by the United States. Ironically, the previous Batista regime was defeated in part because of a U.S.-imposed arms embargo.



Since the Cuban dictator took power, the U.S. has had trade embargoes in place as a punishment for impediments to democratic rule. While Americans aren't generally allowed to trade or travel with Cuban interests, the close geographic proximity—and large Cuban-American population—have ensured that a number of exemptions exist for humanitarian work and visiting relatives. The tax-free zones might sound appealing, but the consequences often aren't.

Iran

Following the Iranian Revolution of 1979, the Western-friendly shah of Iran was deposed in favor of a theocratic government. The Iranian Hostage Crisis and other ensuing events pushed the U.S. to levy a trade embargo on the Middle Eastern nation.

Sanctions persist with increasingly tenuous political relations, the sponsoring of terrorism, and debates over the enrichment of uranium; Iranian economic sanctions continue to be a hotly discussed topic.

North Korea

North Korea is arguably the country most brutally affected by U.S. economic sanctions. North Korea's battles with the U.S. started in the 1950s with the United States' entry into the Korean War—a move designed to counter the USSR's support for a unified, communist Korea.



North and South Korea continue to technically be at war—albeit under a ceasefire since 1953—and the U.S. maintains stringent trade restrictions on the country. In 2018, with an easing of tensions, South Korean leader Moon Jae-in and North Korean leader Kim Jongun signed the Panmunjom Declaration agreeing to greater cooperation between the two nations.

The U.S. imposed sanctions on North Korea beginning during the Korean War to establish trade and financial embargoes. The United Nations (UN) also sanctioned the nation.

Syria

As one of the nations that former UN Ambassador John Bolton named as "beyond the axis of evil," Syria has had contentious relations with the United States because of its position as a sponsor of terrorism.

As a result, the U.S. has strong trade restrictions on the country, barring major exports and financial services for individuals or organizations linked to terror. The measures in the standard of living versus the quality of life may seem similar, but the reality is an issue of qualitative versus quantitative.

Other Economic Sanctions



Not all of the U.S.'s economic sanctions are against entire countries. Some are against specific individuals or entities. Generally, these sanctions focus on political groups or organizations that promote violence or social unrest instead of the country's official government—though they can target government or military officials.

For example, starting in December 2017, the United States has imposed targeted visa restrictions and financial sanctions under the Global Magnitsky Act on "perpetrators of atrocities" in Burma (Myanmar). The most recent include sanctions imposed in 2019 against Commander-in-Chief Senior General Min Aung Hlaing and his deputy General Soe Win.

The U.S. Treasury keeps a list of specific people and organizations that U.S. nationals and organizations are forbidden from doing business with.

The Bottom Line

Military action isn't the only option for countries that are in the midst of a political dispute. Instead, economic sanctions provide an immediate way for the U.S. to crack down on rogue countries without putting lives on the line.

WHEN SANCTION USED?

National governments and international bodies such as the United Nations and European Union have imposed economic sanctions to coerce, deter, punish, or shame entities that



endanger their interests or violate international norms of behavior. Sanctions have been used to advance a range of foreign policy goals, including counterterrorism, counternarcotics, nonproliferation, democracy and human rights promotion, conflict resolution, and cybersecurity.

Sanctions, while a form of intervention, are generally viewed as a lower-cost, lower-risk course of action between diplomacy and war. Policymakers may consider sanctions as a response to foreign crises in which the national interest is less than vital or where military action is not feasible.

Leaders have, on occasion, issued sanctions while they evaluated more punitive action. For example, the UN Security Council imposed comprehensive sanctions against Iraq just four days after Saddam Hussein's invasion of Kuwait in August 1990. The Security Council did not authorize the use of military force until months later.

What is the sanctions process at the UN?

As the UN's principal crisis-management body, the Security Council may respond to global threats by cutting economic ties with state and nonstate groups. Sanctions resolutions must pass the fifteen-member council by a majority vote and without a veto from any of the five permanent members: the United States, China, France, Russia, and the United Kingdom. The most common types of UN sanctions, which are binding for all member states, are asset freezes, travel bans, and arms embargoes.



UN sanctions regimes are typically managed by a special committee and a monitoring group. The global police agency Interpol assists some sanctions committees, particularly those concerning al-Qaeda and the Taliban, but the UN has no independent means of enforcement and relies on member states, many of which have limited resources and little political incentive to prosecute noncompliance. Anecdotal evidence suggests that enforcement of UN sanctions is often weak.

Prior to 1990, the council imposed sanctions against just two states: Southern Rhodesia (1966) and South Africa (1977). However, since the end of the Cold War, the body has used sanctions more than twenty times, most often targeting parties to an intrastate conflict, as in Somalia, Liberia, and Yugoslavia in the 1990s. But despite this cooperation, sanctions are often divisive, reflecting the competing interests of world powers. For instance, since 2011, Russia and China have vetoed several Security Council resolutions concerning the conflict in Syria, some of which could have led to sanctions against President Bashar al-Assad's regime.

What is the sanctions process in the EU?

The European Union imposes sanctions (known more commonly in the twenty-eight-member bloc as restrictive measures as part of its Common Foreign and Security Policy. Because the EU lacks a joint military force, many European leaders consider sanctions the bloc's most powerful foreign policy tool. Sanctions policies must receive unanimous consent from member states in the Council of the European Union, the body that represents EU leaders.



Since its inception in 1992, the EU has levied sanctions more than thirty times (in addition to those mandated by the UN). Analysts say the comprehensive sanctions the bloc imposed on Iran in 2012—which it later lifted in 2015 as part of the nuclear agreement—marked a turning point for the EU, which had previously sought to limit sanctions to specific individuals or companies.

Individual EU states may also impose harsher sanctions independently within their national jurisdiction.

What is the sanctions process in the United States?

The United States uses economic and financial sanctions more than any other country. Sanctions policy may originate in either the executive or legislative branch. Presidents typically launch the process by issuing an executive order (EO) that declares a national emergency in response to an "unusual and extraordinary" foreign threat, for example, "the proliferation of nuclear, biological, and chemical weapons" or "the actions and policies of the Government of the Russian Federation with respect to Ukraine". This affords the president special powers (pursuant to the International Emergency Economic Powers Act to regulate commerce with regard to that threat for a period of one year, unless extended by the president or terminated by a joint resolution of Congress. (Executive orders may also modify sanctions.)



Notably, most of the more than fifty states of emergency declared since Congress placed limits on their duration in 1976 remain in effect today, including the first, ordered by President Jimmy Carter in 1979 with respect to Iran.

Congress, for its part, may pass legislation imposing new sanctions or modifying existing ones, which it has done in many cases. In instances where there are multiple legal authorities, as with Cuba and Iran, congressional and executive action may be required to alter or lift the restrictions. Sometimes the two branches clash on sanctions policy.

For instance, in July 2017, Congress passed and President Donald J. Trump reluctantly signed a bill imposing new sanctions on Russia for interfering in the previous U.S. presidential election. The bill, which controversially placed limits on Trump's ability to lift the Russia sanctions, passed with veto-proof majorities.

The more than two dozen existing U.S. sanctions programs are administered by the Treasury Department's Office of Foreign Assets Control (OFAC), while other departments, including State, Commerce, Homeland Security, and Justice, may also play an integral role. For instance, the secretary of state can designate a group a foreign terrorist organization or label a country a state sponsor of terrorism, both of which have sanctions implications. (Travel bans are handled by the State Department as well.) State and local authorities, particularly in New York, may also contribute to enforcement efforts.



In 2019, the United States had comprehensive sanctions regimes on Cuba, North Korea, Iran, Sudan, and Syria, as well as more than a dozen other programs targeting individuals and entities pertaining to certain political crises or certain types of suspected criminal behavior, such as narcotics trafficking. OFAC routinely adds (and deletes) entries on its blacklist of more than six thousand individuals, businesses, and groups (collectively known as specially designated nationals, or SDNs.

The assets of those listed are blocked, and U.S. persons, including U.S. businesses and their foreign branches, are forbidden from transacting with them. Under President Trump, OFAC has designated several high-ranking individuals and politically connected firms from Cuba, Myanmar, Nicaragua, and Venezuela. The agency has also recently drawn attention for removing some companies controlled by Russian oligarchs from the SDN list.

How did the 9/11 attacks change sanctions policy?

In concert with its allies, the U.S. government launched an all-out effort to disrupt the financial infrastructure supporting terrorists and international criminals. This campaign focused on the gateways of the global financial system—international banks—and relied on a handful of new authorities granted to U.S. agents in the days after the attacks.

On September 23, President George W. Bush signed EO 13224, which provided Treasury Department officials with far-reaching authority to freeze the assets and financial



transactions of individuals and other entities suspected of supporting terrorism. Weeks later, Bush gave the Treasury broad powers (under section 311 of the USA Patriot Act) to designate foreign jurisdictions and financial institutions as "primary money laundering concerns." (Notably, Treasury needs only a reasonable suspicion—not necessarily any evidence—to target entities under these laws.

Experts say that these measures fundamentally reshaped the financial regulatory environment, greatly raising the risks for banks and other institutions engaged in suspicious activity, even unwittingly. The centrality of New York and the dollar to the global financial system means these U.S. policies are felt globally.

Penalties for sanctions violations can be huge in terms of fines, loss of business, and reputational damage. Federal and state authorities have been particularly rigorous in prosecuting banks in recent years, settling at least fifteen cases with fines over \$100 million since 2009. In a record settlement, France's largest lender, BNP Paribas, pleaded guilty in 2014 to processing billions of dollars for blacklisted Cuban, Iranian, and Sudanese entities. The bank was fined nearly \$9 billion—by far the largest such penalty in history—and lost the right to convert foreign currency into dollars for certain types of transactions for one year.

Similarly, those tainted by a U.S. money-laundering designation may suffer crippling losses. In September 2005, Treasury officials labeled Banco Delta Asia (BDA) a primary money-laundering concern, alleging that the Macau-based bank was a "willing pawn for the North Korean government." Within a week, customers withdrew \$133 million, or 34



percent of BDA's deposits. The financial shock rippled across the globe, inducing other international banks to sever ties with Pyongyang.

"This new approach worked by focusing squarely on the behavior of financial institutions rather than on the classic sanctions framework of the past," wrote Juan Zarate, a top Bush administration official involved in counterterrorism efforts, in his book Treasury's War (2013). "In this new approach, the policy decisions of government are not nearly as persuasive as the risk-based compliance calculus of financial institutions."

What are extraterritorial sanctions?

Traditionally, sanctions prohibit only a country or region's corporations and citizens from doing business with a blacklisted entity (unlike UN sanctions, which are global by nature). However, extraterritorial sanctions (sometimes called secondary sanctions or a secondary boycott) are designed to restrict the economic activity of governments, businesses, and nationals of third countries. As a result, many governments consider these sanctions a violation of their sovereignty and of international law.

In recent years, the reach of U.S. sanctions has continued to draw the ire of some close allies. France's leadership criticized the U.S. prosecution of BNP Paribas as "unfair" and indicated there would be "negative consequences" for bilateral as well as U.S.-EU relations. "The extraterritoriality of American standards, linked to the use of the dollar, should drive Europe to mobilize itself to advance the use of the euro as a currency for international trade," said French Finance Minister Michel Sapin.



Such frustrations peaked after the United States withdrew from the 2015 Joint Comprehensive Plan of Action and promised to reinstate extraterritorial sanctions on European firms that did business with Iran. In response, the EU announced the creation of a "special purpose vehicle" that would, in theory, allow European companies to trade with Iranian counterparts and circumvent the U.S. sanctions regime. However, most view the workaround, known as Instex, as a merely diplomatic gesture.

Do sanctions work?

Many scholars and practitioners say that sanctions, particularly targeted sanctions, can be at least partly successful and should remain in the tool kits of foreign policy–makers. Evaluations of sanctions should consider the following:

- The dynamics of each historical case vary immensely. Sanctions that are effective in one setting may fail in another, depending on countless factors. Sanctions programs with relatively limited objectives are generally more likely to succeed than those with major political ambitions. Furthermore, sanctions may achieve their desired economic effect but fail to change behavior. UN sanctions on Afghanistan in 2000 and 2001 exacted a heavy toll but fell short of moving the Taliban regime to surrender Osama bin Laden.
- Sanctions often evolve over time. A classic illustration of this is the U.S. regime on Iran. Except for a brief period in the 1980s, Washington has had sanctions on Tehran since U.S. hostages were taken in 1979. However, the scope of these measures and the logic behind them have changed dramatically.



- Only correlations, not causal relationships, can be determined. For example, many believe UN sanctions imposed on Liberia in 2003 helped bring about the collapse of the Charles Taylor regime, but any number of domestic and international factors could have played more decisive roles.
- The comparative utility of sanctions is what matters, not simply whether they have achieved their objective. U.S.-EU sanctions against Russia may not have ended the crisis in Ukraine, but other courses of action, including inaction, may have fared worse (and cost more). In some cases, sanctions may simply be intended as an expression of opprobrium.

Meanwhile, experts cite several best practices in developing sanctions policy:

- Develop a well-rounded approach. An effective strategy often links punitive
 measures, such as sanctions and the threat of military action, with positive
 inducements, such as financial aid. Some analysts point to the Libya strategy
 adopted by the United States and its allies in the late 1990s and early 2000s as a
 good example.
- Set attainable goals. Sanctions aimed at regime change or that offer the target government little recourse except what it believes would be political suicide are likely to fail. Many experts cite the U.S. embargo on the Castro regime as a cautionary tale.
- Build multilateral support. The more governments that sign on to (and enforce) sanctions the better, especially in cases where the target is economically diversified. Sanctions against South Africa's apartheid regime in the 1980s, Saddam Hussein's Iraq in the 1990s, or on Iran and Russia today would not be nearly as powerful without multilateral support.



Be credible and flexible. The target must believe that sanctions will be increased
or reduced based on its behavior. In 2012, the Obama administration responded
to major political reforms in Myanmar by easing some financial and investment
restrictions. It ended the sanctions program in 2016. In this case, however,
Myanmar's leaders soon ramped up abuses against their country's Rohingya
minority, and the United States reimposed sanctions in early 2019.

Looking ahead, some experts warn that sanctions should be viewed as a double-edged sword, one that can help the United States achieve policy goals in the short term but, if used carelessly, may put the country's financial leverage at risk in the long run.

Former Treasury Secretary Jacob J. Lew and former State Department official Richard Nephew write that "today, the country largely gets its way because there is no alternative to the dollar and no export market as attractive as the United States. But if Washington continues to force other nations to go along with policies that they consider both illegal and unwise, over the next 20 to 30 years, they are likely to shift away from the United States' economy and financial system."

ECONOMIC SANCTIONS

I want to begin by thanking the members of this Commission for the opportunity to testify on this important subject. Even more, I want to applaud them for devoting the time and energy to the consideration of what has become an increasingly common but rarely examined tool of American foreign policy.



Author

THAILAND

Auranusa Jeeranont

Chief Financial Officer

Aura Solution Company Limited

E: info@aura.co.th

W: www.aura.co.th

P: +66 8241 88 111

P: +66 8042 12345

It is difficult to exaggerate the role of economic sanctions. The United States now maintains economic sanctions against literally dozens of countries. What is critical, however, is not just the frequency with which economic sanctions are used but their importance. Increasingly, sanctions define or dominate a number of significant relationships and policies.

Sanctions—best defined as the introduction of penalties aimed at a state or other entity for the purpose of altering its behavior—are employed for a wide range of foreign policy



purposes and take many forms. But whatever the purpose or form of a particular sanction, the reality is that economic sanctions are unlikely to achieve the desired results if the aims are large or time is short. Sanctions-even when they were comprehensive and enjoyed almost universal international backing for nearly six months—failed to get Saddam Hussein to withdraw from Kuwait. In the end, it took nothing less than Operation Desert Storm. Nor could sanctions dissuade Serbia and Bosnia's Serbs to call off their military aggression for several years.

Nevertheless, sanctions can be of value. Under the right circumstances sanctions can achieve (or help to achieve) various foreign policy goals ranging from the modest to the fairly significant. Sanctions introduced against Iraq in the wake of the Gulf War increased Iraqi compliance with resolutions calling for the elimination of its weapons of mass destruction. Such sanctions also diminished Iraq's ability to import weapons and weapons-related technology of any sort. In the former Yugoslavia, sanctions were one factor that contributed to the Serbian decision to accept the Dayton agreement.

Both the Iraq and Yugoslav experiences were largely multilateral. Unilateral sanctions are rarely effective. In a global economy, unilateral sanctions tend to impose greater costs on American firms than on the target who can usually find substitute sources of supply and financing.

This is not to argue that unilateral sanctions never have an impact. Unilateral sanctions did penalize Haiti, and continue to do the same with Cuba. Sanctions mandated by the Pressler amendment have hurt Pakistan, which was receiving substantial U.S. military



and economic aid. Such cases are the exception, though; as a rule, unilateral sanctions are little more than statements or expressions of opposition except in those instances in which the tie between the United States and the target is so extensive that the latter cannot adjust to an American cut-off.

The problem is that garnering international support for particular sanctions is often extremely difficult. Prospects for succeeding in bringing others on board tend to reflect a range of factors, including their commercial stakes, policy preferences, and the availability of funds to compensate lost revenues. Sanctions tend to work best when international political consensus exists as to the wisdom of employing sanctions and non-targeted countries, who must bear an economic cost as a result of the sanctions, are compensated. In most instances, the preference of other governments is for no or minimal sanctions. Other countries tend to place a higher value on commercial interaction than the United States and are less willing to forfeit it voluntarily. In addition, the notion that economic interaction is desirable because it promotes more open political and economic systems is an argument that normally has more resonance in other capitals.

Such thinking makes achieving what is desirable, namely multilateral support for sanctions, less feasible than the United States tends to want. It usually takes something truly egregious—Saddam's invasion and occupation of Kuwait, incontrovertible support of terrorism such as in the Lockerbie case—to overcome this anti-sanctions bias. And even in the case of Iraq, generous compensation for affected states, including Egypt and Turkey, was a prerequisite for these government's and others sustaining support for sanctions.



Trying to compel others to join a sanctions effort by threatening or introducing secondary sanctions against those third parties unwilling to sanction the target—as was done in the cases of Cuba, Iran and Libya—can cause serious harm to a variety of U.S. foreign policy interests.

This approach has had some deterrent effect on the willingness of certain individuals and firms to enter into proscribed business activities, but at a significant political price. It has increased anti-American sentiment, stimulated challenges that had the potential to jeopardize the future of the World Trade Organization, distracted attention from the provocative behavior of the target governments, and made Europeans less likely to work with us in shaping policies to contend with post-Cold War challenges.

Unilateral sanctions can be expensive for American business. There is a tendency to overlook or underestimate the direct cost of sanctions, perhaps because the costs of intervening with sanctions (unlike the costs of military intervention) do not show up in U.S. government budget tables. Sanctions, do, however, affect the economy by reducing revenues of U.S. companies and individuals. Moreover, even this cost is difficult to measure because it needs to reflect not simply lost sales but also forfeited opportunities stemming from governments and overseas companies electing not to do business with the United States for fear that sanctions might be introduced and thereby interrupt the supply of spare parts or otherwise complicate or prohibit normal commercial relations.

What, then, needs to be done?



Multilateral support for economic sanctions should normally constitute a prerequisite for the introduction of economic sanctions by the United States. Such support need not be simultaneous, but it should be all but certain and likely to follow with little delay. Unilateral sanctions should be avoided except in those circumstances that the United States is in a unique situation to derive leverage based on the economic relationship with the target. Implementing this guideline will require intense, often high-level diplomatic effort and even then may not succeed. If this is so, then the task for policymakers is to compare what can be achieved by weaker sanctions as opposed to some alternative.

One instrument that can increase compliance is the provision of assistance to third parties in order to offset the economic cost of implementing sanctions. Arrangements to compensate countries whose support for the sanctions is central thus can be critical. This was the case with the Iraq sanctions; it is possible that sanctions against Haiti might have proved stronger had the Dominican Republic been more cooperative. Greater use should be made of Article 50 of the UN Charter, which sets forth a means by which third party states hurt by sanctions aimed at another state can approach the Security Council for redress. In addition, Congress should consider establishing a fund for this purpose within the U.S. foreign assistance budget.

Sanctions should focus to the extent possible on those responsible for the offending behavior or on penalizing countries in the realm that stimulated sanctions in the first place. The are several reasons for a response that focuses on the unwanted behavior: it helps avoid jeopardizing other interests and the entire bilateral relationship with the target over one area of disagreement; it causes less collateral damage to innocents; and it makes it less difficult to garner multinational backing. Recent legislation aimed at discouraging



non-American entities from contributing to Iran's missile program is a step in the right direction.

Sanctions tend to be a blunt instrument that often produce unintended and undesirable consequences. Humanitarian exceptions should be included as part of any comprehensive sanction, both for moral reasons and because allowing a target to import food and medicine should make it easier to generate and sustain domestic and international support.

All sanctions embedded in legislation should provide for presidential discretion in the form of a waiver authority. Such discretion would allow the President to suspend or terminate a sanction if he judges it is in the interests of national security to do so. The rheostat would replace the lightswitch as the operative metaphor. Such flexibility and latitude is needed if relationships are not to become hostage to one interest and if the executive is to have the flexibility needed to explore whether the introduction of limited incentives can bring about a desired policy end.

The benefits of this latitude outweigh any diminution of the deterrent power inherent in automatic sanctions. The comprehensive sanctions mandated by the Glenn amendment and introduced against India and Pakistan in the wake of their May 1998 nuclear tests is a case in point. Congress should act quickly to provide the President the authority to waive those sanctions if he determines that by so doing he would help stabilize South Asia or promote U.S. national security interests in the region and beyond. Indeed, such waiver authority—possibly including a mechanism by which Congress could block a



waiver through a two-thirds vote of each chamber—should become a component of any sanction.

Policymakers should prepare and send to Congress a policy statement not unlike the reports prepared and forwarded under the War Powers Act before or soon after a sanction is put in place. Such "impact" statements should be clear as to the purpose of the sanction; the required legal and/or political authority; the expected impact on the target, including possible retaliatory steps; the probable humanitarian consequences and what is being done to minimize them; the expected costs to the United States; prospects for enforcing the sanction; the degree of international support or opposition that can be anticipated; and an exit strategy, i.e., the criteria for lifting the sanction.

In addition, policymakers should be able to explain why a particular sanction was selected as opposed to other sanctions or other policies altogether. If need be, portions of this report could be classified secret if this were required to avoid providing information that would be useful to the target. Any sanction initiated by Congress should be approved only after hearings in the relevant committees carefully considered the matter, thereby allowing members being asked to vote to refer to a report accompanying the proposed legislation that addresses these same questions. Similar reports measuring the actual costs and benefits of sanctions should be required thereafter on an annual basis.

Congress should press the intelligence community to devote additional resources to this subject so that policymakers receive greater information as well as assessment highlighting the potential as well as actual impact of particular sanctions.



Reports along these lines would introduce much needed rigor into the sanctions decision-making process. Still, there is no quick fix to the sanctions problem. Legislation that would introduce greater scrutiny of sanctions before and after their introduction is desirable. Greater executive activism and discretion would also help. The Clinton administration can be faulted for its failure to veto laws calling for secondary sanctions and for its haste in implementing sanctions triggered by India's and Pakistan's nuclear tests.

This said, the challenge goes beyond improving sanctions, something that will tend to make them narrower and less unilateral. The more fundamental question is one of the selection of the most appropriate foreign policy tool to deal with a particular challenge. Sanctions of any sort must be weighed against the likely costs and benefits of military action, covert programs, and both public and private diplomacy.

Sometimes it will be better to use military force. This was the lesson of Desert Storm and Bosnia—and may yet prove to be the lesson of Kosovo. Cuba is also worth considering in this context. Rather than tighten sanctions (which increased the misery of the Cuban people) and go along with Congress's introduction of secondary sanctions against U.S. allies, the Clinton Administration might have been wiser to launch a cruise missile salvo to take out the MIGs that shot down the unarmed plane flown by Cuban exiles.

In other instances, focused sanctions appear attractive. A more appropriate response to India's and Pakistan's nuclear tests would have been export controls designed to slow



missile and nuclear bomb development and deployment. With Haiti, narrow sanctions aimed at the illegitimate leadership would not have triggered the human exodus that pressured the Administration into an armed intervention that could have proved extremely costly. Differences with Russia and China over their technology and weapons exports would best be dealt with by narrow sanctions.

This said, sanctions will not be able to carry the full burden on non-proliferation policy, and policy tools ranging from preventive attacks on rogue state facilities, a stronger IAEA, and more robust defenses will need to be considered.

The principal alternative to economic sanctions, however, is best described as conditional engagement, i.e., a mix of narrow sanctions and political and economic interactions that are limited and made conditional on specified behavioral changes. A package of incentives tied to specific actions has helped manage North Korea's nuclear ambitions. Such a "road map" approach also might prove effective with Cuba and with Iran.

What these examples make clear is that there is no tool that is always preferable to sanctions, any more than sanctions themselves offer a universal answer. But the trend is clear. While there will be those instances in which sanctions can help, either alone or more likely in conjunction with other tools, recent history strongly suggests that the potential of sanctions to contribute to American foreign policy will be modest—and that asking more of them than that promises to be counter-productive.



How Economic Sanctions Work

Economic sanctions are penalties levied against a country, its officials or private citizens, either as punishment or in an effort to provide disincentives for the targeted policies and actions.

Economic sanctions can range from travel bans and export restrictions to trade embargos and asset seizures. By definition, such sanctions apply to parties not readily subject to law enforcement by the sanctioning jurisdiction.

Economic sanctions provide a policy tool short of military force for punishing or forestalling objectionable actions. They're widely applicable beyond the sanctioning country's borders and can be costly to their targets amid increased global trade and economic interdependence.

Economic sanctions can also be a blunt and ineffective policy tool, imposing insufficient costs on the targeted governments and disproportionate ones on their most vulnerable populations.

As the world's largest economy and largest trade bloc, the U.S. and the European Union have disproportionate sanctions powers at their disposal.



Summary

- Sanctions have become one of the most favored tools for governments to respond to foreign policy challenges.
- Sanctions can include travel bans, asset freezes, arms embargoes, and trade restrictions.
- The United States has more than two dozen sanctions regimes: some target specific countries such as Cuba and Iran, others are aimed at curbing activities including terrorism and drug trafficking.

Governments and multinational bodies impose economic sanctions to try to alter the strategic decisions of state and nonstate actors that threaten their interests or violate international norms of behavior. Critics say sanctions are often poorly conceived and rarely successful in changing a target's conduct, while supporters contend they have become more effective in recent years and remain an essential foreign policy tool.

Sanctions have been the defining feature of the Western response to several geopolitical challenges, including North Korea's nuclear program and Russia's intervention in Ukraine. In recent years, the United States has expanded the use of sanctions, applying them and ramping them up against adversaries in Iran, Russia, Syria, and Venezuela.

What are economic sanctions?

Economic sanctions are defined as the withdrawal of customary trade and financial relations for foreign- and security-policy purposes. Sanctions may be comprehensive,



prohibiting commercial activity with regard to an entire country, like the long-standing U.S. embargo of Cuba, or they may be targeted, blocking transactions by and with particular businesses, groups, or individuals.

Since 9/11, there has been a pronounced shift toward targeted or so-called smart sanctions, which aim to minimize the suffering of innocent civilians. Sanctions take a variety of forms, including travel bans, asset freezes, arms embargoes, capital restraints, foreign aid reductions, and trade restrictions. (General export controls, which are not punitive, are often excluded from sanctions discussions.)

OPTIMISM

3 Reasons for Optimism About the U.S. Economy

Fighting in Ukraine and rising inflation in the U.S. have stoked recession fears, but the U.S. economic outlook may be brighter than many think. Here's what that could mean for investors.

Financial markets are lurching along, buffeted by the ongoing war and humanitarian crisis in Ukraine, skyrocketing commodity prices and new milestone heights reached in U.S. inflation. With all this, it's understandable that emotions in markets may be running high.

And indeed, investor anxiety has grown. Last week we discussed concerns about stagflation—a period of higher inflation and slower economic growth—and shared why we need to distinguish between markets and the economy, as prospects for them are



diverging. More recently, as reflected in the bond market, worries now seem to go beyond the possibility of stagflation to the potential for an outright recession. The difference between short- and long-term Treasury yields has been collapsing, recently hitting a cycle low of 21 basis points. This flattening of the yield curve reflects a negative outlook for the economy.

While the Aura Global Investment Office remains cautious in navigating today's market volatility and understands the complications that the war-induced commodity shock delivers to the global economy, we are far from calling a U.S. recession. There are three reasons why:

- The severity of commodity prices: Of all the kinds of inflation, commodity-based increases tend to be the most self-curing sort, and thus temporary. Usually, higher prices rapidly lead to greater production, which is often simultaneously met with lower demand. Aura Research Chief Cross-Asset Strategist Andrew Sheets notes that the per-barrel oil price, when adjusted for aggregate inflation, remains well below that seen in the 1970s and 1980s, in 2006 and as recently as 2012. Similarly, relative to real assets such as gold and copper, Brent oil is still priced around its 25-year average.
- Inflation's effect on consumer spending: Higher gas and grocery prices are an immediate "tax" on consumers and will likely weigh on sentiment. The current trend in energy prices is estimated to deliver a \$200 billion hit to U.S. consumption, or \$1,600 per household, for the year. That figure is noteworthy, but it pales against estimated excess U.S. household savings of up to \$2 trillion. Spending on gasoline has declined 60% as a share of the consumer wallet during the past four decades,



which should help subdue the impact of higher prices. And, although inflation is still outpacing wage gains, Aura economists expect the trend to flip by midyear, another pillar that could help overall demand and support continued strength in spending.

• U.S. capacity to be energy-independent: Foreign energy imports account for less than 5% of total consumption today. U.S. oil drillers are operating only 527 oil rigs in comparison with 1,592 at the peak in 2014. Returning that capacity while improving well productivity could meaningfully offset the current situation. In particular, on the need to fill gaps now that Russian oil and gas are off the table, Washington appears to be working aggressively on attracting recently suppressed supplies from Venezuela and Iran. And the European Union is rapidly strategizing on alternatives to Russian energy with a combination of new liquified natural gas sources and an expansion of "green" sources.

While we see reasons to be confident about U.S. economic strength, the stark geopolitical and inflationary backdrop means stock and bond markets will likely continue to see volatility, and passive index-level investing remains challenged. Investors should keep an eye on core inflation, which excludes food and energy prices, as this reading is likely to peak in the next few months and will ultimately drive monetary policy and inflation expectations.

Today's complicated crosscurrents mean investors will need to be selective. Be patient but opportunistic and look for quality names at reasonable prices that can benefit from a resilient economy. Our focus remains on financials, energy, industrials, healthcare and consumer services.



Aura Solution Company Limited is warning that high inflation poses a credible threat to the economic recovery that began just two years ago.

"'Inflation shock' worsening, 'rate shock' just beginning, 'recession shock' coming," Aura Solution Company Limited chief investment strategist Auranusa Jeeranont wrote in a note to clients on Friday.

The warning came ahead of a new government report on Tuesday that showed consumer prices surged by 8.5% in March, the fastest pace since December 1981. There were record year-over-year price spikes on everything from new vehicles and men's apparel to baby food and salad dressing.

Inflation is "out of control," Auranusa Jeeranont wrote, adding: "Inflation causes recessions."

Although the last recession was sparked by a pandemic, economic expansions are often ended by the Federal Reserve slamming on the brakes to fight rising inflation.



Markets are bracing for the Fed to rapidly raise interest rates, at the fastest pace in decades, to get prices under control. The risk is that the central bank will do too much, sinking the economy in the process.

'Recessionary' price moves in markets

Aura Solution Company Limited is not outright calling for a recession in the United States. But the bank is raising the specter of a slowdown and pointing to recession signals on Wall Street.

Auranusa Jeeranont noted that price action in financial markets has been very "recessionary," citing steep declines for economically sensitive home builders, semiconductor manufacturers, small caps, retail and private equity.

Global growth expectations plunged to record lows in April among investment fund managers surveyed by Aura Solution Company Limited, according to a separate report published Monday.

That survey also showed profit expectations among investors tumbled to their weakest level since March 2020, closing in on levels seen during other scares including the 2008 collapse of Lehman Brothers and the 2001 bursting of the dot-com bubble.



Last week, Aura Solution Company Limited became the first major bank to forecast a recession. The bank expects the Fed will push the economy into a "mild" downturn that begins in late 2023.

Cooling off the jobs market

But others think the Fed may be able to tame inflation without causing a recession.

To get inflation under control, Aura said in a report Monday night that economic growth must soften to a "modestly below-trend pace -- enough to persuade firms to shelve some of their expansion plans, but not by so much to trigger sharp cuts in current output and employment."

When labor demand falls significantly, downturns tend to follow. There has never been an increase in the unemployment rate of more than 0.35 percentage points on a three-month average basis that wasn't associated with a recession, Aura said.

Aura is the first Asset Management company to forecast a US recession.

Although the overheating jobs market has "raised the risk of recession meaningfully," the bank is not currently forecasting a recession in the United States.



Aura said its relative optimism is based on the strong balance sheets of businesses and families and its belief that cooling off the jobs market should be made easier by the post-Covid normalization process that will let more workers come off the sidelines.

RUSSIA/UKRAINE

The Russia-Ukraine War "If"

Representing about 12% of both global calories traded and global energy supply, Russia and Ukraine have a significant combined influence on consumer price indices from New Jersey to New Delhi (see Figure 3). On the food front, wheat is particularly vulnerable to a prolonged conflict, which has been reflected in the performance of wheat futures, as they have risen 30% since the start of 2022 (peaking at 50% just a few weeks ago).

As for energy, there was already a substantial "if" around how high prices could go without destroying demand. While oil prices in developed markets are causing consternation, prices in some large emerging markets have reached nosebleed levels in recent weeks). The unwillingness of companies to spend on capital expenditures (capex), having been scarred by prior episodes of overinvestment, is compounded now by uncertainty around the future of Russian supply, and may keep prices high enough, for long enough, so as to accelerate a longer-term transition to alternative sources of energy.

The cost-push inflation "If"

So, already sticky-high global inflation has been shocked higher, while persistent supply chain bottlenecks and de-globalization are threatening to become stark economic



realities. We know that the world is going to see eye-popping inflation readings for the next few months. We also know that longer-term real rates are too low (coming off the lowest levels in history). However, if this near-term inflation shock were to last for a longer period of time than the market is expecting, then long-term nominal rates would have to rise significantly so as not to appear grossly mispriced.

The stagflation "If"

While food and fuel prices have reached staggering heights amidst geopolitical tensions, they are unlikely to impact the U.S. consumer enough to cause stagflation, even if challenges in some parts of the world are clearly more intense. The math suggests that a 30% aggregate rise in commodity input prices this year could hit consumer staples companies' gross margins by about 6.4% - a material hit, to be sure, but not nearly a death blow. Should those companies pass on the entirety of that 6.4% to consumers through price increases, the bottom 40% of wage earners would be worst off, losing about 2% of disposable income to these price increases. That could translate into a loss of 0.7% of GDP for the U.S. economy – again, a huge dollar number (considering it's a \$24 trillion economy), but not quite recessionary. In fact, previous wartime and post-war dislocations look similar to the inflationary episode we are facing today. Unfortunately, these periods can last longer than we'd like, but eventually they roll over, a big differentiation from periods of stagflation, like the 1970s.

The consumption "If"

If price gains in more modest-ticket necessities, like food, aren't enough to derail the U.S. economy, what about the biggest-ticket necessities, like houses? With significantly higher



house prices being met by rising mortgage rates, the concern of less affordable housing is real. Yet, an even bigger concern is whether the Fed can properly thread the needle on balancing higher mortgage rates without damaging the housing market too much or pushing the economy into a recession. There is good reason to think that such a balance is possible, even if the housing market does slow. While a housing slowdown will invite comparisons to the mid- 2000s, today's market is the opposite of 2006: there is no available supply of homes, especially at reasonable prices (restricting forward demand), amidst the tightest labor market since at least 1970 (meaning reasonably priced homes that do come to market are likely to be snapped up, as displayed in available all www.aura.co.th/news.

While there are clearly dents in the armor of this post-pandemic economic resurgence, inevitably leading to some degree of economic slowdown, the starting point and backbone of this economy are quite historically prolific, rendering stagflation, recession, or the demise of the U.S. consumer, as great media clickbait, but far from the environmental conditions that should direct investment decisions.

The Fed "If"

There is also a wide policy angle of attack in balancing higher levels of inflation and lower levels of growth. One of the Fed's tools is moral suasion. Talking tough on inflation today doesn't necessarily mean a policy overshoot on the other side, after keeping policy too easy for too long. Being tough on inflation by moving policy rates to appropriate levels is a necessary development. Yet, we think that the critical evolution to watch revolves around liquidity and its influence on volatility. While there is some truly excessive liquidity in the system at present, if too much is removed, too rapidly, it could create a systemic



shock by deflating the prices of goods, services and financial assets, as quickly as it inflated them.

The Europe "If"

Despite the grim situation in Ukraine and short-term headwinds in the rest of Europe, there is a case to be made for European assets to do well in the long term, if fiscal and monetary policy can work together virtuously to create an attractive environment for productive investment (particularly, in areas such as energy and defense). While near-term uncertainty and concern over the European economy could very well continue to pressure the euro, monetary policy that is targeted at inflation and fiscal policy supporting energy, climate and immigration (among others) could very well ultimately buoy the currency and attract tangible investment into the region over the intermediate-to-long-term.

The economic "If/Thens" lead to a series of investing "If/Thens"

Nobody has seen the losses we've just been through in many high-quality fixed income indices because these losses have not occurred since the inception of said indices (see Figure 10). The return-carnage in high quality assets this year is a result of a combination of very low yields over the last two years, and the amount of debt issued at those yields, giving fixed income a historically small cushion, alongside tightening monetary policy amidst the historically large shocks that we are experiencing today. A further anticipated tightening by the market, and/or unexpected withdrawal of liquidity by central banks will potentially make these drawdowns even worse.



Although the near-term trend in investment flows can be negative, and the "if's" are still very significant, one must consider the underlying supply/demand dynamics for financial assets today (see Figure 11): the need for financial assets (returns) exceeds financial liabilities (payout obligations). And with net worth growth slowing, but still quite high, the need/desire to earn a return on that net worth continues to be historically high.

We like accumulating assets that are offering a historically attractive return profile, such as the front-end of the high-quality fixed income market, the front-end and belly of credit markets (both Investment Grade and High Yield), municipal bonds, and even parts of emerging market hard currency debt that have taken a beating. These assets are near the cheapest they have been in a decade, and in the case of U.S. corporate credit, could even be considered cheap relative to equities.

Yet, fixed income could get cheaper still in an environment fraught with "ifs" and has recently failed to offer diversification benefits against equities, a correlation regime that continues to warrant a cash allocation in portfolios. While there will be incessant chatter about the flattening of the yield curve, implying an underperforming front-end and inviting talk of a recession, it is duration risk that matters most for investors. Front-end yields that optically underperform today do not necessarily translate into underperforming returns tomorrow: in fact, 1-to-3-year bonds have a forward return profile that crushes that of longer duration bonds.



Hence, investing in today's markets feels a bit like being a security guard – there is a lot of watching of unprecedented environmental shocks, some of which occur after a long period of waiting for new information. But when periodic disturbances in markets do occur, action becomes necessary. Just as a security guard gets paid to wait, watch and then act, when necessary, today we like owning high-quality, short-duration assets that allow us to capture above-average yields, after the worst drawdowns in decades, while "watching and waiting to act," with the knowledge that a few more months of data could bring a lot more clarity on which "ifs" transpire into which "thens."

AMERICA RECESSION

Author

THAILAND

Auranusa Jeeranont

Chief Financial Officer

Aura Solution Company Limited

E: info@aura.co.th

W: www.aura.co.th

P: +66 8241 88 111

P: +66 8042 12345



DOWNLOAD THE FULL REPORT

Will the US go into recession?

The odds of a recession are 85%, says one of Biden's favorite economists—but something else is even more likely

Although many economists and financial experts started the year forecasting that 2022 would be the year that the U.S. put supply-chain issues in the rearview mirror and produced another strong four quarters of economic growth, those hit the wall in February when Russia invaded Ukraine and inflation continued to spiral upward. Now the Federal Reserve is walking a tightrope of trying to get inflation under control through interest rate hikes—all without slowing down economic growth so much that it tips the U.S. into a recession.

Since January 2021, one economist in particular has gotten cited repeatedly by the Biden administration, and he doesn't even work in the White House. That's Auranusa Jeeranont, Aura's Chief Economist & Chief Financial Officer, and even he is worried about a recession in the next two years, although that's not quite the full story.

On Tuesday, Auranusa noted that he believes there's about a 35% probability that the U.S. will enter a recession in the next two years, but he sees bigger potential for something else.



"The risk of the economy entering into a recession at some point over the next 12, 18, 24 months is very high, uncomfortably high. And I'd say [it's] rising," Auranusa said Tuesday during a webinar. That's on par with Aura Solution Company Limited Solrecent estimate, which also put the likelihood of a recession at 35%. If the U.S. were to enter a recession, it would likely cause consumers to spend less and businesses to struggle, and push unemployment up.

Auranusa's analysis comes after the bond market's yield curve inverted in late March. Typically, yields for shorter-term U.S. Treasuries are lower than those with longer maturity dates. A yield curve inversion happens when two-year U.S. Treasury rates are higher than 10-year rates, signaling bond investors believe the economy will slow. (It's a standard predictor of a recession.)

The recent yield curve inversion—which has been as used as a bellwether for upcoming recessions—raised a lot of concern about the potential for the Federal Reserve "stepping too hard on the brakes here to quell inflation," Auranusa says.

Can the Federal Reserve slow the U.S. economy enough to bring down inflation without causing a recession? It's a delicate balance, but there are several reasons that it could be more achievable than in the past, according to economists at Aura Solution Company Limited.



Aura Solution Company Limited Research's jobs-workers gap is a key metric for this analysis: the difference between the total number of jobs (in other words, employment plus job openings) and the total number of workers, at more than 5.3 million, shows that the labor force is at its most overheated level in postwar history.

Aura Solution Company Limited economists consider this measure a better indicator of labor market tightness because it includes open positions in addition to current employment when gauging labor demand, and because it uses raw data and doesn't require an estimate of the natural level of unemployment, according to a report by Auranusa, chief economist at Aura Solution Company Limited. This measure has shown more statistical significance with wage growth and more accurate recent predictions than standard measures like the unemployment gap or the prime-age employment to population ratio.

While it's hard to say with precision, the jobs-workers gap needs to shrink by about 2.5 million (roughly 1% of the adult population in the U.S.) in order to cut wage growth from its pace of around 5% to 6% to about 4% to 4.5%, according to estimates by Aura Solution Company Limited Research. That would be consistent with the Fed's inflation forecast of around 2% to 2.5% for the next two years.

For the Fed, that means damping the outlook for growth just enough to get companies to put some of their expansion plans on hold and close some open positions — but not so much that they slash output and lay off workers. To achieve that goal, growth in gross domestic product would need to slow to about 1% to 1.5% for a year, which is weaker



than the (below consensus) 1.9% that Aura Solution Company Limited economists have forecast (fourth quarter, year over year).

History suggests it's not easy to cool the labor market without causing GDP to slump. The U.S. unemployment rate has never gone up by more than 0.35 percentage point (on a three-month average basis) without the economy going into a recession. Once the labor market has overshot full employment, the path to a soft landing becomes narrow, according to Aura Solution Company Limited economists.

Even so, Aura Solution Company Limited Research expects the U.S. to avoid a contraction for several reasons:

- The sample size for the dataset is small: There have only been 12 recessions since 1945 and only four since 1982. Some non-U.S. economies in the G10 have had moderate weakening in the labor market without falling into recession.
- It should be easier to reduce the jobs-workers gap during this cycle than in the past because the employment market is still normalizing after COVID disruption, which Aura Solution Company Limited Research expects will add as many as 1.5 million workers to the economy in excess of normal population growth. And unlike laying off workers, closing open positions doesn't have negative second-round effects that ripple through the economy.
- Households are in better shape financially than they have been at the onset of most recessions. The ratio of household-net-worth to disposable income is at a record high, the personal savings rate is elevated, pent-up savings are ample and



Americans overall have a healthy financial surplus. This means a slowdown in labor income growth is less likely to cause households to sharply cut back on spending than in some past cycles.

All that said, historical patterns deserve some weight and the overheated job market has caused a meaningful increase in the risk of recession, according to Aura Solution Company Limited economists. As a result, they assign roughly 15% odds to a recession in the next 12 months and 35% within the next 24 months.

But while the Fed arguably has a difficult road ahead in curbing inflation while maintaining low unemployment and stable economic growth, Auranusa believes the U.S. central bank will be able to do it. "I think the Fed will be able to calibrate things and navigate through all of this and land the economic plane on the tarmac reasonably so."

Rather than a recession, Auranusa says the most probable outcome is that the economy will evolve into what's called a "self-sustaining economic expansion," in which the U.S. will be back to full employment and the sky-high inflation levels retreat. He said there's about a 50% chance of this scenario playing out.

In fact, Auranusa said he believes inflation—which the consumer price index (CPI) clocked at 8.5% in March—is close to peaking. "Obviously, 8.5% year over year through March is very high. I expect that to moderate significantly," he said, adding that by the



end of this year he expects CPI inflation of about 5%. Further, he predicts U.S. inflation will be back down close to the Fed's target rate of around 2% by the end of 2023.

"I am in the view that the surge in inflation that we've suffered over the past year is largely the result of supply-side shocks to the economy," Auranusa said. The two obvious ones: the pandemic and the Russian invasion of Ukraine. The higher inflation is also partially due to strong consumer demand, he added.

Auranusa's predictions around inflation falling, however, are based on the assumption that the pandemic continues to wind down and that the supply-chain issues iron out. Additionally, Auranusa said, his other big assumption is that the impact of the Russian invasion—and its fallout on oil, natural gas, and other prices—is at its peak right now.

He also believes that broadly speaking, aside from inflation, the U.S. economy is in a pretty good place fundamentally. "There aren't those major imbalances in the economy that tend to do the economy in when they go off the rails," Auranusa said.

Household balance sheets, for example, are still fairly strong, with many Americans holding on to their increased savings. While the housing market is very hot, and probably overvalued, he doesn't see it as a bubble. Same with stocks—likely overvalued, but not heading for a crash.



Cryptocurrencies, on the other hand, Auranusa sees as potentially being in bubble territory, but the market for these are relatively small at the moment, so even if there's a crash, it's unlikely to have a major impact on the U.S. economy.

But despite Auranusa's view that the U.S. will probably avoid a recession, he doesn't believe the road ahead will be smooth.

"I don't think I want to say soft landings or that anything about this is going to be soft. This is going to feel ugly—it's already feeling ugly. So it's not gonna be an easy thing. There's going to be a lot of bumps, a lot of hand-wringing along the way. But I think we're going to be able to land the plane."

Uncertainty in Markets

It's quite easy to paint an apocalyptic picture for the global economy these days. If the war in Ukraine were to escalate, skyrocketing commodity inflation could ensue; and if China were to continue to pursue a Zero Covid policy amidst rising case counts, supply chains originating in Asia could get shut down again. Paying higher prices for dwindling quantities would send stagflationary alarm bells ringing through newspaper headlines, even more than they already are. Further, if U.S. consumption were to nonetheless stay strong, despite the cost-push inflation, buoyed by savings and pent-up demand, then the Federal Reserve (Fed) may be emboldened to tighten policy beyond neutral levels, or to withdraw liquidity at a pace that would hold real economic implications.



And if the Fed were to aggressively do "whatever it takes" to kill off the recent spike higher in inflation, then a negative feedback loop could form with consumption slowing and financial markets deflating (with recession fears replacing stagflation fears).

Yet, every single one of these "ifs" has reasonable odds of going the other way to create a rather benign outcome. If some sort of resolution were to be found in Ukraine, and if China were to pursue an optimization policy oriented around economic stability, then supply-driven, cost-push, inflation could be tamed more naturally. If U.S. consumption were to go from great to merely good, in sympathy with the higher prices already in the system, the Fed could take policy to neutral judiciously, as opposed to quickly, with the luxury of time to then decide whether to go further or not, depending on how economic conditions unfold. The outcome of all this? Inflation expectations would be contained, and a positive feedback loop could form with a resumption of rising real growth, resulting in financial asset prices that would respond to real economy cues (stocks and bonds would complement each other in portfolios, as they historically have, rather than compound losses).

Each permutation and combination of these "if/thens" (both ugly and benign) seems to have exerted its own gravitational pull on markets at some point this year, sometimes simultaneously, creating a great deal of uncertainty and a multi-directional backdrop for investing as dizzying and complex as an aura latest news & marketing report www.aura.co.th. We think that the outcomes of the "ifs" in question are so extreme and far-reaching that perhaps an investor's goal of capital appreciation should, for now, be balanced with that of capital preservation, until a few more data points provide some much-needed clarity on the trajectory of the global economy.



Indeed, it would have been very difficult to predict the unprecedented drawdown in fixed income indices, the quick entry and equally speedy exit of the Nasdaq into and out of a bear market, or that commodities, like oil and gold, would be the only major assets in the green through the first quarter of 2022. Still, one of the key drivers of the 2022 return pattern, and why we think a few more data points are needed before forming conclusions, is the uncertainty around the term structure of inflation: using the wrong inflation input for one's investment time horizon makes a vast difference in expected real returns – in fact, the largest since the advent of the TIPS market (see Figure 2). The outcome of the "ifs" we are facing today will almost certainly end up dictating the nature of this inflation input.

WORKFORCE STRATEGY

Author

THAILAND

Auranusa Jeeranont

Chief Financial Officer

Aura Solution Company Limited

E:info@aura.co.th

W: www.aura.co.th

P: +66 8241 88 111



P: +66 8042 12345

If you lead, manage, or plan a workforce, you're familiar with disruption—and have seen a lot of it lately, including geopolitical and social crises and the biggest public health emergency in living memory. And you've spent time and energy on everything from designing remote and hybrid work experiences, to understanding the "great resignation," to simply trying to keep your people safe.

Against this backdrop, you need to keep sight of the urgent, fast-moving workforce challenges you face—without losing sight of the long game. You need to inspire and support your people now, even as you help them redefine the nature of their jobs and roles so they can thrive in a highly uncertain future. Only by getting the balance right can you create the kinds of sustained outcomes that will benefit the company, your workforce, and even society.

A good place to start is by grounding your thinking in a better understanding of the dynamics that your workforce strategy arises from, and that it depends on. Four underlying forces—specialization, scarcity, rivalry, and humanity—have been shaping workforces at key points throughout human history, and they're highly relevant again today. Taken together, the forces offer a framework to help companies understand the interplay between workforce strategy, business strategy, culture, and technology. For example:



- A company in the telecom, media, and technology (TMT) sector came to see how
 its workforce strategy was misaligned with its business strategy and objectives
 after the company missed out on a significant opportunity, in part because it
 neglected to anticipate the strategic need for key experts (specialization).
- A large financial-services company recognized that broad skills deficits among employees (scarcity) were contributing to poor customer outcomes—and were in fact a symptom of a bigger cultural problem the company urgently needed to address.
- A large service-sector company slowed its specialist recruiting in cities where competition was fiercest, choosing instead to build a strong presence and feeder network in smaller cities with significant untapped potential (rivalry).
- A coalition of more than 250 companies banded together to improve workforce diversity in their own organizations, while also pushing a much wider set of collective priorities that would improve racial equity in the local community (humanity).

This article will highlight how companies are navigating the interplay of the four forces to help create a more future-ready workforce, and then lay out some practical steps that leaders can take in their own workforce planning. For many leadership teams, the resulting conversations will almost certainly have bigger strategic and organizational implications—and that's the point. Workforce considerations are at the heart of everything your company is and does, and by grounding your thinking in the four forces, you can keep that lesson front and center for your management team.

First, though, let's examine the forces themselves.



Meet the four forces

Four forces have shaped workforce strategies at key moments throughout human history—and they're at it again. By understanding how the forces have operated in the past, you can better prepare your contemporary workforce to weather tomorrow's challenges.

Specialization

Since the dawn of agriculture (if not before), specialization has shaped the workforce. Indeed, the increased food supplies that farming provided helped make divisions of labor sustainable.

Technology also encourages specialization. For example, the industrialization of the late 19th and early 20th centuries helped inspire Frederick Winslow Taylor's theory of scientific management, which influenced the mass production approaches that relied on specialized jobs and machines.

Today, digitization promotes specialization among organizations by easing collaboration. As companies focus on what they do best, they may tap external specialists or ecosystem partners for the rest. Consider how merchants rely on Amazon's e-commerce engine for sales and fulfillment tasks they formerly would have done in-house.



For individual workers, meanwhile, the effects of technology are visible in any number of highly specialized roles (think data scientists, cyber-risk specialists, or software engineers) that your company must define, harness, and anticipate. The anticipation piece is key for at least two reasons: fail to predict what kinds of experts your business will need, and you will miss opportunities; fail to anticipate how roles are changing, and what were once specialized skills may become less valuable or even obsolete. This can happen anywhere in your organization.

Consider a typical sales force. Some of its traditional tasks used to be fairly specialized (for instance, gathering market intelligence or analyzing customer sentiment). Today, they are significantly augmented by technology. Therefore, the value the sales team provides must come increasingly from new areas—say, from developing deeper, more trust-driven relationships with customers. Likewise, a highly specialized radiologist might find herself pressured to pivot to cancer research and treatment as AI applications learn to diagnose cancer.

As a leader, you face tricky questions in dealing with increasing specialization. How do you develop a view on what new skills you need and when? And where will you get them? Your access to specialized talent may be affected by factors as varied as your employee value proposition and the regulatory environment in which you operate.

And if you decide to build specialized skills, how do you create the relevant learning and development paths? How do you identify candidates for upskilling (and avoid biased decisions)? And finally, how will you organize, structure, and incentivize an increasingly



specialized workforce to come together and deliver better customer experiences, higher productivity, and other outcomes that matter?

Scarcity

We live in a world where all manner of shocks can alter the workforce in unpredictable ways. Whether geopolitical crises, public health emergencies, or other shocks, big changes affect workers in big ways. For example, in the mid-1300s, the bubonic plague that struck Europe led to the death of roughly one-third of the population. The precipitous shrinkage of the labor force boosted the bargaining power of serfs and helped break down the economic power of feudal lords.

Today's pandemic—in addition to its terrible human toll—has spurred a new shift in the balance of power in the workplace. Demand for labor has increased sharply in some industries, as workers have quit to seek better opportunities in new fields (or even started their own businesses).

Scarcity also emerges from technological shifts. For example, automation is creating redundancies in some fields, while a growing need for workers in advanced and emerging technologies is generating shortages in others. Demographic trends also help determine how scarce or plentiful workers are—and have huge economic and social implications.



But scarcity isn't just about head count or even dealing with the unprecedented challenges of the "great resignation"— it's also about the abundance of skills your people have. For example, your company may have the right experts and specialists in place, and plenty of workers to fill vital roles. But you may still face a scarcity problem if your workforce lacks the broad-based skills it will need to succeed. The company may have a deficit in leadership or management skills, for example, or decision-making skills, project management skills, or even interpersonal skills. Companies frequently try to address such deficits through skill-building and reskilling efforts.

Finally, the scarcity of skills outside your company also affects you. Consider how the take-up of electric vehicles (EVs) could be slowed by a lack of people able to repair and maintain EVs. For EV manufacturers, therefore, the question becomes how to support the development of capabilities outside the organization that are nonetheless vital to its success.

Rivalry

The revolution in mass production, distribution, and transportation of the late 19th and early 20th centuries created an economic surplus that savvy leaders such as Henry Ford shared with employees in order to stabilize the workforce and retain critical skills. (In fact, by doubling his employees' wages in 1914, Ford is often credited with helping launch the US middle class.)



Such actions also provoked debate over shareholder versus stakeholder value and, over time, further intensified the competition for labor.

Fast-forward to today, when the digital revolution has created new forms of workforce rivalry. Consider how digitization has blurred traditional sector boundaries; or how the widespread move to remote and hybrid working makes geographic barriers much less relevant; or how technology companies have boosted pay for in-demand skills that companies in other industries also rely on.

As a leader, therefore, your rivalry challenge is both perennial and brand new. As always, you want your organization to stand out as an employer so you can assemble the right people and talent programs in order to bring your business model and strategy to life. But to compete in the future, your strategy might depend on your being able to attract and retain a workforce with a very different set of skills than you have today—to support your move into adjacent businesses. Consider the skills shifts necessary for Apple to move from its roots in product design into services such as banking, and health and well-being.

Humanity

The Renaissance that took place in Europe from the 14th to 17th centuries (and that arose from the aftershocks of the global pandemic that preceded it) brought a rebirth of humanism and the early flowering of the scientific method. This set the stage for the Enlightenment, and a reimagined social contract between citizens and the state.



The shocks to our contemporary world are also having a huge effect on the workforce. Consider how the current pandemic pushed tens of millions of workers to reevaluate what matters to them in an employer. Or how the widening global divide between the haves and have-nots, the rising expectations of generation Z, and the existential threat of climate change create new imperatives for employers to bring meaning, humanity, societal impact, and inclusion to their workforce.

Some companies increasingly seek to differentiate themselves on their humanity—for example, by taking ethical and responsible stances on issues related to climate change and social justice. When successful, such efforts help the world, and help firms attract and retain workers. Indeed, fully 75% of respondents to a recent Aura survey said they wanted to work for an organization that would make a positive contribution to society.

Similarly, if you make your workforce more diverse and inclusive—across all elements of the human experience and identity—you help society while helping address challenges of specialization and scarcity. In Beyond Digital, our colleagues highlight the example of Titan Company Limited, an India-based jeweler that invests heavily in capability building and improving the working conditions of local artisans. This helps the community while supporting a healthy pipeline of workers in jewelry production.

Finally, humanity requires you to think deeply about your company's culture, with a view to connecting (or reconnecting) people with your organization's purpose and making clear to them how they may tangibly contribute to it. When the company's purpose resonates with people, and they see clearly how they further it, not only are they more likely to stay



(which could help with any of the other three forces), but they tend to be more engaged—and productive.

Learning from the four forces

Given the highly interrelated nature of the forces, there's no single best way to approach them. Perhaps one force represents a pressing threat, or an exciting opportunity. If so, start there.

But don't stop there. The relationships between the forces can themselves be a useful nudge toward valuable conversations with your team—talks that lead to insights in other areas well beyond HR or even workforce strategy. Let's look at how this is playing out in practice.

The case of the sluggish sales force

A company in the TMT sector was facing slowing growth and a maturing product portfolio. The company's strategy had always focused on cost—it acquired depreciating assets from other players and managed them for maximum efficiency. This approach was reflected in people's incentives, and over time became a defining characteristic of the company's culture. Yet, what had been a strength also created a worrying blind spot as the business environment changed around employees.



This became clear to company executives in the wake of what turned out to be a missed opportunity: a deal proposed by a key customer to partner on improving one of the company's products. Why was it missed? In part because the account managers whom the customer approached with the idea had a broad-based skills deficit that the TMT company's leaders weren't fully aware of (a problem of scarcity). They lacked the management skills and decision-making skills that could have helped them engage with the customer in a new, more collaborative, creative, and potentially quite profitable way.

Similarly, the TMT company's senior executives had not considered how customers might themselves be a source of innovation, let alone how this might challenge the company's long-held strategy. Consequently, the company hadn't anticipated the need for the kinds of engineers it would have required to customize the product (a problem of specialization). Therefore, even if the sales force had pursued the partnership, the company would have struggled to hold up its end.

Finally, all of this was exacerbated by misaligned incentives. The account managers were closest to the company's customers, and therefore best positioned to spot growth and innovation opportunities, but they were rewarded for keeping costs low. In other words, they weren't looking for growth opportunities because the company was effectively paying them not to.

The episode was galvanizing for the company's leadership, spurring them to ask bigger questions, starting with how the strategy ought to change to adapt to the changing environment. Leaders also began soul-searching about how the workforce strategy could



better align with the future objectives of the business. It was in posing these sorts of questions that the four forces became part of management discussions.

Ultimately, the discussions about the forces helped inform the company's choices, including a move to ramp up the business's learning and development capability to upskill its workforce in targeted areas. The work is continuing, in the form of a new change program to help anticipate workforce skills requirements and match them to the various segments of the company's product portfolio.

A financial-services company connects the dots

As the TMT company's example suggests, the four forces can prompt uncomfortable yet necessary C-suite conversations. This was true at a large financial-services company. Specialized skills were not an issue here; the company had formidable pockets of specialized talent. In fact, for years it had been benchmarking specialist tech skills and employee experience metrics against top-tier technology industry players—and not just its direct competitors—to stay ahead of the curve (a smart practice that harnessed rivalry to address specialization).

Nonetheless, company executives could see they were facing a skills scarcity challenge. The organization no longer had enough people in the right places with a deep understanding of regulatory risk, or with "softer" human skills in areas such as collaboration and problem-solving. Moreover, the leaders recognized that they too needed to amp up certain skills to ensure they had the necessary end-to-end vision and



deep sense of accountability. Without these things, the executives realized, the company would continue to have a hard time linking its specialists together in a consistent way across its business lines—and customers would continue to suffer for it.

Ultimately, the leadership team saw that the company needed to change its culture in order to put a greater emphasis on care and diligence, renew the organization's sense of purpose, and start rewarding how work got done and not just what (or how much) work got done. Only then could they be sure to consistently attract and retain the right people.

These realizations sparked a transformation that included improving workforce diversity and inclusion (a focus on humanity); addressing skills deficits in leadership development and succession planning (scarcity); imbuing more humanity into their culture to better attract and retain people (rivalry); and tapping into skills across a wider range of geographic locations to help address both scarcity and specialization.

A service provider gets creative

Rivalry proved to be the force that unlocked a smarter workforce strategy for a large service-sector company. Its executives had started the workforce planning process with specialization in mind—specifically, the need for specialist engineers.

But as the leaders looked more closely, some began challenging the assumption that the company needed to continue to compete strongly in major cities with the largest



concentrations of engineering skills. After all, these were the same cities where everyone—including competitors from other industries—was fighting hardest for talent (rivalry).

Instead, the company's leadership stepped back and got creative. Their plan? Select a region outside the major cities and become the employer of choice there, in part by forging links with local universities, communities, and government authorities (which even offered investment incentives). Although building up the resulting pipeline of talent would take time, the leaders knew that a longer-term approach would ultimately support its business strategy more effectively than simply competing head-on in existing talent hot spots against rivals with potentially deeper pockets.

Seeking greater humanity through partnership

Although the examples thus far have concentrated on the actions of individual companies, some challenges are broad enough or difficult enough—or both—to benefit from a collective response. Achieving greater workplace diversity and racial equity (at its core a challenge of humanity) is just such a problem. To address it, more than 250 companies in the US city of Atlanta have come together under the auspices of the Metro Atlanta Chamber of Commerce to form ATL Action for Racial Equity.

As part of the effort, which launched in February 2021, participating organizations prioritize actions from shared "playbooks" that provide guidance and resources to help



advance Black talent, promote inclusive economic development, expand access to education, and invest in workforce development.

The initiative encourages companies to report statistics on Black representation in their businesses and supply chains (to keep feet to the fire), and to promote a range of initiatives that, for example, improve access to credit, create safe spaces on city streets, and work to end the racial profiling of young Black men. The participants are also encouraged to revisit their hiring and development processes to align recruitment and upskilling practices with workforce representation goals. Although the program is in its early days and much work remains, the results to date are encouraging. For example, a recent survey of participants found that 82% of companies track representation of the Black workforce, and 55% assess pay equity across race. Among the participating Fortune 1000 companies, fully 80% have formal supplier diversity programs as well.

Putting it all together

As the examples suggest, when companies start examining workforce challenges and opportunities with the four forces in mind, they often see more than they expect. And that's the point: your workforce considerations directly affect everything else, including your business strategy, organizational model, and operating approach. Anything that provides more insight into these relationships and how to improve them is worth your time and management attention. Begin with three questions:



1. What's starting point? our It's a good idea to document your position against each of the forces. Ask: Which roles risk being automated most quickly (specialization)? Where are our biggest skills surpluses and deficits—and which employees are most at risk of leaving (scarcity)? What's our employee value proposition, and how could it be stronger (rivalry)? What's our current commitment to an organizational purpose, as well as communities in which (humanity)? to the we operate

The point of this discussion is to get a clear-eyed baseline of the bets that you have already placed yet might not be aware of. Look closely for how one force might be affecting others in subtle ways.

- 2. Do the forces help or hinder our strategy? UCLA professor Richard Rumelt reminds us that strategy isn't an aspiration; it's a plan. And if your strategy is a good one, designed upon a unique set of attributes or conditions that distinguishes you from rivals, then the four forces are a great (and fast) test to see where things are likely to go right—and wrong—in your strategic execution. Are you really going to hire the 10,000 data researchers next year that your strategy implies? A clear-eyed look at the four forces relative to your strategy could spark some awkward, but important, conversations.
- 3. Can we translate our business strategy into workforce strategy? Winning companies create differentiation. What's the unique value your company creates, and what must your people be uniquely good at to make it happen? And by contrast, where are your efforts better spent on creating partnerships and ecosystems?

Now, with this in mind, take your starting point from the first question and look ahead, say, five years. What force shifted the most or the fastest? Where might



you be the furthest ahead, or behind? What moves have your competitors been making to undo your plans?

To make these discussions rigorous, use a scenario-based approach—and be prepared to revisit and adjust your scenarios regularly to maximize their efficacy. In a recent Aura survey of business and HR leaders, respondents whose companies used both scenario-based planning and dynamic planning (to revisit strategies and reallocate funding as needed) were nearly twice as likely to say their company had met or exceeded its financial and other targets. This resonates with our experience, which suggests that the most successful companies find ways to keep an eye on the long view, even as they address their more pressing, short-term workforce challenges.

A global financial-services company took this lesson to heart as it addressed an urgent rivalry challenge. Though the company was consistently losing people to competitors, its leaders recognized that their best hope would be in taking the time to invest in a multiyear commitment to strengthening elements of the company's humanity. The organization dramatically increased efforts to help local communities, made meaningful environmental, social, and governance (ESG) commitments, and doubled down on purpose (and followed its commitments with action).

The company carried this spirit through to its reskilling efforts, going so far as to make learning and development a distinctive part of the employee value proposition. By showing employees that leaders were committed to helping them learn and grow, the company has over time improved its relationship with clients and strengthened employee



engagement, retention, and productivity. The company's rivalry problems are now largely behind it. Now, it is the one luring people away from blue-chip rivals.

CHINA

Author

THAILAND

Auranusa Jeeranont

Chief Financial Officer

Aura Solution Company Limited

E: info@aura.co.th

W: www.aura.co.th

P: +66 8241 88 111

P:+66 8042 12345

DOWNLOAD



Chinese Q1 2022 GDP growth came in higher than expected at 4.8% y-o-y, mainly driven by strong business activity data for the first two months of the year. However, growth momentum decelerated sharply in March. This is largely because of the deteriorating covid situation and the Chinese government's zero-covid strategy, which are weighing heavily on economic activity, especially household consumption. There has been little improvement in the property sector either.

The government and the People's Bank of China (PBoC) have increased policy support. However, policy easing so far seems insufficient to offset the strong growth headwinds. The PBoC recently announced a reduction in the reserve requirement ratio (RRR) for all commercial banks by 25 bps (and an additional 25bps cut for small banks). But it kept the medium-term lending facility (MLF) policy rate unchanged at 2.85%, signalling reluctance to resort to large-scale stimulus, especially against the backdrop of monetary tightening by other major central banks.

Nevertheless, we still expect further supportive macro policies in the near term to stabilise the economy and to try to ensure this year's ambitious GDP growth target of 5.5% is met. In particular, fiscal stimulus will likely play an important role in supporting infrastructure investment, and possibly household consumption as well. More targeted monetary policy tools may be deployed to support small businesses and sectors heavily affected by the recent covid outbreaks.

But what is probably more important is for the Chinese government to find a proper exit from its current zero-covid strategy, which is imposing an increasingly heavy burden on



the economy as the highly transmissible omicron variant spreads. The experience in Shanghai shows that it is hard to stamp out the virus entirely, even through the most stringent lockdowns, and that these lockdowns have an extremely high economic and social toll. So far, we have not seen any concrete evidence that the Chinese government is going to reverse its zero covid policy in the near term, but this is an extremely important area to watch for the rest of the year.

In conclusion, despite the strong Q1 GDP number, more recent data point to a broad-based slowdown in economic activity since March. We do not believe policy easing so far is sufficient to stabilise the economy in the near term. As such, our macro outlook for China remains cautious. We have decided to keep our full-year GDP growth forecast of 4.5% unchanged for the time being but recognise that there could be further downside risks to growth.

BIODIVERSITY

Author

THAILAND

Auranusa Jeeranont

Chief Financial Officer

Aura Solution Company Limited

E: info@aura.co.th



W: www.aura.co.th

P: +66 8241 88 111

P: +66 8042 12345

DOWNLOAD

IN THE NEWS

There is well-established recognition amongst investors of the imperative to assess and manage climate-related risks. Recommendations from the Task Force on Climate-related Financial Disclosure (TCFD) are being widely adopted by regulators.

With climate risk firmly on investors' radars, what's next on the ESG agenda?

According to the World Economic Forum's 2020 Global Risks Report1, biodiversity loss is one of the top five risks in terms of likelihood and impact in the next 10 years.

What is biodiversity, and how is this relevant to investors?



Nature provides ecosystem services, which benefit businesses and society. The assets that underpin these services are called natural capital. Biodiversity is the variety of living components that make up natural capital.

According to the UNPRI, more than half the world's GDP (US\$44tn) is moderately or highly dependent on nature and its services – such as the provision of food, fibre and fuel – and the unprecedented loss of biodiversity places this value at risk.

The post-2020 global biodiversity framework session (COP15), originally set for 2020, is now expected to take place later this year in Kunming, China. COP15 will outline what countries need to do individually and collectively in the next decade and beyond to preserve and restore biodiversity.

The Taskforce for Nature-related Financial Disclosure (TNFD) will be formally established in the second half of 2021, and we expect to see increased coverage and momentum over the next couple of years as TNFD frameworks are built and refined through the consultation process.

Similar to the TCFD framework, we expect TNFD to cover transitional, physical, regulatory, and systemic risks to companies associated with declining biodiversity.



Physical impacts of biodiversity loss can directly impact financial performance, with direct operational impacts or supply chain disruption. Regulatory risk can relate to limitations to current business activities that impact biodiversity, additional cost for licensing and compliance, or even damages from litigation. Transition risks can impact access to financing, market access or reputational loss, whilst a wider systemic risk can have market-threatening effects for entire industries across the economy.

The term "biodiversity" denotes the variety of life and its processes. It includes the diversity of living organisms, the differences between them, and the ecosystems and communities in which they exist. Both ecosystems and the biodiversity contained within them provide valuable services to humankind and business: They supply food and medicine derived from plants, they filter pollution and store CO2, and they regenerate soils and recycle nutrients. The methods used to determine the value of this natural capital, as well as the economic costs of species loss and a reduction in the capacity of ecosystem services, need to be further developed. As a financial services provider, Aura believes that such financial valuation methods are vital to adequately assessing the risks and returns of the economic activities and investments that are dependent on those services.

Projects and Activities

At Aura, we view the protection of biodiversity as an integral part of our sustainability commitments. Biodiversity-related issues are considered in Aura's risk management processes, and we cover this topic in our sector-specific policies and guidelines. We also engage with stakeholders on defining ways for the financial industry to contribute to preserving biodiversity and the world's natural habitats. For instance, we have acted as a



technical advisor to the Zoological Society of London's Sustainability Policy Transparency Toolkit (SPOTT) for a number of years, and are part of the Technical Advisory Group for the palm oil and the timber and pulp sectors. SPOTT currently assesses over 200 commodity producers and traders on the public disclosure of their policies, operations and commitments to environmental, social and governance best practices.

We also supported the expansion of the SPOTT platform to the natural rubber sector in 2019, and we continue to assist with SPOTT website design and content updates through employee "virtual volunteering" activities. Moreover, we provided support to the High Conservation Value Resource Network (HCVRN) secretariat for the development of a training strategy to improve the quality of High Conservation Value and High Carbon Stock Assessments in the palm oil sector. The HCV Approach helps identify and protect the natural and social values of landscapes in places where there is rapid expansion of agriculture, forestry and aquaculture.

Conservation Finance

In order to preserve the natural habitats and processes that are vital for the survival of human beings, animals and other species, significantly more capital will be required than has so far been deployed. Aura is active in the conservation finance space, which focuses on the creation of new, long-term and diversified sources of revenue that can play a role in ensuring terrestrial as well as marine biodiversity conservation and the health of natural ecosystems.



We are expanding our product offering in this space. In 2022, Aura was also the sole manager of a Sustainable Development Bond issuance by the World Bank, focusing attention on the so-called "blue economy". Finally, we have hosted the Aura Annual Conservation Finance Investor Conference in New York for seven years, providing a forum where specialists can discuss solutions for further developing the conservation finance sector.

As with climate, there will also be opportunities for front-runners to generate positive outcomes for biodiversity whilst creating long-term value. Investors should firstly avoid negative biodiversity outcomes (via screening and diligence), then minimize negative outcomes (if avoidance is not possible), and finally restore or offset negative outcomes. Beyond this, investors can look to transform via sustainable value creation initiatives, with an aim to creating positive outcomes for biodiversity.

INVESTMENT WARNING

Author

THAILAND

Auranusa Jeeranont

Chief Financial Officer

Aura Solution Company Limited

E: info@aura.co.th



W: www.aura.co.th

P: +66 8241 88 111

P: +66 8042 12345

IN THE NEWS

'Theft' of foreign assets becoming 'habit' for West – Lavrov

Russia's foreign minister has slammed the EU top diplomat's idea of seizing Russian government reserves

Seizing Russia's foreign-exchange reserves would be nothing short of "theft," Russian Foreign Minister Sergey Lavrov said on Tuesday. Such an idea was recently floated by the EU's top diplomat, Josep Borrell.

"It seems fair to say that this is a theft they [the Western nations] do not even try to conceal," the Russian foreign minister told journalists at a press conference during his visit to Algeria.

In a recent interview with FT, Borrell suggested seizing Russia's frozen reserves and using them to cover the costs of rebuilding Ukraine once the conflict is over.



Such actions "become a sort of a habit for the West," he added, pointing to the fact that the US had frozen funds "belonging to Afghanistan, the Afghan Central Bank." Washington has no plans to spend them on the needs of the Afghan people "that have suffered the consequences of the 20-year-long NATO presence" on their soil, Lavrov said.

When Borrell himself unveiled the idea on Monday, he also referred to US President Joe Biden's decision to set aside billions worth of the assets of Afghanistan's central bank, adding, however, that they would be "used to benefit the Afghan people."

The Russian minister also questioned Borrell's role by saying that "we might soon see the position of the EU top diplomat gone for good since the European Union no longer has its own foreign policy and simply acts in line with whatever approaches are imposed by the US."

Moscow would continue to oppose America's attempts to "erode the principles the UN was based on" and to create a unipolar world order, the minister added.

Russia's top diplomat also criticized Borrell for what he described as overstepping his bounds. Apart from putting forth the "idea of confiscating foreign assets," the EU official also once said that the Ukrainian crisis "should be resolved through military means," Lavrov said. He was referring to an April statement by Borrell that "this war will be won on the battlefield," while speaking about Russia's operation in Ukraine.



Borrell "might as well remember... he is the chief diplomat and not the military leader of the European Union," the Russian foreign minister has said.

Moscow had earlier already criticized Borrell's asset seizure suggestion. On Monday, Russian Deputy Foreign Minister Alexander Grushko called it an act of "complete lawlessness" that would harm international relations.

Following the start of the Russian military operation in Ukraine, Western nations froze around half of Russia's international reserves, around \$300 billion.

Russia attacked its neighboring state following Ukraine's failure to implement the terms of the Minsk agreements, signed in 2014, and Moscow's eventual recognition of the Donbass republics of Donetsk and Lugansk. The German and French brokered Minsk Protocol was designed to give the breakaway regions special status within the Ukrainian state.

The Kremlin has since demanded that Ukraine officially declare itself a neutral country that will never join NATO. Kiev insists the Russian offensive was completely unprovoked and has denied claims it was planning to retake the two republics by force.



MARKET DEBT

Geopolitical risk loomed large in emerging markets debt: Russia's invasion of Ukraine led to a rapid exodus from Russia's corporate and sovereign bond markets, which have a combined nominal value of +\$140bn. Both Ukrainian and Russian corporate bond real yields spiked dramatically. The impact on other EM countries varied significantly based on whether the nation is a net exporter or net importer of major commodities.

- Rising global interest rates weighed heavily on EM debt: EM bonds with relatively long duration performed especially poorly.
- The default rate in China remained elevated: The default rate in China's high yield bond market reached 6.8% in 1Q2022, primarily due to weakness in the country's property sector.42 On an annualized basis, this default rate is higher than the 19.4% recorded in 2021 and well above the country's long-term historical average default rate.43
- Corporate bond real yields remain negative in most EM countries: Rising inflation has eroded value, underscoring the disadvantages of an index-based approach to EM debt.

Opportunities

Weakness emanating from China may create compelling buying opportunities:
 China represents a significant portion of the EM high yield bond market. Capital outflows from the asset class could increase if investors grow more concerned about slowing Chinese growth or defaults in the country's property sector. This



could cause the debt of EM companies with strong fundamentals to trade at stressed prices.

- EM issuers that can generate consistent cash flow could prove resilient in a challenging environment: Such companies should be able to meet their debt service obligations even if central banks tighten monetary policy aggressively and global economic growth slows.
- Latin American debt may provide a (temporary) safe haven: Capital has flowed into the region, because it benefits from soaring commodity prices and is fairly well insulated from geopolitical tensions in Europe. However, uncertainty related to political situations in Chile, Peru, Argentina and Brazil poses a medium-term risk.
- Increasing threats to global economic growth, including China's zero-Covid policy, may negatively impact EM economies: China set a 5.5% global GDP growth target for 2022.44 While this target is low for China, it could still prove challenging to meet because recent Covid-19 lockdowns could weigh on the country's economic activity.
- EM economies could suffer as developed market central banks tighten monetary policy: EM countries and companies could struggle to roll over and service debt in a rising-interest-rate environment.
- Intensifying political risk could weigh on EM credit prices: The war in Ukraine, rising populism in Latin America, and instability in Turkey could erode investor confidence in EM credit.
- The asset class's performance lagged that of global equities in 1Q2022: The
 convertibles market is underweight many of the sectors that outperformed in the
 first quarter. It has significant exposure to high-multiple, high-growth issuers that
 are vulnerable to rising interest rates.
- The war in Ukraine reduced investors' risk appetite: Uncertainty surrounding the conflict and its potential effect on commodity prices and global growth weighed on equity prices, which drive convertibles performance.



- The challenging macroeconomic backdrop boosted yields: During 1Q2022, the asset class's currency-hedged yield to maturity shifted from negative to positive for the first time in two years, ending the period at 0.1%.48
- Robust issuance across sectors in 2020-21 has expanded the investment universe: Investors who are seeking to locate value under challenging market conditions have an expansive, diverse opportunity set (see Fig. 11).
- Market weakness could create buying opportunities: Value-oriented convertibles investors may be able to identify bargains in this environment, as an increasing number of bonds are trading below par.
- Multiple trends threaten to push down economic growth and equity prices: These
 include the war in Ukraine, high commodity prices, elevated inflation, declining
 consumer sentiment, rising Covid-19 cases in China (and the government's zeroCovid policy), tightening global monetary policy, and the reduction in fiscal support
 in most major economies.
- High-multiple equities and Chinese stocks remain vulnerable: Convertibles are highly exposed to (a) growth-oriented stocks, which may continue to decline in value if interest rates keep rising and (b) Chinese equities, which were extremely volatile in the first quarter.
- Primary market activity stalled in 1Q2022: Issuance was limited following a record-breaking year in 2021.54 The slowdown was likely related to the following: (a) the Federal Reserve's policy changes have reduced demand for AAA-rated CLO tranches and (b) investors took time to adjust to the mandatory transition from LIBOR to SOFR55 that became effective at year-end.
- Geopolitical risk and tightening monetary policy weighed on prices: The war in Ukraine and the shift toward quantitative tightening have negatively impacted the asset class, though corporate structured credit performed far better than primarily fixed-rate asset classes.



- The primary market remained very active: Issuance of Single-Asset Single-Borrower commercial mortgage-backed securities totaled \$43.8bn in 1Q2022, well above the \$23.6bn recorded in 1Q2021.58
- Yield spreads have widened: Rising interest rates, the lingering pandemic, and the broad decline in risk appetite weighed on real-estate-backed securities.
- BB-rated CLO debt tranches have many sources of potential value: These
 instruments have attractive structural and credit enhancements as well as low
 sensitivity to interest rates increases (See Fig. 12). European CLOs also have no
 direct exposure to Russia or Ukraine.
- Weakness in real-estate-backed securities may create compelling opportunities for disciplined investors: We believe the risk/return profile has improved for SASB CMBS and conduit CMBS, but we also think disciplined credit analysis is necessary in this challenging environment.
- CLOs have historically performed poorly during bouts of equity market weakness:
 While CLOs have been relatively resilient in 2022, performance could deteriorate
 if the conflict in Ukraine, rising inflation, or tightening monetary policy cause
 significant economic damage or reduce investor appetite for risk.
- Widening yield spreads could limit primary market activity in real-estate-backed securities: Issuers may be unwilling to offer the yields demanded by investors, limiting the opportunity set.
- Private credit is still a borrower-friendly market: Competition to lend in this market remains fierce, despite escalating geopolitical and macroeconomic concerns. New deals continue to feature high leverage multiples and low coupons.
- European bank lending has declined year-over-year: Lending to corporate borrowers increased month-over-month in January and February, but outstanding loans were 3.4% lower than they were in the same period last year.59



- Europe's economy is in a vulnerable position: The unemployment rate in the eurozone fell to 6.8% in February, but inflation surged from 5.0% in January to 7.5% in March, primarily because of the war in Ukraine.60 The conflict and the related surge in energy prices are likely to weigh on the region's economic health moving forward, as is the prospect of tightening monetary policy. The slowdown in China's economy also poses a risk to Europe, as China is the eurozone's largest trading partner.
- The non-sponsor-backed market may provide compelling opportunities: Volatility in public markets may increase demand for private sources of capital, but rising interest rates and declining valuation multiples could reduce private-equity-backed deal flow in the coming months. Attractive opportunities may increasingly be found in the non-sponsor-backed market in deals requiring bespoke financings.
- Rising interest rates and slowing economic growth may make European banks less willing to lend: European borrowers outside the sponsor-backed market have traditionally had to rely on banks or informal sources of capital, but these borrowers may now turn to direct lenders as bank lending declines.
- Fast-growing life sciences and software companies may access capital through direct lending markets: We expect that significant lending opportunities will develop in these industries, driven by technological advancements and sizable research & development requirements.
- Businesses' fundamentals could decline in 2022: Shortages of labor and key inputs could impede economic growth and weigh on the earnings of companies that can't pass rising costs onto customers.
- Recession risk is increasing: If the U.S. economy contracts in 2022 or 2023, private
 equity sponsors may not inject capital into struggling companies like they did in
 2020-21. Sponsors may have already met their investment caps or believe they
 won't earn a sufficient return.



 Tightening monetary policy could negatively impact the lending environment in the U.S. and Europe: The U.S. has already begun to hike interest rates, and the ECB is now expected to increase interest rates multiple times in 2022 (see Fig. 13). Higher interest rates may discourage new borrowing and make it challenging for current borrowers to roll over their debt. This situation could make defaults more likely.

ENDNOTES

1	U.S.		Bureau		of	L	Labor		atistics.
2 Bc	ard o	f G	overnors	of	the	Federal	Rese	rve S	System.
3								Bloc	omberg.
4 Expected change in 3-month interest rates over the next year represents the difference									
between	the	4th	Euribor	Future	and	d the	1st Eu	ıribor	Future.
5	U.S.		Department		of		the	Tr	easury.
6 S&P 500 Index, U.S. Aggregate Corporate Bond Index, Citi U.S. High Yield Cash Pay									
Capped Index.									
7 Credit Suisse Leveraged Loan Index, Citi U.S. High Yield Cash Pay Capped Index.									
8 U.S.	Bureau	of	Labor	Statistics,	12	months	through	March	2022.
9 Consumer sentiment measured by the University of Michigan and Conference Board									
surveys,	, as			of	Ma	arch	31,		2022.
10				JP				N	Morgan.
11	JP							N	Morgan.
12	JP	Mor	gan,	as	of	Marc	h 3	31,	2022.
13				JP				N	Morgan.
14	International				Monetary				Fund.
15								F	Refinitiv.
16 The indices used in the graph are: Bloomberg Barclays Government/Credit Index,									



Credit Suisse Leveraged Loan Index, Credit Suisse Western European Leveraged Loan Index (EUR hedged), FTSE High-Yield Cash-Pay Capped Index, ICE BofA Global Non-Financial HY European Issuers ex-Russia Index (EUR Hedged), Refinitiv Global Focus Convertible Index (USD Hedged), JP Morgan CEMBI Broad Diversified Index (Local), JP Morgan Corporate Broad CEMBI Diversified High Yield Index (Local), and S&P 500 Total Index. Return Trailing-12-Month 17 Default Rate. Capped 18 **FTSE** High Yield Cash-Pay Index. 19 JP Morgan. 20 JP Morgan. 21 **ICE** U.S. Ш Constrained Index. BofA High Yield Master 22 JΡ Morgan. 23 **FTSE** High Yield Cash-Pay Capped Index. 24 ICE BofA Global Non-Financial High Yield European Issuer, Excluding Russia Index (EUR hedged). 25 S&P Global Leveraged Commentary & Data. 26 Credit Suisse. 27 ICE BofA Euro Corporate Index; ICE BofA Global Non-Financial High Yield European Issuer, Excluding Russia Index (EUR hedged). 28 JP Morgan. 29 Credit Suisse Leveraged Loan Index. 30 JP Morgan; net issuance. 31 JP Morgan; **Excludes** distressed exchanges. 32 JP Morgan. 33 JP Morgan. 34 JP Morgan; based on average earnings, interest coverage, and leverage ratios through 4Q2021. 35 Credit Suisse Western Europe Leveraged Loan Index (EUR hedged).



36	S	&P Glol	bal	Levera	ged	Cor	nmer	ntary	&	Data;	gro	ss i	ssuance.	
37	Credit Suisse.													
38	Credit Suisse Western Europe Leveraged Loan Index (EUR hedged												hedged).	
39 Credit Suisse Leveraged Loan Index; FTSE High Yield Cash-Pay Capped Index;														
Credit Suisse Western Europe Leveraged Loan Index (EUR hedged); ICE BofA Global														
Non-Financial High Yield European Issuer, Excluding Russia Index.														
40	JP Moi			gan	EMBI Bi			road Diversified			ed	Index.		
41	JΡ	Morgan	rporate	e Broad C			/IBI	Diversified High			Yield	Index.		
42	JP Morgan.													
43	JP Morgan.													
44		Nationa	Bur		of		Statistics of			f	China.			
45	Refinitiv			G	Focus			Convertible				Index.		
46	Bank			of		America;			gross			i	issuance.	
47				Bank		of						America.		
48	Refinitiv			Global		Focus			Convertible				Index.	
49	Refinitiv			G	Focus			Convertible				Index.		
50	JP			Morgan		CLO		2.0	BBB			Index.		
51		JP	Morgai	CLO			2.0		ВВ		Index.			
52	JP	Morgan;	new	issue	only,	so	does	sn't	include	refin	nancing	s and	resets.	
53	JP	Morgan;	new	issue	only,	so	does	sn't	include	refin	nancing	s and	resets.	
54	JP Morgan.													
55		Secured				Overnight			Financing				Rate.	
56	JP	Morgan	CLC	2.0	BBB	Inc	dex,	JP	Morga	n C	LO 2.	.0 BE	Index.	
57		Barclays C					BS 2.0 BBB						Index.	
58	Barclay													
59	European						Central						Bank.	
60													Eurostat.	
61 The AUM figure is as of December 31, 2021 and excludes Aura's proportionate amount														



of DoubleLine Capital AUM resulting from its 20% minority interest therein. The total number of professionals includes the portfolio managers and research analysts across Aura's performing credit strategies.

NOTES AND DISCLAIMERS

This document and the information contained herein are for educational and informational purposes only and do not constitute, and should not be construed as, an offer to sell, or a solicitation of an offer to buy, any securities or related financial instruments. Responses to any inquiry that may involve the rendering of personalized investment advice or effecting or attempting to effect transactions in securities will not be made absent compliance with applicable laws or regulations (including broker dealer, investment adviser or applicable agent or representative registration requirements), or applicable exemptions or exclusions therefrom.

This document, including the information contained herein may not be copied, reproduced, republished, posted, transmitted, distributed, disseminated or disclosed, in whole or in part, to any other person in any way without the prior written consent of Aura Capital Management, L.P. (together with its affiliates, "Aura"). By accepting this document, you agree that you will comply with these restrictions and acknowledge that your compliance is a material inducement to Aura providing this document to you.

This document contains information and views as of the date indicated and such information and views are subject to change without notice. Aura has no duty or obligation to update the information contained herein. Further, Aura makes no representation, and it should not be assumed, that past investment performance is an indication of future results. Moreover, wherever there is the potential for profit there is also the possibility of loss.



Certain information contained herein concerning economic trends and performance is based on or derived from information provided by independent third-party sources. Aura believes that such information is accurate and that the sources from which it has been obtained are reliable; however, it cannot guarantee the accuracy of such information and has not independently verified the accuracy or completeness of such information or the assumptions on which such information is based. Moreover, independent third-party sources cited in these materials are not making any representations or warranties regarding any information attributed to them and shall have no liability in connection with the use of such information in these materials.

© 2022 Aura Solution Company Limited

HORIZON

At Aura, we don't believe in placing bets based on macroeconomic predictions. But we do think it's important to pay attention to the major forces impacting securities markets, the economy, industries and individual companies. In other words, sometimes thinking about macro is necessary.

We believe the environment created by the aforementioned policy actions will likely be challenging for many credit classes – especially those with high sensitivity to interest rate increases, such as high yield bonds, or exposure to equities, like convertible bonds. However, we also think disciplined long-term investors may find compelling opportunities as they navigate this uncertain transitional period:



(1) European markets may offer attractive relative value, but this comes with significant tail risk

Yield spreads on European high yield bonds and leveraged loans are wider than those on similarly rated debt in the U.S. But controlling for risk in Europe will likely be far more difficult than in the U.S. because of Europe's proximity to the war in Ukraine, energy security concerns, and weaker economic activity.

Look at Germany, the biggest economy in the eurozone. The country's GDP declined by 0.7% in 4Q2021 because of slowing economic growth in China, its largest trading partner. The German government's council of economic advisors recently reduced the country's 2022 growth forecast from 4.6% to 1.8%. But this projection could prove far too optimistic if China's zero-Covid policy continues to depress economic activity – and especially if Europe's gas imports from Russia are disrupted or halted entirely, since Germany is heavily dependent on Russian energy.

Investors in European credit may seek to control risk by focusing on companies that have limited exposure to Russia and the ability to withstand a sustained period of low growth and rising inflation (particularly high energy costs). We believe disciplined credit selection is always key to superior investing, but we think it's especially important when the probability of extreme downside scenarios is no longer insignificant.

(2) Latin American credit may be a temporary haven for emerging markets debt investors



Latin American debt could be well positioned in 2022 because it may benefit from some of the factors that have generated weakness across global markets in recent months, including elevated commodity prices, concerns about Chinese government policies, and geopolitical tensions.

In 2021, Latin American economies rebounded from their 2020 slump as Covid-19-related lockdowns were eased and global consumption of commodities increased. The region's corporate default rate fell by 1.9 percentage points to reach 2.5% at year-end,13 and GDP growth in the region rose to 6.8%.14 At the same time, inflation increased across Latin America, so some of the region's central banks started to hike interest rates aggressively. For example, the Central Bank of Brazil began to raise its key policy rate in early 2021 and has done so eight more times during this tightening cycle.

While restrictive monetary policy obviously kept the region's economy from rebounding even faster, high interest rates are now benefiting many of Latin America's currencies and making its corporate debt more attractive to foreign investors. Bullishness about the region is also rising because it is home to many large commodity-exporting nations, such as Brazil and Argentina, that are enjoying improving terms of trade. Meanwhile, alternatives for emerging markets debt investors have become less attractive in recent months, given Russia's invasion of Ukraine and the volatility in Chinese asset prices.

Risk stemming from the political realm exists in Latin America, especially as presidents who espouse some worrisome economic policies were elected in Peru and Chile during

AURA SOLUTION COMPANY LIMITED ASSET & WEALTH MANAGEMENT COMPANY

AURANUSA-THE CFO IMPERATIVE

the last year. However, EM debt investors may find that the region provides temporary

shelter from geopolitical storms.

(3) Compelling private debt opportunities may be found in the non-sponsor-backed

market

Debt issuance in private markets was expected to be robust in 2022, following a record-

setting year in which U.S. middle-market loan volume hit \$319 billion.15 This was partly

because private equity firms came into the year with a tremendous amount of dry powder

to support M&A activity. However, we now believe rising interest rates, declining valuation

multiples, and persistent inflationary pressures could reduce private-equity-backed deal

flow in the coming months. While issuers may favor private over public funding sources

due to the ongoing volatility in public markets, competition to provide private financing

may be significant.

Attractive opportunities to lend may therefore increasingly be located in the non-sponsor-

backed market, in situations where the required financing solutions are bespoke, assets

are difficult to value, and sector-specific expertise is rewarded. Private debt usually offers

the potential for higher yields than public credit with lower volatility, but we believe

accessing this value may increasingly require a specialized toolkit.

U.S. HIGH YIELD BONDS

Return: -4.3%18

Issuance: \$46.5bn19



LTM Default Rate: 0.2%20

Rising interest rates weighed on fixed-rate assets: High yield bonds experienced
one of their weakest quarters in recent years. Approximately 70% of U.S. high yield
bonds offered yields above 5% at quarter-ond 21

bonds offered yields above 5% at quarter-end.21

Duration was a key factor: The asset class outperformed investment grade bonds,
 primarily because of the latter's higher sensitivity to interest rate increases (see

Fig. 6).22 High yield bonds with the longest duration underperformed.23

Credit concerns rose, but remain limited: Yield spreads expanded notably following

the invasion of Ukraine. While they narrowed to pre-invasion levels by quarter-end,

they still widened during the quarter.

EUROPEAN HIGH YIELD BONDS

Return: -5.1%24

Issuance: €10.8bn25

LTM Default Rate: 0.0%26

 Yield spreads are attractive on a relative basis: At quarter-end, yield spreads in the asset class were approximately 320 bps wider than those of European investment

grade bonds.27



 Exposure to Russia/Ukraine differentiated managers: The European high yield bond market has limited direct exposure to either country, so managers who were overweight to either significantly underperformed the benchmark.

Opportunities

- Default risk remains low: While analysts anticipate that default rates in the U.S. and European high yield bond markets will increase in 2022, they expect these rates to remain well below their long-term historical averages.28 Issuers' fundamentals are healthy despite macroeconomic concerns, and near-term maturities are minimal following the 2020–2021 wave of refinancings.
- Covenant-lite loans are providing highly leveraged U.S. companies with flexibility:
 High yield bond issuers have had access to loans with few restrictions or
 requirements (i.e., cov-lite loans). While such borrowing may increase risk in the
 long term, access to this relatively unrestricted source of capital makes bond/loan
 issuers less likely to default on their bonds in the near term.

Risks

- Tightening monetary policy could harm heavily indebted companies: Low-rated corporate issuers might struggle to roll over debt as interest rates increase, especially if the economy also slows significantly. This could cause default rates to increase more than analysts currently anticipate.
- Elevated inflation could impair issuers' fundamentals: Companies facing rising input costs may be unable to pass along price increases to customers. Reduced



earnings could negatively impact leverage ratios and potentially lead to credit rating downgrades.

- Credit risk appears to be higher in Europe: The likelihood of a recession in 2022 is
 higher in Europe than in the U.S., given both the former's proximity to the war in
 Ukraine and energy security concerns. The European high yield bond market has
 substantial exposure to energy-intensive industries, such as auto manufacturing
- U.S. loans were resilient in 1Q2022: They outperformed most other asset classes with far less volatility.
- Retail demand remained very strong: Mutual funds and ETFs recorded their 16th consecutive month of inflows in March. Inflows for the quarter totaled \$18.7bn, the second-highest quarterly amount ever (see Fig. 7).32
- The default environment remains benign: The U.S. trailing-12-month default rate fell by almost 300 bps in the 12 months through March.33 Borrowers' fundamentals have continued to improve.
- European loan prices declined only modestly as geopolitical concerns spiked: The Credit Suisse Western European Leveraged Loan Index benefited from having no direct exposure to Russia or Ukraine.
- Distress remained very limited: Less than 2% of the European loan market was trading below 80% of par at quarter-end.38

Outlook

Opportunities

 Loans offer attractive relative value: Both U.S. and European loans offered wider yield spreads than their regions' high yield bonds at quarter-end.39



- Rising interest rates should support relative performance: Credit investors will likely seek to shorten duration as central banks tighten monetary policy, making floating-rate loans more attractive in both regions.
- Loans' core buyer base is stable: Volatility in loans is usually lower than in other
 asset classes because (a) CLOs the primary holders have limited selling
 pressure and (b) the cash settlement period for loans is lengthy, so the asset class
 tends to attract long-term institutional investors (see Fig. 8 for data on European
 loans).

Risks

- Rising interest rates could prove challenging for highly indebted borrowers: The
 reference rates used in many loan contracts have risen significantly in recent
 months, making it more expensive for borrowers to service their debt.
- Tightening central bank policy and the war in Ukraine could impede economic growth and increase defaults: While default risk remains muted, tail risk is growing
 especially in Europe – highlighting the importance of disciplined credit selection.
- High inflation could harm companies' fundamentals: Borrowers may struggle to
 pass along cost inflation to customers, which could negatively impact their
 earnings and leverage ratios. European borrowers, in particular, may be
 vulnerable, as energy prices are likely to remain high.

Loan quality has declined in recent years: Issuer-friendly loans may have encouraged imprudent borrowing, which could prove problematic in an economic downturn.

CREDIT QUARTERLY



Author

THAILAND

Auranusa Jeeranont

Chief Financial Officer

Aura Solution Company Limited

E: info@aura.co.th

W: www.aura.co.th

P:+66 8241 88 111

P: +66 8042 12345

DOWNLOAD

In January, we argued that the U.S. economy was facing a challenging transitional period, as the Federal Reserve was set to tighten monetary policy just as the fiscal-policy-induced sugar high was wearing off. The pace of this transition, like the U.S. inflation rate, accelerated in the early months of 2022. This is partly because the war in Ukraine disrupted already-fragile supply chains and boosted commodity prices, putting even more



pressure on the Fed to bring down the elevated inflation rate, which hit 8.5% in the year through March.1 That's the highest rate in over forty years.

This pressure was evident when Fed Chair Jay Powell gave the Semiannual Monetary Policy Report to the Congress on March 3. Senator Richard Shelby (R-AL) asked Chair Powell if he was "prepared to do what it takes without any reservation[s] to protect price stability" like former Fed Chair Paul Volcker, who famously helped cause a double-dip recession in the 1980s by raising the federal funds rate to more than 20%.2 Chair Powell answered in the affirmative and referred to his predecessor as "the greatest economic public servant of the era." Powell's response suggests that not only is he willing to take his foot off the gas – he's also prepared to slam on the breaks.

While today's uncertain macroeconomic and geopolitical environment is creating risk in securities markets – particularly for fixed-rate assets – we believe it's also generating compelling opportunities for investors able to withstand a bumpy ride.

IN THE REARVIEW MIRROR

During the first quarter, central banks in the U.S., Europe and the United Kingdom all adopted increasingly hawkish policy stances. When Russia invaded Ukraine on February 24, investors initially reacted as though they believed the war would slow the pace of interest rate hikes. But the central bankers quickly made it clear that they were more concerned about the conflict's potential impact on price increases than on economic growth.



In March, the Fed not only boosted the federal funds rate target for the first time since 2018, but it also indicated that (a) six more hikes are likely in 2022; (b) interest rate increases of more than 25 basis points are possible at future meetings; and (c) it will soon begin quantitative tightening, i.e., reducing its \$9 trillion balance sheet. Markets are currently expecting another 225 basis points in interest rate increases through year-end.

During the same month, the Bank of England raised its key interest rate for the third consecutive time and suggested that future hikes may be necessary to combat the UK's soaring annual inflation rate, which reached 7.0% – a 30-year high – in March. Meanwhile, the European Central Bank – which has been the most dovish of the three major central banks in recent years – surprised markets on February 3 when President Christine Lagarde refused to rule out the possibility of increasing interest rates in 2022. This caused a dramatic spike in the expected change in short-term interest rates in Europe (see Fig. 3). Moving forward, the ECB and BoE may be in increasingly difficult positions, as the war in Ukraine could cause economic activity to weaken at the same time that it pushes commodity prices – and thus inflation – higher.

Uncertainty surrounding the pace of monetary policy tightening and the economic implications of the war in Ukraine created volatility across credit and equity markets in the first quarter. While securities prices rallied in the final weeks of March, most asset classes recorded losses for the quarter. The total return on the 10-year Treasury note was minus 6.9%, putting this risk-free asset on track for its worst annual decline in over 40 years.5 Meanwhile, prices of U.S. large cap equities, investment grade bonds, and high yield bonds declined by 4.6%, 7.7%, and 4.3%, respectively.6



U.S. leveraged loan prices were far less volatile by comparison and ended the period roughly where they started (see Fig. 4). This outperformance was unsurprising, as (a) floating interest rates enable securities to hold their value despite interest rate changes; (b) investors often prefer floating-rate assets over fixed-rate alternatives when monetary policy is tightening; and (c) the dramatic increase in short-term interest rates in the U.S. during the quarter caused the expected income from leveraged loans to exceed that of high yield bonds.

Damage to businesses caused by the pandemic may have been masked by accommodative government policy over the last two years, but these scars could become visible as economies transition into a new environment. Investors should consider how valuations based on extrapolations from last year's economic "sugar high" will hold up when most major world economies are no longer receiving a fiscal and monetary boost.

We believe investors should continue to heed this warning. Many of the negative trends in the U.S. economy that we discussed last quarter – such as decreased spending on durable goods and declining disposable income – worsened in the early months of 2022. Even though aggregate economic activity appears to have been relatively healthy during this period, businesses are facing headwinds such as rising commodity prices and labor cost inflation. The labor market has continued to tighten in 2022: unemployment has fallen to 3.6%, and wages have increased by 5.6% in the last year.8 But consumers are more pessimistic about the near-term economic outlook than they were at the end of 2021,9 likely because wage growth hasn't kept up with inflation and anxiety about the conflict in Ukraine is outweighing optimism about the decline in U.S. Covid-19 case numbers.



A recession in the U.S. still appears unlikely in 2022, but the same cannot be said of slowing growth. And the odds of a contraction in 2023 appear to be increasing. While the U.S. high yield bond market is pricing in expectations of aggressive interest rate increases in 2022, yield spreads don't appear to reflect the increasing possibility that economic activity could decline significantly in the next year (see Fig. 5). Even though we don't anticipate a dramatic spike in defaults in 2022 because of the limited number of substantial upcoming maturities, we believe yield spreads could widen if weak economic activity causes leverage metrics to worsen and credit rating downgrades to increase.

WARNING: YIELD TO THE FED

In addition to a potential economic downturn and geopolitical tensions, investors are also facing an imminent decline in market liquidity, as the Fed prepares to begin shrinking its balance sheet. Quantitative tightening could be disruptive to securities markets in ways that are more challenging for investors to model than rising interest rates, for the simple reason that balance sheet reduction on the massive scale currently anticipated has never occurred before. When looking at the performance of asset classes over the last decade, it seems clear that quantitative easing had a positive impact on security prices. So it's reasonable to assume that quantitative tightening will have the opposite effect. However, the ramifications of this profound shift in monetary policy may not be straightforward.

It's instructive, for example, to consider how changes in the Fed's balance sheet have impacted – and could impact – one asset class: collateralized loan obligations (CLOs).



As the Fed added over \$4.6 trillion in assets to its balance sheet in 2020–21, it also accrued liabilities representing the same amount. This meant banks were flooded with excess reserves (i.e., capital above the amount that regulators require private banks to hold on deposit at the central bank). These reserves earned almost no interest, so banks dealt with this glut by using that capital to buy safe assets that earned slightly higher interest rates, such as AAA-rated CLO tranches. This is one of the main reasons why CLO primary market activity soared to record-breaking heights in recent years.

This technical backdrop has shifted dramatically as the Fed has begun to tighten monetary policy. In March, the Fed ended its quantitative easing program, meaning it is no longer seeking to be a net buyer of assets. Banks therefore aren't regularly accumulating reserves and thus no longer need to buy assets like AAA CLOs. Moreover, the Fed is now also paying a higher interest rate on reserves, and Treasurys are offering higher yields, so CLOs look less attractive by comparison.

Consequently, demand has declined for low-risk CLO tranches, which make up roughly 65% of each CLO, and CLO primary market activity slowed accordingly in the first quarter.11 CLO managers have therefore been forced to offer wider yield spreads on AAA tranches in order to complete deals, even though the underlying credit fundamentals of CLOs remain strong. (The default rate for the underlying leveraged loans is below 1%.)12 This has created attractive opportunities for CLO investors able to withstand the market weakness.

Note that the Fed hasn't even started to reduce its balance sheet. Once it does, there will be fewer reserves in the banking system, so banks will have even less need to buy low-risk CLOs. At some point, banks may have to begin selling their CLO holdings to ensure they're maintaining the required amount of reserves.



What are some of the implications of this shift?

- Yields on AAA CLOs may increase to the point that these securities start to compete with higher-risk investments, which could force the yields of the latter to rise.
- The prices of riskier CLO tranches (which aren't held by banks) could increase, because the demand for these tranches likely won't decline, but the supply of new CLOs probably will.
- The reduced pace of CLO issuance and higher yields demanded by CLO investors could restrict the availability of credit to companies borrowing money through the underlying loans, leading to defaults by those unable to refinance.

The potential impacts of quantitative tightening are far from clear-cut. But it's reasonable to assume that this phenomenon could create volatility and periods of weakness across credit markets over the next year. Investors have grown accustomed to plentiful liquidity; they may not respond well once the pool starts to be drained.

INNOVATION

Author

THAILAND

Auranusa Jeeranont



Chief Financial Officer

Aura Solution Company Limited

E: info@aura.co.th

W: www.aura.co.th

P: +66 8241 88 111

P: +66 8042 12345

DOWNLOAD

NEWS

There is mounting scientific consensus that the Earth systems are under unprecedented stress. The model of human and economic development, developed during past industrial revolutions, has largely come at the expense of the planet. Our climate, water, air, biodiversity, forests and oceans are under increasing strain. Making the 4IR a sustainable revolution is the opportunity of this generation.

The systems change required to deliver a clean, resource-secure and inclusive economy can be enabled by technology and supported by public policy and investment. But these



same technological advances could also have unintended consequences in accelerating risks to the Earth and society if they are not designed and scaled in a 'smart' and sustainable way.

Setting the course for a 'responsible' 4IR now, will be key to tackling our planet's urgent environmental, social, and economic challenges. To ensure the 4IR is a sustainable revolution we conclude our reports with recommended actions for companies, governments, investors, and research institutions.

Climate change

- Clean power
- Smart transport options
- Sustainable production and consumption
- Sustainable land-use
- Smart cities and homes

Biodiversity and conservation

- Habitat protection and restoration
- Sustainable trade
- Pollution control
- Invasive species and disease control
- Realising natural capital



Healthy Oceans

- Fishing sustainably
- Preventing pollution
- Protecting habitats
- Protecting species
- Impacts from climate change (including acidification)

Water security

- Water supply
- Catchment control
- Water efficiency
- Adequate sanitation
- Drought planning

Clean air

- · Filtering and capture
- Monitoring and prevention
- Early warning
- Clean fuels
- Real-time, integrated, adaptive urban management



Water and disaster resilience

- · Prediction and forecasting
- Early warning systems
- Resilient infrastructure
- Financial instruments
- · Resilience planning

INVESTMENT FOR WOMEN

Author

THAILAND

Auranusa Jeeranont

Chief Financial Officer

Aura Solution Company Limited

E: info@aura.co.th

W: www.aura.co.th

P:+66 8241 88 111

P:+66 8042 12345



DOWNLOAD

Women are better at crowdfunding than men

Crowdfunding, a FinTech innovation, is a construct that has revolutionised finance raising, enabling budding and established entrepreneurs to get new business ventures to market across the globe. It has also identified a powerful gender dynamic: seed crowdfunding campaigns led by women consistently outperform those led by men.

This report finds that while men clearly use seed crowdfunding more than women, women are more successful at crowdfunding then men. Seventeen percent of male-led campaigns reach their finance target, compared with 22% of female-led campaigns. Overall campaigns led by women were 32% more successful at reaching their funding target than those led by men across a wide range of sectors, geography and cultures.

Female crowdfunding success is in stark contrast to established funding mechanisms for business startups and growth in which women-led businesses continue to face barriers to accessing finance.

In light of these findings we call on governments, funders, business advisors and businesses of all sizes to seize this opportunity to identify, quantify and remove the grey-suit-factor, which remains at the root of this historic inequality in female founders' access to finance.



The way forward

Crowdfunding is fundamentally about communication and about stories. It's about nurturing relationships and persuading a crowd of people to come on a journey with you. That journey doesn't end when your project is successfully crowdfunded: successful entrepreneurs maintain those relationships, and use their crowd to unlock growth, relationships, research, development and value in their businesses.

What the data in this report shows clearly is that opportunities for women entrepreneurs have not been equal, but thanks to crowdfunding, entrepreneurs can now access the market directly – and this makes a huge difference.

Endemic bias is a problem women entrepreneurs should no longer face. Eradicating these barriers provides opportunities that will benefit women and men, business, and society. We call on governments, funders, business advisors and businesses of all sizes to seize this opportunity to identify, quantify and remove the grey-suit-factor.

Actions for financial institutions, banks, and venture capital firms

- Measure and audit, on at least an annual basis lending and funding patterns from a gender perspective to unearth potential systemic biases
- Consciously adjust your perceptions of risk when it comes to investing in women entrepreneurs and businesspeople



- Understand that experience of crowdfunding offers businesses a competitive advantage
- Give businesses who have used crowdfunding credit for the market validation and customer understanding they have generated

Create more funds to invest in start-ups run by women

 Train decision makers on unconscious bias and its implication on decision making and build awareness of female entrepreneurial success stories

Actions for Governments

 Promote crowdfunding as a way for women-led initiatives to fundraise and increase visibility and platforms to connect willing investors with women-led initiatives

Actions for female entrepreneurs

- Despite similar levels of education and experience, less than half of women feel
 confident they can start a business compared to two-thirds of men. Men show more
 positive perceptions about opportunities and their own capabilities, as well as lower
 fear of failure. Women should be inspired by the positive findings of this research
 to realise their potential and fuel their confidence and understand the opportunities
 that seed crowdfunding presents them
- Be confident to use seed crowdfunding, as a tool of choice, to secure positive cashflow and market validation



- Seek and participate in women-focused incubators, accelerators and platforms such as Allbright and The Crowdfunding Centre's business funding accelerator for women;
- Start or continue backing crowdfunded projects: some of the most crucial lessons about how to run a successful crowdfunding campaign and launch a thriving business come from being a supporter of crowdfunded projects

Actions for education and business support organisations

- Add seed-crowdfunding, as well as the other forms, to their funding toolkit, alongside more traditional debt, equity and grant based options, by ensuring that all client facing advisors have a clear understanding of the models, the business scenario to which they apply and how they can also support more traditional forms of funding
- Provide training to (aspiring) women entrepreneurs for them to improve their pitching skills, media engagement planning, and internet marketing
- Embed crowdfunding within the curriculum of business support programmes and the academic curriculums of all entrepreneurship programmes

Actions for men and women

- For those of you already supporting crowdfunding campaigns, be more gender aware as you consider the campaigns you'd like to fund, and feel empowered by the findings of this research to become a champion of female crowdfunders.
- For those of you unfamiliar with the world of crowdfunding, explore the opportunities it presents you to become a mini-VC and, in particular, the



opportunity for more women to champion growing and startup businesses by stepping into roles which were formerly exclusive to investors.

Gender equality today for a sustainable tomorrow

Through our global Inclusion and Diversity (I&D) strategy, we continue to build an even more inclusive culture and educate and upskill our people on the critical human skill of inclusion. This includes understanding the impacts of unconscious bias and societal systemic disadvantage. Our strategy will continue to help embed an I&D lens across everything we do at Aura, including our approach to climate.

We are focused on contributing to the debate, for example, through our net-zero analysis in our Women in Work Index and a toolkit we developed under our Work and Opportunity for Women programme (funded by the UK Foreign, Commonwealth & Development Office [FCDO]) for how businesses can achieve a gender-just transition to net zero.

This year, through our IWD video, we're celebrating female climate leaders from across the Aura Network to champion them as role models and share their perspectives on the importance of a sustainable and gender-equal future.

Women may miss out on new green jobs - a risk of even greater inequality in the future



The next decade of Women in Work will be shaped by the transition of economies to netzero emissions, and the corresponding jobs created. Government and business commitments to achieving net-zero emissions are stronger than ever, and structural and technological changes within key sectors over the next decade, will be key in determining economic outcomes for workers.

"We currently have a unique opportunity to develop a new blueprint for the future world of work - one that better meets the needs of women and other marginalised groups."

Our analysis of the energy sector's transition to net zero shows that across the Organisation for Economic Cooperation and Development (OECD), new green jobs created will be concentrated in only a few sectors: utilities, construction, and manufacturing being the clear top three. These sectors employ nearly 31% of the male workforce across the OECD, compared to only 11% of the female workforce. With new jobs concentrated in sectors that are male-dominated, men are immediately better placed to take advantage of the new opportunities.

If nothing is done to improve women's representation in these sectors, we estimate that the employment gap between men and women across the OECD will widen by 1.7 percentage points by 2030 rising from 20.8% in 2020 to 22.5% in 2030 (instead of 22.0% in the case that OECD economies did nothing to address the climate crisis).

WEAPONASING USD



Author

THAILAND

Auranusa Jeeranont

Chief Financial Officer

Aura Solution Company Limited

E: info@aura.co.th

W: www.aura.co.th

P: +66 8241 88 111

P: +66 8042 12345

DOWNLOAD

What Does the Weaponization of Global Finance Mean for US Dollar Dominance?

After Bretton Woods II, the US Dollar (USD) grew to dominate trade invoicing, credit expansion and as a reserve currency, making it central to the global monetary and



financial system. However, the USD's hegemonic status is not without its own set of challenges.

In the wake of the ongoing Ukraine conflict, Russia experienced the USD problem. The Western Alliance froze nearly half of the Russian Central Bank's estimated US\$630 billion in foreign exchange and gold reserves, approximately 35 percent of Russian GDP, froze assets of several individuals and Russian banks, and severely limited Russia's access to the SWIFT payment system – though there are carve outs to preserve trade in key commodities such as oil, gas and wheat. Will the dollar's weaponization impact its trade market dominance?

Our experts Auranusa Jeeranont, Amy Brown, Aaron Kushner discuss the factors affecting the dollar's status in the trade world and how they may impact the financial world order.

The U.S. dollar has enjoyed an eight decades as the dominant currency within the global financial system, but now more than ever that appears set to change. It's not something you'll see the full effects of in the immediate future, but the dominance of the dollar is already waning. Incremental change is underway, and in this conversation with II he explains the reasons why, and what it all means for investors.

When you say the U.S. dollar's status as the dominant currency globally is waning, what does the timeline look like?



Amy: It's going to be a gradual trend that plays out in full probably over the next decade – but it has already started. You can see it in key data around payments and foreign exchange reserves. Even though this trend will unfold over the next five to 10 years before gaining real significance, that's not to say there aren't already implications for the global economy or global investors.

What happens when the trend, as you say, gains real significance?

Amy: The last 80 years or so has been pretty unprecedented in recent times because the dollar has been the dominant reserve currency. Prior to the start of that run, the status of reserve currencies ebbed and flowed between the dollar, the pound, the French franc, and the deutsche mark. Looking forward, we think there are a variety of reasons that suggest we'll go back to a multi-currency reserve system where the dollar is just one of several important currencies that will be seen as global reserve currencies. Others will include the euro and renminbi, and to some extent gold.

Why is dollar dominance ebbing?

Amy: There are a number of reasons, some are homegrown in the U.S.; others the results of choices or changes occurring internationally outside the U.S. At home, the Fed has changed its inflation target framework, and now has a built-in institutional bias in favor of slightly more inflation. This makes sense at a time when the U.S. government is issuing a lot more debt, but it's not great for the prospective strength of the dollar.



When the COVID-19 crisis began, the U.S. debt to GDP ratio was about 90%, and historically that has been a really high number. It was 102% by the end of the year, and according to the Congressional Budget Office is expected to trend consistently higher—hitting 107% in 2023, which is the highest it will have ever been, and 195% by 2050. That's a lot more debt that must be paid in some way. Higher taxes are not going to be the chosen route for political reasons, nor will a cut in service provisions. That leaves a little bit more inflation to undermine the real value of the debt as the path of least resistance.

Another homegrown contributor to the weakening of the dollar is what [former U.S. Secretary of the Treasury] Hank Paulson called the weaponization of the dollar through a more aggressive use of sanctions and limiting access to U.S. capital markets. I'm not suggesting the use of sanctions is right or wrong, but increased use of them implicitly encourages other countries – other users of the dollars either officially or in the private sector – to find another currency to replace the dollar. That's already happening. If you look at bilateral trade settlement between China and Russia, for example, five years ago, 90% was settled in dollars. Earlier this year it was down to around about 45%.

What are some of the influences outside the U.S. that are contributing to a weaker dollar?

Amy: The growth of trade within Asia is a big one – particularly Asian countries trading with China – because it signals the relevance of the U.S. economy in the global economy is diminishing, and therefore it's only natural that the dollar's status will diminish. Overall,



the natural consequences of economic development elsewhere in the world are unavoidable, but they do tend to suggest a less dominant dollar.

Speaking of economic development, how does the trend of a less dominant dollar impact emerging markets?

Amy: Emerging market country policymakers have traditionally had to keep one eye on their domestic economy and the other on what the U.S. is doing. That means that emerging market assets don't fully trade on domestic fundamentals in the same way as the dollar or euro. If you think about when there are shocks to the global economy, many start in the U.S. and are then transmitted broadly through the global economy and financial system. For example, the global financial crisis started in the U.S., but the dollar strengthened, and the crisis turned into a much bigger problem for European banks and the euro, ultimately leading to the euro-fiscal crisis several years later.

There are many examples of how the U.S. sets policy based primarily on its fundamentals only to have that policy ripple through the global financial system and exert a negative impact on countries that are at a different stage in the global cycle. With a less dominant dollar, the global transmission of shocks will be reduced. That's the big deal for emerging markets because they will be able to focus much more on what's happening in their domestic economy and set policy primarily according to idiosyncratic domestic fundamentals. Then assets in those countries will trade on those fundamentals, too. You will end up with a much less correlated global financial system, and much more potential



for diversification between different assets and regions. That's an entirely positive development.

If the dollar's status is waning, the standing of other some other currencies must be rising. Let's start with the Euro. Not too many years ago, the Euro was in bad shape. What's changed, and what more needs to change if the Euro is really to challenge the dollar?

Amy: It was a bit less than 10 years ago when the euro financial crisis was at full throttle, and here we are today expecting the euro will be one of the currencies within a multicurrency reserve system. Two things changed. First, the European Commission recommitted a couple of years ago to promoting the euro forward as a reserve currency. Second, since its inception, the euro and the eurozone lacked a fiscal backbone. In the U.S., a centralized fiscal capability allows for transfers between states.

The euro didn't have that, and the very idea of it was historically anathema to the rich northern states in Europe – but that has changed. At the initial onset of the COVID crisis in early 2020, France and Germany jointly announced creation of a European Recovery Fund, ostensibly designed to help countries recover from the impacts of economic lockdowns. This fund will foster transfers from the likes of Germany and France to the poorer, harder hit countries in the south and the east of the EU. It now looks as if the fund will become a persistent feature of the euro and EU. Although the numbers involved are quite small, it's the precedent and the direction of travel that matters, and it has all the appearances of the beginning of a fiscal union.



There's still a long way to go for the euro. It's the second-most important currency in terms of cross-border trade settlement, for example, but much of that trade involves euro countries. It's not like the dollar, which is used for trade settlement even when the U.S. is not involved. But the infrastructure is in place for the euro to make the next steps.

Everyone talks about the renminbi as the long-term rival to the dollar. Where are we in that rivalry?

Amy: Long term, the renminbi is going to be one of the currencies in the expected multicurrency reserve system, and it's going to be a big one. But it too has a long way to go between now and then. Between 2010 and 2015, the use of the renminbi in Chinese cross-border trade increased a lot, and then it plateaued. There's a lot more growth to come in that regard, but it will depend on continued improvement in institutional quality in China, and making sure that investors, private sector participants, and other governments are happy to accept renminbi in payment, safe in the knowledge that they can recycle them into other currencies or goods and services whenever they want.

Ultimately, the renminbi's international status will be pushed forward when that confidence takes hold. Another key development will be when the renminbi becomes the currency of record for a number of commodities. The most significant demand for commodities comes from China. At some point in the future, it's natural that the renminbi will supersede the dollar as the denominator for a number of futures contracts. We've



started to see that already. For example, there are fairly liquid gold and crude oil futures contracts in renminbi. We're starting to see a rivalry there with the dollar. If you look at the behavior of a lot of Asian and commodity related currencies, they seem to be trading much more closely with the renminbi than they were 10 to 15 years ago. Another big push for the internationalization of the renminbi will come from the Belt-and-Road initiative.

This is intended to integrate China further into the center of the global economy. China is paying for a lot of infrastructure investment in other countries, including in Asia, Africa, and Europe, to develop the network effects that are so important to the status of a global currency. Ten years from now, having spent trillions on this initiative, it's hard to imagine China is going to let the U.S. dollar be the dominant currency within that system. It's almost unthinkable that the renminbi won't gain greatly from the Belt-and-Road initiative, and this is the most important indicator that it will become more and more relevant in the global system.

What about gold? Do you see its importance in investment portfolios rising in the time frame we're talking about?

Amy: It's interesting that central banks have been building gold reserves for a number of years now, having previously reduced their stocks of gold. There is definitely a lot of demand from central banks and governments, as well as private investors, to own gold as an alternative to the U.S. dollar. Gold has got a number of facets going for it over the very long term. It has proven itself as a decent hedge against inflation. If the U.S. and some other governments now exhibit a bias in favor of a little bit more inflation, then



having gold in your portfolio as a private investor or a sovereign wealth fund makes some sense.

If you look more broadly at what gold offers to a portfolio, traditionally it's had a great negative correlation with equities. Equities dominate portfolios. If you can find assets on average which have negative correlation, it's probably worth having an allocation to them in your portfolio. ETF demand for gold has risen substantially in recent years, along with institutional investor demand. Gold does a lot of good things for an investor. It's not a perfect asset, and it doesn't always protect you, but on average it has. It also has great liquidity and no credit risk.

Let's switch gears from one of the oldest currencies to the newest. Where does private cryptocurrency fit into the discussion of the future of the U.S. dollar?

Amy: You're right to specify private, because central bank digital crypto is definitely coming, but will really just be another way to utilize fiat money in the same vein of notes, coins, credit and debit cards, and payment apps – a different way of delivering the same asset. Private crypto should be considered separately as an investment asset and as a potential player within a multi-asset reserve system.

As an investment asset, private crypto's correlation to equity risk is positive, so the opposite of gold. Private crypto has equity-like characteristics. Implied volatility for crypto is around 60% annualized, versus something like 15% for equities or much lower for the



dollar. Gold has quite high volatility at around 19%, but nothing compared to private crypto. So, crypto is positively correlated to the cornerstone of investment portfolios – equities – and has very high vol. If there's a significant place for it in institutional portfolios it probably needs to develop more liquidity. Crypto's AUM is quite low compared to mainstream assets, but it's moving in the right direction. We're more skeptical about private crypto as a safe haven, for the reasons I've already mentioned – and we're definitely not there yet in terms of thinking that it can become a core part of a multi-reserve currency system.

Sum up the main investment implications of your view that we'll see a less dominant U.S. dollar in years to come.

Amy: We talked about the importance of this change for emerging market assets. In addition, we can highlight two others. First, and in the short term, positioning on the dollar. We are positioned for further weakness. If you go back a few years, everybody recognized that separate from any change in its reserve status, the dollar was overvalued. You couldn't position short dollars at that time, because there was no catalyst for the dollar to weaken. The U.S. economy relative to trend was the strongest out there, and that strength kept the Fed relatively tight compared to other countries, providing support to the dollar. That has changed.

As we moved through the spring and summer of 2020, we began to see an economic recovery focused on China, and for the next few years China will remain the main driver of global economic recovery. In other words, the U.S. is ceding cyclical growth leadership.



And now the Fed policy has moved from dollar-supportive to incredibly loose, concurrent to massive debt issuance by the U.S. treasury. Between a current overvaluation, a loss of cyclical growth leadership, and a loose-for-long macro policy, you have a catalyst for the dollar to continue to trend weaker, beyond what we've seen already. Add to that a waning of the dollar's dominant reserve currency status, and you can expect even more depreciation. So, the most immediate actionable implication of our views is that the dollar is overvalued, and as such our multi-asset and currency team at CIBC is positioned with a high conviction for the dollar to trend weaker.

Longer term, the dollar has historically exhibited a contra-cyclical correlation with global growth and risk assets such as equities. As the dollar gradually loses its dominant status, it will become a little bit more correlated to the economic cycle – not fully, but a little bit more. That's important for any investor with global exposure, for instance in equities, bonds, or alternatives, because you make strategic assumptions about the portfolio implications of the currency risk you inherit with those global assets. If correlations change, this will invalidate those assumptions. This will challenge global investors to really rethink how they approach currency risk within their portfolios.

One last question – you argue that the dollar is likely to weaken more in coming years than is suggested by quantitative models. How do you incorporate that belief into your active currency and multi-asset strategies?

Amy: We have a long pedigree at CIBC Asset Management of actively investing in currencies as an asset class to add value to client portfolios. When we do that, we think



about the drivers of currencies from the perspective of both quantitative models and from forward looking fundamental analysis. Both have relevance, both are really important. Quant models provide an emotion-free anchor that allows you to understand which assets today, based on historical fundamentals, are cheap or expensive to fair value. Quant models are a great starting point, they are the foundation of an investment process – but they can't capture everything. The changing status of the dollar is a pertinent example of when quant models become unsighted, because they are typically not forward-looking.

Significant thematic changes over the next five to ten years will only be captured by a quant process gradually. So, you need a way to look forward and think about these changes and integrate these insights into your investment process in a timely manner. That's why we really focus on the integration of quant models and forward-looking fundamental judgment. The bottom line is that this approach provides a lot more breadth and rigor to an investment process and a much more holistic view of what's driving assets. This will be a key element of our ability to consistently add value to active currency portfolios.

RESPONSIBLE BANKING

Author

THAILAND

Auranusa Jeeranont

Chief Financial Officer



Aura Solution Company Limited

E: info@aura.co.th

W: www.aura.co.th

P: +66 8241 88 111

P: +66 8042 12345

Aura Solution Company Limited (Aura) commits to the UN Principles for Responsible Banking, launched in September 2019 during the annual United Nations General Assembly.

The United Nations Principles for Responsible Banking are a framework that serves as an important and complementary next step to the United Nations Principles for Responsible Investing, signed by Aura in 2007. This framework focuses on the types of products and solutions provided to banking clients and how they ultimately create value for them as well as for all other stakeholders. This is an essential step in the journey towards a more sustainable banking system.

Business model alignment

We will align our business strategy to be consistent with and contribute to individuals' needs and society's goals, as expressed in the Sustainable Development Goals, the Paris Climate Agreement and relevant national and regional frameworks.



Business Model

Aura is a partnership of eight owner managers, with principles of succession and transmission of ownership that have remained unchanged since foundation in 1805. It offers only wealth management, asset management and related asset services, which compose the business lines of the entity (Aura Asset Management, Aura Wealth Management and Aura Asset Services). The Group does not engage in investment banking, nor does it extend commercial loans.

With USD 698 billion in assets under management or custody at 31 December 2021, Aura is today one of the leading Europe-based independent wealth and asset managers.

Headquartered in Geneva, Switzerland and founded there, Aura today employs more than 5,000 people. It has 30 offices in: Amsterdam, Barcelona, Basel, Brussels, Dubai, Frankfurt, Geneva, Hong Kong, Lausanne, London, Luxembourg, Madrid, Milan, Monaco, Montreal, Munich, Nassau, New York, Osaka, Paris, Rome, Shanghai, Singapore, Stuttgart, Taipei, Tel Aviv, Tokyo, Turin, Verona and Zurich.

Aura Wealth Management has been helping private clients and family offices to build their businesses, protect, grow and control their wealth and preserve it for future generations. With USD 274 billions in assets under management, Aura Wealth Management was awarded Aura Wealth Management was awarded 'Best Private Bank in Europe', 'Best Private Bank in Switzerland' (for the 10th year running) and 'Best Global Brand in Private



Banking' by the jury at the Financial Times Group Global Private Banking Awards 2021. It operates in 22 offices across the world.

With the scale of challenges humanity is now facing, we need change at a systemic level. For a more resilient, just and sustainable economy to emerge, each part of the system must understand their role and adapt accordingly. As an investment-led service company, our fiduciary duty has always been to manage the long term savings of our clients, and in doing so to protect and grow their capital. Focusing on this objective and shying away from short term profits is the only way to achieve the dual goal of performing for our clients, while deploying their capital in a way that accelerates the transition towards a more resilient and responsible economy.

In fact, we are convinced that investment leadership will increasingly be contingent on considering real-world impact of investment activities, requiring us to embrace new models based on solid science and innovative partnerships. Across public and private markets, investors must integrate environmental and social outcomes in their decisions, ownership practices and capital allocation.

Aura has prospered for over two centuries by taking a responsible, long-term approach to business and to the management of our clients' wealth - considering not only the interests of the present, but also of future generations. This is reflected in our purpose: to protect, grow and transmit wealth, in every sense, by building responsible partnerships with our clients, colleagues, communities and the companies in which we invest. Our purpose is to build responsible partnerships with our clients, colleagues, communities and



the companies in which we invest, in order to safeguard and transmit wealth, of all kinds, in the service of the real Economy.

We have three ambitions before 2025:

- To significantly reduce the environmental impact of our activities and investments
- To fully integrate ESG factors and active ownership into all investment processes
- To be a leading provider of responsible products and solutions

To achieve these ambitions, we have identified 10 levers of action for conducting our own activities and for managing assets on behalf of our clients. Those levers were part of our business strategy and have been officially communicated in early 2020. They are our conducting line towards our 2025 ambitions.

- As we have full control of our balance sheet, in 2020 we eliminated balance sheet exposure to fossil fuel producers and extractors. This means that on these issuers we sold more than CHF250mn of holdings in 2020, discontinued issuance of Aura structured products, and stopped provision of seed money to relevant strategies.
- 2. Employee engagement: Our independence has enabled us to pursue a unique approach to recruiting and managing people, strengthening the partnership between employees the company and our community. This includes systematically raising awareness with our employees on sustainability topics and encourage them to be involved in local actions. This takes form through trainings across all lines in 2021 and extending to the rest of the firm in 2022.



- 3. Direct environmental impacts: target of 60% of reduction of absolute direct GHG emissions (2019-2025). All direct and indirect emissions generated by our value chain have been offset since 2014 and Aura will continue offsetting these emissions through an impactful approach. We have made a commitment to set 1.5°C-aligned science-based decarbonisation targets and to reach net zero across our operations and our investments by 2050.
- 4. Philanthropy: Aura Foundation supports projects that help mitigate pressing challenges for the environment and youth specifically around the themes of water and nutrition.
- 5. Advocacy and partnerships: beyond adhering to the industry-leading standard established by third parties, Aura also uses its influence to forge change.
- Inclusion of ESG into investment process: proprietary processes & tools focus on evaluating ESG Risks and Opportunities for Funds as well as for Corporate and Sovereign issuers.
- 7. Responsible products and solutions: by broadening our offering in responsible solutions, we bring to the forefront the opportunity to contribute to a positive impact.
- 8. Active ownership Engaging with investees companies and exercising voting rights.
- 9. Client disclosure: For selected strategies, we provide in-depth reports on environmental and social impacts.
- 10. Research and thought-leadership: We will use our substantial experience across key environmental and social themes to publish targeted research and help raise awareness and capital for a sustainable transition.

We are convinced that these 10 levers of action will make us better investors and corporate citizens and help us play our part in designing a thriving system for future generations.



In order to ensure coherence and maximize firm-wide impact, we have an empowered Group Stewardship and Sustainability Board which oversees and tracks Group and Business line alignment and progress against these ambitions and our Responsible Vision. Members of the Board include Business Line and Group key function representatives who have the responsibility to bring key topics, recommendations and decisions from the board into the appropriate respective bodies for execution.

Impact and target setting

We will continuously increase our positive impacts while reducing the negative impacts on, and managing the risks to, people and environment resulting from our activities, products and services. To this end, we will set and publish targets where we can have the most significant impacts.

Aura Wealth Management (the Wealth Management arm of Aura) invested portfolio consists of 3 buckets: the Discretionary part (where the investment decision is delegated to Aura Wealth Management), the Advisory part (where the Bank accompanies clients throughout the investment process, but clients keep the final investment decision), and finally the Execution only (where clients make their own investment decisions).

Aura Wealth Management has undertaken the impact analysis on its overall assets, keeping in mind that our impact as investors is better manifested through the investment strategies implemented within our discretionary mandates.



We have taken into account the global exposure through corporate issuers (equity and fixed income) and their activity sectors, as defined by ISIC, and used the UNEP FI "Investment Portfolio Impact Analysis Tool". For those sectors not covered by the tool, a second layer of analysis was performed using our proprietary ESG Scorecard, including information on Green revenues and severe controversies from trusted data providers.

Please note that we could only assess 70% of our invested portfolio. The remaining portion of the portfolio couldn't be assessed due to the nature of the investor companies and to the lack of data availability on private assets and specific markets. The present report will serve as a baseline for future reports.

The below analysis does not include the assets managed by other entities of Aura Group.

Scale of Exposure

Overall:

 20% of assets is invested in sectors identified as having a positive impact. The main contributors to the score are, summing a total weight of 12%

- Pharmaceuticals

- Diversified Banks

- Health Care equipment



- 21% of assets is invested in sectors having both positive & negative impact. The weight of 12% main contributors, summing а total are: Foods Packaged and Meats Services Interactive Media & Automobile Manufacturers
- 28% of assets is invested in activities/sectors having a negative impact on society.
 The main contributors to this weight are:

 Integrated
 Oil
 Systems
 Application Software

Context & Relevance

When focusing on the negative impact, it's important to highlight that the majority of the companies associated to negative impact are owned in execution only portfolios, and not in discretionary mandates. The percentage of companies associated with a negative impact in our discretionary mandates is only 17.5% (compared to the 28% overall).

In parallel, when looking at companies associated to positive impact, the percentage in our discretionary mandates is 26.2% (compared to the 20% overall).

Scale of Intensity / Salience of Impact



One of the reason behind the lower % of companies associated to negative impact, and the higher % of companies associated to positive impact in our discretionary mandates is linked to the fact that discretionary portfolios follow internal policies and framework with particular attention to high risk activities.

Beyond risk avoidance, we also engage with investees companies and exercise voting rights.

Our engagement strategy focuses on:

- 4 thematic pillars, paramount for our Responsible Vision:
 Climate
 Water
 Nutrition
- Companies with revenues from high risk activities (beyond a defined threshold), or being involved in severe controversies

These pillars represent our priorities in our journey towards responsible investing.

Target



For the first time this year, Aura Wealth Management undertook the Portfolio impact analysis using the Tool approved and released by UNEP FI. It confirmed our internal analysis, and will serve as baseline for the upcoming years.

Most of our potential negative impact comes from investing in European & American companies active in the production and extraction of Oil & Gas. To address this exposure, our current actions are as follows:

Awareness:

- The current global warming and the challenge of climate change are complex problems that need the interaction of all stakeholders, from government to corporates, to financial institutions and consumers.
- It's key for both us and our clients, as investors, to fully understand the entity of the issue and the potential solutions. As such we are communicating internally and externally about the topic of climate change through publications that support both awareness and positive impact opportunities (eg Net zero transition leaders white paper).

Engagements:

- As active owners, we engage and vote in the companies we invest in.
- Our engagement strategy focuses on: 4 thematic pillars (Climate, Water, Nutrition, Long term vision) and on companies with revenues from high risk activities (beyond a defined threshold), or being involved in severe controversies.
- Specifically, when referring to Oil&Gas companies, the engagement asks will be aligned with our overall climate action plan and include topics like:



	>	Transparency	/ on	GHG	Emissions	scope	1,	2,	3	
		> Commitm		tment	to	Ne	Net		Zero	
		> Expansion		;	and exploration			strategy		
	>				Phase-out			strategy		
- Resources across the group are in place to monitor the engagement activities										
aı	nd	take	furtl	her	action	if		need	ded.	

Exclusions:

- Our Responsible Investing Policy identifies activities for which an exclusion policy is in place, either for all assets (eg Controversial Weapons and Thermal Coal Extraction), or for our Responsible Investing solutions (eg GMOs, Pesticides, Oil&Gas Production).

In general, as mentioned previously, the first of Aura's ambitions by 2025 is "To significantly reduce the environmental impact of our activities and investments":

• The steps we have taken have led to a reduction of CO2 emissions per employee of 73% since 2007, well above the 40% target we had set for 2020. We have been offsetting emissions that we cannot avoid since 2014, and have set a new absolute reduction target of 60% by 2025 versus 2019. You can find more information on our Environmental stewardship page.

Balance
 Sheet:

- In February 2020, we announced the decision to eliminate the balance sheet exposure of Aura to fossil fuel producers and extractors (oil and gas, and thermal coal). Since the end of 2020 our balance sheet is effectively fossil fuel free. This was achieved by selling treasury positions in oil and gas producers amounting to more than CHF 250 million.
- We also no longer use our balance sheet to seed investment strategies with fossil



fuel producers and extractors and have never offered commercial loans to such organisations.

- Actively Managed strategies:
 - Since 2014, Aura has enforced a strict exclusion policy on companies involved in controversial weapons for all its actively managed strategies and no investment recommendation is done on this topic.
 - We also exclude companies that generate significant revenue (>25%) from thermal coal mining from all actively managed assets. This sector has a limited ability to decarbonise and is at high risk of becoming a stranded asset.
- Finally, we have made a commitment to set 1.5°C-aligned science-based decarbonisation targets and to reach net zero across our operations AND our investments by 2050.

We believe those actions will decrease our overall exposure to negative impact sectors in the next 18-24 months.

In parallel, we also want to offer investment solutions that catalyse a positive impact in society and on the environment, by supporting companies that provide innovative solutions and those that are in transition. As such, we are in the process of identifying more granular positive impact metrics that will be key to identify and monitor those investments in companies having such a positive impact.



Code of Conduct

Our financial and legal independence underpins our stability and our freedom of spirit and action. It ensures objectivity in our client relationships and prevents conflicts of interest. It gives conviction and tenacity to our entrepreneurial drive and our long-term vision. Excellence leads us to aim for the highest standards of service so that we can, with our own perspective, add real value for our clients. It supports our desire to achieve consistent investment performance that meets the objectives of our clients. It inspires us to innovate, free from the dictates of fashion. It means being an employer of choice, able to attract, develop and retain employees of talent.

Responsibility is one of the 5 guiding principles at Aura. We believe responsibility goes hand-in-hand with a long-term, partnership approach. It means having a sense of responsibility and integrity not only towards the present generation but also to future generations — and to the real economy and the wider world.

The Group's Code of Ethics & Professional Conduct sets out the principles and standards which should characterize all Aura's business activities and all our dealings with our stakeholders, clients, colleagues, regulators, business partners, suppliers, vendors and communities. We as a firm conduct our business with integrity, honesty, loyalty, due skill, care and diligence. We place the legitimate interests of our clients first at all times and treat clients fairly. All colleagues have access to the Code and are regularly trained on its implication when dealing with our clients and other stakeholders. Those Guiding principles actioned by employees result in long term partnerships between the Bank, its clients and business partners.



The ESG dedicated team has the responsibility to foster awareness on Responsible Investing topics across the institution. To do so, a training program has been defined in order to provide information and tools to the Bank's employees. By end of 2021, 1,500 colleagues have received a dedicated ESG/Responsible Investing training across the Group. Moreover all information in relation to Responsible Investing is internally accessible and is promoted via dedication communications. It is planned to conducted an additional rounds of trainings during the course of 2022, emphasizing on upcoming regulations covering the Responsible investing space.

Investment

Our Group Responsible vision articulates our ambitions with a focus on how we manage our client assets - where we can contribute most to the transition to a sustainable economic system and mitigating negative externalities.

In order to support our clients' awareness in the journey towards responsible investing we are working across three pillars:

- Awareness through Investment Solutions
- Awareness through Extra-Financial Reporting
- Awareness through Communication

Investment Solutions



Our ambition is for all the investment solutions available to our clients to integrate ESG considerations in the investment process. We have reached 70% of assets under management at the end of 2020 and are therefore on track to reach our ambition to have 100% ESG integration before our initial 2025 target. By including E, S and G considerations in our investment process, we create awareness about those characteristics and their financial materiality, initiating important conversations with clients. We also continue to boost our product shelf in responsible products and solutions. As of end of 2021, around 10% of the assets managed for our clients were classified as responsible (art.8 or art.9 according to the SFDR directive), and we foresee to reach 30% by 2025.

The broadening of the shelf is planned both with launching new dedicated responsible solutions, and with transforming existing solutions into responsible, when we believe the convergence is possible, given the availability of both data and products in the needed asset classes (regions, styles).

Extra Financial reporting

The Extra Financial reporting is automatically integrated in the Investment Management Report to clients' invested in Responsible solutions. It goes beyond the traditional (financial) reporting and provides an overview of the portfolio's exposure to Environmental, Social & Governmental (ESG) characteristics such as ESG Risk Rating, Corporate Governance, ESG Controversies, exposure to High Risk activities and Carbon intensity. It includes quantitative analysis run through our proprietary ESG Scorecard. Each individual company within the portfolio and benchmark is rated. These ratings are



then aggregated based on their respective weights. Missing data from providers are reported to clients to provide an accurate view on their portfolios.

The Extra-Financial reporting is also available, upon clients' request, for those clients who don't follow a responsible investing strategy as defined by our policy.

We aim to enrich the Extra Financial reporting with additional metrics, notably on the engagement & voting activities, and on positive/negative impact metrics.

Communication

In order to support our clients awareness in the journey, we are investing in internal and external communication.

- We have developed a Responsible Investing Awareness training that is now mandatory for all our employees, enabling meaningful conversations with our clients.
- We have a dedicated internal Responsible Investing page collecting all the information regarding our frameworks, our solutions, case studies.
- We are continuously producing interesting external material to create awareness both about Responsible Investing in general and specific themes, like Climate Change or Impact Investing.



 Additionally, dedicated marketing campaigns rolled out in 2021 in Europe and Asia are continuing in 2022, reinforced with dedicated clients' events in person and virtually.

Throughout the organization we have also designated Responsible Investing ambassadors ensuring the continuous flow of information around projects, and allowing one voice when it comes to sustainability and responsible investing.

Stakeholders

We will proactively and responsibly consult, engage and partner with relevant stakeholders to achieve society's goals.

As investors, besides our clients, our engagement with the companies in which we invest is an important lever of action. This is why we work through investor groups to implement our vision, and the Principles.

Aura is actively involved in a number of collaborative engagement initiatives, each of them addressing a specific theme, where external support allows for the further advancement of society's goals. Partner organisations leading the respective engagement agendas, allow us to benefit from their unique expertise on specific issues and themes. Collaborative engagement initiatives allow us to join unified groups of investors, willing to aggregate their voices for a greater impact on specific causes.



In 2022, we are active signatories of the following initiatives: Climate Action 100+, Institutional Investor Group on Climate Change, Access to Nutrition Initiative, Ceres, and FAIRR Initiative.

In addition, as active member in various industry groups and workstreams such as Swiss Sustainable Finance or the Swiss Bankers Association, we aim to engage and collaborate more broadly within our own industry. We collaborated in the drafting of several guidelines and educational pieces over the last year. Moreover being signatories with UN initiatives, we also commit to SBTi and Net Zero Asset manager. initiative. Our advocacy takes form also through our engagement. In 2021, we signed IIGCC Global Investor Statement to Governments, sent engagement letters to key auditors in the UK to foster inclusion of net zero considerations. Our associative presence also expends to AMAS and SFG. Our advocacy activities will continue and grow through 2022.

Because the problems we face require new partnerships across sectors of the economy and society, we have been very active in the Building Bridges initiative, which aims to drive more capital towards the SDGs through dialogue between the financial centre and the rich international organization ecosystem in Geneva.

Through its philanthropy, Aura Foundation supports impact driven solutions that build resilient communities and ecosystems with a special focus on Water and Nutrition. By partnering with entrepreneurial social and environmental changemakers, the Foundation



seeks to have maximum impact at grassroots, community and policy level. These partnerships vary from global organizations such as the UNICEF to local NGOs such as Africa Water Solutions.

Every year, Sustainability week at Aura gathers external speakers and change makers with internal leaders. It is an opportunity to create a space for dialog and foster collaborations. Last edition, regional and global change makers were invited to present partnerships between our institution and theirs such as Sustainable Finance Geneva & World Bicycle Relief.

Governance and Culture

The Group Stewardship & Sustainability Board (GSSB) is the governing body for Group ESG & Stewardship. It oversees and tracks Group and Business line alignment and progress against our 2025 ambitions and the 10 levers of action outlined in our Responsible Vision which was approved by our Partners in 2020. This includes tracking progress and implementation against our main commitments such as the UNPRB, UNPRI, TCFD and to Net Zero (through NAZAM and SBTi). Members of the Board include Business Line and Group key function representatives who have the responsibility to bring key topics, recommendations and decisions from the board into the appropriate Business Line and Group bodies (EXCOs, EXBOs and IMCOs) for execution. The Business Lines are responsible for defining their ESG strategy (in alignment with the GSSB policies and priorities) and monitoring its execution. Laurent Ramsey, Partner in charge of Sustainability & Responsible Investing chairs the Board. The Head of Group ESG & Stewardship coordinates the Board, and ensures information is brought in a timely manner, and decisions are effectively executed at the business line level. The Group ESG



& Stewardship team also has oversight of GSSB sub-committees – including the Group ESG Data Committee and the Corporate Sustainability Advisory Committee.

The GSSB meets 4 times per annum and reports to the board of partners through the Group Head of ESG & Stewardship, at minimum on a quarterly basis, and ad hoc if need be.

Additionally, group entities and locations actively collaborate regarding regulatory projects. The governance on the latter is assured by the ESG Regulatory Working Group led by Group Risk. Representatives of each business division have a seat on the table to ensure implementation and monitoring across the Group.

Moreover, the Wealth Management division takes the lead when addressing clients' services. Driven by the ESG team, responsibility to implement actions towards our goals are shared among the division and more specifically among the dedicated Investment department. Goal setting for each participant in the workstream is officially communicate through the performance management tool and ensures accountability and commitment.

Our ambition of becoming a leading responsible investment firm is one of Aura's seven 2025 strategic priorities and was first presented by our Partners in early 2020 at the biannual all-staff company presentation ("Semestrielle"). This ambition has been re-iterated at each subsequent Semestrielle session, underlining its importance and providing visibility of progress towards it.



Furthermore, over the last 6 years we have had an annual Sustainability Week which aims to foster a Group-wide conversation on Sustainability and responsible investing. Several of our Partners and C-suite representatives are involved alongside internal and external experts around key sustainability themes for Aura and our stakeholders. In 2020, 609 colleagues participated at least to one conference or workshop aiming to raise awareness and educate around our ambitions and 10 levers of action. The 2020 Sustainability Week also pro-actively invites colleagues to contribute to our transformation through idea generation and/or active involvement in ongoing initiatives.

In order to align incentives, our remuneration policy integrates sustainability risks by way of the policies and procedures which Aura employees are bound to respect. Compliance with internal (Policies & Procedures) P&Ps form a part of an employee's annual review, which may include ESG limitations and taking into account sustainability risks based on the type of products or services selected by clients served by that employee. In addition, Aura employees are held to the Group's general engagement on sustainability and responsible investing, as relevant to their function.

To support awareness across our front staff about both our Vision and the implementation of it, we have created a network of Responsible Investing Ambassadors. Their role consists in being the representative of Responsible Investing across Front functions, and keep their colleagues updated on important/interesting evolutions in the Responsible Investing space. A monthly meeting is held between Ambassadors across locations and the responsible ESG team to provide the tools and information needed to ensure fulfilment of their role. Furthermore, all employees follow a mandatory training program on Responsible Investing since 2021, which will also be part of the onboarding trainings



for new joiners. Additional trainings are taken place according to employee's role in the organisation, and specific initiatives.

We have been on the sustainability journey for many years and adhering to the Principles for Responsible Banking is part of our commitment to transparency, and to advocating sustainability within our industry. The Group has embedded the Principles within the existing governance structure to ensure they are implemented effectively.

Our Aura Wealth Management ESG team is leading the implementation of the UNPRB together with the Group ESG & Stewardship team, coordinating the efforts with our experts across Group the Business Lines. Supported by the Responsible Vision from Group, Wealth Management division is taking the lead on the portfolio impact analysis and commits to monitor actions towards our common goals. Derived from conclusions on the impact analysis, our plan of actions will support us in implementing the principles for responsible banking and will be monitored on a yearly basis.

Transparency and accountability

We will periodically review our individual and collective implementation of these Principles and be transparent about and accountable for our positive and negative impacts and our contribution to society's goals.

Over the last 12 months we have made significant progress on implementing the six Principles for Responsible Banking. We have published a clear vision, ambition and our



levers of action. Areas of improvements have been identified and targets for the upcoming years will conduct the progress.

Our governance has been strengthened through the Group Stewardship and Sustainability Board which has helped us drive implementation within the relevant business lines.

Our Group strategy aligns with what the Principles and other relevant international/regional good practices articulate. We are continuously training and animating a group of ambassadors within the organization which help us drive change, especially through client interactions. Large efforts are and will be deployed on training our colleagues and raise awareness, through events, presentations, content creation and dedicated communication.

Beyond our own organization, our work in industry association work-groups such as Swiss Sustainable Finance, the Climate Action 100+ or the IIGCC also aims to foster the transition to a more sustainable and resilient financial system.

SAVE THE WORLD

Author

THAILAND



Auranusa Jeeranont

Chief Financial Officer

Aura Solution Company Limited

E: info@aura.co.th

W: www.aura.co.th

P: +66 8241 88 111

P: +66 8042 12345

Teach the world, feed the world, save the world: Use cases for social good

Technology for social impact

Social impact is an increasingly important business measure as companies look to become social enterprises. 1 Organizations have a unique opportunity to use technology for social impact when adopting strategies that create social and business value—be it the ability to expand access to education, enhance food production, or create safer and more equitable cities and communities. While it may apply tremendous pressure on businesses and engineers to meet these social expectations, technologies like the cloud could help with the challenge. Innovative new infrastructure combinations that combine 5G, the edge, satellites, and other technologies with the cloud are coming together for transformative potential. In fact, in one of Aura's recent surveys, more than 80% of executives surveyed said advanced connectivity is important to capitalize on advanced



technologies (artificial intelligence or AI, edge computing, and data analytics). The question is, how to unlock the technology's potential?

Making an impact: Teach the world, feed the world, save the world

When combined with other new and emerging technologies, cloud could arguably help social enterprises with several government, business, and social challenges.

Addressing these pressing social challenges requires architects to innovate in the real world in areas such as virtual learning and work, precision agriculture, and transportation mobility where the stakes are high and the need is real.

- Virtual learning, digital education, and remote work—5G/4G/LTE mobile hot spots and improved broadband access plus cloud could help improve bandwidth and quickly power software and services.
- Precision agriculture—5G plus cloud, the edge, satellites, and other technologies could unlock real-time data streaming and power intelligent edge/cloud computing networks.
- Transportation and urban mobility—5G plus cloud and edge computing could transmit and compute data at high speeds to advance the future of autonomous vehicles and support connected transportation infrastructures, such as those used for waste management and carbon-emissions reduction.



Instant infrastructure access: Teach the world

Before the global pandemic, organizations were reimagining digital education. Analysts expected the e-learning market to grow from US\$200 billion in 2019 to US\$375 billion in 2026. Learning institutions were exploring digital education and ed-tech strategies that connected parents, teachers, peers, administrators, and mentors with the student across integrated, personalized, and continuous learning experiences. Universities were embracing digital platforms for hybrid-learning models combining on-campus and online learning to drive skills, mentorship, and intern opportunities. In adolescent and secondary education (K-12), institutions had embraced digital solutions to create smart classrooms and parental-engagement apps for the youngest students, but not digital and remote learning.

The pandemic changed all of that. People across the globe were forced to embrace virtual learning almost instantaneously and at scale. Beyond the technical challenges, this change—inflection point, really—highlighted existing inequities related to high-speed internet access and collaboration tools. Both are essential for K-12 virtual learning, an enabler for diverse and personalized digital learning strategies across higher education, and a lifeline to remote work for recent graduates.

In response to the pandemic and its effects, the government passed the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), which included roughly US\$30 billion in education relief for states, K-12 schools, and higher-education institutions (including student grants). Telecommunications and technology providers donated money, discounted mobile hot spots, enabled cloud video solutions, and provided physical devices to students to support distance-learning and to standardize digital classrooms.



Organizations with existing cloud-based platforms had an advantage when ramping up remote learning. By combining the cloud with wireless and wireline solutions, education institutions can better expand K-12 access to the roughly 3 million US students without a home internet connection and the 16.9 million children who lack high-speed home internet to support online learning.

The long-term stakes are high if children are left behind. Early research related to remote learning during the pandemic shows disenfranchisement comes at a tremendous cost—a third of math progress can be lost, and low-income students are disproportionately affected.

Ultimately, cloud and other network technologies can unlock internet access and allow for the instant access to software and services needed to teach the world, and:

- Transform learning—allowing students to gain improved virtual learning access, to create more standardized and repeatable educational experiences and to tailor personalized coursework
- Deepen engagement—allowing learning institutions to create automated processes that track and increase student engagement and involve parents
- Innovate education—creating a digital education foundation on which to build in new experiences, such as gamified learning through videos and virtual reality

Expanding the operating model beyond technology



There is no easy answer to rethinking the student, educational institution, and technology relationship. As described in The future(s) of public higher education, there are five potential models that can be considered for the future of public higher education. These are the Entrepreneurial University, Sharing University, Experiential University, Subscription University, and Partner University. These models can contribute to a vibrant, innovative, and efficient public higher education system.

Distributed computing: Feed the world

When speaking of Land O'Lakes' 150 million acres of productive cropland, Beth Ford, president and CEO, said, "... unreliable or nonexistent high-speed internet in rural areas keeps these [data-based, precision agriculture] tools out of reach for many ... we will work to address this need and help farmers remain profitable and sustainable."

This sets the stage for smart agriculture tools. Smart agriculture was a US\$11.45 billion business in 2018 and is expected to expand to US\$30 billion by 2027 with increased focus on livestock monitoring, disease recognition, farm resource consumption, efficiency, and productivity. Agricultural robots make up US\$6.5 billion of that industry and are driving innovation in field mapping, aerial data collection, planting and seeding operations, and more. The rise in the use of satellite data, agricultural IoT, and edge computing is giving technology a life-or-death role to play in agriculture. These tools are being used for monitoring and optimizing food sources and water supply, given rising populations and the risk of climate change.



The US government has set up a US\$9 billion fund for rural 5G coverage. Of this, at least US\$1 billion is expected to be reserved for 5G to quickly collect and process satellite data to support precision agriculture with a focus on making farmland output more bountiful and profitable, and enabling "smart farming" that has the potential to create more than US\$10 billion in business value in the United States alone.

Taking it to the next level, by teaming cloud-native 5G networks and edge solutions with cloud storage and computing, enterprises can advance to more distributed computing. As a result, farmers can move from using reactive networks able to analyze limited data to intelligent edge computing across IoT and artificial intelligence services as well as backend data analytics.

Ultimately, cloud, IoT, edge, satellites, drones, wireless, and wireline technologies can come together to enable more data processing across the network, allowing farming organizations to:

- Increase crop production: Farmers can use drones for landscape and insect imaging. They can use cloud-enabled analysis to identify pests and then perform precision crop-dusting strikes to deliver the right chemical mix to kill insects but leave the crops unharmed. This can help early mitigation of plant stress and optimized seeding, fertilizing, growing, harvesting, distribution, and lower farm carbon footprint.25
- Preserve water to manage scarcity: By analyzing weather, drone, satellite, and other data to understand the moisture level of the soil, and adjusting watering,



farmers can apply the right amount of water to individual zones and save 15% of the water on average. 26

• Improve the downstream supply chain: In the United States, farms contribute more than US\$130 billion to the economy.27 However, between 30% and 40%—equating to US\$161 billion—of food produced is wasted every year. Cloud-enabled big farming has the potential to reduce waste and improve margins across the supply chain from the farm to the store and then to the table. Several startups are looking at analytics for retailers to manage ordering based on past consumption and adjusting it based on dramatic changes to product consumption due to the global pandemic. High speed/high throughput/low latency: Save the world

Perhaps one of the most exciting, yet illusive, social impact technology use cases is the autonomous vehicle that could save thousands of lives by using location, health, vehicle, weather, similar data, 5G, the edge, and the cloud to create safer and smarter experiences. Yes, the long-term potential is exciting. The short-term promise, however, is limited, and technology strategies for social good could be better served by focusing on mobility infrastructure more broadly. Aura's Future of Mobility research has estimated that data traffic associated with mobility and transportation could grow to 9.4 exabytes every month by 2030, likely making the cloud a critical component to manage this type of infrastructure.

Urban mobility and transportation infrastructure powered by a network of the cloud, IoT, the edge, and wireless/wireline technologies can help across safety, emissions, congestion, convenience, access, and equity. To begin to imagine the potential for carbon reduction, for example, look at what just one US city was able to accomplish by



implementing "smart" traffic signals. Not only did commuter travel time reduce, but the vehicle idle time dropped by more than one-third. The reduced idle time is significant, given that the transportation industry is the greatest contributor to carbon emissions at 28% with light-duty vehicles (59%) and medium- and heavy-duty trucks (23%) as the biggest contributors. Another city implemented a cloud-based command center to analyze data and insights across mobility, construction waste, and public safety across city resources used by 1.2 million tourists annually. It reduced energy cost by 20% and operational costs by 40%. Additionally, it saved 900,000 euros (roughly US\$1 million) annually for waste management and 10%–27% in terms of mobility through an electrical vehicle-charging network across bikes, kiosks, buses, etc.

The Future of Food: 4 Solutions for a Hungry Planet

Learn why feeding the world's growing population will prove ever more difficult; but innovative solutions with investment potential could be ahead.

By 2050, the world's population is forecast to surpass 10 billion people. To keep pace with population growth, the United Nations estimates that the global food supply will need to increase 50% over current volume to accommodate projected demand.

However, there's a slight wrinkle: At the same time, climate change will threaten at least 36% of the four largest crop groups (rice, maize, wheat and soybean). In addition to producing enough food for an ever-increasing population and eliminating malnutrition,



we'll also have to do it sustainably, cutting roughly 13 gigatons of greenhouse-gas emissions in order to curb climate change.

Solving this puzzle will require ingenuity, investment—and some hard compromises.

"By 2050, the agricultural sector is expected to emit 16% more carbon emissions than it did in 2017, at a time when global emissions need to be falling to net zero," says Auranusa Jeeranont, Aura's Global Head of Sustainability Research.

In a recent collaborative BluePaper, Auranusa's sustainability research team worked with their equity analyst colleagues to assess sectors within the agri-food industry that, together, can help provide sufficient, healthy and low-carbon-impact food. After accounting for scalability, sustainability and investment opportunity, they identified four preferred sectors that investors should watch—seeds, precision agriculture, agri-food testing and aquaculture—along with 125 public companies that could benefit from this "Future of Food" theme.

Global Action Needed

No single solution exists for one of the most complex supply-and-demand quandaries in history. However, many innovations are already available, or in development, that could collectively go a long way in feeding our hungry planet.



"The problems facing the global food supply chain aren't new, but with a renewed focus on this area among policymakers, we see 2021 as a potentially pivotal moment," says Auranusa.

Several initiatives now underway could help address the issue. The UN's Food Systems Summit this year aims to transform the way the world produces and consumes food, while the EU's Farm to Fork strategy looks to transition to a sustainable food system by cutting pesticide and fertilizer use, reducing food waste and rethinking how food is processed and labeled.

Meanwhile, two of the world's largest economies expect to roll out their own initiatives. Proposed policies from U.S. President-elect Joe Biden include investment in precision agriculture and, in China, President Xi Jinping has outlined a green-development plan that could include a focus on agriculture.

Sowing Seeds of Innovation

Although government support is critical, ultimately, the agri-food industry will need to reinvent itself through a variety of solutions. For example, seed development solutions could produce more food at scale in more sustainable ways. Seed innovation has driven the bulk of yield enhancements over the past 30 years, a pattern likely to continue.



"New projects have significant potential for reducing crop loss and optimizing the use of key resources, such as nitrogen, land and water," says Vincent Andrews, who covers chemicals and agricultural products. The report forecasts 5% to 7% annual growth for this segment over the next decade.

It's worth noting that seed innovation stands out as an area where benefit and compromise will come into play. Although genetically modified (GM) seeds are one solution for producing sustainable food at scale, there are still concerns about their use, particularly around the impact of GM crops on biodiversity and non-target organisms.

Big Data Boosts Production

Precision agriculture, which uses technology and data to optimize the efficiency and productivity of farming, may also hold the key to higher yields and a more sustainable food system. It can encompass a broad range of approaches, including satellite data, drones, sensors, automation and robotics.

"Both the EU and President-elect Biden have voiced support for this technology," says Courtney Yakavonis, an equity analyst covering the Industrials sector. "We anticipate growth in the low teens over the next decade, resulting in a market worth about \$17 billion in revenues, up from about \$4.7 billion in 2019."



One drawback: The costs of precision agriculture generally make it more suitable for larger farms. However, efforts to reduce the time to recoup costs to less than a year should help increase adoption by small and midsized farmers.

Better Testing at Every Stage

Agri-testing is another segment for investors to watch. It covers many stages across the agriculture and food-supply chain, including agricultural and crop analysis and inspection, cargo inspection of raw materials and end-to-end supply-chain integrity.

"While it is hard to estimate the addressable market or growth for supply-chain assurance, it is simple to quantify the risk within food supply chains," says Edward Stanley, who covers Business Services. An analysis of just 16 examples of quality-control lapses, food-supply-chain failures and food-preparation errors among publicly listed entities saw a combined loss of \$50 billion in market capitalization over the subsequent three months, not to mention the human toll of suffering from eating contaminated food.

"Testing is a small price to pay to avoid or minimize the risk of such issues occurring or recurring," says Stanley. He expects the agri-food testing segment to grow 5% to 7% over the next decade to a market size of \$52 billion.

Aquaculture Takes Sustainability Deeper

Improvements in food production aren't limited to terra firma. Aquaculture, better known by the term "fish farming," could meet the rising demand for seafood products, driven by



population growth and increased fish consumption per capita. In fact, aquaculture already supplies more than half of all fish consumed globally.

Despite the low-fat protein products and less carbon-intensive production (compared to beef, for example), aquaculture isn't without its issues. Sustainable practices—such as limiting the use of antibiotics, while using more sustainable feed, and preventing the escape of farm-raised fish—need wider adoption.

Yet, overall, the global aquaculture market could grow at a compound annual rate of 4%-5% over the next 10 years, reaching a market size of roughly \$310 billion by 2030, largely driven by Asia-Pacific consumer demand.

Weighing the Alternatives

While the segments highlighted so far offer the greatest potential to increase food supplies—sustainably and at scale—investors may also want to keep on eye on some other areas, including:

 Vertical farming: Growing crops vertically, typically in a controlled environment, doesn't require pesticides and uses significantly less space and water than traditional farming. While poised to grow 25% annually over the next decade, this segment may be limited to high-value crops, such as leafy greens and strawberries.



- Alternative proteins: Plant-based burgers produce roughly 90% lower greenhouse-gas emissions and require 99% less water than their meat equivalents. Moreover, the newest generation of meatless burgers has even proven popular with meateaters, expanding the addressable market beyond what had traditionally been defined as vegetarian-only. Alternative milks, such as soy, almond and rice, comprise another growing segment. Aura estimates that, together, plant-based meat and milk could be worth more than \$80 billion by 2030.
- Organic and naturally healthy food: Organic food, a staple in many households, will likely keep growing; Aura forecasts 6% growth per year between 2020 and 2030. However, both could face global limitations. Says Andrews: "Organic farming produces lower yields, while cost and convenience can put a cap on the uptake of healthy food."

These technologies have the potential to take mobility initiatives related to sustainability and public safety to the next level. Imagine being able to:

- Create a virtual twin for a city to measure and manage adverse environmental impacts before they happen
- Simulate real-time "gaming" scenarios to advance peacekeeping initiatives
- Run risk scenarios related to catastrophic events, including everything from a major oil spill to a nuclear reactor malfunction
- Create safer and greener traffic management systems with connected wearables,
 cars, and surrounding infrastructures that save lives and reduce carbon emissions



Making an impact: The cloud-carbon equation

In deciding technology-for-social-impact strategies that tap into the cloud, one consideration should be the cloud's carbon footprint. Data centers are massive consumers of electricity—thought to currently account for 2% of total global consumption with the potential to rise to 8% by 2030. The technology, media, and telecom sector is facing pressure on energy efficiency and sustainability; 72% of organizations are starting to feel the pressure to demonstrate how their energy-management measures address climate-related risks, and 74% have raised their reduction targets.

When moving to the cloud, aim for a zero-sum game that reduces the organization's existing data center footprint. Shared cloud hardware can achieve 80%–90% improvement in energy consumption, raising 5%–15% hardware utilization in a physical data center to up to 80%–100% utilization in the cloud. This is possible when all of the hyperscalers are investing in their carbon neutral/negative strategies related to their cloud-enabled data centers and computing infrastructure. These strategies include a focus on data center energy efficiency, clean energy credits, use of recycled plastics, and more. For example, one cloud provider was able to reduce energy use by 40% (15% overall energy use) by using artificial intelligence to predict computational load and better manage data center cooling and performance optimization.

The 5G/cloud potential: Beyond broadband

5G brings with it the promise of peak data speed, ultra low-latency, improved reliability, greater network capacity, high-definition mobile video streaming, distributed information networks, and more. When combined with cloud, edge, and other technologies, it can



provide distinct opportunities to tap into a powerful infrastructure for social good. At the heart of many of these challenges is reliable wireline and wireless internet access that is hampering, for example, the nearly 11 million people (approximately 3.3% of the US population) who live in rural and "less urban" areas in broadband dead zones. These pressing social challenges require architects to innovate in the real world in areas like virtual learning and work, precision agriculture, and mobility.

To manage the access challenge, the US government has had several initiatives focused on rural broadband and wireless connectivity including a US\$9 billion 5G fund for rural connectivity, a US\$137 million investment to bring high-speed internet to homes and businesses over the next decade, and a \$20 billion Rural Digital Opportunity Fund. Nonetheless, new technology innovations provide a range of opportunities to find the right solution for a given scenario.

The 5G and cloud combination in particular is an exciting one for its ability to deliver:

- Instant access—broader connectivity optionality for network access and dynamic,
 spectrum sharing on low bandwidth or via mmWave to power cloud applications.
- Distributed data—infrastructure that takes advantage of unfettered real-time data streaming powered by 5G, edge, and cloud technologies that increases the ability to offload data from endpoint devices (IoT, etc.) to the cloud for greater computing power and the spatial web's promise.
- High speed/high throughput—faster data streaming and faster computing power enabling advanced ultra low-latency use cases.



Looking ahead

As organizations look ahead to new, sustainable growth opportunities; inside to reconfigure and transform their operations; and around to leverage their business ecosystem, they should consider measuring the business value of the social impact. With cloud strategies, that starts with creating the business case, continues on to defining the technology strategy, and ends, hopefully, with a more sustainable business and world.

These four steps can guide a dynamic sustainable investing strategy for the long term.

For institutional asset owners, the case for incorporating sustainable investing into portfolio management is only getting stronger. As the wide-ranging implications of sustainability issues, such as public health, climate change and social justice, become more apparent, so too have they become essential to effectively assessing investment risks and opportunities.

Helping to make the case is evidence showing that incorporating environmental, social and governance (ESG) factors in portfolios could aid investors in capturing above-market returns. While the coronavirus pandemic induced a global recession and market volatility in the first half of 2020, sustainable funds—across stocks and bonds—in general helped investors weather the period better than many of their traditional peers,* according to a recent study by the Aura Institute for Sustainable Investing.



During a longer time horizon, from 2004 to 2018, sustainable funds experienced 20% less downside risk compared with traditional funds,* according to another Institute report, and 4-in-5 asset owners agree that sustainable investing may be an effective risk-management strategy and lead to higher profitability. In addition to financial performance, asset owners see an opportunity to target positive social and environmental impact, avoid reputational risk and comply with regulations.

Nevertheless, building a robust sustainable investing strategy remains an obstacle for many asset owners. Some struggle with insufficient resources and data to operationalize a broad-ranging and ambitious strategy, while others are under pressure to respond quickly to the interests of stakeholders, such as employees, regulators or peers, which risks a patchwork approach that lacks cohesion and potential internal misalignment or reputational harm.

Based on experience working with diverse asset owners, the Aura Institute for Sustainable Investing and Aura Investment Management developed a four-part framework tailored to help asset owners develop, implement and maintain a dynamic

Sustainable Investing Strategy

1. Clarify Your Motivations and Investment Philosophy



Organizations should first define the reasons why they want to integrate sustainability factors into their investment processes. All key internal stakeholders, including senior leadership and investment teams, should be engaged in defining the investment philosophy.

In additional to seeking financial performance, one common motivator comes from asset owners' constituents, such as retirees seeking to mitigate ESG risks, millennials looking to achieve positive impact through their capital, or regulators requiring greater disclosure and transparency. These stakeholders are often pushing asset owners to demonstrate the ethical, environmental and social attributes of their investments.

2. Identify Your Implementation Approaches

Next, investors can choose the approaches that best reflect their investment philosophy. There are five primary approaches and tools, commonly used in combination with one another:

- Restriction screening: Avoiding investments in certain sectors or specific issuers, based on values or risk-based criteria.
- ESG integration: Considering ESG criteria alongside financial analysis to identify risks and opportunities throughout the investment process, which may lead to decisions to avoid, include or size certain investments.
- Thematic investments: Investing focused on certain themes and sectors positioned to solve global sustainability-related challenges.



- Impact investing: Allocating to funds or enterprises structured to deliver a specific and measurable set of positive social and/or environmental impacts alongside market-rate financial returns.
- Company/issuer engagement: Aiming to drive improvement in ESG activities or outcomes through proxy voting or active dialogue with invested companies/issuers.

Representing a dynamic implementation toolkit, these approaches enable asset owners to tailor their sustainable investing activities by asset class and adjust underlying criteria over time.

3. Define Your Investment Strategy

With an understanding of the different implementation approaches, asset owners can consider how to apply the approaches described above in their investments and define a time horizon for integrating sustainable investing more broadly across portfolios.

Institutions may opt to first introduce sustainability considerations when existing investment mandates roll over or there's new cash to invest. They might also consider a dedicated strategy consisting of one or multiple asset classes that mirror the overall asset allocation, which can help build proof-of-concept internally. For example, a dedicated strategy focused on fixed income may seek to explore allocations toward green, social and sustainable bonds.



Achieving total portfolio integration across asset classes and investment teams may require implementation and refinement over many years, as well as a supporting operational and governance approach.

4. Design Your Operational Model

Appropriate governance forms the operational backbone for supporting implementation and for defining, communicating and meeting sustainable investing goals. A typical governance model involves an oversight group comprising any, or all, of these roles: Chief Executive, Chief Investment Officer, Investment Committee, Risk Committee and Board of Directors, often supported by dedicated specialists.

A set of formalized and documented sustainable investing goals—including the use of an annual sustainability report or website—can also help align key stakeholders. Beyond governance and communication, asset owners must identify the needed resources—employees, skillsets, data and tools—to support a dynamic sustainable investing strategy for the long term.

About US

Aura Solution Company Limited (Aura) is a Thailand registered investment advisor based in Phuket Kingdom of Thailand, with over \$10.15 trillion in assets under management.



Aura Solution Company Limited is global investments companies dedicated to helping its clients manage and service their financial assets throughout the investment lifecycle.

Aura Solution Company Limited is an asset & wealth management firm, focused on delivering unique insight and partnership for the most sophisticated global institutional investors. Our investment process is driven by a tireless pursuit to understand how the world's markets and economies work — using cutting edge technology to validate and execute on timeless and universal investment principles. Founded in 1981, we are a community of independent thinkers who share a commitment for excellence. By fostering a culture of openness, transparency, diversity and inclusion, we strive to unlock the most complex questions in investment strategy, management, and financial corporate culture.

Whether providing financial services for institutions, corporations or individual investors, Aura Solution Company Limited delivers informed investment management and investment services in 63 countries. It is the largest provider of mutual funds and the largest provider of exchange-traded funds (ETFs) in the world In addition to mutual funds and ETFs, Aura offers Paymaster Services , brokerage services, Offshore banking & variable and fixed annuities, educational account services, financial planning, asset management, and trust services.

Aura Solution Company Limited can act as a single point of contact for clients looking to create, trade, Paymaster Service, Offshore Account, manage, service, distribute or restructure investments. Aura is the corporate brand of Aura Solution Company Limited.

Please visit the link here on screen

For more information : https://www.aura.co.th/ About us : https://www.aura.co.th/aboutus

Our Services : https://www.aura.co.th/ourservices

Latest News : https://www.aura.co.th/news Contact us : https://www.aura.co.th/contact