



亚洲与世界： 共同的挑战 共同的责任

Asia and the World:
Common Challenges,
Shared Responsibilities



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共迎挑战，共担责任

Common Challenges, Shared Responsibilities

欢迎各位在这样一个阳光明媚、气温宜人、万物欣荣的龙年春日参加博鳌亚洲论坛2024年年会。欢迎各位重返这场博鳌大家庭的年度聚会，与我们一起重温友谊、再续前缘，一起回顾过往、碰撞思想，一起谋划蓝图、用行动迎接未来。来自亚洲和世界各地的2000多名政府要员、商界领袖和学术泰斗在这座小岛上齐聚一堂，并将在未来三天就当今一系列最紧迫的问题进行头脑风暴。社会各界对我们寄予厚望。我们决不能让他们失望。

回顾过去，我们取得了许多值得欣慰和自豪的成绩。我们成功走出了多年以来最严峻的局面，以比预期更强的韧性顶住了接二连三的冲击和危机。世界从新冠疫情的控制和恐惧中浴火重生。通货膨胀的威胁小于预期，而且在大多数国家都迅速得到了控制。全球经济很可能不会硬着陆。温和但稳定的增长指日可待。

展望未来，前路绝不会一片坦途。挑战随处可见，我们任重道远。黑天鹅、灰犀牛、白象或黑水母事件随时可能发生。在当今这样一个高度互联、全球化的世界，这些挑战和风险的影响往往不会局限于某一个国家或地区，而是会跨越国界，蔓延开来，迫使我们必须在未知中同舟共济、共克时艰。

比如气候危机。在我们为经济问题和地缘政治问题头疼的同时，全球变暖也在按照自己的节奏不断向前发展。全球气温仍在稳步上升。刚过去的2023年已被确认为有记录以来最热的一年。这一记录很可能会被再次打破，因为2024年1月已被确认为有记录以来最热的月份。

全世界都在行动，只是行动的速度还不够快，力度还不够大。去年12月，联合国气候变化框架公约缔约方大会第二十八届会议（COP28）誓言要摆脱对化石燃料的依赖，将可再生能源占比增加两倍，并为最脆弱国家

提供更多气候融资。对于实现1.5℃目标而言，这项协议具有历史性意义，但还仅仅是个开始，而不是终点。全球气候行动必须跟进，通过快速、深入、持续地减少全球温室气体排放，践行自己的誓言，从而实现到2030年和2035年碳排放分别比2019年减少43%和60%、到2050年碳净零排放的目标。

全球行动必须建立在信任和团结的基础上，遗憾的是，这种基础在过去几年飞速流失。竞争、对抗和冲突日益加剧。俄乌冲突与巴以冲突或将进一步撕裂世界。各国都在根据意识形态或地缘政治重新站队。我们需要同舟共济，但并非每个人都在朝着同一个方向前进。持续和平与可持续发展这两个支撑联合国的崇高目标仍遥不可及。

面对日益增强的复杂性和不确定性，我们必须要有远见卓识、勇气和创新精神，而这些又必须建立在常识和经过实践检验的智慧之上。我们必须以《联合国宪章》所载的那些行之有效的价值观和原则为准绳。我们必须再次发挥以联合国为核心的那些证明过自己能力的机构的作用。我们必须重振过去那种为捍卫和平、促进繁荣发挥过重大作用的多边方式。面对共同的挑战，我们必须团结一致，朝着同一个方向前进。

作为联合国前秘书长和博鳌亚洲论坛理事长，我对各国及各国人民共同努力时所能爆发出的力量充满信心。在此，我向出席博鳌亚洲论坛2024年年会的各位领袖和代表发出呼吁，请携手并进，共同迎接我们共同的挑战，承担起我们共同的责任，并为打造和平与发展的未来而共同努力。虽然大家在博鳌的行程只有四天，但却足以给亚洲，乃至整个世界带来巨大影响。

衷心祝愿2024年年会一如既往取得圆满成功。■

Welcome to the Annual Conference 2024 of the Boao Forum for Asia in the sunny, mild and promising spring-time of the Year of the Dragon.

Welcome back to this annual gathering of the Boao Family to renew friendship, reconnect, review, debate, plan and act. More than 2000 government, business and intellectual leaders from Asia and around the world are gathered in this tiny island for a three-day intensive brainstorming on the most pressing issues of the day. People lay high hopes on us. We must not let people down.

Looking back, there is much to take comfort from and pride in. We have beaten the worst-case scenario, and emerged from a successive barrage of shocks and crises with stronger-than-expected resilience. The world is freed from the grip and fear of the pandemic. Inflation is less threatening as we thought it would be, and falling fast in most countries. Global economy may well escape a hard landing. A modest but steady rise is in sight.

Looking ahead, however, it's no all roses or plain sailing. Challenges abound and weigh heavy. Black swans, grey rhinos, white elephants or black jellyfish may pop up anytime on the way. Quite often, in a highly connected and globalized world, these challenges and risks are not confined to one country or region. They cross borders, spill over, and force us into one same boat in the uncharted waters.

The climate crisis, for instance. None of our economic or geopolitical headaches has disrupted the pace of global warming. It just keeps going up. The past year of 2023 was just confirmed as the hottest year on record. That record, however, may well be broken again as January 2024 was just found to be the hottest month on record.

The world is acting, but not fast and enough. Last December, the COP28 vowed to transition away from fossil fuels, triple renewables and increase climate finance for the most vulnerable. A historic agreement to keep the

1.5℃ goal alive, but just the beginning, not the finish line. Global climate action must follow up and match the words with rapid, deep and sustained reductions in the global greenhouse gas emissions of 43 percent by 2030 and 60 percent by 2035 relative to the 2019 level, and net-zero carbon emissions by 2050.

Global action must be based on trust and solidarity, which unfortunately is quickly missing in the past few years. On the rise are intensifying rivalry, confrontation and conflicts. The Ukraine conflict and the Israel-Palestinian conflict threaten to rip the world further apart. Countries are regrouping and realigning along ideological or geopolitical lines. We're forced into one same boat, but not everyone rows in the same direction. Sustained peace and sustainable development, two lofty goals underpinning the United Nations, are still far away.

Addressing such increasing complexities and uncertainties takes vision, courage and innovativeness which, however, must build on common sense and proven wisdom. We must go back to the proven values and principles enshrined in the UN Charter. We must rekindle the proven institutions with the UN at the core. We must revitalize the multilateral approach that has helped safeguard peace and promote prosperity. In the face of common challenges, we must row in the same direction as a team.

As former Secretary General of the UN and Chairman of the Boao Forum for Asia, I have deep faith in the power of countries and people working together. I call upon you, leaders and fellow delegates of the BFA Annual Conference 2024, to rise to our common challenges, take up our shared responsibilities and work together towards our shared future of peace and development. Your stay in Boao is only four days, but enough to make a big difference in Asia and the world.

I wish the Annual Conference 2024 a shining success as always. ■



周小川
博鳌亚洲论坛副理事长
ZHOU Xiaochuan
Vice Chairman, Boao Forum for Asia

为了人类未来共担责任共迎挑战

Sharing Responsibilities and Meeting Challenges Together for the Future of Humanity

欢迎各位新老朋友齐聚博鳌小镇出席博鳌亚洲论坛2024年年会。后疫情时期，世界未能迎来经济快速复苏，俄乌冲突持续，巴以新一轮冲突爆发，去年7月全球高温创历史纪录，ChatGPT横空出世。世界看上去正偏离和平发展的轨道，自然失衡与科技迭代给人类带来巨大的冲击与考验。面对世界之变、时代之变、历史之变，共担责任共迎挑战是为了人类共同未来的唯一出路。在此过程中，亚洲将发挥重要作用。

亚洲是世界经济增长的压舱石。当前，全球经济面临复苏迟缓的挑战。IMF预计全球经济增长仍低于疫情前的历史平均水平，世界银行认为世界已进入30年来最缓慢增长的5年。高利率环境抑制了全球总需求，一些发展中经济体债务压力持续。许多经济体亟需寻找失落的动能，重回增长轨道。面对诸多的外部制约因素，亚洲国家特别是发展中亚洲仍将成为世界经济增长的压舱石。中国、印度、印尼等国家的增长率均超过4%，亚洲对世界经济增长的贡献预计仍保持三分之二左右。

亚洲是经济全球化的重要支撑。逆全球化思潮抬头，贸易保护主义加剧，脱钩断链，小院高墙，阻碍了关键原材料、中间产品、科技和人才的有效流动，严重损害全球福祉。在此背景下，亚洲多国积极落实《区域全面经济伙伴关系协定》(RCEP)、《全面与进步跨太平洋伙伴关系协定》(CPTPP)、《数字经济伙伴协定》(DEPA)等新型、高标准贸易规则，并以此推动WTO规则与时俱进。妥善处理贸易争端，反对单边主义与搞阵营对抗和排他性的小圈子，让经济全球化惠及每一国每一人，是亚洲的坚定呼声。

亚洲是实现绿色低碳发展的关键地区。2023年，全球气候行动面临巨大缺口，绿色产业革命需要巨额资金技术投入。在迪拜召开的第28届气候变化大会达成具有里程碑意义的“阿联酋共识”，为能源系统转型摆脱化石

燃料按下加速键。作为全球人口最多、能源消耗和碳排放最多的地区，亚洲肩负着绿色低碳发展的艰巨任务。同时，作为“世界工厂”，亚洲拥有世界清洁生产的核心技术，集中了全球清洁能源投资，在绿色生产、基础设施建设、资金和技术合作上积极有为。

亚洲是科技创新和数字经济发展的新兴力量。科技创新和数字经济已成为新一轮国际竞争核心领域，数字服务贸易和跨境电商等新业态正重构国际经贸格局，生成式人工智能成为全球治理焦点问题。亚洲已形成多个科技创新集聚区，正在塑造全球数字创新的未来，数字经济规模占GDP比重超过38.5%。在加强全球科技治理，促进公平竞争和数据安全有序跨境流动，让人工智能与人类的多元价值对齐，缩小数字鸿沟，保护劳动者权益上，世界期待亚洲方案。

在同一个星球上，同一个地球村，亚洲好可以促进世界好，但只有世界好亚洲才能好。亚洲各国外部面临着世界格局大变革带来的巨大挑战，内部面临着亟待解决的重大政治经济议程。亚洲应与世界携手，共同推动全球治理，使世界重返和平、稳定和可持续发展的轨道。这是我们的责任。

中国国家主席习近平指出，中国愿同国际社会一道，以人类前途为怀、以人民福祉为念，推动构建人类命运共同体，建设更加美好的世界。中国将集中精力实现中国式现代化，加快形成新质生产力，积极倡导平等有序的世界多极化和普惠包容的经济全球化。这是中国的担当。

博鳌亚洲论坛作为立足亚洲、面向世界的全球政商对话平台，将携手论坛会员合作伙伴与志同道合之士，为增进亚洲内部以及亚洲与世界的理解，为共担责任共迎挑战多做工作。希望各位嘉宾在年会上畅所欲言，为亚洲与世界携手，为了人类的未来贡献力量。■

Welcome everyone. Thank you for taking the time to attend the Boao Forum for Asia Annual Conference 2024. In the post-COVID-19 era, the world appears to be deviating from its track of peaceful development. The world economy has failed to recover swiftly, the Russia-Ukraine conflict is still ongoing, and a fresh round of the Israel-Palestine conflict has erupted. Meanwhile, July 2023 was the hottest month on record, and ChatGPT took the world by storm. Indeed, the disruptions caused by natural disasters and technological advancements pose significant challenges and tests for the human race. Confronted with global, epochal and historical changes, coming together to share responsibilities and address challenges is the sole path toward building a shared future for humanity. In this process, Asia will play a key role.

Asia is the cornerstone of world economic growth. The tepid recovery remains a challenge for the global economy. The IMF forecasts that the global economy will continue to grow at a level below the pre-COVID-19 historical average, while the World Bank believes that the world has entered its slowest five-year growth phase in 30 years. The high interest-rate environment has suppressed global aggregate demand, and some developing economies are still weighed down by their debt burden. Many economies direly need to regain their lost growth momentum. Faced with many external constraints, Asia — and particularly developing Asian countries — will continue to be the cornerstone of world economic growth. Countries such as China, India and Indonesia are all growing at more than 4%, and the continent is still expected to account for about two-thirds of world economic growth.

Asia is a key pillar of economic globalization. The rise of anti-globalization sentiment, heightening protectionism, decoupling and severing of supply chains, as well as taking the “small yard, high fence” approach, have obstructed efficient flows of key raw materials, intermediate products, technology, and talent, significantly damaging global well-being. In this context, many Asian countries have implemented new and high-standard trade rules such as the Regional Comprehensive Economic Partnership, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership, and the Digital Economy Partnership Agreement, so that WTO rules may be brought up to date. Asia firmly believes in handling trade disputes appropriately, opposing unilateralism, camp confrontations and exclusive small circles, as well as allowing economic globalization to benefit every country and individual.

Asia is a key region for making green, low-carbon development a reality. In 2023, there was a major gap in global climate action. The green industrial revolution requires enormous commitment in funding and technology. The UAE Consensus reached at the COP 28 UN Climate Change Conference in Dubai, calling for an accelerated

transition from fossil fuels to reach net zero, is an important milestone. As the most populous region with the world’s highest energy consumption and carbon emissions, Asia assumes the arduous task of green, low-carbon development. At the same time, Asia, the “world’s factory,” has core technologies for clean production and has brought together global clean energy investment. It has actively contributed to green production, infrastructure development, as well as funding and technological collaboration.

Asia is an emerging powerhouse in technological innovation and the digital economy. Technological innovation and the digital economy have become key areas in the latest wave of international competition. New forms of businesses such as digital services trade and cross-border e-commerce are reconstructing the international trade landscape. Meanwhile, generative AI has become a key issue in global governance. Technological innovation clusters abound in Asia, and are shaping the future of global digital innovation. The digital economy has surpassed 38.5% of GDP. The world awaits an Asian solution that will strengthen global technology governance, promote fair competition, foster safe and orderly cross-border data flows, help align AI with diverse human values, narrow the digital divide, and protect labor rights.

Sharing the same planet and being members of the same global village, what benefits Asia benefits the world, and vice versa. Externally, Asian countries face enormous challenges resulting from significant changes in the global landscape. Internally, major political and economic agendas need to be urgently addressed. Asia should work together with the rest of the world, and jointly advance global governance so that the world can return to a peaceful, stable and sustainable track. This is our responsibility.

With the future of humanity in mind and taking the well-being of the people to heart, China’s President Xi Jinping said that China is willing to work with the international community to promote the building of a community and a better world. China will focus on achieving a Chinese path to modernization, accelerating the creation of new quality productive forces, and actively advocating the construction of a fair and orderly multipolar world and inclusive economic globalization. This is China’s responsibility.

Based in Asia and facing the world, the Boao Forum for Asia serves as a global platform for political and business dialogue around the world. It will work together with Forum members and partners as well as like-minded individuals to increase understanding within Asia and between Asia and the rest of the world, as well as to share responsibilities and meet challenges. I hope that all our distinguished guests will speak their minds freely at the annual conference, and contribute to Asia’s collaboration with the world and to the future of humanity. ■



李保东
Boao Forum for Asia
Secretary General, Boao Forum for Asia

亚洲与世界： 共同的挑战，共同的责任

Asia and the World: Common Challenges, Shared Responsibilities

大地回春，万物复苏。在这欣欣向荣的季节，论坛再次迎来一年一度的盛会。热烈欢迎大家重聚博鳌，在融融春意中畅所欲言，共商发展。

博鳌亚洲论坛2024年年会定于3月26日至29日在博鳌召开。年会将汇集包括东道国中国在内的各国领导人、政府官员、国际组织负责人、企业代表、专家学者和媒体人士，分析亚洲和世界发展形势，探讨未来一年的优先事项和重要议题。

当今世界，我们面临着一系列严峻挑战。世界经济复苏乏力，各经济体增长不均衡现象突出。许多发展中国家短期增长前景严峻，部分低收入经济体债务压力不断增大。国际形势持续动荡，地缘政治局势紧张。俄乌冲突和巴以冲突短期内仍看不到终止的迹象。极端天气和自然灾害多发。国际社会总体减排承诺与目标仍相距甚远。实现联合国2030年可持续发展目标面临挑战。人工智能的巨大潜在风险引起国际社会高度关注和积极讨论。加强全球治理迫在眉睫。

同时也要看到，世界经济总体上还是在逐步走出疫情的阴霾，科技的不断进步总体上也给人类带来了巨大福祉。国际上要和平安定要发展的力量在不断增长，加强合作、共谋发展仍然是国际社会的主流呼声。

在上述背景下，论坛今年年会的主题定为“亚洲与世界：共同的挑战，共同的责任”。我们希望通过年会的探讨，在挑战中看到积极面，发掘正能量，推动亚洲与世

界凝心聚力。

今年年会设置了四个板块的议题：“世界经济”、“科技创新”、“社会发展”以及“国际合作”。每个板块的议题均体现了团结促发展这一主旨，通过对不同议题的深入探讨来求证，直面挑战、共担责任是国际社会的共同利益，是建设人类命运共同体的必然选择。

“世界经济”板块包括世界经济展望、中国经济展望、减少贸易碎片化、投资亚洲未来等议题。

“科技创新”板块包括科技革命的“奇点”、AIGC改变世界、人工智能全球治理、能源低碳转型等议题。

“社会发展”板块包括加快应对气候变化行动、碳定价市场与碳关税、增强企业创新性、展望老龄友好型社会等议题。

“国际合作”板块包括全球地缘政治展望、全球南方的兴起、深化亚洲金融合作、打造亚洲增长中心、高质量共建“一带一路”等议题。

此外，年会当中还设置了金融、文化、青年、女性等圆桌会以及企业家对话会等一系列活动。

参与年会讨论的嘉宾都是来自政商学界的精英和各行业的佼佼者。我们非常高兴能提供一个畅所欲言的平台，供各方深入交流。道虽迩，不行不至；事虽小，不为不成。我们坚信，只要我们群策群力，就一定能够攻坚克难。让我们共同应对当今世界面临的挑战，共同挑起肩上的责任，携手打造亚洲和世界的光明未来！■

Spring, the season when everything comes to life, also means that our annual conference is just around the corner. I warmly welcome everyone to Boao to share your ideas freely and discuss future development.

At the 2024 Boao Forum for Asia Annual Conference, held from March 26 to 29, Chinese and foreign political leaders, government officials, heads of international organizations, corporate representatives, experts and scholars, as well as the media will gather to analyze the state of Asian and world development, and to discuss priorities and key topics for the year ahead.

At present, the world faces a series of major challenges. The global economic recovery remains weak, and growth among different economies is markedly imbalanced. The short-term growth outlook for many developing countries is poor, with growing debt pressure among a number of low-income economies. The global situation remains in turmoil, marked by geopolitical tensions. We see no signs of an end to the Russia-Ukraine conflict or the Israel-Palestine conflict in the near term. Extreme weather and natural disasters have become frequent occurrences. The gap between the international community's commitments to overall emissions reduction and their actual goals is still quite wide. Achieving the UN's 2030 sustainable development goals remains a challenge. The significant underlying risks of artificial intelligence have attracted much attention and led to intense discussion within the international community, with a pressing call for bolstering global governance.

We do note, however, that the world economy is gradually recovering from the pandemic on the whole. Continued technological advances have also significantly benefited the human race. Within the international community, forces advocating peace, stability, and development are increasing. Strengthening cooperation and pursuing common development is still the mainstream voice of international society.

Given the above context, “Asia and the World: Common Challenges, Shared Responsibilities” is the theme for the 2024 Boao Forum for Asia Annual Conference. From the discussions at the annual conference, we hope to identify positives amid challenges, uncover positive energy, promote unity between Asia and the world, and enhance cooperation to spur development.

This year's annual conference will feature four discussion modules with the following topics: “World Economy”, “Scientific and Technological Innovation”, “Social Development” and “International Cooperation”. Each topic will reflect the main theme, which is that unity promotes development. Through in-depth discussions of the different modules, we aim to demonstrate that meeting challenges head-on and sharing responsibilities are in the common interest of the international community, and are the inevitable choice for building a community with a shared future.

The “World Economy” module includes topics such as Global Economic Outlook, China's Economic Outlook, Confronting Fragmentation in Global Trade, and Investing the Future Of Asia.

The “Scientific and Technological Innovation” module includes the Breakthrough Moment Of The Technological Revolution, AIGC Reshaping the World, Global AI Governance, Low-Carbon Energy Transformation, and other topics.

Topics for the “Social Development” module include Accelerating Climate Action, Carbon Pricing, Carbon Market and Carbon Tariffs, Making Companies More Innovative, and Envisioning an Age-Friendly Society, among others.

The “International Cooperation” module includes topics such as Global Geopolitical Outlook, Rise of the Global South, Deepening Financial Cooperation in Asia, Asia: Building an Epicentrum of Growth, and Supporting High-Quality Belt and Road Collaboration.

In addition, the annual conference will also feature roundtables for finance, culture, youth issues, and women's issues, as well as a series of events such as dialogues with entrepreneurs.

The participants at the annual conference are political, business and academic elites, and are the best in their respective industries. We are thrilled to be able to provide a platform for all to speak freely, and to carry out in-depth exchanges. We firmly believe that we can overcome all challenges and hardships if we brainstorm and collaborate. Together, let's meet the challenges facing the world today, and shoulder our responsibilities to build a bright future for Asia and the world! ■

2024年年会议题设置

Annual Conference 2024 Agenda Setting



板块一 世界经济 The World Economy

世界经济展望
Global Economic Outlook

中国经济展望
China Economic Outlook

减少贸易碎片化
Confronting Fragmentation in Global Trade

投资亚洲未来
Investing the Future of Asia

全球自由贸易港发展
Global Free Trade Port Development

实体经济的突围
Real Economy: The way forward

金融圆桌:
亚洲金融市场发展与金融全球化
Financial Roundtable: Financial Market Development in Asia and Financial Globalization



板块二 科技创新 Scientific and Technological Innovation

科技革命“奇点”离我们有多远?
How Far is the Breakthrough Moment of Technological Revolution?

AIGC改变世界
AIGC Reshaping the World

人工智能全球治理
Global AI Governance

能源低碳转型
Low-Carbon Energy Transformation

新能源汽车赛道的未来
The Future of New Energy Vehicles

融合与创新的数字经济
Digital Economy in Integration and Innovation

知识产权促进可持续发展
Roundtable on Intellectual Property for Sustainable Development

“创新、绿色、数智、融合”
引领高质量发展
Innovation, Greenness, Digital Intelligence and Integration Led High-Quality Development



板块三 社会发展 Social Development

加快应对气候变化行动
Accelerating Climate Action

增强企业创新性
Making Companies More Innovative

社会治理与区域安全
Social Governance and Regional Security

展望老龄友好型社会
Envisioning an Age-Friendly Society

关注罕见病, 促进健康公平可及
The Health Equity Frontier - Closing the Rare Disease Care Gap

“一带一路”绿色投融资圆桌
Financing a Greener “Belt and Road”

企业ESG信息披露新动向
Sustainability Disclosure, the New Normal

加速迈向零碳电力
Accelerating Transition toward Zero-Carbon Power



板块四 国际合作 International Cooperation

全球地缘政治展望
Global Geopolitical Outlook

全球南方的兴起
Rise of the Global South

深化亚洲金融合作
Deepening Financial Cooperation in Asia

打造亚洲增长中心
Asia: Building an Epicentrum of Growth

高质量共建“一带一路”
Supporting High-Quality Belt And Road Cooperation

跨越政治藩篱, 应对气候危机
Overcoming Political Hurdles to Address the Climate Crisis

全球安全倡议:
破解安全难题 共促世界和平
The Global Security Initiative: Addressing Security Challenges and Promoting World Peace

碳定价、碳市场和生物多样性融资
Carbon Pricing, Carbon Market and Biodiversity Credits



圆桌会议 Roundtable

华商圆桌
Overseas Chinese Roundtable

文化圆桌
Cultural Roundtable

女性圆桌
Women Leadership Roundtable

跨国公司 CEO 圆桌
Multinational Corporation (MNC) CEO Roundtable

民营企业圆桌
Private Entrepreneurs Roundtable



对话会 Dialogue

中美企业家对话会
China-US CEO Dialogue

中澳企业家对话会
China-Australia CEO Roundtable

中欧企业家对话会
China- Europe CEO Dialogue

青年论坛
Youth Forum

宗教对话
Religious Dialogue

截至2024年3月14日数据统计, 最终信息请以现场为准。



年会热词 Buzzwords

危与机

Crisis and Opportunity

苏马·查克拉巴蒂: 如果说去年的年度词汇是“多重危机”，那么或许我们在2024年的讨论中可以带来些许乐观。我认为是“危与机”这个词，在中文里，不仅意味着危险与困境，也蕴含了“机会”的寓意。

这并非否认我们在未来一年将面临严峻挑战，而是希望我们在应对挑战的同时，也能抓住变革、改革与合作的机遇。例如，气候危机就为我们提供了契机，推动能源系统转向更清洁的技术，走上更环保的发展道路。

同样，为应对一些全球最棘手的危机，围绕金融体系和多边开发银行改革的重大议程也可能开辟新的变革和发展机遇。

Suma CHAKRABARTI: If the word of the year last year was ‘polycrisis’, perhaps we might inject a little more optimism into the discussion in 2024, so I would suggest the Chinese word 危机 (weiji), which denotes both crisis and, in the second half, 机 (ji), the word for opportunity, 机会 (jihui).

This isn’t to deny that we face very substantial challenges in the year ahead, but it is to hope that, alongside these, we may also be able to seize opportunities for change, for reform and for cooperation. The climate crisis, for example, is an opportunity to shift energy systems to cleaner technologies and spur greener paths of development.

Major reform agendas, for instance around the financial architecture and reform of the multilateral development banks, may also present new opportunities for change and development in some of the world’s most challenging crises.



苏马·查克拉巴蒂
英国海外发展研究院董事
前欧洲复兴开发银行行长

Suma CHAKRABARTI
Chair of Overseas Development Institute (ODI) Board
Sixth President of European Bank for Reconstruction
and Development (EBRD)

人工智能 Artificial Intelligence

胡晓炼: 以ChatGPT为代表的生成式人工智能取得的突破, 将极大地改变世界经济发展模式: 一方面, 驱动数字领域投资需求快速增长, 创造数字经济消费巨大空间; 另一方面, 将极大改变产出的组织方式和消费模式。数字经济创新成为经济增长的核心驱动力, 数字经济本身形成超长产业链, 带动各行业各领域转型升级。

这是人类社会又一次经历充满挑战的新革命, 各国特别是主要经济体应秉承人类命运共同体的理念, 加强合作, 发展好、运用好、驾驭好人工智能这一具备无限潜力又潜藏巨大未知风险的新质生产力。

HU Xiaolian: Breakthroughs in generative AI represented by ChatGPT will greatly change the world's economic model. On the one hand, they will drive the rapid growth of investment demand in the digital field, creating immense growth potential for digital economic consumption. On the second, they will significantly change production organization and consumption patterns. Digital economic innovation has become a core driver of economic growth, and the digital economy itself has formed an ultra-long industrial chain, driving the transformation and upgrading of various sectors and fields.

This is another new revolution full of challenges for human society. All countries, especially major economies, should uphold the concept of a community with a shared future for mankind and strengthen cooperation to ensure the optimal development, utilization and control of AI, which is a new quality productive forces with unlimited potential and huge unknown risks.



胡晓炼
中国国际经济交流中心副理事长
原中国进出口银行行长

HU Xiaolian
*Vice Chairman of China Center for International
Economic Exchanges and Former Chairwoman of the
Export-Import Bank of China*

地缘政治 Geopolitics

戴惟德: 世界超过40%的人口有资格参与选举投票, “政治”可能是2024年的流行语, 或者更具体地说, 是地缘政治。全球经济一直并可能保持相对的韧性, 而面临的主要风险并非来自经济政策或全球经济的结构性因素。相反, 来自地缘政治趋势和紧张局势。

四大关键的地缘政治风险可能会改变全球经济的轨迹。首先是中东, 以色列和哈马斯之间的冲突, 以及胡塞武装对红海商业航运的袭击, 已经损害了供应链效率并增加了成本。其次, 如果俄乌冲突继续仍会影响欧洲的商业信心导致投资下滑。第三, 目前中美之间的关系虽然稳定, 但不排除变化可能, 这取决于太平洋两岸的政策走向。最后, 即将到来的美国大选可能导致美国在贸易、跨境投资、移民和与盟国关系方面的政策发生变化。

David HILL: With more than 40% of the world's population eligible to vote in an election this year, the buzzword is likely to be politics or more particularly, geopolitics. The global economy has been, and is likely to remain, relatively resilient. The main risks to the global economy come not from economic policy or structural factors in the global economy. Rather, from geopolitical trends and tensions.

Four key geopolitical risks could change the trajectory of the global economy. First, there is the Middle East, where the conflict between Israel and Hamas, and Houthi attacks on commercial shipping in the Red Sea, have hurt supply chain efficiency and added to costs. Second, if the Russia-Ukraine conflict continues, it will likely hurt business confidence in Europe, leading to a downturn in investment. Third, tensions between the US and China, while stable now, could intensify depending on political decisions made on either side of the Pacific Ocean. Finally, the upcoming election in the US could lead to changes in US policy regarding trade, cross-border investment, immigration, and relations with allies.



戴惟德
德勤亚太首席执行官

David HILL
Chief Executive Officer, Deloitte Asia Pacific

「科技创新」

Scientific and Technological Innovation

碳中和 Carbon Neutrality

阿卜杜拉哈曼·阿尔-法季：作为全球最大的化工企业之一，沙特基础工业公司 (SABIC) 的首席执行官，我一直在和行业同仁们探讨“碳中和”相关话题。化工和能源作为制造业的双重驱动力，必须向更低碳的能源和产品转变，同时促进循环经济的更好发展。我们需要采取大胆的战略举措，释放化工行业的发展潜力，不仅去适应变化，更要充分抓住低碳能源转型的机遇。

Abdulrahman AL-FAGEEH: From my perspective as CEO of one of the world's largest chemical companies, I can tell you that my industry colleagues and I are constantly talking about carbon neutrality. The reason is that chemicals and energy, the dual drivers of the manufacturing sector, have to move towards lower-carbon energy and products, as well as drive a more-circular economy. We need to engage in bold, strategic initiatives that unlock the chemical industry's potential to evolve, not just to cope with...but to take advantage of...the transition to lower carbon energy.



阿卜杜拉哈曼·阿尔-法季
博鳌亚洲论坛理事
沙特基础工业公司 (SABIC) 首席执行官

Abdulrahman AL-FAGEEH
BFA Board Member & CEO of SABIC

知识产权 Intellectual Property



张跃
远大科技集团有限公司董事长兼总裁

ZHANG Yue
Chairman & CEO, BROAD GROUP

张跃：强化知识产权保护是创新前提，严惩剽窃才能鼓励创新。

ZHANG Yue: The prerequisite for innovation is to strengthen the protection of intellectual property. Innovation can only be encouraged if intellectual property theft is severely penalized.

合作 Collaboration

苏博科：“合作”既是取得进步的基石，也是持续创新的关键，不仅促进专业知识和技能的交流，更激发出在单独个体努力下不可能产生的新洞察和新方法。

我们持续投资并加大合作，为全球患者带来先进的疗法，这包括在细胞、基因和 RNA 疗法及表观遗传学等领域共同推动下一代的科学和技术突破。在中国，我们与诚益生物就处于临床研究阶段的 GLP-1 受体激动剂达成授权协议，彰显了阿斯利康致力于满足心血管代谢疾病和肥胖症患者（全球已超过 10 亿人）未被满足的巨大需求。除此之外，近期收购巨喜生物将进一步探索细胞疗法重置自身免疫疾病免疫反应的潜力。

“合作”具有巨大力量和潜力。这也是阿斯利康积极寻找拥有前沿技术和创新能力合作伙伴的原因，因为这些技术和创新将有望改变全球患者的生命。“合作”对于科学发现至关重要，它跨越了公共和私营部门，也跨越了世界各国。

Pascal SORIOT: Collaborations foster the exchange of knowledge and expertise, sparking new insights and approaches unlikely to emerge from independent or individual efforts.

At AstraZeneca, we continuously invest in collaborative endeavors to deliver advances to patients around the world. This includes collaborations to drive the next generation of scientific and technology breakthroughs, including in new modalities such as cell, gene and RNA therapies, as well as in fields such as epigenetics.

Here in China, we partner extensively with companies in the biopharmaceutical and biotechnology sectors. For example, our recent licensing agreement with Eccogene on GLP-1RA underscores our commitment to addressing the high unmet need of people living with cardiometabolic conditions and obesity, a population that already exceeds one billion people globally. Additionally, our recent acquisition of Gracell Biotechnologies explores the potential for cell therapy to reset the immune response in autoimmune diseases.

These are just a few examples of what I strongly believe exemplifies the power and potential of collaboration, and it is why AstraZeneca remains on the lookout for new partners with cutting-edge technologies and innovations with the potential to transform the lives of patients. Collaboration is critical to scientific discovery, across the public and private sector as well as across countries globally.



苏博科
博鳌亚洲论坛机构理事
阿斯利康全球首席执行官

Pascal SORIOT
Corporate Member of the Boao Forum for Asia,
Chief Executive Officer, AstraZeneca

AI、新质生产力

AI,
New Quality
Productive Forces

胡柏山: 2024年会继续衔接2023年的迅猛势头，科技创新的最热词汇依然是“AI”或者说“AI大模型”。vivo2018年就成立了AI全球研究院，有近千人的AI研发团队，去年11月发布了历时六年研发的AI蓝心大模型；vivo的蓝心小V智慧助理也让AI大模型真正走进千家万户，帮助普通人更快捷地走进AI时代。

新质生产力是代表新技术、创造新价值、适应新产业、重塑新动能的新型高质量生产力，是实体经济转向高质量发展的强大驱动力。全面拥抱新质生产力，是实体经济突围的必然选择。手机行业天然就是数实融合的实体经济标杆。我们认为现有赛道中，比如手机、耳机、手表和眼镜等设备，未来极有可能进化成用户贴身携带的整合型智慧终端，把人工智能提供的诸多能力随身携带，就是隐形机器人。此外，vivo还看好人形机器人，它可能在养老、教育、医疗等方面有广阔发展空间。

HU Baishan: In my view, 2024 will continue the rapid momentum of 2023, with the hottest terms in technological innovation still being “AI” or, to be more specific, “AI Large Models”.

Speaking for vivo, we established our AI Global Research Institute back in 2018, with a nearly thousand-strong AI R&D team, and released BlueLM last November. vivo’s BlueLM V smart assistant has also brought AI large models into thousands of households, helping ordinary people to step into the AI era more swiftly.

“New Quality Productive Forces” is another key buzzword. It represents a new type of high-quality productivity that signifies new technologies, creates new values, adapts to new industries, and reshapes new dynamics. It is a powerful driver for the real economy to shift towards high-quality development.

The mobile phone industry is a natural benchmark for the integration of digital and real economies. We believe that existing products, such as mobile phones, earphones, watches, and glasses, are likely to evolve into integrated smart terminals that people carry with them in the future, carrying the capabilities provided by artificial intelligence with them, essentially becoming invisible robots. Moreover, vivo is optimistic about humanoid robots, which may have broad development prospects in areas such as elderly care, education, and healthcare.



胡柏山
博鳌亚洲论坛机构理事
vivo 执行副总裁、首席运营官

HU Baishan
Corporate Member of the Boao Forum for Asia,
Executive Vice President & COO, vivo

新质生产力

New Quality
Productive Forces

余兵: 习近平总书记指出，新质生产力是创新起主导作用，摆脱传统经济增长方式、生产力发展路径，具有高科技、高效能、高质量特征，符合新发展理念的先进生产力质态。当前，全球科技日新月异，产业结构深度调整，面向前沿领域及早布局、提前谋划变革性技术、夯实未来发展的技术基础、形成并发展新质生产力，已成为制胜未来的关键力量。国家能源集团正在聚焦劳动者工程师化、劳动资料可再生能源化、劳动对象数据化、劳动工具智能化、运输工具电气化，发力传统产业高端化、智能化、低碳化、谱系化发展和战略性新兴产业规模质量发展，重塑形成“煤火风光水、化油气氢核等能源谱系+物流贸易金融支撑+产研用融通”的综合性现代化产业发展新格局。

YU Bing: As President Xi Jinping put it, led by innovation, “New Quality Productive Forces” broke away from traditional economic growth models and development paths of productivity. They possess characteristics of high technology, high efficiency, and high quality, and dovetail with the new development philosophy of China. Given the ever-evolving global technology landscape and the profound restructuring of industries today, the key to securing a bright future lies in our ability to develop blueprints for frontier, revolutionary technologies, and foster new quality productive forces. China Energy is now focusing on transforming means of labor into renewable energy sources, and digitalizing and intelligentizing labor objects and tools, seeking to facilitate intelligent, low-carbon and coordinated development of traditional industries as well as the high quality development of strategic emerging industries. The ultimate goal is to establish a new modern industrial development pattern integrating various energy resources such as coal, wind, solar, hydropower, chemicals, oil, natural gas, and hydrogen. With logistics, trade and financial support provided, it connects production, research and application activities across-the-board.



余兵
国家能源投资集团有限责任公司总经理

YU Bing
General Manager, China Energy Investment
Corporation Limited.

大模型

LLM
(Large Language Model)

袁辉：科技创新成为促进全球经济繁荣的关键力量，“人工智能”是在未来百年里最核心的话题之一，反映了科技如何推动这个世界进一步发展。

在人工智能领域，当下毋庸置疑的“热词”依然是大模型。人工智能已经来到新时代，大模型就是新时代的操作系统，在操作系统之上，所有应用全部会重塑，底座发生了核心的根本性改变。从产业本身发展角度来讲，这是前所未有的结构性机会。

通用人工智能（AGI）是与人类智能相当、甚至超越人类智能水平的人工智能系统，具有高级的自主决策能力、广泛的应用前景。大模型的出现被视为人类迈向AGI的一次重大技术飞跃。大模型必须解决三个核心挑战——可控、可定制、可交付，只有解决这些核心挑战，大模型才能实现商业落地，促进全球经济繁荣发展。

Max YUAN: In the present world, scientific and technological innovation has become a key force in promoting global economic prosperity, and “AI” is precisely one of the core topics in the next hundred years, which reflecting how science and technology can promote the world further.

In the field of AI, LLM is undoubtedly the current “hot word”, Today, we have reached a new era of AI, the large language model is the operating system of the new era. On top of that, all applications will be reshaped, the core fundamental structure have undergone radical changes, From the perspective of the development of the industry itself, this is an unprecedented structural opportunity.

Under this influence, general AI (AGI), an AI system that is equivalent to or even surpasses human intelligence, has advanced autonomous decision-making capabilities and broad application prospects, the emergence of LLMs is regarded as a huge step forward for the entire mankind in the AGI field. LLMs must solve three core challenges — controllable, customizable, and deliverable, Only by solving these core challenges can LLMs achieve commercial implementation and promote global economic prosperity and development.



袁辉

小i集团董事长兼CEO

Max YUAN

Chairman, Xiao-i Corporation

和美

Harmony

曾从钦：我选择“和美”。因为它集中代表了人们应对社会发展问题时的一种目标、态度、期许和方法。面对激烈的社会竞争，希望建立以和为贵、和气致祥的“和美”人际关系；面对日益趋紧的资源环境约束，希望建立和谐共生、天人互泰的“和美”自然关系；面对不同观点的交锋碰撞，希望建立求同存异、和合汇融的“和美”文化关系；面对发展的不平衡不充分问题，我们希望建立同甘共苦、和衷共济的“和美”城乡关系。

解决社会发展问题需要共同的价值理念做支撑，“和美”就是其中很重要的价值理念。“和美”，即“和合共生、美美与共”，充分体现了中国人在解决自我生存、社会发展、国家治理等方面的深邃思考和通达智慧，“和”是做人做事的方式，“美”是社会进步的追求。

ZENG Congqin: If I could only choose one, it would be “harmony”, as it represents the objective, attitude, expectation, and approach when dealing with social development issues. Facing intense competition in the modern world, we hope to build “harmonious” interpersonal relationships for mutual benefit. To address acute resource and environmental constraints, we hope to promote harmony between humanity and nature. When it comes to different viewpoints, we hope to foster a harmonious culture of seeking common ground while shelving differences. To tackle the imbalances and inadequacies in development, we hope to strengthen a harmonious urban-rural relationship where urban and rural areas work together and promote each other for common prosperity.

No matter what social development issues we face, we need to uphold shared values, and a crucial one is “harmony.” “Harmony” means the pursuit of common development in harmony. It is the essence of fine traditional Chinese culture and reflects the deep reflection and wisdom of Chinese people when it comes to self-survival, social development, governance, and other issues. It also sets the benchmark for who we should be and how we should act, and points the way forward for social progress.



曾从钦

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ZENG Congqin

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Chairman, Wuliangye Group Co.,
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创新 Innovation

张剑秋: 创新, 是社会发展的恒久动力, 也是企业从快速成长到持续增长的重要驱动力之一。作为传统产业, 奶业从粗放式、大投入, 到集约式、高效能跨越式发展, 离不开创新的驱动, 离不开生产力的释放与激活。伊利作为其中的典型代表, 每一次的生存突围和驭势而行, 都是牢牢把握创新机遇、紧跟技术革新潮流, 以科技创新推动产业创新, 实现全产业链条的生产力跃迁。

多年以来, 伊利将创新作为驱动企业发展的重要战略。全国唯一的国家级乳业技术创新中心由伊利牵头建设, 总部坐落于呼和浩特市伊利现代智慧健康谷。同时, 伊利在欧洲、大洋洲、东南亚等地打造了15个创新中心。伊利围绕产业链布局创新链, 形成“从一棵草到一杯奶”的创新链路, 解决全产业链技术瓶颈, 加速推动技术成果转化和应用, 增强产业的核心竞争力。

ZHANG Jianqiu: Innovation is a perpetual force driving social development. It is also driving enterprises to make the transition from rapid growth to sustained growth. As a traditional industry, the dairy industry required both innovation and the unleashing of productivity as it transitioned from an investment-heavy, extensive-growth model to a high-efficiency one. As a quintessential representative of this reality, Yili has firmly grasped opportunities for innovation and kept up with technological innovations in all its endeavors, allowing it to manage any situation that it encounters. It promotes industrial innovation through technological innovation, thereby achieving a productivity leap in its entire industrial chain.

For years, Yili has seen innovation as an important strategy to drive its development. China's only national-level dairy technology innovation center is headquartered in Hohhot City. Yili has also set up 15 innovation centers in Europe, Oceania, and Southeast Asia. It has formed an innovation chain “from a blade of grass to a cup of milk”, which addresses the technical bottlenecks of the entire industry chain, accelerates the transformation and application of technological achievements, and enhances the core competitiveness of the industry.



张剑秋
内蒙古伊利实业集团有限公司高级执行总裁
ZHANG Jianqiu
CEO of Inner Mongolia Yili Industrial Group Co., Ltd.

人工智能和 跨境出海 Artificial Intelligence and Cross-border (Going global)

邱寒: 人工智能近年来是无可争议的“热词”, 2024, 也将热度不减。AI应用领域的突破在全球掀起了新一轮风暴, ChatGPT、Sora这类现象级应用惊艳了全球。AIGC在技术和商业领域的广泛应用, 必然会给各行各业带来颠覆性的改变。2024年初, PayPal贝宝正式发布了多项创新举措, 基于人工智能技术的相关应用是其中的重要内容。

当前, 中国企业的国际竞争力不断增强, 跨境出海方兴未艾, 各种外贸新业态为中国经济增添了新的动能和活力。其中, 跨境电商是发展速度最快、潜力最大、带动作用最强的外贸新业态, 而作为重要基础设施, 跨境支付也迅速发展。PayPal贝宝在全球为大约3500万商户提供支付服务。

Hannah QIU: Artificial Intelligence has been an undisputed “hot topic” in recent years, and attention is set to continue into 2024. Breakthroughs in AI applications have sparked a new global storm, with phenomenal applications like ChatGPT and Sora dazzling the world. The widespread use of AIGC in technology and business sectors will inevitably bring disruptive changes to all industries. At the beginning of 2024, PayPal officially launched several innovative initiatives, with applications based on artificial intelligence technology being an essential part of these.

Chinese enterprises have increasingly become internationally competitive, and the trend of going global continues to rise. Various new forms and models of foreign trade have injected new energy and vitality into the Chinese economy. Among these, cross-border e-commerce is the fastest-growing and has the most potential to form an influential new model of foreign trade. The cross-border payment sector is also rapidly developing. PayPal provides payment services to approximately 35 million merchants globally.



邱寒
贝宝高级副总裁
中国区首席执行官
Hannah QIU
SVP, China CEO, PayPal

数字劳动 Digital Labor

基里尔·巴巴耶夫：在本世纪10年代，数字劳动是指在互联网搜索信息、发布照片、评论等。这些娱乐活动尽管免费，但产生的数据会被数字平台追踪收集。“数字足迹”变成商品，被出售给广告商，再以定向广告的形式出现在用户面前。

如今，数字劳动不仅包括互联网用户的免费活动，也包括有偿工作——从开发在线产品到通过应用与客户沟通并完成送餐。数字工作还包括脱离了数字环境之外无法从事的职业，例如发博客或流媒体。

数字化不仅涉及工业领域，也包括农业、旅游、教育和文化等。据《中国互联网络发展状况统计报告》，中国互联网用户约有10.8亿人（占总人口70%）。据《2023年互联网数据报告》，到2023年底全球互联网用户规模已达53.5亿，其中亚洲用户最多，占全球总数的55%。《中国数字经济发展研究报告（2023年）》称，2022年中国数字经济规模达到50.2万亿元（占GDP的41.5%）。博鳌亚洲论坛《亚洲数字经济报告》则显示，2022年报告研究的14个亚洲国家数字经济规模估计达到12.8万亿美元（占GDP的38.5%）。

Kirill BABAEV: In the 2010s, digital labor refers to searching for information on the Internet, posting and uploading photos. While these leisure activities are free, it resulted in user data that was tracked and collected by digital platforms. These “digital footprints” have become a commodity, which is then sold to advertisers and returned to the user in the form of targeted advertising.

Today, digital labor includes paid work – from developing an online product to delivering food to a client. The category of digital work also includes professions that are impossible outside the digital environment, such as online streaming.

Digitalization covers not only the industrial sector, but also agriculture, tourism, education, and culture. According to a series of reports, about 1.08 billion people (70% of the population) use the Internet in China. The number of Internet users worldwide reached 5.35 billion by the end of 2023, with Asia being the region with the most users, accounting for 55% of the total. By 2022 China’s digital economy reached 50.2 trillion yuan (41.5% of GDP). According to BFA Report, in 2022, the digital economy of 14 selected Asian countries was estimated to have reached \$ 12.8 trillion (accounting for 38.5% of GDP).



基里尔·巴巴耶夫

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多重危机 和团结 Polycrisis and Solidarity

李熙燮：我认为今年的“热词”会有两个，一个是“多重危机”，另一个是“团结”。这两个词分别代表了我們目前所处的局面和必须要走的道路。

我们生活的世界面临着诸多挑战，包括贸易保护主义、“新冠”余波、俄乌战争、技术安全与地缘政治因素导致的全球供应链重组、气候变化等等。

在这种牵涉广泛的“多重危机”中，国际团结与合作对我们找到相关解决方案，同时最大限度减少全球混乱带来的压力和冲击至关重要。特别是在东亚，由于各国在自由贸易体系中形成了彼此交织的价值链，并由此实现了共同增长，现在迫切需要恢复供应链的正常运转。

也就是说，对团结与合作精神的强烈需求已经成为我们战胜共同挑战的强大力量。随着第四次工业革命的迅猛发展、超级不确定性和多重危机的出现，东亚必须以团结合作的坚强意志来度过“多重危机”时代，并成为亚洲和其他地区增长的动力。

LEE Hee-sup: I would like to suggest two buzzwords for this year’s conference: “polycrisis” and “solidarity”. These two words represent the situation we are in, and the path we must take forward.

The world we live in now is facing various challenges, such as trade protectionism, the aftermath of COVID-19 pandemic, the war in Ukraine, the restructuring of global supply chains due to technological security and geopolitical factors, climate change, and so forth.

In such multi-faceted ‘polycrisis’, the role of international solidarity and cooperation is imperative in finding solutions whilst minimizing the pressure and shock of global chaos. Particularly, the restoration of supply chains is urgently needed in East Asia, where common growth was made under the intertwined value chain of the free trade system.

This implies that the strong need for the spirit of solidarity and mutual cooperation have served as a strong force for overcoming our common challenges. With the rapid development of the Fourth Industrial Revolution and the rise of hyper-uncertainties and multiplexed crisis, East Asia must overcome the age of ‘polycrisis’ through the strong will of solidarity and cooperation, and become the driving force for the growth of Asia and beyond.



李熙燮

中日韩合作秘书处秘书长

LEE Hee-sup

Secretary-General of the Trilateral Cooperation
Secretariat (TCS)

凝聚力量，
赋能团结
Empowered Unity

雷纳特·别科图尔沃夫：现在的当务之急是培养合作、交流精神，对抗全球分裂，重新赋予多边主义活力。赋能团结应包括四大关键领域：

首先是国际安全架构需要国际合作，这需要各国团结一致，通过外交努力和相互理解来应对安全威胁、维护和平、解决冲突。

其次是能源、气候变化与可持续性。在进行有关可持续性的选择、参与绿色和低碳倡议以及推广有助于促进可再生能源发展和实现气候适应性的政策时，需要各国共同努力。

第三，全球经济发展。通过推动全球决策者、企业与政府之间达成实质性合作，可以维护经济稳定，提振经济增长。

第四，AI技术在各领域的作用越来越大，正在改变现代世界。AI技术在金融技术中的应用已成为提高金融服务效率和便利性的关键催化剂。

Renat BEKTUROV: It is important to foster a spirit of cooperation and exchange to counter global fragmentation and to revive multilateralism. Empowered unity shall encompass 4 key areas:

First, international security calls for cohesive international partnerships. It underscores the need for countries to stand together in addressing security threats, promoting peace, and resolving conflicts through diplomacy and mutual understanding.

Second, energy, climate change and sustainability. This highlights the importance of collective effort required to make sustainable choices, participate in green and low-carbon initiatives, and advocate for policies that promote renewable energy and climate resilience.

Third, global economic development. Economic stability and growth can be enhanced by fostering meaningful collaboration among the policymakers, businesses, and governments around the world.

Fourth, AI's growing role in all areas is transforming modern world. The infusion of AI into financial technology (Fintech) has emerged as a pivotal catalyst for efficiency and accessibility within financial services.



雷纳特·别科图尔沃夫
阿斯塔纳国际金融中心总裁

Renat BEKTUROV
Governor of Astana International Financial Centre

选举年、
中东局势
Election Year、
Middle East Conflict

王辉耀：选举年：2024年是重要选举年，可能给各国政策和国际局势带来巨大不确定性。

中东局势：巴以冲突爆发后，特别是胡塞武装对途经红海的商船发动袭击，苏伊士运河实际通航能力大减。

供应链韧性：应重新审视供应链应对潜在重大冲击并在遭受冲击后快速恢复的能力。

WANG Huiyao:

Election year: 2024 is an important election year, and may lead to significant uncertainty regarding policies in various countries and the international situation.

Middle East conflict: After the outbreak of the Israeli-Palestinian conflict, especially with Houthi forces launching attacks on ships passing through the Red Sea, the actual navigational capacity of the Suez Canal has shrunk markedly.

Supply chain resilience: It is necessary to re-evaluate the global supply chain's ability to both respond to potential major shocks, and swiftly recover after such shocks have occurred.



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国务院原参事

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Founder and President of Center for China
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一带一路
全球发展倡议和
中国经济增长
BRI, GDI, and China
Economic Growth

海孟德·阿德拉卡：一带一路、全球发展倡议和中国经济增长。

Hemant ADLAKHA: BRI, GDI, and China economic growth.



海孟德·阿德拉卡
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嘉宾问答 Guest Q&A

嘉宾问答 Guest Q&A

「专家观点」

Expert Insights



苏马·查克拉巴蒂

英国海外发展研究院董事、前欧洲复兴开发银行行长

Suma CHAKRABARTI

Chair of Overseas Development Institute (ODI) Board
Sixth President of European Bank for Reconstruction and
Development (EBRD)

问：除周期性因素外，近年来世界经济变得更容易受到意外冲击的影响。2024年，全球将迎来创纪录数量的选举，不确定性将进一步加剧。您认为2024年全球经济面临哪些主要风险？

答：我想指出两个主要风险。首先是气候危机，其影响日益严重和紧迫。我们亟需更多、更有效的资金来进行减排和适应措施，这种融资方式需要建立在公平正义的基础上，以支持最脆弱国家的应对能力。

其次是人道主义和地缘政治风险，尤其是中东和欧洲当前的主要冲突，以及全球范围内的多起危机和大规模人口流离失所问题。这些冲突都在加剧全球地缘政治分裂。

尤其值得注意的是，如果美国及其盟友扣押俄罗斯资产，这可能会促使包括中国在内的其他中等收入国家采取措施，寻求减少对美元及其所支持金融体系的依赖，我们可能会看到经济分化进一步加剧。

问：随着地缘政治风险上升和贸易保护主义兴起，全球产业和供应链仍在重建之中。重复投资和劳动分工侵蚀，以及由此带来的收益减少，阻碍了全球经济增长潜力。我们如何在供应链和产业链的效率与安全之间取得平衡？

答：近期地缘政治的变动引发了这样的疑问：我们是否正在见证全球经济的结构性变化，而这种变化正朝着去全球化的方向发展。全球分裂的风险是切实存在的，对企业和消费者都可能造成严重后果。如果企业将其供应链转向本国周边而非追求效率，可能会导致消费者面临更高的价格，同时损害国内经济和供应链原本所在国经济。

尽管如此，在地缘政治风险、贸易保护主义以及全球贸易格局持续变化的背景下，全球化仍然是经济增长

和减少贫困的关键因素。

虽受到政策变动和新冠疫情的干扰，但根据世界银行的最新研究，全球价值链(GVC)目前在全球贸易中所占份额在2022年达到了52%，比2015年的48%有所上升。

企业仍在全球范围内寻找客户和供应商，继续推动全球化。对于那些依赖专业化投入的行业，难以替换已有供应链，开拓新市场也存在困难。保护主义政策阻碍全球贸易，不仅影响这些企业的运营，还会助长全球通胀压力，阻碍整体经济增长。

因此，保持国际合作和开放性尤为重要。政策制定者需要支持供应商体系多样化，评估保护主义措施可能带来的全球影响，以确保供应链和产业链既高效又安全。

在企业层面，鉴于日益严峻的形势，采取积极主动策略至关重要。

企业应评估其价值链中的机遇与风险，为供应链制定应急方案，探索提高响应能力的途径。长期来看，这可能涉及供应链抗灾能力的情景规划和实时监测系统的实施，以便及早发现潜在冲击。

未来一年，另一个值得关注的新趋势是所谓的“绿色挤压”。

逐步引入的以“绿色”为由的贸易政策因其高合规成本和复杂性，减少了贫困国家进入发达市场的机会。欧盟“绿色新政”相关的措施最为突出，但其他主要经济体也在跟进。欧洲大型零售商响应新政，寻求限制对进口产品的依赖，生产商和出口商的业务因此面临不利影响。

像美国《通胀削减法案》这样旨在促进脱碳的工业补贴政策，也开始影响全球价值链和供应网络的供需关系。■

Q: Besides cyclical factors, the world economy has become more vulnerable to unexpected shocks in recent years. A record number of elections will be held worldwide in 2024, and uncertainty is set to heighten further. In your opinion, what are the major risks confronting the global economy in 2024?

A: I would highlight two. The first is the climate crisis, the effects of which are being felt with ever-increasing force and urgency. We desperately need more and better financing for mitigation, but also increasingly adaptation, embedded within an approach grounded in equity and justice, to support the resilience of the most vulnerable countries.

The second is humanitarian and geopolitical risk, in particular the major conflicts currently under way in the Middle East and Europe, but also the large number of crises around the world, and large-scale displacement. These conflicts are deepening geopolitical faultlines, and we are likely to see a growing economic bifurcation, especially if, for example, the US and allies seize Russian assets, which is likely to provoke responses from other middle-income countries (including China) to diversify away from the US dollar and the dollar-backed financial architecture.

Q: As geopolitical risks and trade protectionism rise, global industry and supply chains are still being reconstructed. Investment overlap and the erosion of division of labor as well as the resulting diminishing yields have impeded global economic growth potential. How can we strike a balance between efficiency and security for supply and industry chains?

A: Recent shifts in geopolitics raise questions about whether we are witnessing structural changes in the global economy that lean towards deglobalisation. The risk of global fragmentation is tangible, and its ramifications could be severe for both companies and consumers. If firms redirect their supply chains towards proximity rather than efficiency, it could result in increased prices for consumers and hurt both domestic economies and economies that are being de-risked.

Nevertheless, amidst geopolitical risks and trade protectionism, and a changing global trading landscape, globalisation remains a key driver of economic

growth and poverty reduction. Despite disruptions from policy changes and the COVID-19 pandemic, global value chains (GVCs) now constitute a larger share of global trade, accounting for 52% in 2022, up from 48% in 2015, according to recent World Bank research.

Firms continue to drive globalisation as they seek customers and suppliers globally. This is due to the difficulty of replacing established supply chains, especially in industries relying on specialised inputs, and the pursuit of new markets. Protectionist policies impeding global trade not only affect the operations of these firms, but also contribute to global inflationary pressures and hinder overall economic growth.

It is all the more important to stay the course on

international cooperation and openness. Policy-makers need to support supplier base diversification and assess potential global repercussions of protectionist measures to ensure efficient and secure supply and industry chains.

At the firm level as well, a proactive approach is essential in light of the increasingly difficult context. Firms should evaluate opportunities and risks in their value chains, plan contingencies in their supply chains, and explore ways to enhance responsiveness. This may involve scenario planning for long-term supply chain resilience and the implementation of real-time monitoring systems for early detection of potential shocks.

Another emerging trend to watch in the coming

year is what's been called the "green squeeze", where the progressive introduction of green trade policies reduces poorer countries' access to developed markets by increasing the costs and complexity of compliance. The most prominent examples of such measures are associated with the EU's New Green Deal, but other major economies are following the EU's lead. Producers and exporters are also at risk of adverse effects to their businesses as large European retailers react to new policies and seek to limit their exposure to imported produce, while industrial subsidies to promote decarbonisation, such as the US Inflation Reduction Act, are beginning to influence demand and supply across global value chains and supply networks. ■





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Economic Exchanges and Former Chairwoman of the
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问：随着能源价格回落，全球高通胀有所缓和，发达经济体加息周期基本结束。发展中国家实现经济增长、就业与物价稳定，宏观政策的空间有多大？

答：2024年全球经济环境总体较上年有所缓和，但这一缓和还难以明显惠及发展中国家。部分发展中国家是能源供给方，能源价格的回落使能源生产国收入下降，对财政收支平衡产生更大挑战。发达国家高通胀虽已见顶有所缓和，但利率水平下降仍有待时日；发展中国家依然处于高利率环境，融资成本高企，债务还本付息压力未有根本减轻。在全球仍处于高利率的环境下，发展中国家的汇率仍面临压力，资本外流的风险依然存在。整体上看，发展中国家财政、货币等宏观政策空间有限，刺激推动增长可用的工具不多。

中国是少数例外的经济体，其所处的经济周期与多数国家有明显差异，应对周期性因素的宏观政策工具仍有较大空间。但深层次的挑战在于结构性因素，一般传统政策工具作用效力下降，全面深化改革，激发各要素活力，方可为中国经济发展注入更大动力。

问：随着主要经济体结束加息周期，全球债务走势如何？如何评估债务脆弱性对全球经济稳定与增长的影响？

答：过去几年，受新冠疫情冲击、地缘政治风险加剧以及西方国家爆发的高通胀影响，低收入国家和最不发达国家的债务脆弱性显著增加，国际社会为缓解这些国家偿债压力和减轻对经济社会稳定的影响，采取缓债措施，取得积极成效。

今年全球债务脆弱性形势向好，一是，当前全球债务结构中，发达国家占三分之二，新兴市场国家占约三分之

一。发达国家此轮应对高通胀措施及时有效，在通胀较快显著下降的同时，经济增长仍然保持了较好的态势，负债率持续下降。

二是，过去几年新增债务，无论是发达国家还是发展中国家，均集中于若干主要大型经济体。这些国家经济基础雄厚，治理能力较强，虽然债务增幅大，但具有较强的债务管理能力和偿债能力。

三是，国际市场利率见顶，国际缓债努力见效，债务脆弱性经济体的压力减轻。因此从短期情况看，全球债务问题已不构成对全球经济稳定与增长的决定性影响，也不会形成系统性的风险冲击。从中长期看，应继续坚持和扩大按照市场原则在全球配置资源，支持和便利跨境投资，构建畅通高效的产业链供应链，带动低收入国家融入全球化，分享发展红利，增强发展能力，从根本上降低债务脆弱性。■



Q: Global inflation has eased amid moderating energy prices, and the interest rate hike cycle in developed economies has basically come to a close. How much room do developing countries have for macro policy maneuver to achieve economic growth, employment and price stability?

A: While the global economic environment in 2024 has generally eased compared with last year, developing countries have yet to reap any significant benefits. Some developing countries are energy suppliers, and the decline in energy prices has reduced their income and posed greater challenges to their fiscal balance. Although inflation in developed countries is easing, it will still take time for interest rates to fall; developing countries remain in a high interest-rate environment, with high financing costs and debt repayment pressures that have not been fundamentally alleviated. The exchange rates of developing countries are still under pressure, and the risk of capital outflow remains. Overall, developing countries have limited room for maneuver in terms of fiscal, monetary, and other macro policies, and there are few tools available to stimulate growth. China is one of the few exceptions. Its economic cycle is significantly different from that of most countries, and it has considerable room for maneuver in terms of macro policy tools to respond to cyclical factors. However, the deep-seated challenge lies in structural factors. Generally, the effectiveness of traditional policy tools has declined. Only

by comprehensively deepening reforms and stimulating the vitality of all factors can China inject greater impetus into its economic development.

Q: As major economies end their interest rate hike cycle, what is the trend in global debt? How should we assess the impact of debt vulnerability on global economic stability and growth?

A: In the past few years, the debt vulnerability of low-income countries and the least developed countries has increased significantly due to the impact of the COVID-19 pandemic, intensified geopolitical risks, and the outbreak of high inflation in Western countries. The debt suspension measures adopted by the international community to ease the debt repayment pressure of these countries and prevent economic and social instability have achieved positive results. The global debt vulnerability outlook for this year is positive. Firstly, developed countries currently account for two-thirds of global debt, while emerging market countries account for about one-third. Developed countries have adopted timely and effective measures to deal with latest bout of high inflation, maintaining momentum in their economic growth while inflation dropped rapidly and significantly, and their debt ratios have continued to decline. Secondly, in the past few years, the new debt of both developed and developing countries has been mostly incurred by a handful of major large economies. These economies have solid foundations and strong governance capabilities. Although their debts have increased significantly, they have strong debt management and repayment capabilities. Thirdly, the pressure on debt-vulnerable economies has eased with the peaking of global market interest rates and as international debt relief efforts take effect. Therefore, in the short term, the global debt problem will no longer have a decisive impact on global economic stability and growth, nor will it create systemic risk. In the medium to long term, continued efforts will be required to uphold and expand global allocation of resources in accordance with market principles, support and facilitate cross-border investment, and build smooth and efficient industrial and supply chains, thereby helping low-income countries integrate into globalization, share development dividends, enhance their development capabilities, and fundamentally reduce their debt vulnerability. ■



李熙燮

中日韩合作秘书处秘书长

LEE Hee-sup

Secretary-General of the Trilateral Cooperation Secretariat (TCS)

问：科技突破离不开国际交流与合作，半导体与新能源技术的诞生就是很好的例证。在当前全球形势下，我们该如何推进科技创新领域的国际合作？

答：在第四次工业革命中，高科技领域的竞争越发激烈。与此同时，随着经济要素与安全关切之间的联系日益加深，科技领域的国际合作窗口也在逐步收窄。但是我们必须分清楚，哪些领域必须通过保持技术优势来争取竞争优势，哪些领域又必须寻求相互合作。

“各司其职”和“共同努力”这两种合作模式对人类的科技发展都不可或缺。虽然人们习惯于从竞争优势的角度来看待科学技术，但科技也是推进集体行动、解决人类面临的一些最紧迫挑战的有力工具。为应对气候危机、自然灾害、疾病与消除贫困而开展的全球科技合作攸关人类命运，凸显了跨国科技合作在制定和实施全球性“多重危机”解决方案方面的重要意义。

2000年前后，中日韩就在科技、信息通信技术、知识产权等相关领域建立起政府间高层磋商机制。三国一直在通过技术转让和联合研究项目等举措推进“开放式创新”。当务之急是要仔细研究那些成功实例，特别是在政策环境差异较大的竞争领域。中日韩知识产权局局长会议就是一个典型代表，该机制的成功运作表明，即使是在受制于各国不同政策制度且高度竞争的部门，也可以实现规范化和制度化的合作。目前，中日韩的专利申请量已占全球62%。在2023年的局长会议上，专门设置了一项特别议程，对人工智能生成的发明以及这些发明是否有资格获得知识产权进行了探讨。人类即将进入人工智能时代，这一问题亟待我们找出答案。

不仅中日韩三国应坚持推进多边合作，东盟以及亚洲更多国家和地区也应继续着力营造一个有利于青年研究人员跨国交流的环境，并推动各方合作解决能源可持续性、环境保护等受到普遍关注的问题。

问：在后疫情时代，区域合作出现了新的发展趋势。亚洲国家应重点在哪些领域加强合作？

答：全球经济进入高度不确定的时代，还出现了许多将会影响全球经济的行业趋势，包括数字化转型、绿色转型和供应链调整等。而这些转变的基础则是自由贸易、多边主义以及低生育率和人口老龄化的人口趋势。

虽然人工智能和量子计算等尖端领域的竞争还将进一步升级，相关保护举措也会不断强化，但各国仍亟须在建立技术标准、制定电子商务法规与网络安全协议方面开展合作。在针对清洁能源转化产业（如氢能和碳捕集与封存技术）、气候变化相关技术领域以及在国际层面应对气候变化的集体努力等方面的海外投资上，也广泛存在合作机遇。此外，在地区集团不断强化，民族保护主义政策日益抬头的当下，各国还需要成立多层次的合作平台来稳定供应链。

与此同时，受低出生率和老龄化影响，中日韩三国的世界人口份额在2023年首次跌至20%以下，东盟国家也面临着类似挑战。因此，迫切需要重新评估、调整过去那种运用日韩技术实力与中国劳动力、巨大国内市场协同效应的宏观经济增长模式。此外，人口问题将会对包括教育、医疗保健在内的整个社会产生重大影响。东亚各国必须就此开展广泛合作，而在银发经济和数字医疗行业等新兴领域，也存在巨大的合作与知识交流潜力。

亚洲地区有着共克时艰的传统。这种韧性的基础是通过“东盟+3”、亚太经合组织和中日韩领导人会议等各种磋商机制，以及通过建立RCEP和CPTPP等经济合作框架而建立起来的信任关系。我们必须继续团结一致，实现各方的协同、互补。最重要的是，在当今自由贸易秩序受到威胁的世界，东亚必须加强团结与合作，捍卫、保护对其历史性经济增长至关重要的自由贸易体系。■

Q: International exchange and cooperation is indispensable to technological breakthroughs. Given the current global situation, how can we advance international cooperation to drive technological innovations?

A: We are witnessing the intensification of high-tech competition amid the Fourth Industrial Revolution. As the interlinkage between economic imperatives and security concerns deepens, the window for international technological collaboration is narrowing. However, we must distinguish between domains where we must strive for a competitive edge by securing technological superiority and areas where we must pursue mutual cooperation.

“Sharing” and “collective endeavor” are both essential. While technology is traditionally viewed through the lens of competitive advantage, it also serves as a potent vehicle for collective collaborations aiming at addressing the most pressing challenges facing humanity. Global technological cooperation undertaken to address climate crises, natural disasters, and diseases is a matter of survival, underscoring the importance of transnational technological collaboration.

Around 2000, China, Japan and Korea established high-level intergovernmental consultative mechanisms for science and technology, IT, and intellectual property rights (IPRs). The three countries have been promoting “open innovation” through technology transfer and joint research projects. It is imperative to closely examine cooperation projects that successfully achieved, especially those in competitive arenas with significant policy differences. The TRIPO Heads Meeting is a good example showing that cooperation can be regularized and institutionalized even in highly competitive sectors. Currently, patent applications in the three countries account for 62% of the global total. Notably, during the meeting held last year, discussions were held regarding AI-generated inventions and their eligibility as IPRs, a salient issue in the AI era.

Not only should China, Japan and Korea persevere in their collaborative efforts, but ASEAN and the broader Asian region must also create an environment conducive to transnational exchanges among young researchers and facilitating collaborative endeavors aimed at achieving energy sustainability and environmental stewardship.

Q: New development trends in regional cooperation have emerged after the pandemic. In what areas should Asian nations focus on bolstering cooperation?

A: The COVID-19 pandemic has ushered in an era of hyper-uncertainty. “Digitalization”, “green”, and “supply chain restructuring” are reshaping the global economy. These shifts are anchored in free trade, multilateralism, and demographic factors, e.g. low birth rates and an aging populace.

While competition and protective measures in frontier technologies such as AI and quantum computing will continue to escalate, countries still need to collaborate in developing technical standards, e-commerce regulations, and cybersecurity protocols. There is plenty of room for collaboration in overseas investment in hydrogen and carbon capture and storage technologies, technologies related to climate change, as well as in collaboratively tackling climate change at the international level. Meanwhile, countries also need to establish a multi-layered cooperation platform to stabilize supply chains in the face of growing regional blocs and nationalistic protectionism.

Meanwhile, facing the double whammy of a low birth rate and population aging, the three countries’ share of the world population fell below 20% for the first time in 2023, and ASEAN countries are also confronted with similar demographic challenges, hence the pressing need to reinvent the macroeconomic growth models previously harnessed synergies between Japan and Korea’s technological prowess and China’s labor force and vast domestic market. The demographic issues will also lead to substantial social impacts on education, healthcare, public policy, etc. The East Asian countries must cooperate on these issues, with significant potential for collaboration in emerging sectors, e.g. the silver economy and digital healthcare industry.

Asia has a long history of collective resilience. This resilience is underpinned by mutual trust built through mechanisms such as ASEAN+3, APEC, and the Trilateral Summit, as well as economic cooperation frameworks like the RCEP and CPTPP. We must maintain solidarity to create synergies and complementarities. In a world where the free trade order is threatened, East Asia must bolster regional solidarity and cooperation to safeguard and sustain the free trade system. ■



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问：第28届联合国气候变化大会达成了重要共识。应逐步淘汰煤炭、石油和天然气等传统燃料，不过未来能源格局中，已采用减排技术的化石燃料仍将是重要部分。如何构建能鼓励发达国家遵守共识的激励机制，又确保欠发达国家拥有转型所需资源？

答：可以做两件事。

首先，第28届联合国气候变化大会已达成逐步淘汰煤炭等传统燃料的共识，似乎为印度、中国等新兴大国提供了更平等的机会，但当务之急是发达国家付出更大努力并投入更多资金，帮助发展中经济体实现碳排放目标。

其次，不管是绿色能源还是可再生能源，发达国家在逐步淘汰化石燃料方面都要承担更多责任，也要更主动。

问：新冠疫情后，区域合作出现了新的发展趋势。亚洲各国应着重在哪些领域加强合作？

答：一个真实而明显的情况是，新冠疫情暴发一年内，不仅全球贸易最先受创，而且随之而来的是全球经济在疫情全球传播早期就开始出现连锁反应。换言之，最重要的是，全球供应链和各级贸易，不管是本地、区域还是全球，都面临着席卷国家、地区和国际的灾难。而且，即便新冠疫情在一两年后就宣布结束或基本克服，无法逆转的去全球化趋势还是导致全球治理欠佳以及区域和/或多边贸易与合作遭遇多起挫折。一方面，区域和国家贸易保护主义已迅速成为当今秩序；另一方面，集

团和国家之间合作的有限性和局限性导致“现代生活的脆弱性”进一步恶化。

然而，尽管存在种种消极态度和消极思维，气候变化和污染领域开展全球合作的新希望仍然存在。最近出版《国际关系中的责任伦理》(An Ethics of Responsibility in International Relations)的国际关系专家丹尼尔·华纳(Daniel Warner)常驻日内瓦，去年他观察南非金砖国家论坛中的合作承诺后评论道：“单个国家，哪怕经济上具有竞争力的国家也无法解决全球预警或全球污染问题。各方行动者，不管是公共和私营部门、国家、多边组织、跨国公司、个人和民间社会，必须加强合作应对气候变化和污染。”

由于个别发达国家正实施反全球化保护主义，亚洲地区和亚太地区(也就是现在所谓的印度洋-太平洋地区)各国必须秉持习近平主席在约翰内斯堡敦促金砖国家扩员时所呼吁的开展广泛合作：“‘金砖国家需要扩员’，从而汇聚力量，集中智慧，推动全球治理更加公正公平”。

习主席呼吁公正公平的治理，目标是明确区分世界新秩序和全球秩序。换句话说，中国并非呼吁彻底改革国际体系。习主席呼吁的是一种不同类型的多边主义，并非由西方大国主导的多边主义，但又在西方制定的《联合国宪章》原则下不脱离基本宗旨的多边主义。

因此，亚洲各国可从约翰内斯堡的金砖国家峰会中汲取“共存与合作”精神，努力在基于当今权力和经济现实进行改革的同时，努力振兴地区和多边合作。■

Q: A significant consensus was reached at COP28. There should be a gradual transitioning away from traditional fuels such as coal, oil and natural gas, but fossil fuels that are subjected to emission reduction technologies will remain a key component of the future energy landscape. How can we construct incentives that encourage developed countries to abide by this consensus and ensure that less developed countries have the resources they need complete their transition?

A: Two things. First, the consensus at COP28 to gradual transitioning away from traditional fuels such as coal etc. Though seems to provide greater parity to large emerging economies such as India, China and others but the need of the hour is for the developed countries to put in more efforts and money to help developing economies meet carbon emission targets; second, green energy or renewable energy, the developed countries cannot absolve themselves of much greater responsibility and initiative in phasing out fossil fuel use.

Q: New development trends in regional cooperation have emerged after the COVID-19 pandemic. In what areas should Asian nations focus on bolstering cooperation?

A: It is indeed true and it was very apparent within a year of the Covid19 outbreak that not only global trade had become one of the earliest casualties but as a consequence the entire global economy had started manifesting its ripple effects in the very early phase of the worldwide spread of the pathogen. Or in other words, more than anything else it was the global supply chain and trade at all levels – local, regional, and global – had been exposed to the vulnerability of calamity or disaster striking a nation, a region, and internationally. Likewise, even after more than a year or two of the Covid19 pandemic being declared as having ended or largely been overcome, global mis-governance as well as several setbacks to regional and/or multilateral trade and cooperation have all been exposed as irreversible de-globalization trends. While

on the one hand, intra-regional and intra-national trade protectionism has been fast established as the order of the day, on the other hand limited, restricted cooperation among blocs and between nations have further cemented “fragility of modern life.”

However, irrespective of the above negative attitudes and thinking, a new hope for global cooperation in the arena of climate change and pollution been found. Observing the commitment for cooperation as manifested in the discussions at the last BRICS meet in South Africa last year, Daniel Warner, a Geneva-based IR expert and author of a recent book, An Ethic of Responsibility in International Relations, commented: “Individual, economically competing countries cannot solve global warning or planetary pollution. All actors – public and private, states, multilateral organizations, multinational corporations, individuals, civil society – must cooperate in order to deal with climate change and pollution.”

Given the anti-globalization protectionism trends as being practiced by a certain number of developed countries, it is imperative for the countries in the Asian region and in the Asia-Pacific (or now what is being called the Indo-Pacific) to cooperate between and among themselves in the spirit of what President Xi Jinping called for while urging the BRICS expansion in Johannesburg: “[BRICS needs to expand] so as to pool our strength, pool our wisdom to make global governance more just and equitable.”

President Xi’s appeal for just and equitable governance was aimed at making a clear distinction between a new world order and a global order. In other words, China is not calling for a total overhaul of the international system. Xi is calling for a different type of multilateralism, one not dominated by Western powers, yet one within the basic tenets of the principles of the U.N. Charter established by the West.

Therefore, the Asian countries may pick up the spirit of “coexistence and cooperation” from the BRICS summit in Johannesburg and strive for striking a balance between reforming according to the power and economic realities as existing today and must make efforts to reinvigorate regional as well as multi-lateral cooperation. ■



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问：刚刚结束的COP28大会达成了一项重要国际共识，即逐渐摆脱煤炭、石油和天然气这些传统能源，但与此同时，经过减排技术的化石能源仍然将是未来能源格局中的重要组成部分。如何通过国际谈判和合作建立起激励机制让发达国家愿意做，同时帮助相对不发达国家能够有足够的资源顺利完成转型？

答：建立激励机制以促使发达国家采取行动并支持相对不发达国家完成能源转型是至关重要的。建议如下：发达国家应通过提供气候融资和技术转移来支持相对不发达国家进行能源转型。这包括提供资金支持、技术援助、知识共享等。

建立全球碳市场和碳定价机制，以激励发达国家减排并支持相对不发达国家进行清洁能源发展。

通过国际组织如国际能源署加强各国合作，提出国际合作项目和倡议，采取多项举措为清洁能源转型提供更多方案。鼓励发达国家与相对不发达国家共同开展清洁能源项目、生态保护计划等。

最后应建立透明度和问责机制，确保资金的有效使用和项目的可追溯性以确保发达国家提供的支持得到有效利用，并为不发达国家提供必要的资源。

问：联合国贸发会议预测，由于地缘政治紧张局势的加剧和贸易模式的转变，预计全球贸易额将同比下降5%，。如何重新让那个贸易作为全球经济增长的引擎？WTO的机构改革应该如何适应这种新变化？

答：重新让贸易成为全球经济增长的引擎需要综合考虑多个方面的因素，并采取相应的政策和措施。首先我们应坚持贸易多边主义，积极参与并推动国际贸易谈判，达成更多的贸易自由化协议，减少贸易壁垒和非关税壁垒。



具体做法上，可以推动数字化贸易和新兴产业，鼓励和支持数字化贸易和新兴产业的发展，例如电子商务、人工智能、生物技术等；加强基础设施建设和互联互通，特别是在发展中国家和地区，以提升贸易的效率和便利性；以及将贸易政策与可持续发展目标相结合，促进绿色贸易、环保产业和可再生能源的发展。

世贸组织是全球化的重要推动力之一。现在，世贸组织面临许多挑战。其中，最大的挑战是上诉机构在某种程度上基本处于瘫痪状态；此外，即使我们在渔业和其他自由贸易领域达成了一些立法成就，但很难再达成新的共识。我认为归根结底，人们必须回到现实中来，世贸组织在过去70多年里极大地改变了世界，我们仍然需要共同努力。

WTO应加强规则执行和纠纷解决机制，确保成员国遵守贸易规则，维护公平竞争环境；加强发展中国家在WTO决策中的参与和发言权，确保它们的利益得到充分保障，推动贸易的包容性增长。另外还应增强WTO的透明度和决策效率，加强成员间的沟通和协调，加快决策进程，更好地应对贸易变化和挑战。■

Q: A significant consensus was reached at COP28. There should be a gradual transitioning away from traditional fuels such as coal, oil and natural gas, but fossil fuels that are subjected to emission reduction technologies will remain a key component of the future energy landscape. How can we construct incentives that will encourage developed countries to abide by this consensus and ensure that less developed countries have the resources they need to complete their transition through international negotiation and cooperation?

A: Establishing incentive mechanisms to encourage developed countries to take action and support relatively less developed countries in completing the energy transition is crucial. Here are some recommendations:

Climate financing and technology transfer: Developed countries can support relatively less developed countries in their energy transition by providing climate financing and technology transfers. This includes providing financial support, technical assistance, and knowledge sharing.

Carbon markets and carbon pricing mechanisms: A global carbon market and carbon pricing mechanisms may be established to incentivize developed countries to reduce emissions and support relatively less developed countries in developing clean energy.

International cooperation projects and initiatives: Cooperation among countries may be strengthened through international organizations such as the International Energy Agency, and multiple measures to provide more solutions for clean energy transition may be adopted. Developed countries should be encouraged to jointly carry out clean energy projects and ecological conservation plans with relatively less developed countries.

Establishing transparency and accountability mechanisms to ensure effective use of funds and the traceability of projects: This can in turn ensure that the support provided by developed countries is effectively utilized, and that necessary resources are provided to relatively less developed countries.

Q: The United Nations Conference on Trade and Development forecast global trade to decline by 5% on the back of escalating geopolitical tensions and changes in the modes of trade. How can trade regain its role

as an engine of global economic growth? How should the WTO's institutional reform accommodate these new changes?

A: To re-establish trade as the engine of global economic growth requires taking into consideration multiple factors and implementing corresponding policies and measures.

We must continue to promote trade multilateralism, actively participate in and promote international trade negotiations, reach more trade liberalization agreements, and reduce trade barriers and non-tariff barriers.

Specifically, we can:

Encourage and support the development of digital trade and emerging industries such as e-commerce, artificial intelligence, and biotechnology.

Strengthen infrastructure construction and connectivity, especially in developing countries and regions, to enhance trade efficiency and convenience.

Promote the integration of trade policies and sustainable development goals, as well as the development of green trade, environmental conservation industries, and renewable energy.

The World Trade Organization (WTO) is on of the key drivers of globalization. Currently, the WTO faces many challenges. In particular, the Appellate Body is basically paralyzed to a certain extent. Despite having achieved some legislative success in areas such as fishery and other free trade areas, achieving consensus in new areas will be difficult. Ultimately, I believe people must return to reality. The WTO has changed the world significantly over the past 70 years. It's imperative that we continue to work together.

The WTO should strengthen its rule enforcement and dispute settlement mechanisms to ensure that member countries comply with trade rules and maintain an environment of fair competition.

The participation and voice of developing countries in WTO decision-making should be enhanced to ensure that their interests are fully protected, and inclusive trade growth is promoted.

Elsewhere, it is necessary to improve the transparency and decision-making efficiency of the WTO, strengthen communication and coordination among its members, accelerate decision-making processes, and respond better to address trade changes and challenges. ■



雷纳特·别科图尔沃夫
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Renat BEKTUROV

Governor of Astana International Financial Centre

问：疫情之后的区域化合作也呈现出新的发展趋势。亚洲各国应该以及可以在哪些方面加强合作？

答：亚洲是人口最多的大洲，经济增长也一直充满活力。特别值得一提的是，亚洲各国的经济颇具互补性，因此可以在许多领域开展合作，但我主要想着重于加强基础设施、深化金融互联互通方面。

地缘政治紧张是导致全球贸易萎缩的原因之一。在此背景下，我们应提高全球贸易路线的多样化，推广更多的替代路线，要实现上述目标，显然要对基础设施进行大量投资，还要实施一系列“软连接”措施，如消除非贸易壁垒、推进数字化转型和改善资产管理水平等。在此我想以中亚为例，据欧洲复兴发展银行估计，要确保欧亚间运输的畅通，需要在中亚实施30多个基础设施项目，总投资需求为185亿欧元。而且在进行这些投资时，还需要结合实施七项软连接措施。

为推动亚欧大陆贸易，哈萨克斯坦为“中间走廊”计划启动了一系列基础设施开发项目。如果上述投资项目和“软连接”措施能够成功落地，经由跨里海国际运输走廊的集装箱量预计将从2022年的1.8万个标准箱增至2040年的86.5万个标准箱，增长约48倍。

在开展贸易、投资实施联合项目及管理相关风险的过程中，我们需要进一步加强本地区各国之间的金融互联互通水平。2013年，中亚与东亚、东南亚的贸易额为525亿美元，此后一直变化不大（2021年约为530亿美元）。在外国直接投资方面也是如此。考虑到过去10年本地区经济增长显著，在贸易和投资方面显然还有巨大的潜力有待挖掘。

在加强东亚、中亚在贸易投资领域的金融互联方面，阿斯塔纳国际金融中心可以发挥重要作用。阿斯塔纳国际金融中心如今已是全面、规范的国际金融交易平台，可以为企业提供多元化的金融工具。凭借符合国际

最佳实践的健全监管框架，阿斯塔纳国际金融中心可以为投资者提供安全透明的投资环境，还可以扮演区域合作与协作枢纽的角色，在企业与全球金融机构之间建立起沟通的桥梁。

问：面对技术的快速进步，如何监控AI的发展不危害人类，与人类的价值观和全球利益相契合是必须回答的时代问题。全球各国对此的监管理念和做法有所差异，如何构建一个既能适应AI不断变化的特性，又能满足全球治理需求的监管机制？

答：纵观全球，各大金融组织已经通过应用人工智能技术取得了丰硕成果，比如效率的提升、客户服务体验的丰富和金融风险的降低。高盛和摩根大通等全球性金融巨头打造了许多令人眼前一亮的應用，用实践展现了人工智能的变革能力，在决策流程自动化和优化客户服务运营方面的作用尤其明显。

迪拜国际金融中心打造了积极利用AI技术开展风险分析和市场趋势预测工作的多元化平台，其实践经验可以表明，监管框架必须要能适应AI技术每一次细微的进步。一般认为，在设置统一标准和准则、确保实现责任的AI治理方面，国际合作至关重要，也只有这样才能促使不同司法管辖区采取协同的监管方法。

金融服务行业在应用AI技术时必须考虑道德方面的问题，必须坚持透明、负责任的原则，只有这样才能维护客户的信任，维持自己诚实守信的形象。比如万事达卡在将AI技术应用于欺诈预防和异常检测时，就对算法流程采用了公开透明的态度，并对相关工作持续进行监控，这种做法在降低风险和防止可能出现的滥用行为方面发挥了至关重要的作用。

要想在金融领域建立AI应用监督机制，必须多管齐下。我们要推动国际合作，采用灵活的监管框架，让利益



相关者都能参与进来，要遵守道德准则，确保公开透明、责任清晰，还要持续监控AI系统的运行状况，并对能力建设进行投资，只有这样，监管机构才能很好地驾驭复杂的AI治理工作。全面的监督管理战略不仅可以帮助金融行业更加谨慎地应用AI技术，还能推动金融行业实现可持续的增长和创新，同时防范潜在风险和道德失范问题的出现。

问：纵观产业发展历史，半导体、新能源等改变了社会与发展的科技突破都离不开国际交流与合作。在当前的全球形势下，如何促进科技创新方面的国际合作？

答：要想在当今这种全球格局中推动国际科技创新合作，有几项工作十分关键。

首先，要打造、培育有利于知识共享、合作研究、技术转让的合作平台；其次，鼓励对有关方面开放科研成果、数据和资源的开放准入；第三，各国政府、跨国组织和私营部门实体可以对那些以应对全球挑战为使命的联

合研究计划进行投资，取长补短，汇集各方资源和专业知识，解决气候变化、医疗保健和网络安全等复杂问题；第四，通过交流项目、联合培训计划和国际奖学金等计划，加强人才流动，增强跨境合作。

第五，需要协同各国标准和法规，这样可以提高相关技术的互操作性和兼容性。通过在数据隐私、网络安全和知识产权等领域建立共同标准，可以让利益相关方对彼此更加信任。

最后但同样也十分重要的是，我们需要为“科学外交”提供支持。我们要将科学外交作为促进国际合作的工具，帮助弥合政治分歧，推进国家间对话。

问：COP28大会达成了一项重要国际共识，即逐渐摆脱煤炭、石油和天然气这些传统能源，但与此同时，经过减排技术的化石能源仍然将是未来能源格局中的重要组成部分。如何通过国际谈判和合作建立起激励机制让发达国家愿意做，同时帮助相对不发达国家能够有足够的资源顺利完成转型？

答：以保护气候的名义要求发展中国家牺牲国家发展、放弃现代化进程显然有失公平。在非化石能源的竞争力和可靠性足以取代化石能源之前，务实的做法是将采用化石燃料，尤其是天然气，作为实现脱碳前的过渡选项。因此，现在的首要任务是开发出能够最大化清洁化石能源的技术，并加以推广。在世界许多地区，核能也会发挥重要作用，哈萨克斯坦也在认真考虑是否加大对核能的投入。

虽然化石燃料的未来面临重重挑战，但在未来的低碳世界中，也有一些机会（比如二氧化碳捕获和储存技术的进步）可以帮其保留一席之地。经过在发达国家的先期应用，许多高能效、可再生能源技术的成本已经明显降低，现在进行相关投资对于南方国家而言也不失为明智之举。

至于如何激励发达国家协助完成能源转型，除了呼吁相关国家作出更有力的承诺，扩大气候融资、充实全球气候基金外，进一步优化投资环境，创造更好的合作机会还大有作为。可以采取的措施包括：通过遵守最高标准、提高投资者信任度，鼓励发达国家对欠发达国家的绿色债券和可持续发展项目进行投资；推动发达国家和发展中国家间合作，携手解决双方在向清洁能源过渡的过程中所面临的共同挑战；签订绿色贸易协定，为积极向清洁能源过渡的贸易伙伴双方提供贸易优惠。■

Q: *New development trends in regional cooperation have emerged after the COVID-19 pandemic. In what areas should Asian nations focus on bolstering cooperation?*

A: Asia is the largest continent in terms of population, and the region has been demonstrating dynamic economic growth. Importantly, the Asian nations have complementing economies, therefore there are many areas where Asian countries could cooperate, I would like to focus on enhancing infrastructure and financial connectivity in the region.

Geopolitical tensions are one of the reasons for the decline in global trade. Global trade routes should be diversified, and more alternative routes should be promoted, which obviously requires significant investments in hard infrastructure and implementation of soft connectivity measures, such as removal of non-trade barriers, digitalization, and improved asset management. For example, the EBRD estimates investment needs of 18.5 bln euro for over 30 infrastructure projects in Central Asia to ensure the sustainable transport connections between Europe and Asia. And these investments need to be coupled with seven soft connectivity measures.

Kazakhstan has initiated a range of infrastructure projects for the development of the Middle Corridor to bolster trade on the continent. If the mentioned investment projects and soft connectivity measures are implemented, transit container volume via the Central Trans-Caspian Network is forecast to increase from 18,000 TEUs in 2022 to 865,000 TEUs in 2040, which means an increase of around 48 times.

As we trade with each other, invest in and implement joint projects, and manage related risks, we need to further enhance financial connectivity between the countries in the region. Trade turnover of Central Asia with East and Southeast Asia amounted to \$52.5 billion in 2013, and since then has not changed much (around \$53 billion in 2021). The same is true in terms of FDI. As our economies have grown significantly over the last 10 years, clearly, there is still significant unlocked potential between our regions in terms of trade and investment.

The AIFC can play a vital role in bridging the gap between Central Asia and East Asia, by facilitating financial connectivity for trade and investment, today the

AIFC offers a comprehensive and well-regulated platform for international financial transactions, and provides businesses with access to a diverse range of financial instruments. With a robust regulatory framework aligned with international best practices, AIFC ensures a secure and transparent environment for investors and serves as a hub for regional cooperation and collaboration, connecting businesses with global financial institutions.

Q: *Given the rapid advancement of technology, ensuring AI does not endanger humanity and that it is compatible with human values and global interests are key issues for our time. Differences exist among countries in terms of their approaches and methods to supervising AI. How can we build an oversight mechanism that can accommodate the ever-changing nature of AI and meet global governance requirements at the same time?*

A: The integration of AI into financial organizations worldwide has yielded remarkable outcomes, including heightened efficiency, enriched customer service experiences, and diminished financial risks. Noteworthy instances from global financial juggernauts like Goldman Sachs and JPMorgan Chase underscore the transformative capabilities of AI, particularly in automating decision-making processes and optimizing customer service operations.

Taking cues from initiatives within the Dubai International Financial Centre (DIFC), where multifaceted platforms harness AI for risk analysis and market trend forecasting, regulatory frameworks must exhibit adaptability to accommodate the dynamic nuances of AI technology. International collaboration is deemed paramount in establishing uniform standards and guidelines to ensure responsible AI governance, fostering a harmonized approach across diverse jurisdictions.

Ethical considerations loom large in the deployment of AI within financial services, necessitating transparent and accountable practices to uphold trust and integrity. As evidenced by Mastercard's utilization of AI for fraud prevention and anomaly detection, transparency in algorithmic processes and continuous monitoring are imperative to mitigate risks and safeguard against potential misuse.

Addressing the question of establishing oversight mechanisms for AI in finance necessitates a multifaceted approach. By fostering international collaboration,

embracing flexible regulatory frameworks, engaging stakeholders, adhering to ethical guidelines, ensuring transparency and accountability, continuously monitoring AI systems, and investing in capacity building, regulators can adeptly navigate the complexities of AI governance. This comprehensive strategy not only facilitates the prudent adoption of AI in finance but also propels the financial industry towards sustainable growth and innovation while safeguarding against potential risks and ethical lapses.

Q: *International exchange and cooperation is integral to scientific and technological breakthroughs. Given the current global situation, how can we advance international cooperation in the area of scientific and technological innovation?*

A: To propel international cooperation in scientific and technological innovation amidst the contemporary global landscape, several key strategies can be employed.

Firstly, creating and nurturing collaborative platforms that facilitate knowledge sharing, research partnerships, and technology transfer is essential.

Secondly, encouraging open access to scientific research findings, data, and resources can foster greater collaboration and innovation.

Thirdly, governments, multinational organizations, and private sector entities can invest in joint research initiatives that tackle global challenges and leverage complementary strengths, which can pool resources and expertise to address complex issues such as climate change, healthcare, and cybersecurity.

Fourthly, promoting talent mobility through programs such as exchange programs, joint training initiatives, and international fellowships can enhance cross-border collaboration.

Fifthly, Harmonizing standards and regulations across countries can facilitate interoperability and compatibility of technologies, thereby facilitating international collaboration. Establishing common standards in areas such as data privacy, cybersecurity, and intellectual property rights can foster trust and facilitate cooperation among stakeholders.

Last but not the least, we need support for science diplomacy. Leveraging science diplomacy as a tool for fostering international cooperation can bridge

political divides and facilitate dialogue among nations.

Q: *A significant consensus was reached at COP28. There should be a gradual transitioning away from traditional fuels, but fossil fuels that are subjected to emission reduction technologies will remain a key component of the future energy landscape. How can we construct incentives that encourage developed countries to abide by this consensus and ensure that less developed countries have the resources they need complete their transition?*

A: It would not be fair to demand that developing countries sacrifice national development and modernization in the name of climate protection. And there is an understanding that fossil fuels, especially natural gas, are a practical bridge toward a decarbonized future until non-fossil energy sources become competitive and reliable enough to replace them. The priority should therefore be the development and dissemination of technologies to process fossil fuels as cleanly as possible. Nuclear energy will also play an essential role in many parts of the world, and in Kazakhstan it is considered seriously. Despite the challenges facing the future of fossil fuels, there are also several opportunities that could help sustain some of their use in a low-carbon world, such as the advancement of CCS technology. Many energy-efficient and renewable energy technologies whose costs have been reduced through prior implementation in developed countries will be good investment targets for the Global South.

As for incentivizing developed countries to assist in this transition, aside from calling for more ambitious pledges to enable a scale-up in climate financing and replenishment of global climate funds, there is a room to provide better investment climates and collaborative initiatives. These include:

Encouraging developed countries to invest in green bonds and sustainable projects in less developed countries by ensuring adherence to best standards to foster credibility among investors.

Promoting collaborative initiatives between developed and developing countries to address common challenges in the transition to clean energy.

Green trade agreements that provide trade benefits for both trading partners actively transitioning to clean energy. ■



基里尔·巴巴耶夫

俄罗斯科学院中国与当代亚洲研究所所长

Kirill BABAEV

Director of the Institute of China and Contemporary
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问：人工智能已超越了科技界，成为推动全球经济、社会治理，乃至改变我们日常生活方式的关键力量。全球各国对此的监管理念和做法有所差异，如何构建一个既能适应AI不断变化的特性，又能满足全球治理需求的监管机制？

答：全球范围内对人工智能进行监管的辩论正以更加激烈的态势展开。欧盟计划通过一项法律，即所谓的《AI法案》，其内容包括：根据潜在危险程度将人工智能技术划分为不同类别、禁止在公共场所使用面部识别技术及警察使用AI预测犯罪的举措，以及规范生成式人工智能的使用。《AI法案》将禁止OpenAI、亚马逊、谷歌和IBM等美国公司向生成式人工智能模型提供API访问。在欧盟提供任何未经许可的模型将导致超过2000万欧元的罚款，或全球收入的4%。这是欧盟以制裁措施威胁美国AI生态系统的重要部分。

俄罗斯很可能也会遵循这条路线进行监管。最需要监管的人工智能应用之一是生物特征面部识别。在《AI法案》中，对生物特征的收集被归类为高风险级别，使用AI从事这些目的的开发公司需要接受独立专家的检查。这样的措施也将在俄罗斯的人工智能立法中非常相关。

问：联合国贸发会议预测，由于地缘政治紧张局势的加剧和贸易模式的转变，预计全球贸易额将同比下降5%。如何重新让贸易作为全球经济增长的引擎？WTO的机构改革应该如何适应这种新变化？

答：21世纪的第三个十年，全球经济体系异常动荡。贸易战、制裁、COVID-19大流行、欧洲安全架构的瓦解——世界正处于全球转型的边缘，全球贸易反映了世界各地正在发生的所有趋势和进程。

世界贸易发生了巨大变化，作为战后秩序一部分的

WTO也有必要进行改革。WTO在21世纪要解决的主要问题包括：以各种理由，例如绿色转型或国家安全等保护主义的增长；对《服务贸易总协定》(GATS)“出于安全考虑而准许的例外”条款的滥用；服务业对国民经济愈发重要且发生了深刻变革，引发了需修改GATS的讨论；农产品贸易存在过度补贴等未解决的问题；以及许多国家开始积极保护自己的国内市场，这在很大程度上是对华盛顿和其盟国对其最具竞争力的国民经济部门实施限制性措施的回应。

全球化的理念正陷入严重危机。

去工业化的国家意识到它们在关键必需品上过度依赖其他国家，例如美国等国因此走上再工业化道路。经济制裁、重建物流路线和全球价值链也导致成本增加。同时，近年来金融部门不确定性增加，国家间本币结算增加，一些非西方参与者打算建立一套独立于西方控制的金融系统。

短期内，贸易重担全球经济增长引擎角色的乐观情况很难实现。中长期来看，如果地缘政治矛盾逐渐减少，各国能够基于理性和经济利益再次建立双边和多边对话，国际贸易才有望走上持续增长的轨道。

过去几年，全球范围内的制裁战争导致对众多经济领域实施了制裁措施，受制裁的国家对于那些在WTO成立初期处于前沿地位的国家（主要是美国）有系统地违反WTO规则表示不满，“双重标准”导致世界经济不得不寻找发展的新机遇。

目前，与西方国家实现正常化的机会并不多，更多的机会来自非西方国家的融合、新经济区块的形成和全球价值链向彼此“友好”的国家重新调整。发展中国家之间更密切的经济互动有望在可预见的未来带来全球经济增长的恢复。■

Q: Artificial intelligence has become a pivotal force in driving the global economy, social governance, and even changing our lifestyles.. Differences exist among countries in terms of their approaches and methods to supervising AI. How can we build an oversight mechanism that can accommodate the ever-changing nature of AI and meet global governance requirements at the same time?

A: The debate about the need to regulate AI is unfolding with renewed vigor. The EU plans to adopt the AI Act. It would divide AI technologies into categories according to their potential danger. The draft would also ban the use of facial recognition technology in public places and the use of AI by the police to predict offenses. It also contains measures to regulate generative AI systems. The AI Act would prohibit American companies from providing API access to generative AI models. Attention is also being paid to the provision that any model available in the EU without licensing will face fines of more than €20 million, or 4% of global revenue. The EU, in fact, threatens important parts of the US technology ecosystem with sanctions.

In Russia, regulation of AI will likely follow the path of centralization of neural network management in the hands of the state and large corporations. One of the most important applications is biometric facial recognition. In the AI Act, the collection of biometrics is classified as high-risk, thus developers using AI for these purposes are required to undergo checks by independent experts. Such a measure would also be relevant in Russian AI legislation.

Q: The UN Conference on Trade and Development projected global trade to decline by 5% year-on-year due to the escalation of geopolitical tensions and structural changes in international trade. How can trade regain its role as an engine of global economic growth? How should the institutional reform of the WTO accommodate these new changes?

A: The third decade of the 21st century has seen exceptional turbulence in the global economic system. Our world is on the verge of a transformation, with global trade reflecting these new developments and processes.

As part of the post-war order, the WTO also needs reform. The main issues that the WTO seeks to address in this century include: the rise of protectionism; the abuse of the “Exemptions for Security Considerations” of the General Agreement on Trade in Services (GATS); the need to amend GATS given the increasing weight of the service industry; unresolved issues such as over-subsidization in agriculture; and the fact that many countries have begun to act aggressively in protecting domestic markets, largely in response to restrictions imposed by Washington and its allies on some of these countries’ most competitive sectors.

Globalization is in serious crisis.

Deindustrialized countries have realized that they are over-reliant on others for the supply of essential goods, and countries like the United States have opted for reindustrialization. Economic sanctions and the need to rebuild logistics routes and global value chains have also led to increased costs. Furthermore, rising uncertainties in the financial sector have increased the volume of intergovernmental currency settlements. Some non-Western nations sought to establish a financial ecosystem independent of Western control.

In the short term, it is hard to imagine a scenario. In the medium to long term, if geopolitical conflicts gradually abate and countries can once again rebuild bilateral and multilateral dialogues based on rationality and economic interests, it is likely international trade will enter a trajectory of sustained growth.

In the past few years, sanctions imposed as a tool of war have led to punitive measures being meted out in various sectors. The sanctioned countries are dissatisfied with the systematic violations of WTO rules by the nations that were the dominant players in the early years of the WTO (mainly the US). Double standards have forced the world economy to seek new opportunities for development. At present, there is little chance for normalizing relations with Western countries. More opportunities come from the integration of non-Western countries, the formation of new economic blocs, and reorientation of global value chains towards friendly countries. The closer economic interactions among developing countries are expected to lead the restoration of global economic growth in the foreseeable future. ■



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博鳌亚洲论坛理事
沙特基础工业公司(SABIC)首席执行官

Abdulrahman AL-FAGEEH
BFA Board Member & CEO of SABIC

问：国际权威机构曾预测，截至2060年，全球能源结构中新能源的占比将突破50%。在此过程中，你预计可再生能源领域将会出现哪些技术突破？

答：展望未来，我们需要在发展规划中牢记能源三难困境（可负担性、安全性和可持续性），并将其纳入考量。在我的设想中，从现在到2060年，化工行业的技术突破主要将与可再生电力的使用有关，关键的生产装置最终将使用可再生电力。例如，电热蒸汽裂解装置有望将乙烯和丙烯生产过程中的二氧化碳排放量减少90%以上，也正因此，SABIC正携手巴斯夫和林德共同打造全球首座电热蒸汽裂解装置。同样，如果我们能提高水电解工艺的性能，代替甲烷转化，则可以在几乎零排放的情况下，生产用于合成氨或甲醇的氢气。

太阳能凭借其高效和高性价比，在目前的可再生能源解决方案中占有主导地位，是最主流的技术之一。我们很高兴看到在提升光伏发电效率、扩展光伏应用场景以及储能设备（电池）尺寸等方面取得了新的技术突破，提升了能源的可负担性。与此同时，光伏工程设计和商业化方面的进展也令人振奋，这能确保最终产品的经济性、坚固性、可靠性和耐用性。SABIC始终坚持与中国合作伙伴携手同行，支持这一全球最大的光伏市场，为光伏组件、逆变器和水上光伏漂浮件提供创新材料和解决方案，帮助光伏系统在更多应用场景中充分发挥作用。

电热蒸汽裂解、水电解和光伏技术，是SABIC作为碳中和路线图的关键环节进行开发或支持的技术，能够将日益普遍的绿色资源更好地应用于化工行业。

问：如何打造鼓励创新、包容失败的企业文化和社会环境？

答：SABIC的愿景是成为世界化学领域的卓越领导者，从建立技术创新团队、增强创新能力，到价值链合作，培养本土人才，并不断追求卓越运营，我们将创新融

入业务的方方面面。

为加快决策过程并促进创新，我们发现有两点至关重要。首先，公司必须成为一个学习型组织，让员工能够自由尝试新想法，不必害怕失败。其次，职场灵活性不仅能简化流程和程序，更可以促进团队协作，从而推动创新。

因此，SABIC打算采用一种“学习者心态”，赋能员工，鼓励尝试。这种心态为失败创造了一个透明、安全的环境，让员工在承认或报告失败时有一种安全感，将失败视为改进的机会，而不是工作中的污点。与此同时，敏捷的决策过程绝不能以牺牲合规性、协作性为代价，也不能因为操之过急而导致安全事故的发生。

根据上述指导原则，SABIC可以进一步采用具体的分类策略，来推动不同层次、不同性质的创新。例如，在科研和工程开发领域，我们可以根据对失败的宽容度来划分研发项目。因此，SABIC有一些研发中心专门为不能承受不必要延误的客户及时提供解决方案，也有一些研发中心专注于较为长期的战略项目，这些项目有更多时间反复尝试，最后找到正确的方向。■



Q: It's predicted that, by 2060, new-energy will account for more than 50% of the global energy mix. In the process, what technological breakthroughs do you expect will occur in the renewable-energy sector?

A: Looking ahead, we need to keep in mind and consider the Energy Trilemma (affordability and access, energy security and environmental sustainability) as a guide in developing our road map. The technological breakthroughs I envisage between now and 2060 have mostly to do with the use of renewable electricity in the chemical industry. I expect that crucial manufacturing units will eventually run on renewable electricity. An electrically heated steam cracker, for example, has the potential to reduce the CO₂ emissions linked with ethylene and propylene production by over 90%. That's why SABIC is collaborating with BASF and Linde on the world's first large-scale "e-cracker". Similarly, hydrogen for the production of ammonia or methanol could be made with virtually zero emissions if we can improve the performance of water electrolyzers and use them instead of methane reformers.

Among current renewable energy solutions, solar power remains one of the most dominant technologies, primarily due to its high efficiency and cost-effectiveness. We are happy to see new technology breakthroughs achieved to promote efficiency and lower the size of photovoltaic systems as well as electricity storage devices (batteries) for energy affordability. At the same time, it is exciting to see progress in engineering and commercialization that ensures the affordability, robustness, reliability and durability of end products. SABIC has been collaborating with partners

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in China to support this largest photovoltaic (PV) market globally, supplying innovative materials and solutions for PV modules, inverters and floaters, to help PV systems operate sufficiently in more places.

E-cracking, electrolyzer and PV are technologies that are being either developed or supported as part of SABIC's carbon-neutrality roadmap, promoting the alignment between increasing green sources and their applications in the chemical industry.

Q: How do we build corporate cultures and social environments that will encourage innovation and tolerate failure?

A: With the vision to become the world's preferred leader in chemicals, SABIC has embedded innovation into every aspect of our business, from the establishment of Technology & Innovation teams and build-up of innovation capabilities to value-chain collaboration, cultivation of local talents and pursuit of operation excellence.

We found two important points in a company-wide intervention that we launched to accelerate decision-making and promote innovation. First, the company has to become more of a learning organization where employees feel free to try out new ideas without fear of failure. Second, achieving agility is more a matter of promoting the right collaborative behavior than it is of streamlining processes and procedures.

As a consequence, SABIC intends to adopt a "learner mindset" in which we're open to empowering our employees and testing ideas. The mindset creates a transparent and safe environment for failure, making employees feel safe admitting or reporting failures and treating it as an opportunity to improve rather than a stain. In the meantime, agile decision-making must not come at the expense of compliance, collaboration, or undue haste leading to safety incidents.

Guided by the above-mentioned fundamental spirit, SABIC can further apply specific segregation strategies to promote innovation at different levels with different natures. For example, in the realm of scientific research and engineering development, we can segregate R&D projects according to their tolerance of failure. That's why some of SABIC's technology centers concentrate on urgent solutions for customers, who cannot afford undue delays, whereas other centers concentrate on longer-term, strategic projects that have the time to back out of technological dead-ends before finding the right course. ■



曾从钦
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五粮液集团(股份)公司董事长

ZENG Congqin
Corporate Member of the Boao Forum for Asia,
Chairman, Wuliangye Group Co.,
Ltd. & Wuliangye Yibin Co., Ltd.

问：科技进步给社会经济带来翻天覆地的变化，与此同时对劳动力提出了更多要求，一方面新进入市场的劳动力需要具备相应的技能，另一方面劳动力需要持续提升和掌握新技能。政府和企业应该如何提供相应的培训以使劳动力跟上技术的变迁？

答：劳动者是生产力中最活跃的因素，人才是第一资源。时代越是向前，知识和人才的重要性就越突出，教育的地位和作用就越凸显。要实现劳动力的可持续发展，关键是健全终身职业技能培训制度，延伸培训时间长度、延展培训种类宽度、适配技术变迁的速度。为此，我建议：

一是加强顶层设计，完善相关法律法规，从制度层面保障终身职业技能培训的实施。如，完善现代职业教育体系，全面提升职业教育服务能力；建立健全以职业技能等级认定和专项职业能力考核等为主要内容的技能人才评价制度等。

二是结合国家和区域重大发展战略、地方产业特色和发展方向，通过“政府引导+社会参与+市场化运作”的方式开发兼具经济性、社会性、可持续发展的技能培训项目。有条件的地区可设立新兴技能展示、体验场景并适时迭代。

三是发挥行业龙头企业等市场主体优势，创新技能培训方式，为劳动力适应社会发展进步提供条件，让员工与企业共同成长。

以五粮液为例，我们已经成为国家级高技能人才培训基地和四川省高技能人才培训基地，每年投入上千万元开展各类技能培训，覆盖职工5万人次；开展各类技能竞赛近300场，参赛职工超3万人次；开展职业技能

等级认定，参加认定的职工超1000人次；各类技术技能人才已有1.2万人。

问：如何选择和推进“小而美”项目推动高质量共建“一带一路”？

答：在第三次“一带一路”建设座谈会上，习近平主席指出，“小而美”的项目，是直接影响到民众的。今后要将“小而美”项目作为对外合作的优先事项，加强统筹谋划，发挥援外资金四两拨千斤作用，形成更多接地气、聚人心的项目。

根据这个标准，“小而美”项目宜重点关注当地民生和社区需求，解决与百姓生活密切相关的“痛点”“难点”“热点”问题。

“小而美”项目虽“小”，但不意味着“散”，更意味着无序。在项目选择和推进时，应进一步加强统筹谋划，有意识地增强多个项目之间的互补性、联动性，加强企业与政府、企业与企业间的协同，融入当地社会，形成“和美”氛围，以实现一加一大于二的效果，聚“小美”成“大美”，聚“个美”成“和美”。

此外，与标志性工程项目以政府投入为主不同，“小而美”项目的参与主体可以更多元、更灵活，政府机构、国企、民企、科研机构、社会组织等都可积极参与。作为中国白酒的典型代表，五粮液充分利用“一带一路”的宝贵机遇，不断加快“走出去”步伐，以“和美全球行”这一创新方式，积极践行“和平合作、开放包容、互学互鉴、互利共赢”的丝路精神，通过贸易、文化等各种交流活动为高质量共建“一带一路”凝聚共识、汇聚合力，这些都是对“小而美”项目的具体实践。■

Q: *Advances in science and technology place new demands on labor. New entrants to the labor market require the right skills, while the labor force, on the whole, needs to upgrade and master new skills. How should governments and enterprises provide the necessary training to help the labor force keep up with changes in technology?*

A: Labor force is the most dynamic factor of production, and talent is the primary resource. As we move into the future, knowledge and talent are of increasing importance, and the status and role of education become prominent. To build a sustainable workforce, the key lies in establishing a sound job training system featuring longer and more diverse training that accords with technological advances. To this end, I would like to make the following recommendations.

First, strengthen top-level design and improve pertinent laws and regulations to provide institutional guarantees for ongoing job training. For example, we need to improve the vocational education system and the service ability for vocational education, and put in place the skilled personnel evaluation systems centered on vocational skills accreditation and special career ability assessment.

Second, develop sustainable skills training projects with economic and social benefits in light of national and regional major development strategies and the characteristics and development direction of local industries. Such projects can be carried out in a market-based way and with public involvement under the leadership of the government. Emerging skills presentation and experience scenarios can be constructed and upgraded in regions.

Third, bring into full play the role of leading enterprises and other market entities to upgrade the skills training methods.

For example, WULIANGYE has been designated as a national highly skilled talent training base and a highly skilled talent training base of Sichuan Province. We spend tens of millions of yuan every year providing skills training for about 50,000 participants. We hold about 300 skills contests, with a total of more than

30,000 participants. Over 1,000 employees are involved in our skills certification program. We now have 12,000 highly skilled employees in various fields.

Q: *How can “small yet smart” programs be selected and implemented to support high-quality Belt and Road cooperation?*

A: At the third symposium on the development of the Belt and Road Initiative in 2021, Chinese President Xi Jinping pointed out that “small yet smart” programs have a direct bearing on the people. He called for prioritizing “small yet smart” programs in international cooperation and strengthening coordinated planning to make full use of foreign aid and develop more practical programs that rally the people’s support.

As I see it, the key criterion for selecting and implementing “small yet smart” programs is whether they are practical and can rally the people’s support. Such programs should focus on the livelihoods and community needs and address tricky problems and widely concerned issues.

Although small in scale, programs are neither “scattered” nor “disorderly.” When selecting and implementing such programs, we should take a coordinated approach to proactively strengthen the complementarity and synergy of multiple programs, enhance coordination between enterprises and government and also between enterprises, so as to create better synergy for common prosperity.

“Small yet smart” programs involve a more diverse range of participants, such as government agencies, state-owned enterprises, private enterprises, research institutes, and NGOs. WULIANGYE is expanding into international markets at a faster pace to seize the significant opportunity brought by the Belt and Road Initiative. Our campaign to promote harmony worldwide exactly echoes the Silk Road spirit of peace and cooperation, openness and inclusiveness, mutual learning, and mutual benefit. We also carry out trade and cultural exchanges to build consensus and pool strength for high-quality Belt and Road cooperation. All these are concrete actions to embrace “small yet smart” programs. ■



胡柏山
博鳌亚洲论坛机构理事
vivo 执行副总裁、首席运营官

HU Baishan
Corporate Member of the Boao Forum for Asia,
Executive Vice President & COO, vivo

问：目前各国，包括美国和欧洲国家，陆续推出芯片和绿色产业政策。你如何看待产业政策对科技创新活力的影响？

答：当前新一轮科技革命和产业变革加速演进，前沿、颠覆性技术持续涌现，产业政策对培育未来产业、带动产业升级、开辟新赛道、塑造新质生产力有至关重要的作用。

首先，行业创新瓶颈问题要求基础理论、底层技术的突破，而通过国家重大科技项目攻关、国家重点实验室研究等，可以加快技术突破，打破创新瓶颈。

其次，蒸汽机、内燃机、电气化、信息革命都是单一技术革命，而当前正在演进的智能革命，则是人工智能、虚拟现实、空间感知、脑机接口、生物工程等各种底层技术的混合革命，更需要跨技术领域、跨产业的协作和产业政策的指引，发挥国家战略科技领军作用，打造原创技术策源地。

最后，基础理论、前沿技术和颠覆性技术突破的投入巨大，但又具有高度不确定性，企业往往很难承担如此高的风险，以举国之力对决定未来国家竞争力的方向进行重投入尤为必要。

vivo坚持用户导向的差异化创新，夯实研发底座，希望在国家产业政策的支持下，促进产业链、供应链集体繁荣，加速产业转型升级，促进新质生产力快速发展。



问：AI在去年的突破性进展横空出世，短期内你预期哪些领域的科技革命最可能逼近“奇点”？

答：我们企业和用户共同成长29年，作为非常了解用户需求的科技企业，vivo更擅长去判断哪些消费级科技革命逼近“奇点”。首先，要看用户需求变化有没有形成显著趋势；其次，我们会在技术研发过程中，寻找能够满足用户需求的科技长赛道。如果用户需求趋势显著，且对应的技术长赛道有跨越式的进展，说明“奇点”可能到来。

近年来，用户对于科技的“随身携带”需求愈发旺盛，我们期待一个“万能”的科技产品随时随地都在我们身边。我们当然可以把这种需求理解为对“手机行业”的基础需求，但考虑到近期不断突破的通信、芯片、人工智能和影像传感技术等，一款隐藏在人们身边可以提供各种智慧服务的“机器人”成为可能，这也许就是一个“奇点”。简单来讲，我们认为手机行业本身就是科技革命最有可能逼近的“奇点”。

多年来，vivo中央研究院基于用户需求和技术趋势选择在“设计、影像、系统、性能”四个长赛道上深耕；2023年vivo还推出了自己的技术品牌“蓝科技”，其中vivo自研通用大模型矩阵——蓝心大模型，是手机行业里发布最早、能力最强的开放大模型之一。手机有真实的需求，行业里也有大量类似vivo蓝科技的科技创新不断涌现，相信很快会有突破性进展的科技产品出现。■

Q: Currently, various countries, including the United States and European nations, are successively introducing policies on semiconductors and green industries. How do you view the impact of industrial policies on the vitality of technological innovation?

A: At present, as the new round of technological revolution and industrial transformation accelerates, cutting-edge and disruptive technologies continue to emerge. Industrial policies play a crucial role in nurturing future industries, driving industrial upgrades, opening new tracks, and shaping new quality productive forces.

First, the innovation bottleneck in the industry requires breakthroughs in basic theories and underlying technologies. This can be accelerated through tackling key technological projects at the national level and research in national key laboratories, thus breaking through the innovation bottleneck.

Secondly, the steam engine, internal combustion engine, electrification, and information revolution were all revolutions of single technologies. However, the ongoing intelligence revolution is a hybrid revolution of various underlying technologies such as artificial intelligence, virtual reality, spatial perception, brain-computer interfaces, and bioengineering. This revolution requires more cross-technological and cross-industrial collaboration and guidance from industrial policies. It emphasizes the leading role of national strategic technological initiatives to create original technology sources.

Lastly, the investment in basic theories, frontier technologies, and disruptive technological breakthroughs is enormous and highly uncertain. It's often

difficult for enterprises to bear such high risks, making it necessary for national efforts to re-invest in directions that determine the future competitiveness of the country.

vivo insists on user-oriented differentiated innovation, solidifying its R&D foundation, and hopes to promote the collective prosperity of the industrial and supply chains under the support of national industrial policies. This aims to accelerate industrial transformation and upgrading, and promote the rapid development of new quality productive forces.

Q: AI saw significant breakthroughs in 2023. In which areas do you foresee that technology will most likely approach “singularity” in the short term?

A: vivo, as a tech company deeply attuned to user needs, excels at identifying which consumer tech revolutions are nearing the “singularity.” First, we look for significant trends in user needs; next, during our technology R&D process, we seek long-term tech avenues that can meet these needs. If there's a noticeable trend in user demands and corresponding technology paths are making leapfrog progress, it indicates that the “singularity” might be approaching.

In recent years, there's been a growing demand for technology to be “portable and personal,” with expectations for a “do-it-all” tech product that's always by our side. While this demand could be seen as a fundamental need within the mobile phone industry, considering the recent breakthroughs in communication, chip technology, artificial intelligence, and imaging sensors, the possibility of a “robot” that blends into our surroundings and provides various smart services has emerged. This could well be a “singularity.” In short, we believe the mobile phone industry itself is where the tech revolution is most likely to approach the “singularity.”

Over the years, the vivo Central Research Institute focuses on “design, imaging, systems, and performance” based on user demands and technological trends. In 2023, vivo also launched its technology brand “BlueLM” including vivo's self-developed general large model matrix—BlueLM, one of the earliest released and most capable open large models in the mobile industry. With real user demands and a wealth of technological innovations like vivo's BlueLM emerging in the industry, we believe it won't be long before breakthrough tech products appear. ■



苏博科
博鳌亚洲论坛机构理事
阿斯利康全球首席执行官

Pascal SORIOT

Corporate Member of the Boao Forum for Asia,
Chief Executive Officer, AstraZeneca

问：由于人工智能与传统研究相结合所产生的巨大潜力，我们正处于科学发展的历史机遇期。您认为，人工智能将为生命科学领域的科学研究和应用带来哪些巨大的变革？

答：数字技术的飞速发展正在加速创新科学的发展，并为人类所面临的最严峻、最棘手的疾病带来改善生命的药物。在阿斯利康，我们很早就认识到人工智能和机器学习具有改变我们工作方式的潜力，应用这些新方法也确实提高了我们处理和理解海量数据的能力，使我们能够更快、更准确地发现、开发和提供新的疗法。

在阿斯利康，我们的研发管线中已有人工智能生成的药物分子。我们的人工智能平台正在使用生成模型来识别潜在的药物分子，这比传统流程快了两倍，有助于我们优先选择最有效的药物分子。我们将生成式人工智能和机器学习应用于抗体发现的过程中，识别目标抗体线索的时间从三个月缩短至三天。此外，我们正在使用领先的云端数据和人工智能工具来更快地解读基因数据，我们的目标是到2026年实现分析多达200万个基因组，从而提高我们对疾病生物学的理解，发现新的基因变异和未来药物的潜在药物靶点。除了以上这些案例，人工智能正在让临床开发变得更快、更高效，并改善参与者和提供者的体验和结果。最近，我们成立了一家名为Evinova的新医疗技术公司，该公司已将人工智能和生成式人工智能融入到创新解决方案中。例如，在药物开发领域，我们正与监管机构进行合作，利用人工智能和机器学习来改进对临床试验终点的界定。这些技术的应用有望将界定时间从4个-5个月缩短至几分钟，并可将成本降低一半以上。人工智能的潜力超乎想象，阿斯利康在人工智能领域的更广泛应用还包括：通过自主生产流程实现药品在工厂的无缝流通；通过创建知识图谱，洞察生物数据，为患者匹配合适的临床试验；通过开发领先的疾病管理平台，帮助医疗专业人士更个性化、

更精准、更可持续地诊断、监测和治疗患者。

人工智能驱动工具已经在推动巨大变革，其中包括生成式人工智能技术。它们帮助我们转变工作方式，更重要的是通过转变护理方式来满足未竟的医疗需求。而且随着技术的不断进步，机遇无限。

问：当今企业都正处于科技创新的前沿。您认为，我们应该如何去构建一个鼓励创新和容错的企业文化及社会环境？

答：不断创新是阿斯利康成功的根本。当前，我们正致力于改变慢性疾病的治疗前景，并为癌症和罕见病患者带去希望。我们的团队坚持不懈开拓科学疆域，为患者带来改善生命的药物。

在阿斯利康，五大价值观是指引我们一切工作的准则——我们坚持以科学为本、患者至上、志在必得、开拓进取、赢之有道。这些价值观是“创新”企业文化的核心。从鼓励终身学习，保持好奇心，以确保个人及公司走在行业前沿；到多元与包容文化，以便我们能发现创造性解决方案的新机会，并敢于挑战既定思维；再到企业合作，通过分享学习成果激发出令人兴奋的新可能。在阿斯利康，合作无处不在，不同团队间的合作能互补专业知识和经验，这也是我们追求卓越科学和发现新药不可或缺的一部分。同时我们还鼓励团队开展外部合作，我们欢迎通过内部努力或是外部合作取得突破性发现。

建立明晰的价值观是建立鼓励创新企业文化的基础，它可以激发自由思考，不断挑战以实现更高的目标，并为行动和决策提供支持。当然我们也意识到，突破科学疆域的过程并不总尽如人意。这种情况下，我们也会坚持我们的价值观，始终以科学为本，并将这些“不尽如人意”作为学习的机会，通常这也会成为开启下一个突破性发现的钥匙。■

Q: *We stand at a time of historic opportunity for science, due to the enormous potential arising from integrating AI and traditional research – known as AI for Science. What kinds of dramatic changes can AI create in the areas of scientific research and application in life sciences?*

A: Rapid advances in digital technologies are accelerating innovative science and the delivery of life-changing medicines for the most serious and complex diseases facing humankind. At AstraZeneca, we have long recognized the potential for AI and machine learning to transform how we work, with the application of new approaches enhancing our ability to process and understand vast amounts of data and allowing us to discover, develop and deliver new treatments far faster and more precisely than ever before.

At AstraZeneca, we have AI-generated molecules in our pipeline today. Our AI-enabled platforms are using generative models to identify potential drug molecules twice as fast as traditional processes and help us prioritize those that will be most effective. We are using generative AI and machine learning in antibody discovery, cutting the time to identify target antibody leads from three months to just three days. And, we are using advanced cloud data and AI tools to interpret genetic data faster with the aim of analyzing up to two million genomes by 2026 so we can enhance our understanding of disease biology, uncover new gene variants and potential drug targets for future medicines.

AI is making clinical development faster and more effective and improving the experience and outcomes for participants and providers. Recently we launched a new health-tech company called Evinova which has incorporated AI into its innovative solutions. For example, in drug development, work is underway with regulators to use AI and machine learning to improve the adjudication of clinical trial endpoints. Use of these technologies has the potential to shorten the adjudication time from 4–5 months to just a few minutes and reduce costs by more than 50%.

The potential of AI is extraordinary, with further examples of application across AstraZeneca including autonomous manufacturing processes to create a seamless flow of medicine through our factories, matching of patients with the right clinical trials through the creation of knowledge graphs that give insights into biological data, and the development of advanced

disease management platforms that help healthcare professionals diagnose, monitor and treat patients more personally, precisely and sustainably.

AI-driven tools are already driving dramatic change, helping us to transform how we work and, most importantly, transform care and address unmet medical need. And, with advances continuing apace, the opportunities are enormous.

Q: *Enterprises are at the forefront of scientific and technological innovation. How do we build corporate cultures and social environments that will encourage innovation and tolerate failure?*

A: The need to continuously innovate is fundamental to the success. We are working to transform the outlook for chronic diseases and bring hope to patients who suffer from cancer and rare diseases. Our teams are relentless in pushing the boundaries of science to deliver life-changing medicines.

At AstraZeneca we have five values that guide all that we do – we follow the science, put patients first, play to win, are entrepreneurial, and do the right thing. These values are central to our culture of innovation – from lifelong learning, to ensure we remain curious and at the forefront individually and as a company, to inclusion and diversity, so we spot opportunities for new discoveries and creative solutions, challenge assumptions and represent the communities we serve, to enterprise collaboration to share learnings and unlock exciting new possibilities. Collaboration across our company, between different teams bringing complementary expertise and experience, is an integral part of our drive toward scientific excellence and the discovery of new medicines. We also encourage our teams to collaborate externally, we welcome discovery breakthroughs whether they are the result of internal efforts or external collaborations.

Establishing clear values is fundamental to building a culture that encourages innovation, by stimulating free thinking, challenging teams around the world to aim higher, and underpinning actions and decision-making. Of course, by truly pushing the boundaries of science, we also appreciate that things will not always go our way. In these instances, we also look to our values and follow the science, using them as an opportunity to learn and, often, also as the key to unlocking ground-breaking discoveries. ■



张剑秋

内蒙古伊利实业集团有限公司高级执行总裁

ZHANG Jianqiu

CEO of Inner Mongolia Yili Industrial Group Co., Ltd.

问：研究报告预计在未来40年中，亚洲老年人的数量将增加近三倍。亚洲大多数老年人口将居住在中国所在的东亚（4.91亿）和印度所在的南亚（4.64亿），亚洲人口老龄化的速度要快于全球其他地区。国家、社会和个人应该如何为这种趋势做好准备？

答：老龄化社会的急速到来，让如何提升老龄人群的生活质量成为了挑战。关爱老龄人群生活、增进老龄人群福祉，全面推进构建老年友好型社会，需要国家、社会、企业和个人的共同努力。

健康食品企业应当积极响应国家政策，深入研究老龄人群的生理特点和膳食结构，针对老龄人群的健康需求，以卓越的创新实力和优质的服务水平，推动适老健康食品的发展。

现在，伊利已经在开展这样的产品研发，并实现成果转化。比如，老龄人群中糖尿病患者、血糖异常的人数在逐年升高，伊利创新推出全球首款高血糖友好牛奶舒化安糖健，通过采用“双重草本+膳食纤维”创新功效配方，助力中老年糖尿病和血糖异常人群实现餐后血糖平稳，精准实现营养补给。类似这样的适老健康食品还有很多，从营养需求研究、配方组合优化到功效验证，伊利建立了从基础研究到产品开发的成熟链路。

“老吾老，以及人之老”，希望我们都能共同努力，打造尊老、爱老、适老的氛围和环境。

问：气候变暖的缓解、双碳目标的实现，不仅仅是产业界需要转型升级加以应对，更需要社会发展方式和

生活方式的变革作为支撑。社会发展如何跟上绿色发展的步伐？

答：早在2007年，伊利就提出“绿色领导力”，并逐步升级为“绿色产业链”理念。伊利已在2012年实现碳达峰，将通过2030年、2040年、2050年三个阶段的具体任务，在2050年前实现全产业链碳中和。

在产业上游，建设“绿智能牧场”，实现源头减碳。初步突破了降低奶牛碳排放量的育种基因编辑技术，为未来培育低碳核心牛群奠定了基础；通过提高奶牛饲料转化率，降低奶牛打嗝产生的甲烷排放，实现源头减碳；推行以养带种、以种促养的“种养一体化”生态农业模式，让饲料种植和奶牛养殖紧密衔接，针对性提升草场碳汇功能；推进多家牧场的光伏项目建设，实现“棚顶光伏、棚内养牛”，建成后将解决牧场40%的用电量。

在产业中游，创新资源节约使用和循环利用技术，打造了5家零碳工厂，其中就包括中国食品行业首个“零碳工厂”。

在产业下游，研发推出5款零碳产品，业内首款“零碳牛奶”“零碳奶粉”“零碳酸奶”“零碳冰淇淋”，引领低碳消费新风向；还升级纸箱配材及工艺、优化塑料包装结构，实现包装轻量化、降低碳排放。

2023年，伊利还开始“水足迹”探索，成为首家获批加入联合国《水行动议程》的中国企业。当前的伊利，正在用“碳足迹”和“水足迹”的“双足迹”，持续推进减污降碳协同增效工作，实现节能减排目标，推动全产业链碳中和，加速迈向零碳未来。■

Q: Research predicts that the elderly population in Asia will triple in the next 40 years. Most of Asia's elderly population will live in East Asia (491 million) and South Asia (464 million), where China and India are located, respectively. Asia's population is aging at a faster rate than the rest of the world. How should countries, societies and individuals prepare adequately for this trend?

A: The rapid arrival of an aging society is posing a challenge to the improvement of the quality of life of the elderly. Caring for the lives of the elderly, and comprehensively promoting the construction of an age-friendly society require the joint efforts of the country, society, enterprises, and individuals.

Health food companies should actively respond to national policies, conduct in-depth research on the physiological characteristics and dietary structure of the elderly, and promote the development of healthy food for the elderly with outstanding innovation capabilities and high-quality service.

Yili has already embarked on such product research and development and has been realizing the transformation of results. For example, the number of older persons with diabetes and abnormal blood sugar levels is increasing year by year, and Yili has launched the world's first functional milk product capable of blood sugar regulation, ShuHua AnTangJian, which uses an innovative formula of "double herbs + dietary fiber" to help people achieve stable blood sugar levels after meals and accurate intake of nutritional supplements. From nutritional needs research and formula combination optimization to efficacy verification, Yili has established a mature link from basic research to product development.

As the Chinese saying goes, "extend the same care you give to your own aged parents to the elderly in general", I hope that all parties will work together to create an atmosphere and environment that respects, cares for, and is suitable for the elderly.

Q: Achieving climate change mitigation and China's dual carbon goals requires both industry and society to play their part. That is, industrial transformation and upgrading, and changes in society's development methods and lifestyle. In what ways can social development keep pace with green development?

A: As early as 2007, Yili proposed "green leadership"

and gradually upgraded it to the concept of "green industry chain."

Yili has reached the peak of carbon emission in 2012 and will strive for carbon neutrality across the entire industry chain by 2050 through specific tasks in three phases: 2030, 2040, and 2050.

In the upstream of the industry, green smart farms are built to reduce carbon emissions. We have made an initial breakthrough in gene editing technology for livestock breeding that reduces the carbon emissions of dairy cows, laying the foundation for cultivating low-carbon core herds. Carbon reduction at the source is achieved by improving the feed conversion rate of dairy cows and reducing methane emissions from cow belching. We are promoting the ecological agriculture model of "integrated planting and breeding" that uses breeding to promote planting and vice versa, so that feed planting and dairy farming are closely connected, and the carbon sink function of grasslands is improved in a targeted manner. We are promoting the construction of photovoltaic projects in many farms to achieve "photovoltaic on the roof of sheds in which cattle are raised." Upon completion, they will meet 40% of the electricity needs of the farms.

In the midstream, we have innovated resource conservation and recycling technologies and built five zero-carbon factories, including the first "zero-carbon factory" in China's food industry.

In the downstream of the industry, we have developed and launched 5 zero-carbon products, including the industry's first "zero-carbon milk", "zero-carbon milk powder", "zero-carbon yogurt" and "zero-carbon ice cream", leading the new trend of low-carbon consumption. We also upgraded carton materials and processes and optimized the structure of plastic packaging to achieve lightweight packaging and reduce carbon emissions.

In 2023, Yili also started examining its water footprint and became the first Chinese company approved to join the United Nations' Water Action Agenda. With the dual footprints of carbon footprint and water footprint in mind, we continue to promote synergy and efficiency in our pollution and carbon emission reduction efforts to achieve our energy conservation and emission reduction goals, promote carbon neutrality throughout the industry chain, and accelerate the realization of a zero-carbon future. ■



戴惟德
德勤亚太首席执行官

David HILL
Chief Executive Officer, Deloitte Asia Pacific

问：随着地缘政治风险和贸易保护主义不断加剧，全球产业链供应链的重构仍在进行。重复投资和失去分工和所带来的收益已经对全球经济增长潜力带来拖累。应如何兼顾供应链产业链的效率和安全？

答：全球化是减少货物、资本和人员流动壁垒的过程，对全球经济起到了推动的作用。相较其他方式，全球化，尤其是在新兴国家，可能促使经济更快增长、降低通货膨胀和增加就业。此外，全球化推动了全球供应链的高效发展。由于世界相对平稳环境，使得公司专注低成本和高速成长成为可能，按照实现低成本和高效原则，全球企业可以对供需模式做出相当合理的预测。

然而，近年来，世界面临贸易战、疫情和乌克兰危机，这些事件导致了短缺、延误、成本上升，并最终导致价格上涨。展望未来，全球企业仍会集中在低成本和高速，并越来越关注供应链的韧性和多样性。

与此同时，由于利益不同，国家之间的紧张关系导致政府对货物和资本的流动施加限制，从而破坏了供应链的高效运转。这种限制可能存在，且进一步加强的风险，但也看到这种风险有助于加速供应链多样化。

全球企业及其所在国政府面临的挑战是在效率和安全性之间取得适当的平衡。目前，有些政府对于关键行业过度依赖集中的供应链有所担心，他们正在采取措施鼓励采取替代方式，以确保供应链的韧性。然而，这种行动是以贸易商品的价格和供应链的效率为代价的。最理想的情况是各国在有明确国家安全理由下才采取此类限制措施。

问：世界经济可能已步入低增长的五年区间。你如何评估2024年全球及亚洲经济形势？对你所在的行业将有何挑战和机遇？

答：经济增长缓慢主要是由于人口结构变化。在主要经济体中，由于长期的低出生率，导致劳动适龄人口的增长速度比过去慢。此外，尽管在一些发达经济体，移民速度加快，但还不足以完全抵消本土劳动适龄人口增长缓慢带来的影响，更何况一些国家的移民增长并不强劲。其结果很可能是增长放缓。

至于2024年全球经济状况存在相互矛盾的影响。一方面，因为通胀正在降速。今年货币政策可能放松，劳动力市场紧张，增长在明年可能出现反弹。另一方面，全球经济的结构性变化可能会带来不利因素。其中包括保护主义抬头，导致供应链和贸易模式的快速变化。此外，清洁能源的投资需求正在吸引资本，促使投资从其他用途转移，并对制造和运输过程投资产生影响。最后，从积极的一面来看，新技术获得大量投资，可以提高生产力和改善生活质量。

我们所处的行业也未能幸免由于全球经济的变化所带来的影响。专业服务的前景往往与经济增长有一定的相关性。经济增长放缓会对我们的行业产生不利影响。商业投资的疲软尤其令人担心。另一方面，结构性变化有时可以让我们的行业受益。随着企业在重新设计供应链、转向清洁能源和实施新技术方面进行投资，它们将需要专业服务公司的协助和建议，这对专业服务行业来讲是非常有利的。■

Q: As geopolitical risks and trade protectionism rise, global industry and supply chains are still being reconstructed. Investment overlap and the erosion of division of labour as well as the resulting diminishing yields have impeded global economic growth potential. How can we strike a balance between efficiency and security for supply and industry chains?

A: Globalisation likely led to faster growth than otherwise, reduced inflation, and greater employment – especially in emerging nations. Moreover, globalisation led to the development of highly efficient global supply chains. Companies focused on low cost and high speed. This was possible because the world was relatively stable. Global companies were able to make reasonably good predictions about supply and demand patterns and design supply chains accordingly to achieve low cost and high speed.

In recent years, however, the world has faced trade wars, a pandemic, and the Ukraine crisis, which resulted in shortages, delays, higher costs, and ultimately higher prices. Going forward, global companies will still care about low cost and high speed. Increasingly, they will also focus on the resilience and redundancy of supply chains.

Meanwhile, tensions between countries that have different interests have led governments to impose restrictions on the movement of goods and capital, thereby undermining efficient supply chains. The risk exists that further restrictions could be implemented, contributing to an acceleration of supply chain diversification.

The challenge for global companies, and for the governments that host them, will be to strike the right balance between efficiency and security. Currently, some governments are concerned that critical industries are excessively dependent on concentrated supply chains. They are taking steps to encourage alternatives to current supply chains to ensure resilience. Yet such action comes at a cost in terms of the prices of traded goods and the efficiency of supply chains. Ideally, countries would only undertake such restrictions where there is a clear national security reason.

Q: The world economy may have entered a five-year-long low-growth phase. What is your assessment of the state of the global and Asian economies in 2024? What are the challenges and opportunities fac-

ing your industry?

A: Slow economic growth is mainly due to demographic change. In major economies, the working age population is growing more slowly than in the past, largely due to a prolonged period of low birth rates. The result will likely be slower growth.

The negative impact of demographics could, theoretically, be offset by rapid growth of labour productivity. However, there has been a steady deceleration of labour productivity in recent decades. Productivity growth is fuelled by innovation in technology and business processes, improvements in human capital, and improvements in physical infrastructure. In the long run, the introduction of Generative AI on a large scale will likely boost productivity growth, enabling faster economic growth. For now, however, growth is likely to remain modest in advanced economies. On the other hand, countries with more favourable demographics, such as India and some parts of Southeast Asia and Africa, are likely to experience stronger economic growth in coming years.

As for the state of the global economy in 2024, there are conflicting influences. On the one hand, inflation is decelerating, monetary policies are likely to be loosened this year, labour markets are tight, and growth is likely to rebound next year. On the other hand, there are structural changes in the global economy that could create headwinds. These include increased protectionism, resulting in rapid changes in supply chain design and trade patterns. In addition, the need to invest in clean energy is diverting capital from other uses as well as creating disruption to manufacturing and transport processes. Finally, on the positive side, there will likely be significant investment in new technologies that will boost productivity and improve the quality of life.

Our industry has not been immune to the changes in the global economy. The outlook for professional services tends to be somewhat correlated with economic growth. Slower economic growth hurts our industry. Weakness in business investment especially hurts. On the other hand, structural changes can sometimes benefit our industry. As companies make investments in redesigning supply chains, switching to clean energy, and implementing new technologies, they will require assistance and advice that will be beneficial to professional service firms. ■



余兵

国家能源投资集团有限责任公司总经理

YU Bing

General Manager, China Energy Investment Corporation Limited.

问：根据国际权威机构的预测，到21世纪60年代，即2060年，全球新能源的比例将会发展到占世界能源构成的50%以上，成为人类社会未来能源的基石。在这个过程中，你预测在可再生能源领域还会发生哪些技术突破？

答：技术突破对于可再生能源在未来占据能源主体地位具有决定性影响，我认为以下几方面值得关注：

一是风电、太阳能发电技术。最近十几年风电、光伏发电技术在提效率、降成本上取得革命性突破，目前已在全球大多数地区实现平价上网。随着新技术、新材料、新工艺持续涌现，未来风光发电效率更高、成本更低、应用领域更广泛，成为能源革命的中坚力量。

二是海洋能发电技术。随着海洋工程技术、材料科学、海洋环境科学等多学科交叉融合，更高效、更稳定的潮汐能发电以及更大规模、更低成本的波浪能发电等技术有望取得突破，成为可再生能源领域的重要发展方向。

三是基于储能、氢能、数智化的电力安全稳定技术。可再生能源的间歇性、波动性和季节性问题的电网稳定运行带来严峻挑战。一方面，低成本的长时大容量储能技术亟待突破，主要涉及固态电池、液流电池等新型电池技术，超导储能、飞轮储能等新型物理储能技术，以及氢能与新能源耦合的柔性制氢技术、长距离管道输氢、规模化储氢技术等等。另一方面，电力智能调度技术亟待突破，需要提升水风光功率预测、因地制宜多能多效电源互补等技术，加强能源生产、转化、储备各环节的数据联通技术，推动源网荷储一体化、多能源协同运行、虚拟电厂等先进能源技术和人工智能、大数据等先进信息技术深度融合，促进可再生电力消纳，确保可再生电力上网的稳定性与安全性，支撑新型电力系统发展。

问：在这段时间里，大语言模型浪潮掀起，以ChatGPT为代表的生成式人工智能工具席卷全球，将人工智能的可能性带入了一个新的维度。你认为AI与产业结合应用的突破将发生在哪些领域？

答：以ChatGPT为代表的生成式人工智能技术，未来有望推动能源企业在智慧管理、生态协作、智能生产等领域实现质的突破。

一是智慧管理领域。以国家能源集团为例，依托现有资源优势，利用人工智能技术，正在建设煤电路港航、煤电油气化、产运销储用的行业大模型，推动自动化、信息化、智能化、网络化、模型化，牵引实现战略运营、调度、管理、监督的赋能重塑。此外，通过数据画像、智能评估等技术，可以为人力资源画像、经营分析等场景提供智能化辅助决策。

二是生态协作领域。生成式大模型正在加速构建产品3D模型、虚拟主播、虚拟货场，通过与AR、VR等新技术结合，可以增强用户参与度和内容互动性，实现多感官交互的沉浸式体验，有望推广到能源产业链供应链环节，实现供需双方在足不出户的情况下，即可获得能源商品实时状态，推动产业链供应链向全景、共振智能化转变。

三是智能生产领域。在设备智能管理方面，推广应用设备智能设计制造、综合状态评估、高度智能化人机交互等技术。在自动驾驶方面，通过数据、图像增强和标注技术，优化自动驾驶认知决策模型，实现露天煤矿无人矿卡、井工矿无人胶轮车等广泛应用。在安全培训教育方面，深度融合元宇宙、虚拟人和数字培训脚本，模拟真实厂矿生产环境，增强生产作业人员风险防范和应急处突能力。■

Q: Authoritative international institutions have predicted that by 2060, new-energy sources will account for more than 50% of the global energy mix. In the process, what technological breakthroughs do you expect will occur in the renewable energy sector?

A: Technological breakthroughs play a decisive role for renewable energy to dominate future energy supplies.

Firstly, wind/solar power technology. The last decade or so saw revolutionary breakthroughs that improved the efficiency and reduced the cost of wind power and PV. Thus far, grid parity has been achieved for wind farms in most parts of the world. As new materials and new processes continued to emerge, wind power will become more efficient and cost-effective, with wider applications, making it the backbone of the energy revolution.

Secondly, marine energy technology. The integration of marine engineering, materials science, and marine environmental science is expected to lead to breakthroughs in tidal energy, which is a more efficient and reliable source of energy, and wave energy characterized by large-scale, cost-effective generation of energy.

Thirdly, power security and stability technology based on energy storage, hydrogen energy and digital intelligence. Intermittency, volatility and seasonality of renewable energy pose serious challenges to the stable operation of power grids. It is simply imperative to make breakthroughs in low-cost, long-term and large-capacity energy storage technologies, which primarily involve flexible hydrogen production, long-distance pipeline hydrogen transportation, and large-scale hydrogen storage technology. On the other hand, we also need to break new grounds in intelligent power dispatching, which involves improving hydro-wind-solar power prediction and multi-energy power complementation adapted to local conditions, further developing data connectivity related to energy production, conversion and storage, integrating generation-grid-load-storage integration, multi-energy coordination and Virtual Power Plants and AI and big data computing, and facilitating on-grid renewable power supply.

Q: We have recently witnessed the rise of large language models. Generative AI tools, such as ChatGPT, have taken the world by storm. In which areas do you expect to see breakthroughs in the integration of AI and industrial applications?

A: Generative AI will motivate energy companies to make meaningful breakthroughs in intelligent management, ecological collaboration, and intelligent production.

First, smart management. China Energy, for example, leverages existing resources and AI to develop an industry-wide large language model (LLM) for coal, power, road, port and shipping businesses. Furthermore, through data portrait and automated assessment, the company provides intelligent decision-making assistance for HR profiling, business analysis, etc.

Second, ecological cooperation. Generative LLM is conducive to the modeling of 3D products, virtual anchors and virtual warehouses. With the assistance of AR and VR, we offer an immersive experience of multi-sensory interactions, enhanced user engagement and content interactivity, which are expected to be applied to energy industry chains and supply chains enabling suppliers and their clients to keep track of the status of energy products in real time.

Third, intelligent production. In terms of intelligent equipment management, China Energy encourages the application of technologies including intelligent equipment design and manufacturing, comprehensive status assessment, and highly intelligent human-computer interaction. As regards autonomous driving, China Energy uses data/image enhancement and annotation technology to optimize cognitive decision-making model of autonomous driving and increase the application of unmanned mining trucks in open-pit coal mines and unmanned rubber-tired vehicles. As for safety training, meta-universe, virtual avatars and digital training scripts are deeply integrated to simulate the real factory and mine production environment to help operating personnel enhance risk prevention and emergency response capabilities. ■



张跃

远大科技集团有限公司董事长兼总裁

ZHANG Yue

Chairman & CEO, BROAD GROUP

问：企业走在科技创新的前沿。如何创建鼓励创新、包容失败的企业文化和社会环境？

答：有创新必会遇到阻碍。政府应在政策法规上为科技创新做出实际改变，而不应总是用“依法依规”老一套思维。例如在建筑创新上，应改变用管包工头和农民工的办法来管工厂化建筑。

具体来说，很多传统建筑的施工单位是临时搭建的班子，工人多是临时工，所以建任何一栋楼都很难自发、有序、精确地进行质量管理。因此，需要对建筑的建造过程进行非常严密的质量跟踪管理，由第三方或者政府主管部门来监管，这就是管包工头和农民工的做法。用这种管理方式管包工头和农民工是好的，因为包工头和农民工是一个临时组织，责任心和经验都欠缺。可是这种方式并不适应工厂化建筑，因为工厂化建筑有一套成熟的研发体系和质量管理体系，管理团队稳定，公司也有品牌，会自觉地达到管理自己产品质量的条件。可以看出，现在工厂化建筑的制造方法跟造汽车的方法是一模一样的，因此也应该考虑由管理制造业的有关部门负责，用管造汽车的方法来管理。

问：根据国际权威机构的预测，到21世纪60年代，即2060年，全球新能源的比例将会发展到占世界能源构成的50%以上，成为人类社会未来能源的基石。在这个过程中，你预测在可再生能源领域还会发生哪些技术突破？

答：如果到2060年，全球新能源在整体能源中的占比仅有50%，地球可能已经不宜人类居住了！我们希望看到的是，到2030年-2040年风能就将占全球能源总量50%，到2050年风能占70%，太阳能占20%，其他10%为生物质能源。只有这样，气候才会稳定，人类才会延续。■

Q: Enterprises are at the forefront of scientific and technological innovation. How do we build corporate cultures and social environments that will encourage innovation and tolerate failure?

A: Obstacles are part and parcel of innovation. The government should make practical changes to policies and regulations related to scientific and technological innovation, instead of going by the book all the time. Take construction innovation for example;

when regulating factory-made buildings, the method of managing general contractors and migrant workers should be changed.

Many conventional construction units are make-shift teams. As most of the workers are temporary workers, conducting quality control in an orderly and precise manner when constructing any building is very challenging. Therefore, it is necessary to carry out very strict quality tracking and management of the construction process, which is supervised by a third party or government authorities. This is the way contractors and migrant workers are managed, and it works because they are a temporary organization and lack a sense of responsibility and experience. However, it won't work when it comes to a factory-made building, which has sophisticated R&D and quality management systems, as well as a stable management team. The company also has its own brand. Hence, it will consciously meet the requirements for managing its own product quality. We note that the current method of manufacturing factory-made build-

ings is identical to the manufacturing of automobiles. Therefore, both should be regulated in the same way. In other words, regulating factory-made buildings by an authority familiar with the manufacturing industry should be considered.

Q: Authoritative international institutions have predicted that by 2060, new-energy sources will account for more than 50% of the global energy mix, and become the cornerstone of future energy. In the process, what technological breakthroughs do you expect will occur in the renewable energy sector?

A: If 50% is all that new energy can muster by 2060, the Earth may well be uninhabitable! We hope to see wind energy account for 50% of the global energy mix between 2030 and 2040. By 2050, wind energy is forecast to account for 70%, solar 20%, and biomass, the remaining 10%. Only then can the climate be stabilized and the human race survive. ■





邱寒
贝宝高级副总裁
中国区首席执行官

Hannah QIU
SVP, China CEO, PayPal

问：数字技术正全面融入经济社会发展的各个领域。如何弥合鸿沟，使数字经济惠及更多群体？

答：过去十年里，中国的数字经济取得了长足进展，处于全球领先地位。在消费端，数字化已经渗透到人民生活的方方面面；在生产端，企业也在大量部署数字化解决方案，尽管仍然面临一定挑战，但数字经济与实体经济的融合已经是大势所趋。

在这个过程中，中小微企业是实体经济的重要组成部分，中小微企业的数字化转型也是数字经济和实体经济融合的关键。数字经济目前正在从现有形态的提升向全新模式的创新发展，对中小微企业的数字化转型来说，数字化的金融和资金流通起到了重要的保障作用，包括数字化支付作为底层基础设施的支撑作用。

PayPal是第一家获准在中国提供在线支付的持牌外资公司。我们特别关注政府和监管机构帮助中小微企业推动实体经济发展的相关政策。相比大型企业，中小微企业的抗风险能力相对较弱，更加需要政府和监管机构的扶持，同时也需要类似于PayPal这样的平台公司，给予它们更多的帮助。正如本次论坛的主题，这是我们“共同的挑战，共同的责任”之一。

问：科技进步给社会经济带来翻天覆地的变化，与此同时对劳动力提出了更多要求，一方面新进入市场的劳动力需要具备相应的技能；另一方面劳动力需要持续提升和掌握新技能。政府和企业应该如何提供相应的培训以使劳动力跟上技术的变迁？

答：科技进步势必会为企业发展带来阵痛期。企业需要从人员思维转换、技能匹配以及技能转型等方面着



手，提供有利于人员技能提升和职业发展的资源和渠道，全面增强团队韧性。

PayPal作为一家跨国企业，我们为员工提供丰富的职场培训和职业能力提升机会，定期邀请职场专业人士开展讲座，分享工作经验，传授如何提升职业能力，缓解员工压力等；同时，公司还通过PayPal Learning Academy提供大量在线课程，鼓励员工进行职业技能和经验提升。2023年，公司在中国倡导推动了多项以实战练习为途径的培训，均取得了积极反馈和效果。

此外，政府为企业提供的各种针对培训的补贴和扶持，特别是对先进的科技型企业加大扶持力度，对于领先的科技型人才给予政策，对于企业数字化转型、提升员工技能培训也具有切实的意义。■

Q: Digital technology is being integrated into every aspect of socioeconomic development. How should we bridge the gap so that the digital economy can benefit more groups?

A: Over the past decade, China's digital economy has made significant progress and is in a leading position globally. On the consumer side, digitalization has permeated every aspect of many people's lives; on the production side, enterprises are also deploying digital solutions on a large scale. Although there are still specific challenges, integrating the digital economy with the real economy is increasingly the reality.

Micro, small and medium-sized enterprises (MSMEs) make up a significant part of the real economy, and their digital transformation is critical to integrating the digital and real economies. The digital economy is evolving from enhancing its existing forms to innovating new models. For the digital transformation of MSMEs, digital finance and circulation of funds play a crucial role in ensuring this transition, including the support provided by digital payments as a foundational infrastructure.

PayPal is the first foreign company licensed to provide online payment services in China. We pay special attention to the policies of the government and regulatory authorities that help MSMEs promote the development of the real economy. Compared to large enterprises, MSMEs have relatively weaker risk tolerance and resistance and need more support from the government and regulatory bodies. They also need support from companies like PayPal to provide them with more help. As the theme of this forum suggests, this is one of our "common challenges, shared responsibilities."

Q: Advances in science and technology place new demands on labor. New entrants to the labor market require the right skills, while the labor force, on the whole, needs to upgrade and master new skills. How should governments and enterprises provide the necessary training to help the labor force keep up with changes in technology?

A: Technological progress is bound to bring a period of growing pains for businesses. Companies need to start with people, specifically the mindsets of employees, skill matching, and transferrable skills, providing resources and channels that facilitate skill enhancement and career development. By doing so, the company can inherently strengthen the team's resilience. As a multinational company, PayPal offers our employees a wealth of workplace training and career development opportunities, regularly inviting professionals to give talks, share work experiences, teach how to enhance professional skills, and alleviate employee stress, among other topics. Additionally, the company provides many online courses through the PayPal Learning Academy, encouraging employees to enhance their professional skills and experience. In 2023, the company advocated and launched multiple training initiatives in China focusing on practical exercises, which have received positive feedback. In addition, the various subsidies and support governments provide to companies for training have tangible significance for enhancing employee skills. In particular, advanced technology companies should receive increased support, and leading tech talents should be given incentives backed by policies. ■



袁辉

小i集团董事长兼CEO

Max YUAN

Chairman, Xiao-i Corporation

问：在这段时间里，大语言模型浪潮掀起，以ChatGPT为代表的生成式人工智能工具席卷全球，将人工智能的可能性带入了一个新的维度。你认为AI与产业结合应用的突破将发生在哪些领域？

答：全行业都会跟人工智能结合，人工智能如同空气、水、电，没有哪个行业不需要，它相当于基础设施能力；以大模型展开的AI新时代人工智能技术，有能力在同一时间推动所有行业发生颠覆性突破。

人工智能引发了第四次工业革命，会改变所有的业态以及生活，对所有行业形成巨大冲击。比如对于呼叫中心行业，通过AI赋能，以多模态机器人矩阵和适量的客服人员，可以高效率高质量地为客户服务，实现数智化转型升级。

金融行业天生的属性就是数据和算法，金融行业的客户服务、风险控制、理财投资、市场营销等各个环节、应用场景都面临着人工智能的改造，而大模型成为金融机构数字化和智能化的突破口，为金融行业提供了效率提升、个性化输出和交互能力等优势，推动金融行业加速迈向AI驱动提质增效。

大模型也会深度融入工业领域的研发设计、生产工艺、质量管理、运营控制、营销服务、组织协同和经营管理各环节，引发新的效率革命。大模型将开启重塑全球制造业的竞争格局，促进工业企业的数智融合，推动工



业企业从制造向智造的发展。

问：AI在去年的突破性进展横空出世，短期内你预期哪些领域的科技革命最可能逼近“奇点”？

答：今天的人工智能远超过去的三次工业革命。人工智能的终极目标是人类所期待的“奇点”，人工智能和人类所面临的最大挑战，就是如何突破过去60年人工智能的理论框架，去颠覆和创造一个全新的体系，这才是奇点的未来。

就目前来看，人工智能过去60年来的整个底层理论框架没有发生突破，奇点没有来临，今天的大模型不是人工智能的奇点。只有在未来的5年-10年，底层理论框架、算法的结构重新被颠覆性突破，奇点才有可能来临。大模型的发展，给了所有人一个重新认知世界的机会，重新认知现实世界和虚拟世界。

这一次真正的人工智能革命最终目标，在于碳基和硅基之争，即人类是否能够重新自我觉醒。如果人类的智慧不进一步挖掘和自我觉醒的话，AI的智慧超越人类是指日可待的。

人类本身所蕴含的智慧是无尽的，但如果不利用它，很有可能就会被机器取代。如果人类不断地探索自己，发现这个世界的真相，AI在人类面前只会是一个工具。■

Q: We have recently witnessed the rise of large language models. Generative AI tools, such as ChatGPT, have taken the world by storm. In which areas do you expect to see breakthroughs in the integration of AI and industrial applications?

A: All industries will be integrated with AI. It's like air, water, and electricity that every industry depends on it. It is equivalent to infrastructure capabilities and the new era of AI technology developed in LLMs has the ability to promote AI at the same time, to make disruptive breakthroughs in all industries.

AI has triggered the fourth industrial revolution, which will change all businesses and everyone's life. It'll have a huge impact on all industries. For example, in the call center industry, through AI empowerment, a multi-modal robot matrix and an appropriate number of customer service personnel can serve customers with high efficiency and high quality, achieving digital transformation and upgrading.

The inherent attributes of the financial industry are data and algorithms. All aspects and application scenarios of the financial industry, such as customer service, risk control, financial investment, and marketing, are facing the transformation that led by AI, LLMs have become a breakthrough for the digitalization and intelligence of financial institutions, provides the financial

industry with advantages such as efficiency improvement, personalized output and interactive capabilities, and promotes the financial industry to accelerate towards AI-driven improvement in quality and efficiency.

At the same time, LLMs are deeply integrated into all aspects of R&D and design, production technology, quality management, operation control, marketing services, organizational collaboration, and business management in the industrial field, triggering a new efficiency revolution. LLM will begin to reshape the competitive landscape of global manufacturing, promote the integration of digital and intelligence in industrial enterprises, promote the development of industrial enterprises from manufacturing to intelligent manufacturing.

Q: AI saw significant breakthroughs in 2023. In which areas do you foresee that technology will most likely approach “singularity” in the short term?

A: Today's AI far exceeds the three industrial revolutions in the past. The ultimate goal of AI is the “singularity” that humans are looking forward to. The biggest challenge facing AI and mankind is how to break through the theoretical framework of AI in the past 60 years to subvert and create a brand new system. This is the singularity of the future.

From the current point of view, there has been no breakthrough in the entire underlying theoretical framework of AI in the past 60 years, and the singularity has not yet arrived. Today's LLMs are not the singularity of AI. Only in the next 5-10 years, if the underlying theoretical framework and algorithmic structure are disrupted again, will the singularity be possible. The development of LLMs gives everyone an opportunity to re-understand the world, both the real world and the virtual world.

The ultimate goal of this real AI revolution lies in the debate between carbon-based and silicon-based technologies, that is, whether humans can re-awaken themselves. If human intelligence is not further explored and self-awakened, it will be just around the corner for AI to surpass human intelligence.

The wisdom contained in human beings is endless, but if we don't use it, it is likely to be replaced by machines. If humans continue to explore themselves and discover the truth about the world, AI will only be a tool in front of humans. ■



全球及亚洲经济信心调查 Global and Asian Economic Confidence Surveys

全球及亚洲经济信心调查¹

2023年，世界形势变乱交织，局部地区动荡不安，后疫情时代的世界未能迎来经济快速复苏，贸易和直接投资增速显著放缓。2024年，全球进入“大选”年，世界经济增长的不确定因素加大。主要发达经济体的快速加息周期可能结束，发展中国家和新兴市场的外部环境有望改善，亚洲增长动力仍可能全球领先。在此背景下，亚洲企业家们对于全球和亚洲经济的增长前景信心如何？重点关注全球经济中哪些重大不确定性因素？主要有哪些因素可能影响企业的经营和发展？亚洲哪些国家和地区、哪些产业最受企业家青睐？2024年中国经济增长前景如何，哪些产业可能成为新引擎？博鳌亚洲论坛研究院于2023年10月底和2024年1月中对论坛会员和合作伙伴共120家企业做了两轮信心问卷调查。感谢会员和合作伙伴的鼎力支持与帮助。

从问卷结果看，对于全球经济前景，在新冠疫情“疤痕效应”尚存、地缘政治冲突加剧、多国面临高通胀的大环境下，三分之二左右的受访者认为全球经济增长将小幅放缓或持平；相同比例的受访者认为贸易和投资会小幅增长或持平。受访者们最为担心的风险仍然是地

缘政治冲突和全球产业链动荡与调整，认为这可能导致对全球经济的进一步冲击。美国大选、极端气候突发事件、全球高债务引发信用危机、通胀高企持续也是受访者比较担心的风险。关于亚洲经济前景，约七成受访企业家对2024年亚洲经济增长持乐观或相对乐观的态度。受访企业大多计划于2024年重点在中国及东盟展业，倾向于在光能、风能、氢能和储能等新能源领域、人工智能应用、智能制造、基础设施建设、芯片与大数据等核心ICT和交通与物流行业投资。俄乌冲突、巴以冲突导致地缘政治紧张局势加剧、中美经贸和科技脱钩风险加大、全球性通胀和利率高企、全球关键矿产供应不稳定和监管政策的变化是企业家们认为的影响企业经营和发展的五大因素。关于中国经济前景，65%左右的受访企业家对全年经济持乐观或相对乐观预期，认为2023年疫情防控政策优化调整、经济复苏带动就业增加、消费回暖、中国的市场规模以及在绿色低碳等产业上的先发优势，将支撑实体经济恢复发展。美国对中国高技术产业的持续围堵、地方政府债务等风险和压力是主要担忧。

1.注：根据博鳌亚洲论坛研究院2024年1月对论坛合作伙伴、会员单位做的问卷调查和2023年10月在长沙举办的全球经济发展与安全论坛第二届大会时的现场企业家信心调查问卷结果编写。

一、全球经济进入温和增长周期，地缘政治冲突、逆全球化进一步引发全球产业链动荡和调整以及大国选举是2024年最重要风险源

三分之二左右的受访者认为全球经济增长将小幅放缓或持平；相同比例的受访者认为贸易和投资会小幅增长或持平

全球经济在2023年整体呈现弱复苏态势，但保持一定韧性。OECD、WB、IMF近期分别预测2024年全球经济增长2.9%²、2.4%³、3.1%⁴。从受访者预期看，42.86%受访者认为全球经济增长将小幅放缓，22.45%认为持平，30.61%认为将小幅加快，4.08%认为会大幅

图1: 受访者对2024年全球经济增长的预期

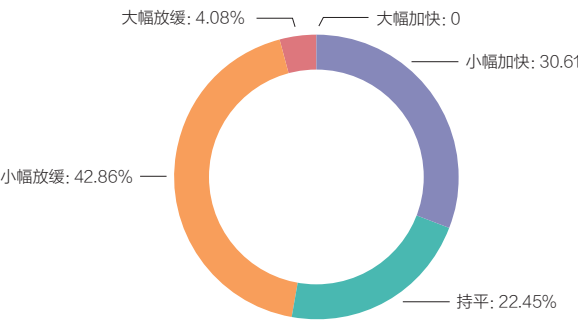
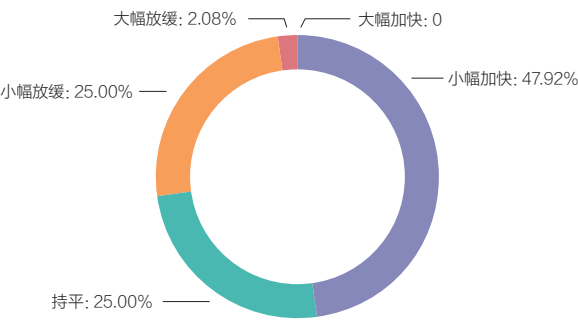


图2: 受访者对2024年全球贸易增长趋势预测



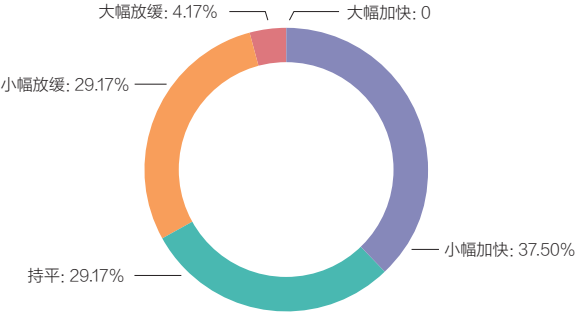
放缓(图1)。

关于全球贸易，联合国贸发会议测算2023年全球贸易额比2022年下降5%约1.5万亿美元至31万亿美元，持续的地缘政治紧张局势、日益加剧的债务问题和普遍的经济脆弱性等因素令2024年的前景仍然“高度不确定且总体悲观”。47.92%的受访者认为全球贸易会小幅加快，25%认为会与2023年增速持平，25%认为会小幅放缓，2.08%认为会大幅放缓(图2)。

联合国贸发会议数据显示，2023年全球外国直接投资增长3%。2024年，受外国直接投资、全球供应链和国际贸易流动紧密相关，地缘政治冲突、跨国公司内部盈利下降、外部政策不确定性等因素影响，全球跨境投资依然承压。调查的结果显示观点分化，37.5%的受访者认为全球贸易增长将小幅加快，29.17%认为将持平，29.17%认为小幅放缓，4.17%认为会大幅放缓(图3)。

数字技术的突飞猛进促进了数字市场和数字平台的发展，数字贸易也被给予成为全球贸易增长重要引擎的厚望。对于推动全球数字贸易的关键因素，清晰的多边数字贸易规则是受访者们普遍认同(67.61%)的最关键因素。规范的国内数字贸易法律法规和完善的数字产品配套服务体系(如移动支付、5G等技术)并列第二

图3: 受访者对2024年全球跨境投资增长的预期



(50.7%)。数据流通、隐私保护、规范监管之间做好平衡以及大型科技平台的引领作用被46.48%和45.07%的受访者认为重要。疫情的催化作用不再是人们关注的主要因素(只有2.82%)(图4)。由此可见，制定和落实多边及一国国内数字贸易规则是数字贸易可持续发展的最重要条件。

地缘政治冲突、全球产业链动荡和调整以及以美国大选为代表的大国政局改变是2024年全球经济的三大风险源

81.63%的受访者认为2024年全球经济面临的头号

风险是地缘政治冲突，超过六成(61.22%)的受访者担心逆全球化继续迫使全球产业链重组和调整。34.69%的受访者担心美国大选等大国国内政治事件的冲击，24.49%的受访者对极端气候、全球高债务、通胀高企持续较为担心。对大宗商品价格大幅波动、能源危机、突发事件或其他方面的担心程度较低(图5)。

二、亚洲经贸合作、数字转型和绿色低碳发展，为世界经济复苏注入稳定力量

多数受访者对亚洲经济增长持乐观或相对乐观态度

图4: 您认为推动全球数字贸易的关键因素有哪些？

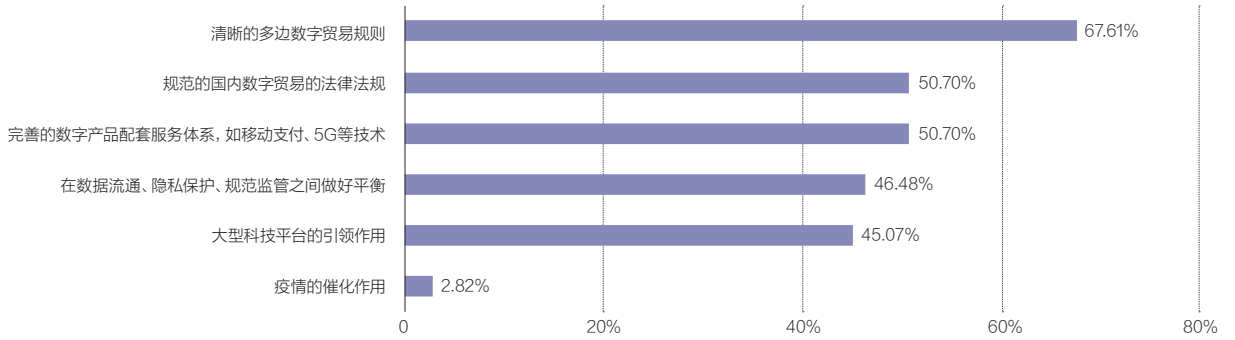
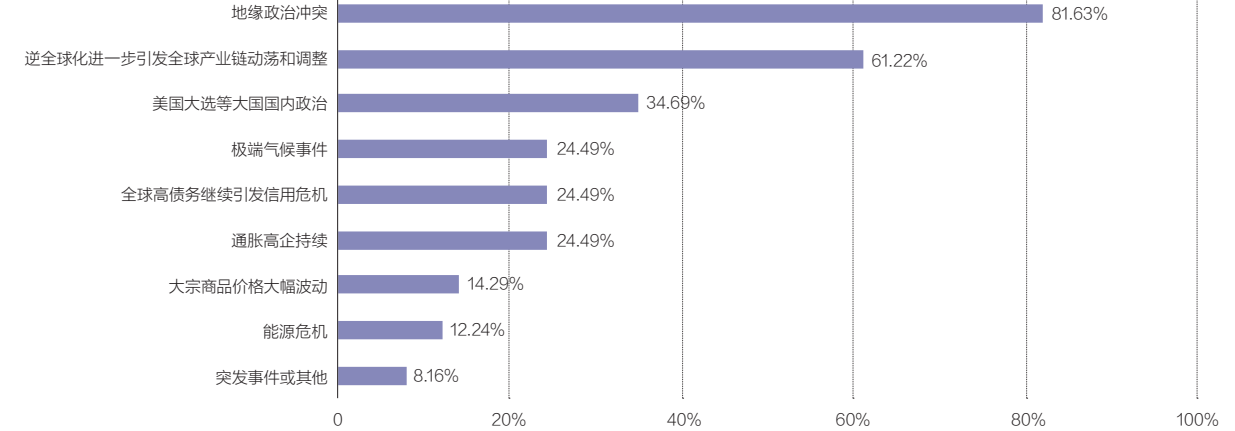


图5: 对2024年全球经济主要风险点的判断



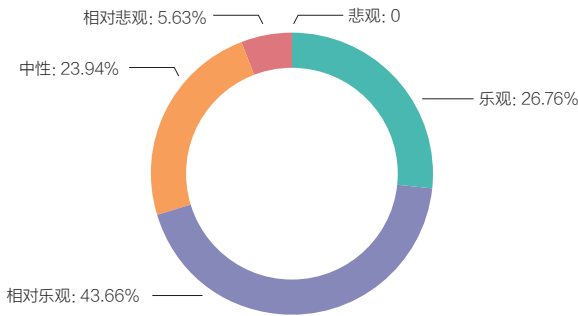
2.注: <https://www.oecd-ilibrary.org/sites/0fd73462-en/index.html?itemId=/content/publication/0fd73462-en>
3.注: <https://www.shihang.org/zh/publication/global-economic-prospects>
4.注: <https://www.imf.org/zh/Publications/WEQ/Issues/2024/01/30/world-economic-outlook-update-january-2024>

表1: 亚洲前20大经济体2024年宏观经济预测数据一览表

国家	GDP增长率				通胀率			失业率
	IMF (2023年10月/ 2024年1月更新)	WB (2024年1月 更新)	ADB (2023年12月 更新)	OECD (2024年2月 更新)	ADB (2023年12月更新, 2024年12月通胀)	IMF (2023年10月更新, 2024年年度通胀)	OECD (2024年2月更新, 2024年12月通胀)	IMF (2023年10月 更新)
中国	4.6	4.5	4.5	4.7	2.0	1.7	1.0	5.2
日本	0.9	0.9	-	1.9	-	2.9	2.6	2.3
印度	6.5	6.4	6.7	6.2	4.2	4.6	4.9	-
韩国	2.3	-	2.2	2.2	2.5	2.3	2.7	3.2
印度尼西亚	5.0	4.9	5.0	5.1	3.0	2.5	2.5	5.2
沙特阿拉伯	2.7	4.1	-	-	-	2.2		-
土耳其	3.1	3.1	-	2.9	-	62.5	49.3	10.1
泰国	4.4	3.2	3.7	-	2.3	1.6		1.1
新加坡	2.1	-	2.5	-	3.0	3.5		1.8
阿联酋	4.0	3.7	-	-	-	2.3		-
越南	5.8	5.5	6.0	-	4.0	3.4		2.1
马来西亚	4.3	4.3	4.9	-	2.7	2.7		3.5
菲律宾	6.0	5.8	6.2	-	4.0	3.2		5.1
孟加拉国	6.0	5.6	6.5	-	-	7.9		-
伊朗	3.7	3.7	-	-	-	32.5		9.6
巴基斯坦	2.0	1.7	1.9	-	-	23.6		8.0
伊拉克	2.9	4.2	-	-	-	3.6		-
哈萨克斯坦	3.1	4.3	4.3	-	8.7	9.0		4.8
卡塔尔	2.2	2.5	-	-	-	2.3		-
科威特	3.6	2.6	-	-	-	3.1	-	2.2

注1: 前20大经济体为按照IMF-WEO2023.10数据库美元GDP排名。
注2: IMF GDP增长率标红的表示2024年1月更新, 标黑的表示2023年10月更新。
资料来源: 博鳌亚洲论坛研究院编制

图6: 您对2024年亚洲整体增长前景的看法是？



IMF预测, 2024年亚洲经济增速将由2023年的4.6%降至4.2%⁵, 其中中国、印度、印尼、马来西亚、越南、孟加拉、蒙古、菲律宾等国家的增速可能高于或者接近亚洲平均增速(亚洲前20大经济体的2024年主要宏观经济指标预测如表1)。约七成的受访企业家对2024年亚洲经济增长持乐观或相对乐观的态度, 持相对悲观态度的占5.63%, 无人表示悲观(图6)。通胀放缓和贸易持续改善带来的强劲内需将推动经济增长。2023年, 亚洲制造业PMI均值为50.7%, 与上年持平。根据2024年2月1日标普和au Jibun Bank发布的PMI数据, 2024年

图7-8: 当前您所在企业的业务规模多大程度上集中在亚洲？2024年在亚洲准备重点拓展业务的地区是？

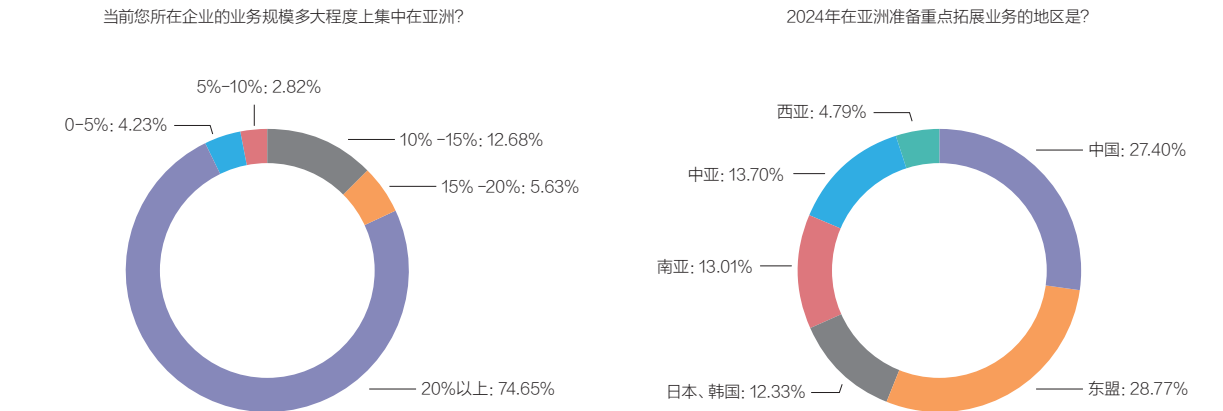
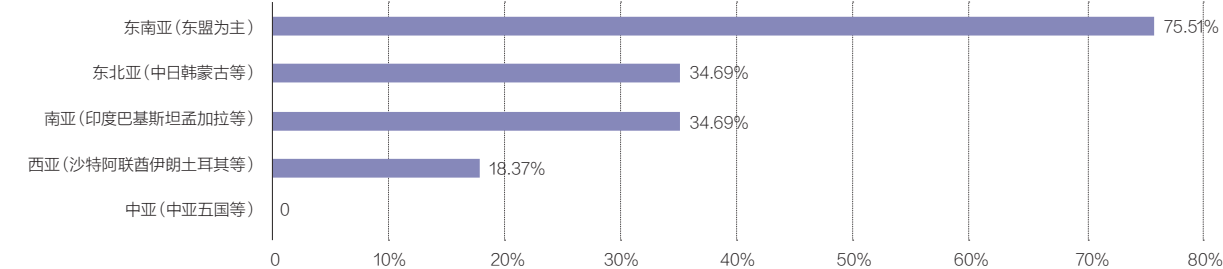


图9: 您认为2024年亚洲最具成长性的地区是？



初亚洲多数地区制造业生产和出口销售均有所上升, 制造业活动显著改善, 主要市场需求逐渐增强。随着美联储加息周期结束, 金融环境将通过贸易融资渠道和投资组合流动进一步放宽。预计亚洲大部分经济体将于2024年迎来稳健增长。

东盟和中国是受访企业的重点业务拓展地区, 新能源领域和人工智能应用等领域最受投资者青睐

74.65%的受访企业表示有20%以上的业务集中在亚洲。75.51%的企业认为东盟是2024年亚洲最具成长性地区, 选择东北亚(中日韩蒙古)和南亚(印度巴基斯坦孟加拉等)的企业占比均为34.69%。在被具体问及2024年重点展业的区域时, 28.77%的受访者将东盟列为重点方向, 27.4%的企业计划在中国布局, 13.7%的企

业准备在南亚拓展业务, 12.33%的企业表示将在日韩拓展业务。由此可见, 东盟和中国作为世界工厂吸引着众多的企业跨国投资(图7-8和图9)。

新能源、人工智能、智能制造是最受投资者欢迎的三大行业。接近六成的企业家勾选了新能源行业, 过半数的企业家看好人工智能应用及智能制造。这说明, 绿色低碳发展和数字经济在亚洲具有良好的投资前景(图10)。

新能源领域, 亚洲国家展现了强劲势头, 特别是电动汽车(EV)及相关供应链方面, 预计将迸发巨大增长潜力。中国和企业有望从中获得丰厚利润。据中国海关总署数据显示, 2023年中国机电产品出口达13.92万亿元, 增长2.9%, 其中新能源汽车、锂电池、光能电池等“新三样”产品首次突破万亿大关, 总计1.06万亿元, 占出

5.注: <https://www.imf.org/en/Publications/REO/APAC/Issues/2023/09/27/regional-economic-outlook-for-asia-and-pacific-october-2023>

图10: 您认为2024年在亚洲以下哪些行业会最受投资者青睐?

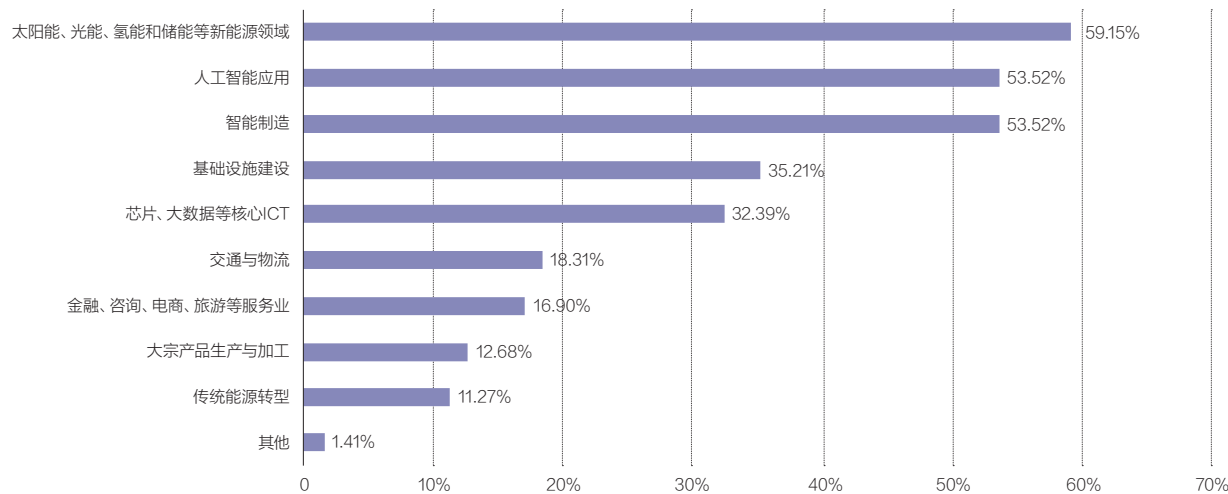


图11: 2024年您最担心影响亚洲企业经营和发展的因素是?

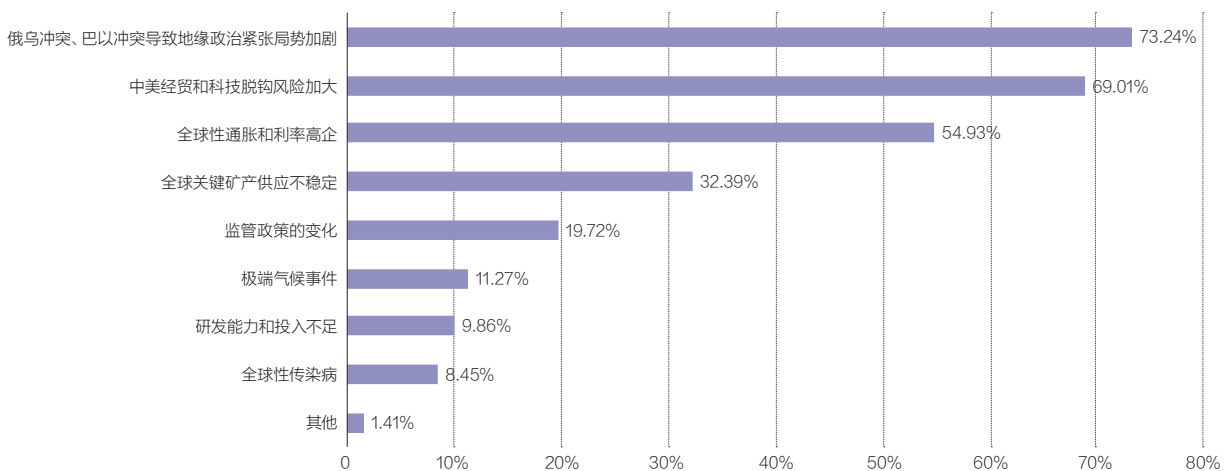
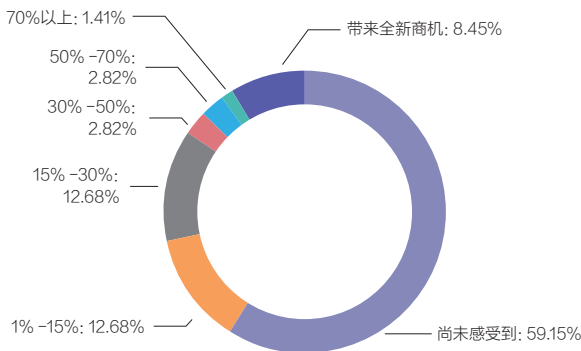


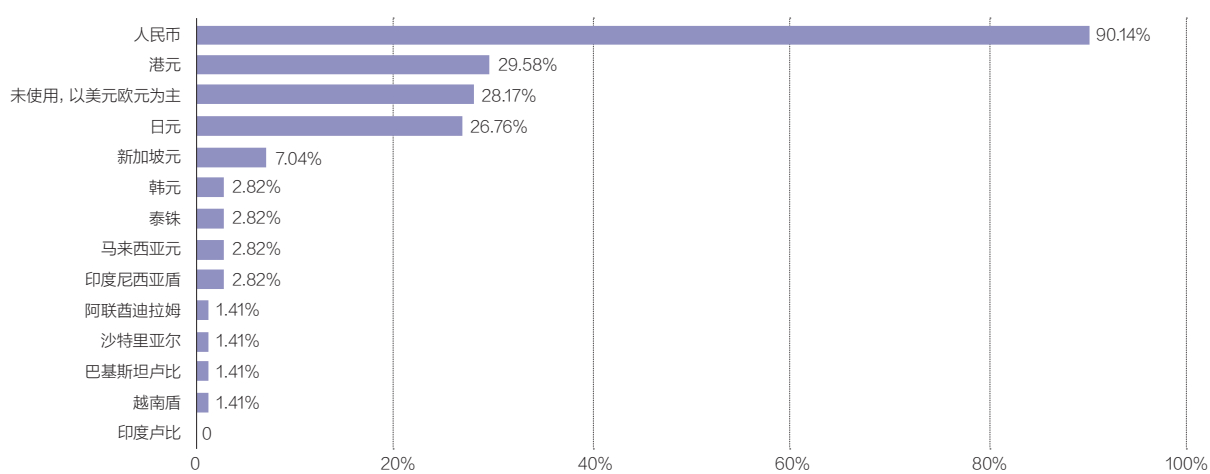
图12: 区域全面经济伙伴关系协定(RCEP)已给您所在企业带来了多大程度的收益?



口总值的58.6%。同时,日本、韩国电动车制造商正在积极进入英美等国家的市场。这表明亚洲地区在绿色低碳发展方面取得了显著成就,为企业提供了有利的商机。

此外,亚洲数字经济规模持续扩张。各主要国家纷纷把数字经济作为应对疫情冲击、提升经济发展能力的重要手段,加快发展信息基础设施、半导体、人工智能、电子商务、电子政务等,数字经济迎来新一轮发展热潮。以人工智能为例,亚洲人工智能企业约占全球的四分之一。截至2023年一季度,全球人工智能企业中,中国占15%,印度为5%,以色列是3%,新加坡和日本均占2%。

图13: 您所在企业在对外贸易和投资中计价和结算使用的前三大亚洲经济体的货币是?



全球181家人工智能独角兽企业中,中国有26家,以色列为5家,印度和新加坡各占3家,四国合计占全球比重超过20%。多数国家融资规模呈现下降趋势,AIGC成为热门投融资领域。

智能制造方面,亚洲制造业业务数字化转型和端到端整合走在世界前列。32%的亚洲企业计划在未来五年建立成熟的数字生态体系,在欧洲、中东和非洲企业中该比例为15%,美洲则为24%。数字孪生技术逐步延伸至制造业多场景。亚洲工业机器人市场发展全球领先。国际机器人联合会(IFR)数据显示,2022年,全球工厂中新安装工业机器人数量为55.31万台,同比增长5%。其中,73%的工业机器人安装在亚洲。中国、日本、韩国分别是亚洲三大工业机器人市场。除此之外,基础设施和芯片半导体领域的发展维持较高热度。韩国、日本和印度等国家纷纷出台相关政策并加大投资,促进芯片制造行业发展。

2023年,地缘政治紧张局势加剧,中美经贸和科技脱钩风险加大,七成左右的企业家认为这将影响亚洲企业经营和发展。全球性通胀(54.93%)、关键矿产供应不稳定(32.39%)以及监管政策(19.72%)也是影响受访企业决策的重要因素(图11)。

RCEP持续为区域经济注入活力,拉动区域内各国

间贸易

《区域全面经济伙伴关系协定》(RCEP)由东盟在2012年率先倡议发起,2020年11月正式签署,成员国包括中国、日本、韩国、澳大利亚、新西兰和东盟十国。RCEP自2022年1月1日正式生效。超过四分之一的受访者认为RCEP自实施以来,给所在企业带来了1%-30%的收益增长,15.49%的受访者认为企业已经有30%以上的收益增长并带来了全新的商机,但接近60%的受访企业尚未感受到RCEP带来的收益(图12)。从现实情况看,根据中国海关总署统计数据显示,2023年中国对RCEP其他14个成员国合计进出口12.6万亿元,较协定生效前的2021年增长5.3%。2023年1月-11月,柬埔寨在RCEP框架下的贸易额飙升至265亿美元以上,占该国同期国际贸易总额(430亿美元)的61%。根据亚洲开发银行研究,预计到2030年,RCEP将使各成员国收入增长0.6%,每年为地区增加2450亿美元收入,为地区增加280万个就业岗位,持续为区域经济注入活力。

亚洲经济体货币合作持续推进,助力提升各国国际收支流动性,为区域内经贸投资关系构建提供金融支持

近年来亚洲经济体在货币合作上的力度不断加大。本币互换安排对促进亚洲经济体间贸易、投资使用本币计价、结算发挥了积极作用。近九成企业在对外贸易和

投资中使用人民币进行计价和结算，人民币、港币、日元是受访企业在对外贸易和投资中计价和结算使用的前三大亚洲货币(图13)，新加坡元、韩元、泰铢、马来西亚元和印尼盾也排在前列。在环球银行金融电信协会(SWIFT) 2023年12月23日公布的2023年11月全球支付货币前二十名中，人民币(4.61%)、日元(3.41%)、港元(1.55%)、新加坡元(1.24%)、泰铢(1.09%)、马来西亚林吉特(0.42%)、新西兰元(0.34%)、菲律宾比索(0.29%)等亚洲货币上榜。人民币、日元、港元、新加坡元和泰铢分列第4、5、8、9、10位。

亚洲企业积极响应净零排放目标，认为绿色产业链不稳定、减排成果不能在碳排放权和碳信用市场上交易等是制约亚洲发展中国家绿色投资的瓶颈要素

2023年成为有记录以来最热的一年，亚洲的碳排放量约占全球的一半，肩负着艰巨的应对气变和绿色低碳转型的任务。49.3%的受访企业已经或者正在制定净零排放目标和时间表，29.58%的企业设定了与环境保护或气候相关的目标。但是，仍有21.13%的企业没有采取任何措施(图14)。

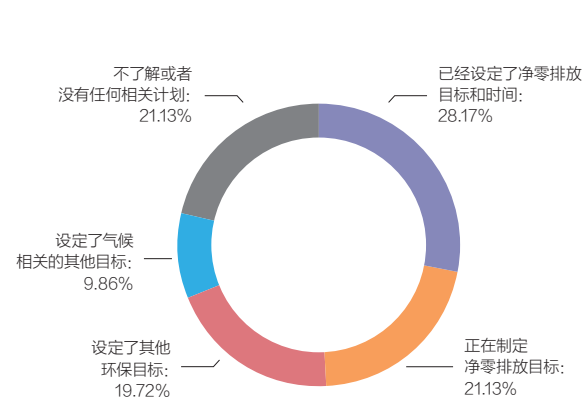
在影响对亚洲发展中国家绿色投资的瓶颈因素上，42.25%的受访者认为是绿色产业链不稳定，40.85%的受访者认为是减排成果不能在碳排放权和碳信用市场上交易，38.03%的受访者认为是政府没有明确的绿色产业发展规划和项目库，30.99%认为是关键绿色资源和技术定价过高，电力系统承载可再生能源能力弱、没有绿色产业补贴、获得包括发行绿色债券在内的绿色融资困难选择的人分别是18.31%、16.9%和16.9%(图15)。这说明，推进企业绿色转型时，当前保证绿色产业链可持续至关重要，碳配额与碳信用市场建设以及提供阶段性的绿色产业补贴将为绿色低碳转型提供重要激励。

三、绿色低碳制造业和数字经济是中国经济高质量增长的新引擎

多数受访者对2024年中国经济增长前景的判断处于乐观和相对乐观区间

三分之二的受访者对中国2024年宏观经济预期较

图14: 您所在企业是否设立了“实现净零排放”的目标和



为积极。25.35%的受访者持乐观态度，42.25%的受访者相对乐观，25.35%的受访者保持中性态度(图16)。

2023年，消费是中国经济增长的最主要动力，对经济增长的贡献率达82.5%，比上年提高43.1个百分点。受访者对2024年居民消费增长的看法总体偏中性，超过29%的受访者对2024年消费增长感到“乐观”或“相对乐观”，持中性态度的近33.33%(图17)。根据2月4日商务部最新数据显示，2023年中国全行业对外直接投资10418.5亿元人民币，同比增长5.7%(折合1478.5亿美元，同比增长0.9%)，对外投资合作平稳发展。受访者对2024年中国投资增长抱有较强的信心，接近45%的受访者对投资增长感到乐观或相对乐观，有38.3%的受访者持中性态度(图18)。2023年中国对外出口总额达到23.77万亿元人民币，同比增长0.6%，出口增长趋于平缓。展望2024年，受访者中近62%认为2024年中国的出口增速会大幅加快和小幅加快，17.02%认为会持平，约21%认为会小幅放缓或大幅放缓(图19)。

绿色低碳制造业和数字经济成为中国经济增长的新引擎

受访者对当前中国制造业可持续发展主要机遇的看法，一定程度上支撑了对制造业总体态度的判断。69.39%的受访者认为，绿色低碳制造业和数字经济服务业是2024年中国制造业的最大机遇，另外分别有

图15: 影响对亚洲发展中国家绿色投资的瓶颈因素有哪些？

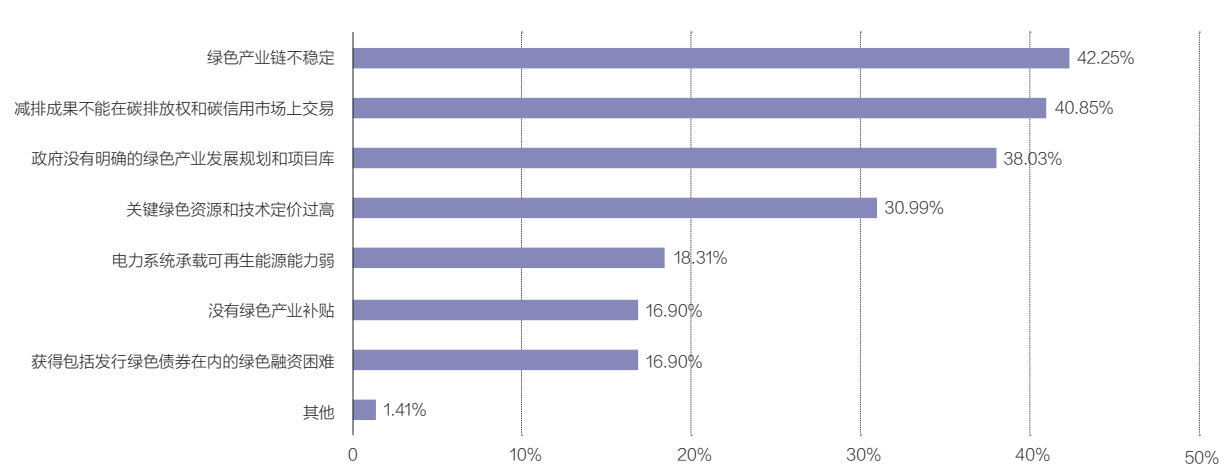


图16: 对2024年中国经济增长的预期

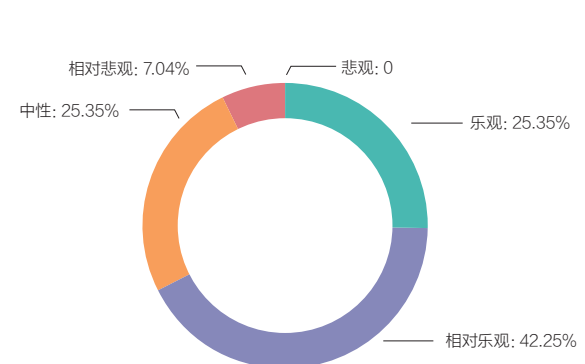


图17: 您对2024年中国居民消费增长的看法是：

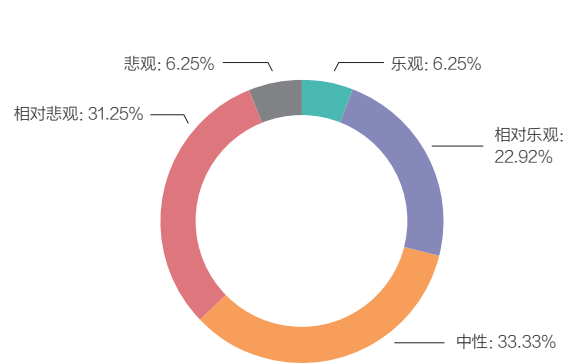


图18: 您对2024年中国投资增长的看法是：

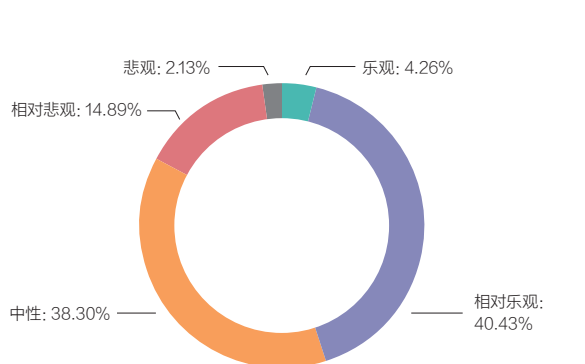


图19: 您认为2024年中国的出口增速会：

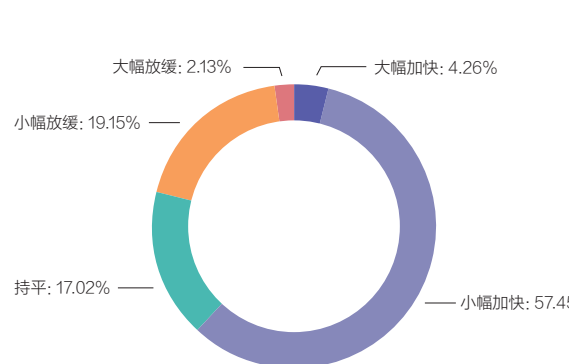


图20: 您认为2024年中国经济增长的产业新引擎将为:

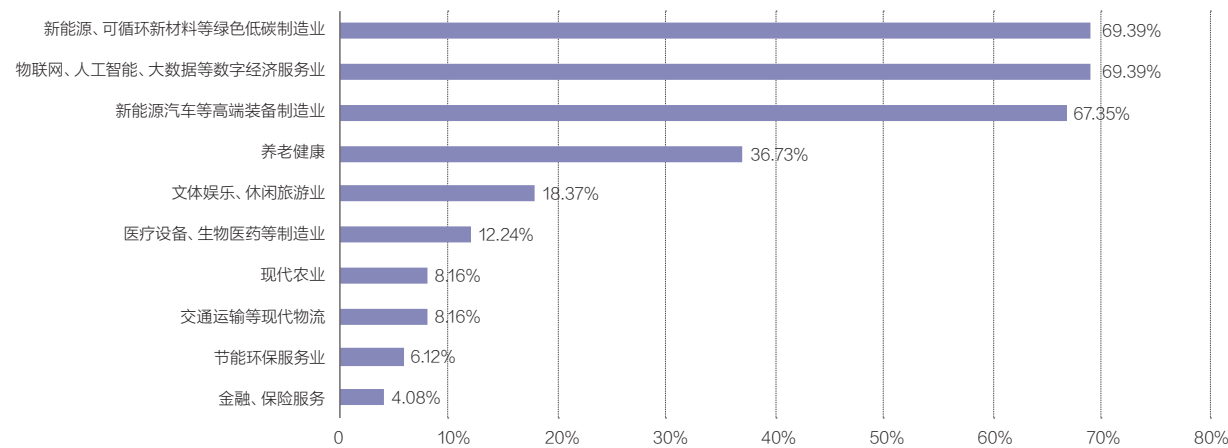
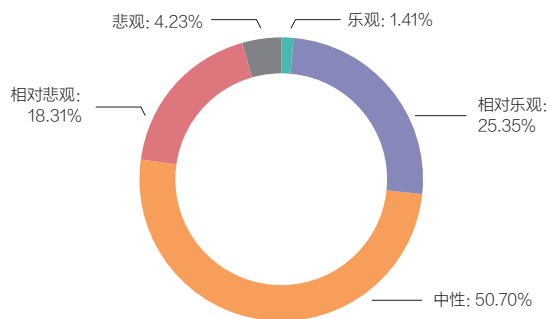


图21: 您对2024年中美关系走向的看法如何? (2023.10)

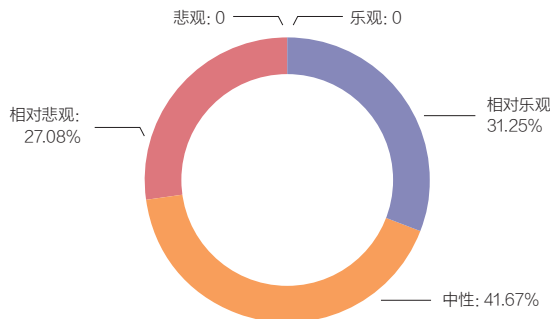


67.35%和36.73%的受访者认为新能源汽车发展、养老健康和文体娱乐、旅游业是最具成长前景的行业。此外, 医疗设备、生物医药等制造业、现代农业、交通运输等现代物流、节能环保服务业、金融、保险服务也被认为是中国经济增长的产业新引擎(图20)。

多数受访者对中美关系看法趋于中性

中美关系对中国发展的外部环境乃至亚洲贸易和投资有着重要影响。中美两国元首旧金山会晤代表中美关系出现了稳定的势头, 为两国关系的未来发展明确了方向。10月调查显示, 受访者中有26.76%的人对2024年中美关系走向持“乐观”或“相对乐观”的态度,

图22: 您对2024年中美关系走向的看法如何? (2024.1)



有50.7%的受访者持“中性”态度, 有22.54%的受访者对中美关系表示“相对悲观”或“悲观”; 1月调查结果对应的数字分别是相对乐观31.25%, 中性41.67%, 相对悲观27.08% (图21和图22)。

刚刚结束的中国“两会”通过的《政府工作报告》明确中国2024年经济发展的主基调为“稳中求进、以进促稳、先立后破”, 把增长目标定在5%左右。扩大内需, 推动高水平对外开放, 发展新质生产力以创新推动经济高质量发展稳定发展成为今年政府工作的重中之重。各方面政策协同发力将有力调动中国经济内生动力, 稳定市场预期, 进一步巩固和增强中国经济回升向好的态势。■

Global and Asian Economic Confidence Surveys¹

In 2023, the global situation was in a state of flux, and some regions experienced turmoil and unrest. The post-pandemic era failed to usher in a rapid economic recovery and witnessed a significant slowdown in trade and direct investment growth. The prospects for global economic growth have become more uncertain amid many elections to be held worldwide in 2024. However, the rapid rise in interest rates in major developed economies may come to an end, and the external environment of developing countries and emerging markets is expected to improve, with Asia still poised to generate much of the world’s growth momentum. How confident are Asian entrepreneurs about the outlook of the global and Asian economies against such a backdrop? What major uncertainties are they focusing on? What are the main factors that may affect Asian enterprises’ operation and development? Which countries, regions, and industries in Asia are most favored by entrepreneurs? What is China’s economic outlook in 2024, and which industries may become the new engines driving its growth? The Boao Forum for Asia Academy conducted two surveys on economic confidence in late October 2023 and mid-January 2024, involving 120 companies that are members and partners of the Forum. The strong support and help rendered by these members and partners are greatly appreciated.

According to the surveys, in an environment where the pandemic has left a “scarring effect,” geopolitical conflicts are intensifying, and many countries are grappling with high inflation, about two-thirds of the respondents believe that global economic growth will decelerate moderately or remain unchanged. The same proportion of respondents believe that trade and investment will accelerate moderately or remain

unchanged. The risks that the respondents are most concerned about are geopolitical conflicts and the adjustment of global industrial chains. The respondents are also concerned about the US election, extreme climate events, a credit crisis triggered by high global debt, and persistent high inflation. About 70% of the entrepreneurs surveyed are optimistic or relatively optimistic about Asia’s economic growth in 2024. Most of the companies surveyed plan to focus on China and ASEAN in 2024, gravitating towards investment in new-energy industries such as solar, wind and hydrogen energy, as well as energy storage, AI applications, smart manufacturing, infrastructure construction, core information and communications technology (ICT) such as chips and big data, transportation, and logistics. The five major factors that the surveyed entrepreneurs believe will affect their business operations and development are the intensified geopolitical tensions caused by the Russia-Ukraine and Israel-Palestine conflicts; the increasing risk of economic, trade and technological decoupling between China and the US; high global inflation and interest rates; the unstable supply of key minerals globally; and changes in regulatory policies. About 65% of the surveyed entrepreneurs have optimistic or relatively optimistic expectations for the Chinese economy in 2024. The view is that the optimization and adjustment of the country’s epidemic prevention and control policies in 2023, the increase in employment driven by economic recovery, the rebound in consumption, the size of the Chinese market, and the country’s first-mover advantages in green and low-carbon industries will support the rebound of the real economy. Risks and pressure points such as the US’ continued containment of China’s high-tech industries and China’s local government debt are the main concerns.

1. Note: Based on the findings of the questionnaire survey conducted by the Boao Forum for Asia Research Institute on forum partners and member units in January 2024 and the on-site entrepreneur confidence survey conducted at the Second Conference of Global Economic Development and Security Forum held in Changsha in October 2023.

I.The global economy entering a moderate growth cycle, geopolitical conflicts, anti-globalization further triggering turmoil, and adjustments in the global industrial chain, and elections in major countries are the most important sources of risk in 2024

About two-thirds of the respondents believe that global economic growth will decelerate moderately or remain unchanged; the same proportion of respondents believe that trade and investment will accelerate moderately or remain unchanged.

The global economy maintained a certain degree of resilience in 2023 even as it displayed a weak recovery as a whole. The Organization for Economic Cooperation and Development (OECD), World Bank, and International Monetary Fund (IMF) recently forecast global economic growth of 2.9%², 2.4%³, and 3.1%⁴, respectively, in 2024. A total of 42.86% of respondents believe that global economic growth will decelerate moderately in 2024, 22.45% think it will remain unchanged, 30.61% think it will accelerate moderately, and 4.08% think it will decelerate significantly (Fig. 1).

Regarding global trade, the United Nations Conference on Trade and Development (UNCTAD) estimates that global trade in 2023 contracted by approximately US\$1.5 trillion or 5% year-on-year to US\$31 trillion, and the outlook for 2024 remains “highly uncertain and generally pessimistic” due to factors like ongoing geopolitical tensions, escalating debt, and widespread economic fragility. A total of 47.92% of respondents believe that global trade will accelerate moderately in 2024, 25% believe that the growth rate will be the same as in 2023, 25% believe that it will decelerate moderately, and 2.08% think it will decelerate significantly (Fig. 2).

According to UNCTAD, global foreign direct investment (FDI) grew by 3% in 2023. Global cross-border investment will likely remain under pressure in 2024 amid factors such as the close correlation between FDI, global supply chains and international trade flows; geopolitical conflicts; declining profits of multinational companies; and external policy uncertainty. The surveys’ results show that opinions are divided in this regard. A total of 37.50% of respondents believe

Fig. 1: Respondents’ expectations for global economic growth in 2024

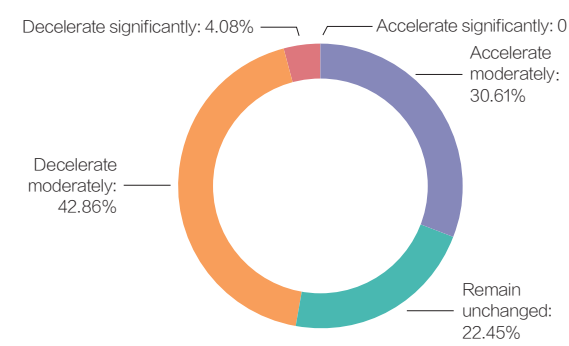


Fig. 2: Respondents’ expectations for global trade growth in 2024

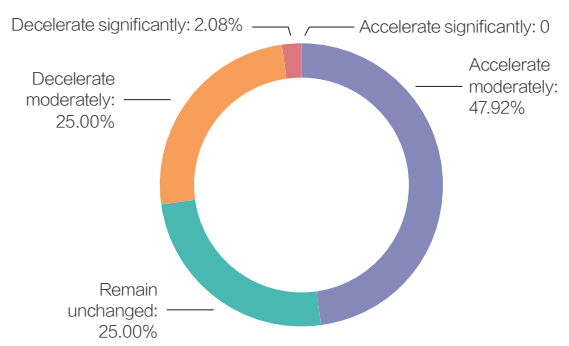


Fig. 3: Respondents’ expectations for global cross-border investment growth in 2024

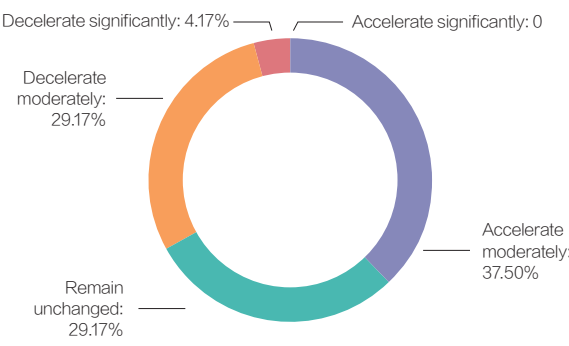


Fig. 4: What are the key factors driving global digital trade?

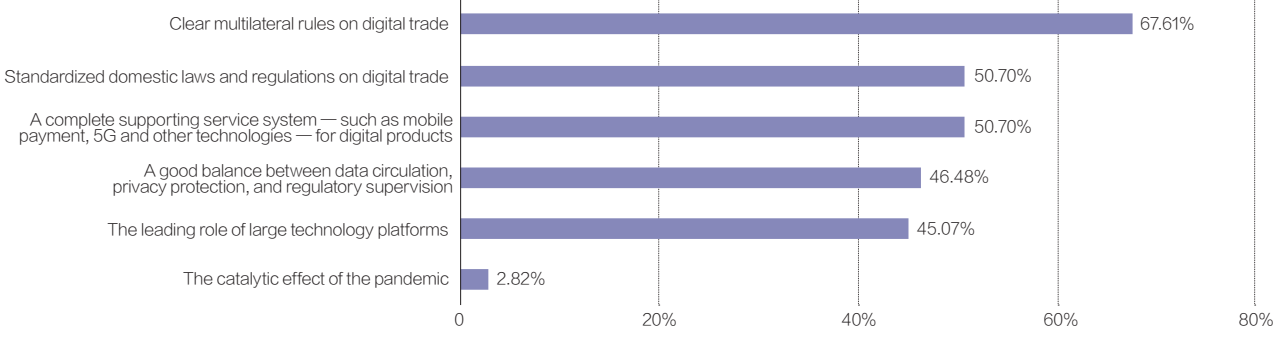


Table 1: Macroeconomic forecasts for Asia’s top 20 economies in 2024

Country	GDP growth rate(%)				Inflation rate(%)			Unemployment rate(%)
	IMF (Oct. 2023/Jan. 2024 update)	World Bank (Jan. 2024 update)	ADB (Dec. 2023 update)	OECD (Feb. 2024 update)	ADB (Dec. 2023 update, Dec. 2024 inflation)	IMF (Oct. 2023 update, 2024 annual inflation)	OECD (Feb. 2024 update, Dec. 2024 inflation)	IMF (Oct. 2023 update)
China	4.6	4.5	4.5	4.7	2.0	1.7	1.0	5.2
Japan	0.9	0.9	–	1.9	–	2.9	2.6	2.3
India	6.5	6.4	6.7	6.2	4.2	4.6	4.9	–
South Korea	2.3	–	2.2	2.2	2.5	2.3	2.7	3.2
Indonesia	5.0	4.9	5.0	5.1	3.0	2.5	2.5	5.2
Saudi Arabia	2.7	4.1	–	–	–	2.2	–	–
Turkey	3.1	3.1	–	2.9	–	62.5	49.3	10.1
Thailand	4.4	3.2	3.7	–	2.3	1.6	–	1.1
Singapore	2.1	–	2.5	–	3.0	3.5	–	1.8
United Arab Emirates	4.0	3.7	–	–	–	2.3	–	–
Vietnam	5.8	5.5	6.0	–	4.0	3.4	–	2.1
Malaysia	4.3	4.3	4.9	–	2.7	2.7	–	3.5
Philippines	6.0	5.8	6.2	–	4.0	3.2	–	5.1
Bangladesh	6.0	5.6	6.5	–	–	7.9	–	–
Iran	3.7	3.7	–	–	–	32.5	–	9.6
Pakistan	2.0	1.7	1.9	–	–	23.6	–	8.0
Iraq	2.9	4.2	–	–	–	3.6	–	–
Kazakhstan	3.1	4.3	4.3	–	8.7	9.0	–	4.8
Qatar	2.2	2.5	–	–	–	2.3	–	–
Kuwait	3.6	2.6	–	–	–	3.1	–	2.2

Note 1: The top 20 economies are ranked according to the US dollar GDP of the IMF–WE02023.10 database.
Note 2: IMF GDP growth rates in red are updated in January 2024, and those marked in black are updated in October 2023.
Compiled by: Boao Forum for Asia Research Institute

2.Note: <https://www.oecd-ilibrary.org/sites/0fd73462~en/index.html?itemId=/content/publication/0fd73462~en>
3.Note: <https://www.shihang.org/zh/publication/global-economic-prospects>
4.Note: <https://www.imf.org/zh/Publications/WEO/Issues/2024/01/30/world-economic-outlook-update-january-2024>

that global trade growth will accelerate moderately, 29.17% believe that it will remain unchanged, 29.17% believe that it will decelerate moderately, and 4.17% think it will decelerate significantly (Fig. 3).

The rapid advancement of digital technology has promoted the development of digital markets and digital platforms, and there are also high hopes that digital trade will become an important engine driving global trade growth. A total of 67.61% of respondents view clear multilateral rules on digital trade as the most critical factor driving global digital trade. Standardized domestic laws and regulations on digital trade and a complete supporting service system (such as mobile payment, 5G and other technologies) for digital products tie for second place (50.7%). A total of 46.48% of respondents believe that a good balance between data circulation, privacy protection and regulatory supervision is a critical factor, while another 45.07% think that it is the leading role of large technology platforms. The catalytic effect of the pandemic is no longer the main factor of concern (only 2.82%) (Fig.4). This shows that the formulation and implementation of multilateral and domestic rules on digital trade is the most important condition for the sustainable development of digital trade.

Geopolitical conflicts, turmoil and adjustments in the global industrial chain, and changes in the political situation of major countries represented by the US election

are the three major sources of risks for the global economy in 2024.

A total of 81.63% of respondents believe that the number one risk facing the global economy in 2024 is geopolitical conflicts, and 61.22% are concerned that anti-globalization will continue to force the restructuring and adjustment of the global industrial chain. A total of 34.69% of respondents are concerned about the impact of domestic political events in major countries such as the US election, and 24.49% of the respondents are concerned about extreme climate events, high global debt, and high inflation. The respondents are less worried about sharp fluctuations in commodity prices, energy crises, and unexpected events or other risks (Fig. 5).

II.Asian economic and trade cooperation, digital transformation, and green and low-carbon development will inject stability into the recovery of the world economy
Most respondents are optimistic or moderately optimistic about Asia's economic growth.

The IMF predicts that the average growth rate of Asian economies will slow to 4.2% in 2024 from 4.6% in 2023.⁵ The growth rate of China, India, Indonesia, Malaysia, Vietnam, Bangladesh, Mongolia, and the Philippines may be close to Asia's average growth rate or exceed it (refer to Table 1 for forecasts of major macroeconomic indicators for Asia's top 20

economies in 2024). About 70% of the entrepreneurs surveyed are optimistic or moderately optimistic about Asia's economic growth in 2024, while 5.63% are moderately pessimistic, and none were outright pessimistic (Fig. 6). Economic growth will be driven by strong domestic demand propelled by slowing inflation and continued improvement in trade. In 2023, the average manufacturing PMI in Asia was 50.7%, unchanged from the previous year. According to PMI data released by S&P and au Jibun Bank on Feb. 1 2024, manufacturing production and export sales increased in most regions in Asia at the beginning of 2024, manufacturing activities improved significantly, and demand in major markets gradually

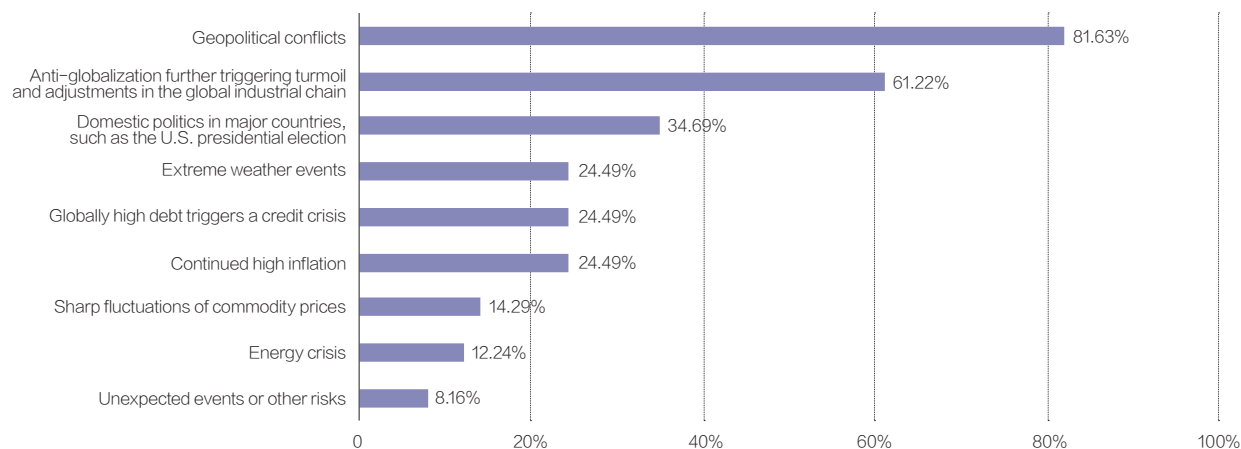
strengthened. As the Fed's rate hike cycle comes to an end, financial conditions will further ease through trade finance channels and portfolio flows. Most economies in Asia are expected to achieve solid growth in 2024.

ASEAN and China are the key areas of business expansion of the surveyed companies, and fields such as new energy and AI applications are most favored by investors.

A total of 74.65% of companies surveyed state that more than 20% of their business is concentrated in Asia. Some 75.51% believe that ASEAN is the Asian region with the highest growth visibility in 2024, while those that select Northeast Asia (China, Japan, South Korea, Mongolia, etc.) and South Asia (India, Pakistan, Bangladesh, etc.) each account for 34.69% of the companies surveyed. When asked specifically about the key regions for their business development in 2024, 28.77% of the respondents named ASEAN, while 27.4% plan to expand in China; 13.7% named South Asia; and 12.33% named Japan and South Korea. This shows that ASEAN and China, as the world's factories, are attracting cross-border investments from many enterprises (Fig. 7, 8 and 9).

New energy, AI, and smart manufacturing are the three most popular industries among investors. Nearly 60% of surveyed entrepreneurs name the new-energy industry, and more than half of the entrepreneurs are optimistic about AI applications and smart manufacturing. This points to the strong investment prospects of green and low-carbon development and the digital

Fig. 5: Judgment of main risks for the global economy in 2024



5.Note: <https://www.imf.org/en/Publications/REO/APAC/Issues/2023/09/27/regional-economic-outlook-for-asia-and-pacific-october-2023>

Fig. 6: What is your view on Asia's overall growth prospects in 2024?

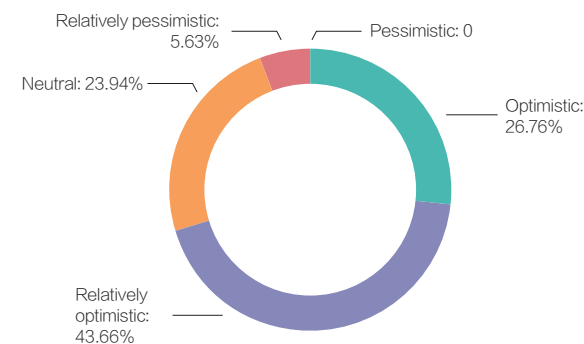
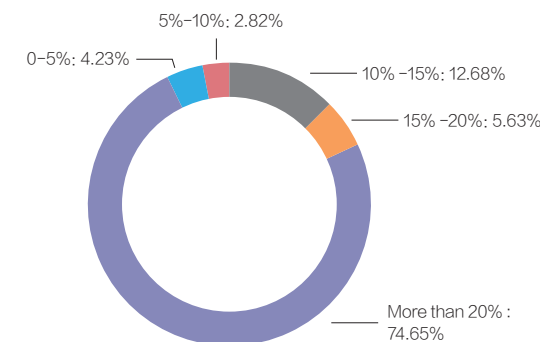


Fig. 7-8: To what extent is your company's business currently concentrated in Asia? In 2024, which Asian region is your planned focus for business expansion?

To what extent is your company's business currently concentrated in Asia?



In 2024, which Asian region is your planned focus for business expansion?

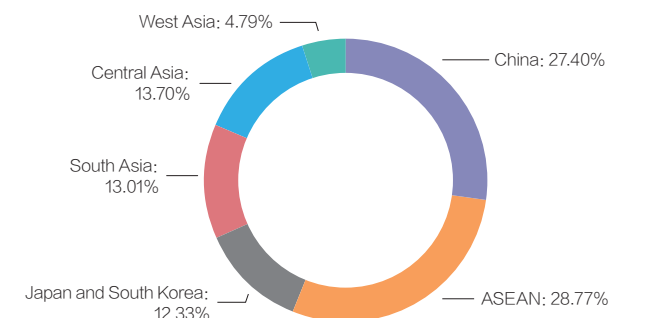


Fig. 9: Which Asian region will have the highest growth visibility in 2024?

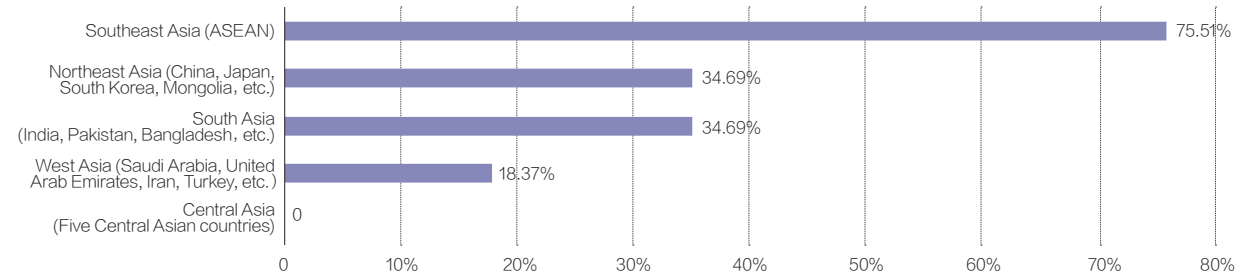


Fig. 10: Which of the following industries in Asia will be most favored by investors in 2024?

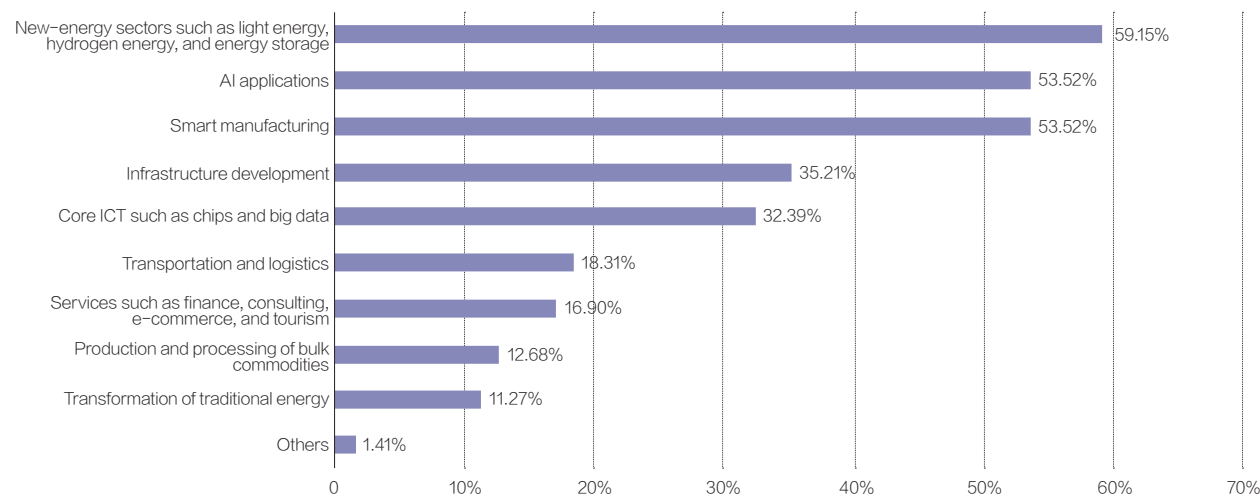


Fig. 11: What factors are you most concerned about affecting the operation and development of Asian companies in 2024?

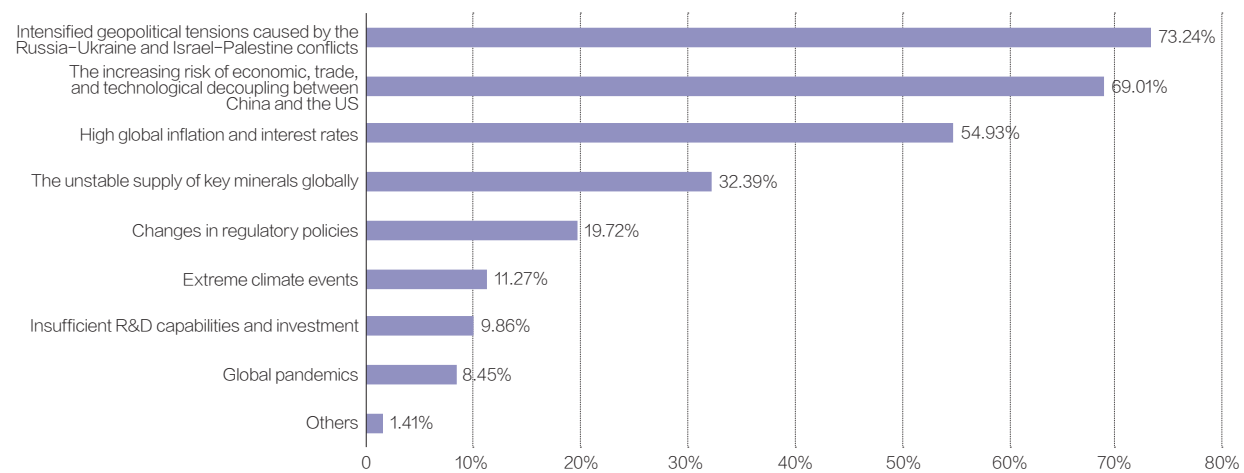
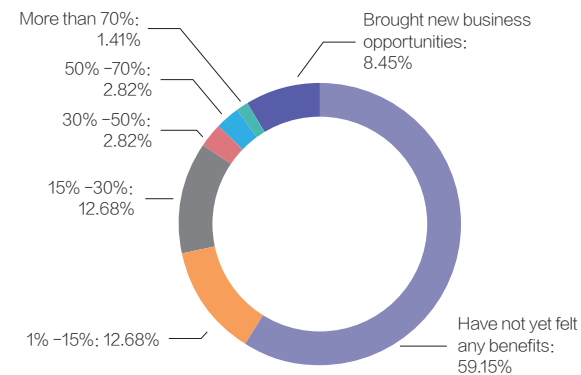


Fig. 12: To what extent has the Regional Comprehensive Economic Partnership (RCEP) brought benefits to your company?



economy in Asia (Fig. 10).

Asian countries are displaying strong momentum in the field of new energy, especially in electric vehicles (EVs) and related supply chains, which are expected to bring out significant growth potential. Chinese and South Korean companies are likely to reap huge profits in the field. According to data from China's General Administration of Customs, the country's exports of mechanical and electrical products reached 13.92 trillion yuan in 2023, an increase of 2.9%. Among them, exports of new-energy vehicles, lithium batteries, and solar cells exceeded the trillion yuan mark for the first time, totaling 1.06 trillion yuan, accounting for 58.6% of the total export value. At the same time, Japanese and South Korean electric-vehicle manufacturers are entering markets such as the UK and the US. This shows that Asia has made significant advances in green and low-carbon development, which has created opportunities for businesses.

In addition, the scale of Asia's digital economy continues to expand. Major countries see the digital economy as an important means to cope with the impact of the pandemic and enhance their economic development, and have accelerated their development of information infrastructure, semiconductors, AI, e-commerce, e-government, etc. The digital economy has ushered in a new development boom. Taking AI as an example, about a quarter of the world's AI companies hail from Asia. As of the first quarter of 2023, China accounts for 15% of global AI companies, India accounts for 5%, Israel accounts for 3%, and Singapore and Japan account for 2% each. Among the world's 181 AI unicorns, 26 are from China, 5 are from Israel, and India and Singapore account for

3 each. The four countries collectively account for more than 20% of the global share. Amid a downward trend in financing in most countries, artificial intelligence-generated content (AIGC) has become a popular investment and financing area.

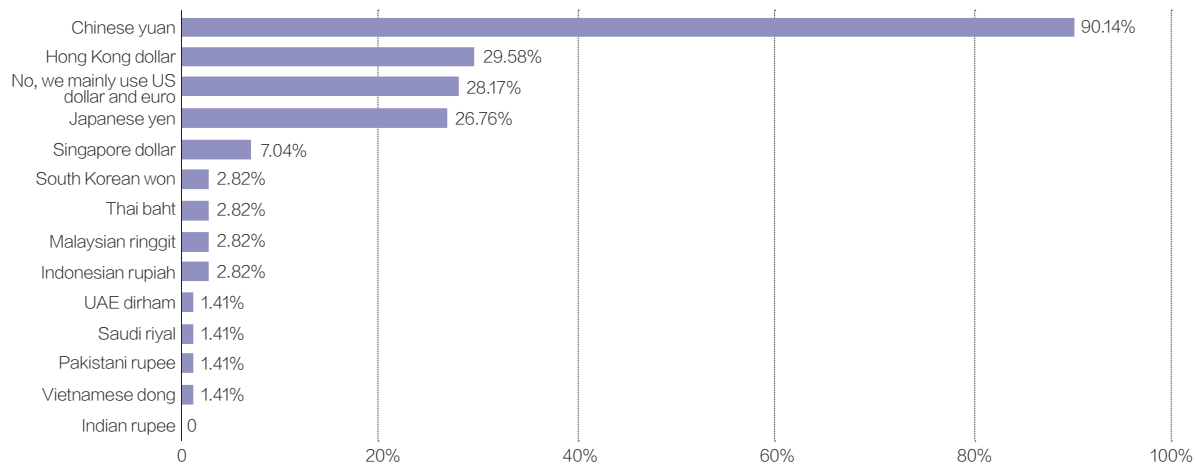
In terms of smart manufacturing, Asia leads the world in digital transformation and end-to-end integration of manufacturing businesses. Some 32% of Asian companies plan to establish a mature digital ecosystem in the next five years, compared with 15% of companies in Europe, the Middle East and Africa, and 24% in the Americas. Digital twin technology is gradually extending to multiple scenarios in the manufacturing industry. Asia leads the world in the development of the industrial robot market. According to the International Federation of Robotics (IFR), 553,000 industrial robots were newly installed in the world in 2022, a year-on-year increase of 5%. Of these newly installed industrial robots, 73% were installed in Asia. China, Japan, and South Korea are Asia's three largest industrial robot markets. In addition, infrastructure and semiconductors remain a popular field of development. Countries such as South Korea, Japan and India have introduced relevant policies and increased investment to promote the development of the chip manufacturing industry.

Geopolitical tensions intensified and the risk of economic, trade and technological decoupling between China and the US increased in 2023. About 70% of the entrepreneurs surveyed believe that this will affect the operations and development of Asian companies. Global inflation (54.93%), unstable supply of key minerals (32.39%), and regulatory policies (19.72%) are also key factors affecting the decisions of the companies surveyed (Fig. 11).

The RCEP continues to inject vitality into the regional economy and boost trade among countries in the region.

The Regional Comprehensive Economic Partnership (RCEP) negotiations were launched at the 2012 ASEAN Summit and the agreement was officially signed in November 2020. Its members include China, Japan, South Korea, Australia, New Zealand and the 10 ASEAN countries. The RCEP agreement entered into force on Jan. 1, 2022. More than a quarter of the respondents believe that the RCEP has brought 1%-30% revenue growth to their businesses since its implementation, and 12.68% of the respondents believe that it has boosted their revenue by more than 30% and has brought new business opportunities. However, nearly 60% of the companies surveyed say they have not yet felt the benefits brought by the RCEP (Fig. 12). According to

Fig. 13: What are the top three Asian currencies your company uses for pricing and settlement in foreign trade and investment?

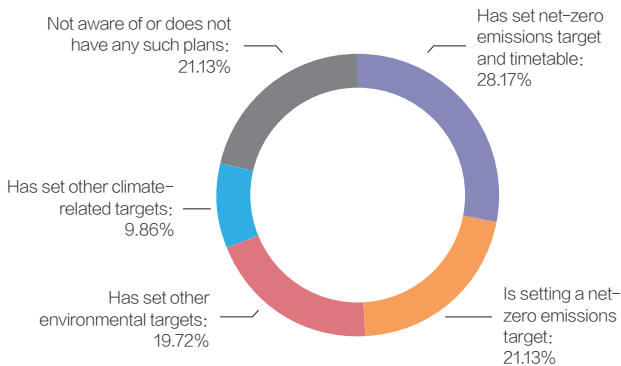


statistics from China’s General Administration of Customs, the country’s total imports and exports to the other 14 RCEP member states in 2023 totaled 12.6 trillion yuan, an increase of 5.3% compared with 2021 before the agreement entered into force. In the first 11 months of 2023, Cambodia’s trade under the RCEP framework soared to more than US\$26.5 billion, accounting for 61% of the country’s total international trade of US\$43 billion during the same period. According to a study by the Asian Development Bank, by 2030, the RCEP will increase the income of member economies by 0.6% while adding US\$245 billion and 2.8 million jobs to the regional economy, continuously injecting economic vitality into the region.

Monetary cooperation among Asian economies continues to advance, helping to improve the liquidity of each country’s balance of payments and providing financial support for the establishment of economic, trade and investment relations within the region.

Asian economies have continued to increase their monetary cooperation efforts in recent years. Local currency swap arrangements have played a positive role in promoting the use of local currencies for pricing and settlement of trade and investment among Asian economies. Nearly 90% of the companies surveyed use the Chinese yuan for pricing and settlement in foreign trade and investment. The Chinese yuan, Hong Kong dollar, and Japanese yen are the top three Asian currencies used by the companies surveyed for pricing and settlement in foreign trade and investment (Fig. 13). The

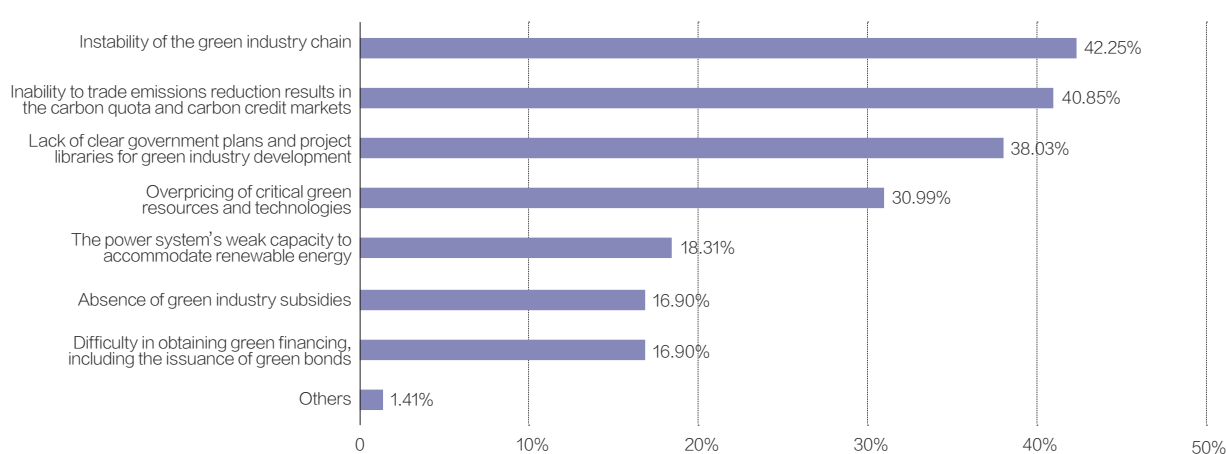
Fig. 14: Has your company set a target and timetable for achieving net zero carbon emissions?



Singapore dollar, South Korean won, Thai baht, Malaysian ringgit and Indonesian rupiah are also high-ranking currencies. The Asian currencies among the 20 most used currencies for international payments in November 2023 announced by the Society for Worldwide Interbank Financial Telecommunication (SWIFT) on Dec. 23, 2023 include the Chinese yuan (4.61%), Japanese yen (3.41%), Hong Kong dollar (1.55%), Singapore dollar (1.24%), Thai baht (1.09%), Malaysian ringgit (0.42%), New Zealand dollar (0.34%), and Philippine peso (0.29%). The Chinese yuan, Japanese yen, Hong Kong dollar, Singapore dollar and Thai baht ranked 4th, 5th, 8th, 9th and 10th, respectively.

Asian companies are actively pursuing net-zero emissions

Fig. 15: What are the bottlenecks affecting green investment in developing countries in Asia?



and believe that the instability of the green industry chain and their inability to trade emissions reduction results in carbon quota and carbon credit markets are bottlenecks that restrict green investment in developing countries in Asia.

2023 was the hottest year on record. Accounting for about half of the world’s carbon emissions, Asia shoulders the arduous task of coping with climate change and engaging in green and low-carbon transformation. A total of 49.3% of companies surveyed have set or are setting net-zero emission targets and timetables, and 29.72% have set goals related to environmental protection or the climate. However, 21.13% are yet to take any measures (Fig. 14).

Some 42.25% of the respondents believe that the instability of the green industry chain is a bottleneck affecting green investment in developing Asian countries. A total of 40.85% believe that it is the inability to trade emissions reduction results in the carbon emission rights and carbon credit markets; while 38.03% believe that it is the lack of clear government plans and project libraries for green industry development. A total of 30.99% believe that it is the overpricing of critical green resources and technologies; 18.31% believe that it is the power system’s weak capacity to accommodate renewable energy; 16.9% believe that it is the absence of green industry subsidies; and 16.9% believe that it is the difficulty in obtaining green financing, including the issuance of green bonds (Fig. 15). This shows that in the promotion of enterprises’ green

transformation, it is crucial to ensure the sustainability of the green industry chain. The construction of carbon quota and carbon credit markets and the provision of phased green industry subsidies will provide important incentives for green and low-carbon transformation.

III.Green and low-carbon manufacturing and digital economy are new engines for high-quality economic growth in China

Most respondents’ views of China’s economic growth prospects in 2024 are in the optimistic to moderately optimistic range.

Two-thirds of the respondents are relatively upbeat about China’s macroeconomic outlook in 2024. A total of 25.35% are optimistic, 42.25% are moderately optimistic, and 25.35% are neutral (Fig. 16).

Consumption was the most important force driving China’s economic growth in 2023, contributing 82.5% to growth, an increase of 43.1 percentage points from the previous year. The respondents’ views on household consumption growth in 2024 are generally neutral. A total of 29% of respondents are “optimistic” or “moderately optimistic” about consumption growth in 2024, while nearly 34% are “neutral” (Fig. 17). In 2023, China’s outbound investment grew steadily. The country’s overall outbound direct investment reached 1,041.85 billion yuan, a year-on-year increase of 5.7% (equivalent to US\$147.85 billion, a year-on-year increase of 0.9%), according

Fig. 16: What is your view on China’s growth outlook in 2024?

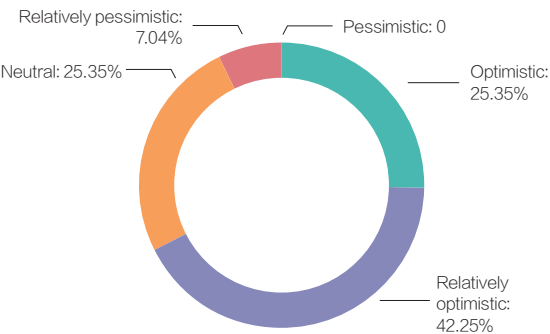


Fig. 17: What is your view on the growth of Chinese household consumption in 2024?

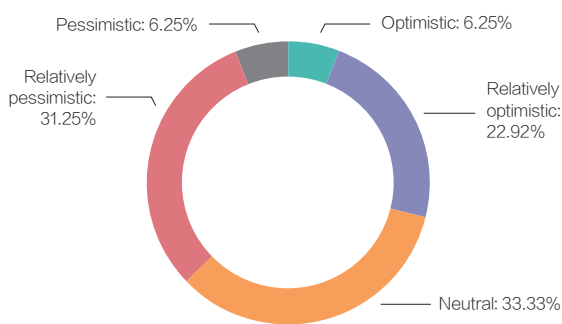


Fig. 21: What is your view on the direction of Sino-US relations in 2024? (Oct. 2023)

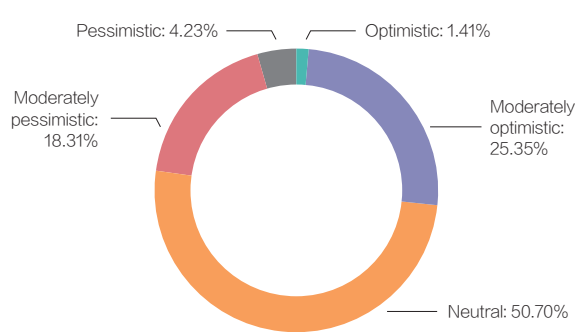


Fig. 22: What is your view on the direction of Sino-US relations in 2024? (Jan. 2024)

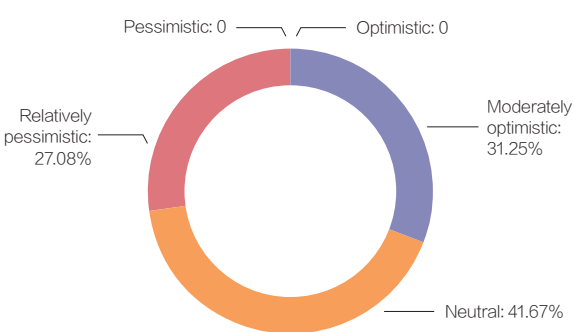


Fig. 18: What is your view on investment growth in China in 2024?

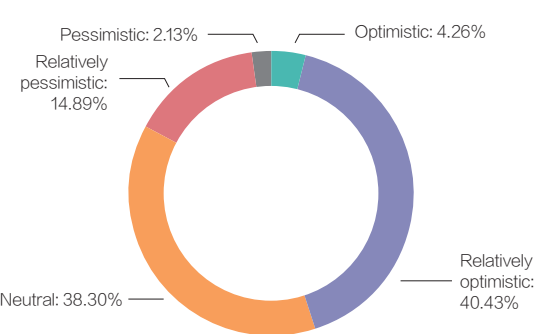


Fig. 19: Compared with 2023, how do you think China’s export growth will change in 2024?

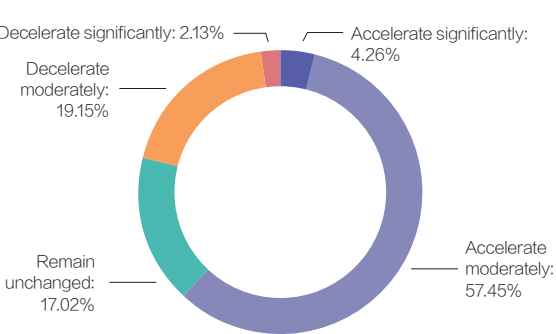
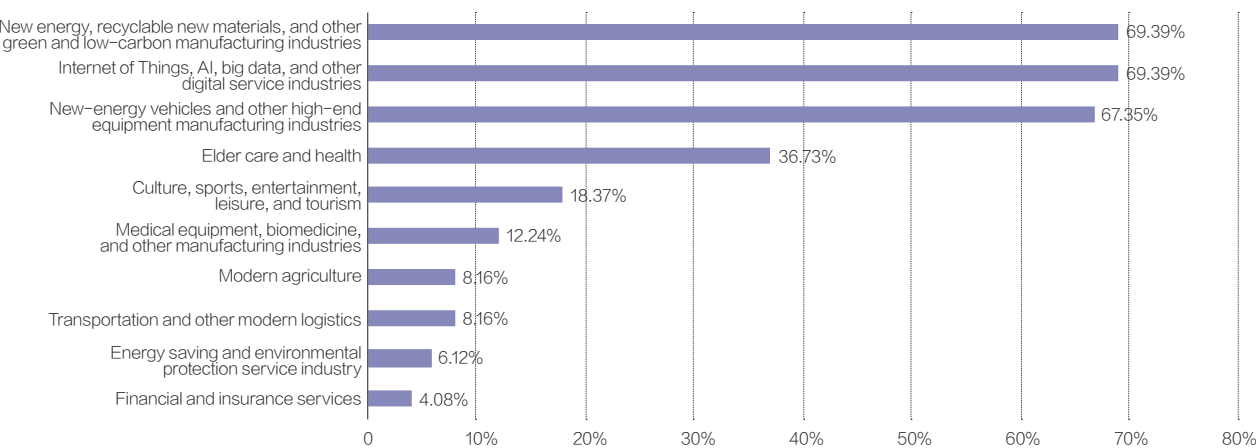


Fig. 20: What do you think will be the new industrial engines of China’s economic growth in 2024?



to the latest data from the Ministry of Commerce on Feb. 4. The respondents express confidence in China’s investment growth in 2024. Nearly 45% of the respondents are “optimistic” or “moderately optimistic,” and 38.3% are “neutral.” (Fig. 18) China’s export growth moderated in 2023. The country’s total exports reached 23.77 trillion yuan, a year-on-year increase of 0.6%. Looking forward to 2024, 61.71% of the respondents believe that China’s export growth will accelerate significantly or moderately in 2024, 17.02% believe that it will remain unchanged, and 21.28% believe that it will decelerate moderately or significantly (Fig. 19).

Green and low-carbon manufacturing and digital economy have become new industrial engines for China’s economic growth.

The views of the respondents on the current major opportunities for sustainable development of China’s manufacturing industry support their judgment of the overall manufacturing industry to a certain extent. Some 69% of the respondents believe that the biggest opportunities for China’s manufacturing industry in 2024 lie in green and low-carbon manufacturing and digital economy services. Also, 67% and 37% of the respondents respectively believe that new-energy vehicles, elder care and health, and culture, sports, entertainment and tourism are the industries with the strongest growth prospects. This reflects the respondents’ important recognition of the new development opportunities of the new-energy industry. Medical equipment, biomedicine and other manufacturing, modern agriculture, transportation and other modern logistics, energy-saving and environmental protection services, and financial and insurance

services are also considered to be the new industrial engines of China’s economic growth (Fig. 20).

Most respondents' views tend to be neutral on Sino-US relations

Sino-US relations have an important impact on the external environment of China’s development and on Asian trade and investment as a whole. The San Francisco meeting between the heads of state of China and the US pointed to stabilizing Sino-US relations and set a clear direction for the future development of relations between the two countries. In the October survey, 26.76% of the respondents are “optimistic” or “moderately optimistic” about Sino-US relations in 2024, while 50.7% are “neutral,” and 22.54% are “moderately pessimistic” or “pessimistic.” In the January survey, 31.25% are “moderately optimistic,” 41.67% are “neutral,” and 27.08% are “moderately pessimistic.” (Fig. 21, 22)

The Government Work Report adopted by China's just-concluded Two Sessions set the main theme of the country’s economic development in 2024 as "seeking progress while ensuring stability, promoting stability through progress, and establishing the new before abolishing the old." The country’s GDP growth target for the year is set at around 5%, and the top priorities of the government this year are to expand domestic demand, pursue high-level opening up, and develop new quality productive forces to promote high-quality and stable economic development through innovation. The coordinated effects of various policies will mobilize the endogenous driving force of China's economy, stabilize market expectations, and further consolidate and enhance China's economic recovery. ■

68+
部长级官员
Ministerial-Level
Officials

19+
国家领导人和
国际组织负责人
Heads of States
and International
Organizations

70+
国家和地区
States and Territories

开幕大会
Opening Plenary

论坛理事会
Meeting of BFA Board
of Directors

50+
分会
Sessions

1800+
参会代表
Delegates

6+
驻华使节和
驻华国际组织代表
Diplomatic Envoys
and Representatives
of International
Organizations in
China

论坛咨委会
Meeting of BFA Council
of Advisors

2
欢迎晚宴
Welcome Dinner

30+
理事咨委
Board of Directors &
Council of Advisors



会员大会
General Meeting of
Members



午餐会
Luncheon Meeting

90+
会员企业
Members

1160+
记者
Journalists

2
旗舰报告
BFA Flagship
Reports

双边会晤
Bilateral Meetings

16
合作伙伴企业
Partners

183+
媒体机构
Media

n
专访
Exclusive Interviews

21
媒体支持机构
Supporting Media

2+
新闻发布会
Press Conferences

截至2024年3月14日数据统计，最终信息请以现场为准。

博鳌亚洲论坛2024年年会

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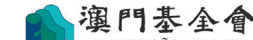
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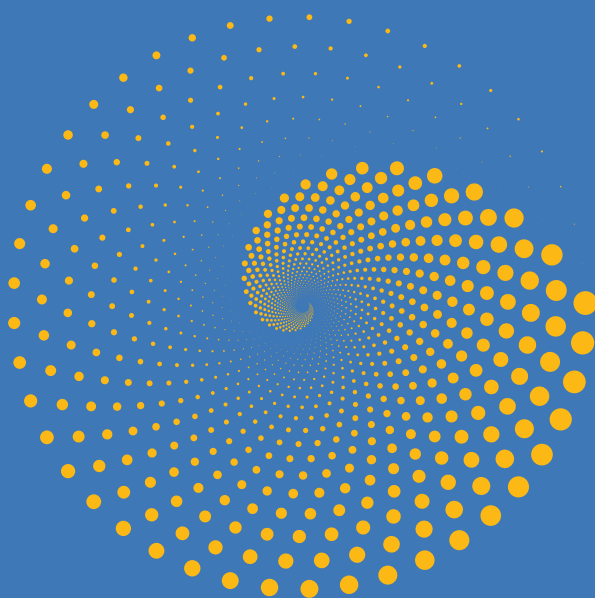
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