Special Feature A

Proceedings of the 2024 Asian Monetary Policy Forum

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The 11th Asian Monetary Policy Forum (AMPF) was held in Singapore over 23–24 May this year, bringing together distinguished members of the academic, financial sector and policy communities for discussions on several key issues concerning the global economy and monetary policy. This Special Feature provides an overview of selected contributions to the proceedings of the Forum.[2] These are:

- Professor David Autor's speech on the long-term implications of generative AI for the future of work;
- Professor Kenneth Rogoff's commissioned paper, which emphasised the importance of a global debt "supercycle" as a contributing factor to low productivity growth and interest rates over recent decades;
- Remarks by Professor Wang Gungwu on the historical and social underpinnings of China's current modernisation drive; and
- Professor Beatrice Weder di Mauro's review of the "too-big-to-fail" regulatory framework for global banks.

1 Artificial Intelligence and the Future of Work

Professor David Autor, Ford Professor of Economics at MIT, delivered the keynote speech on how Artificial Intelligence (AI) could affect jobs and the work of the future. Central to his thesis is the concept of worker expertise, which he defined as domain-specific knowledge or competencies needed to complete job tasks. He argues that the value of labour derives from the expertise required of a worker when using technology in a complementary way to human skills. Comparing road crossing guards with air traffic controllers as an example, the latter is paid a higher wage because the skills entailed in air traffic control take years to acquire—thereby making it scarce—whereas a crossing guard needs no training and certification.

Professor Autor next reviewed how the nature of labour scarcity had changed over the past two centuries. The First and Second Industrial Revolutions induced the replacement of previously scarce artisanal labour with a system of mass production whereby educated managers supervised workers who operated with machines in performing repetitive tasks. With significant advances in computerisation in the second half of the 20th century, the nature of work expertise was altered yet again, as businesses replaced costly labour involved in

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2 For full summaries of the sessions from the AMPF programme, please refer to the Forum Proceedings uploaded on the AMPF website.

clerical and administrative tasks with machines that can carry out repetitive tasks at high speed and progressively lower cost.

In recent decades, computerisation has led to “job polarisation” by automating many job tasks performed by production, office, clerical and administrative workers. In contrast, professional and technical jobs were more difficult to automate and in fact experienced an increase in demand because they required access to information and decision-making in the form of elite expertise. At the other end of the income distribution, lower-pay jobs such as cleaning, security and food services were also preserved because they require what Karl Polanyi called “tacit knowledge”, or skills that cannot be articulated clearly and hence cannot be automated readily. The result has been some hollowing-out of middle-income jobs.

Turning to the likely impact of AI, Professor Autor noted that there are presently two camps of thought. The first is optimistic about the potential for AI to augment expertise, while the second is pessimistic because of its potential to displace human workers. The conflicting views stem from the nature of AI, as a technology capable of autonomous learning and executing creative tasks that are normally performed by people, including those for which formal algorithms or rules do not exist. However, AI does not necessarily understand the rules; rather, it learns them inductively and in an unstructured manner, from examples embedded in training data. An instructive illustration is unravelling the highly complex folding structure of proteins in human bodies. For half a century, this task eluded researchers in structural biology but was finally solved in 2000 by Google’s Deep Mind tool, a milestone that AI accomplished by learning from examples and making predictions that matched protein structures calculated from experimental data.

Previous waves of technology have amplified the value of expertise. For example, radar technology enhanced the human expertise of air traffic controllers. However, improved technologies have also replaced labour and skill, such as when the invention of GPS supplanted the knowledge of roads and places of taxi drivers and devalued their expertise. In view of these diametrically opposed outcomes, it is too early to predict whether AI will reduce the inequality of productivity, who it will displace—non-users or experts—and whether it will make expertise more, or less valuable. Indeed, even at this early stage, AI has demonstrated the potential to amplify human expertise for some occupations while supplanting expertise in others.

Professor Autor argued that it us up to us to determine whether AI is likely to amplify or replace expertise, just as mastery of nuclear fission could be used for weaponry or energy generation. The eventual impact of AI will depend on what type of investments are made in the technology. Professor Autor also put forth his view that fears over advances in AI leading to the end of work are misplaced. In many economies, labour is becoming increasingly scarce due to lower fertility rates and reduced immigration. AI can be harnessed for tasks such as assistance with elder care, providing real-time information to workers doing maintenance and repair jobs, and making education more immersive. Moreover, not all new technology is amenable to the automation of human labour. Instead, work in the future will continue to rely on expertise and new skill sets that were not previously available. Rather than replicate human capabilities, the best application of AI is to use it to extend our ability to do things in novel ways.

2 Debt Supercycle versus Secular Stagnation

The Commissioned Paper for AMPF 2024 was presented by Professor Kenneth Rogoff, Professor of Economics and Maurits C. Boas Chair of International Economics at Harvard University. The background to this paper was a debate in the aftermath of the Global Financial Crisis (GFC) of 2008–09, on whether advanced economies have entered a state of secular stagnation. Proponents of secular stagnation argue that long-run structural factors are primarily to blame for low economic growth and low interest rates. Lawrence Summers has posited that a structural shortfall in global demand and a rise in savings since the 1970s, alongside a long-term slowdown in innovation (as argued by Robert Gordon of Northwestern University), has weighed on interest rates and productivity growth.

Professor Rogoff has been a sceptic of the secular stagnation hypothesis since it first surfaced in macroeconomic policy discussions. Criticising the "remarkable" consensus in the economics profession that productivity growth would be permanently lower, he had written a paper as early as 2010 that predicted that AI would be the next big innovation. He tended to agree with historians like Joel Mokyr who maintained that history suggests a very different outcome from the productivity pessimists. Specifically, they recognised that the prerequisites for productivity growth are very much in place today: interactions between innovation and the instruments for scientific discovery, widespread access to information, and institutions that allow ideas to develop and flourish.

Instead, Professor Rogoff argues that a global debt supercycle provides a more convincing explanation for low economic growth and interest rates since the GFC. In his account, the current debt supercycle may have extended as far back as the early 1990s, when Japan experienced a huge run-up in debt that culminated in the bursting of the asset bubble and deflation. Similarly, signs of the global debt supercycle were clearly present in the US housing market bubble in the 2000s, which subsequently led to the subprime mortgage problem and the GFC. To evaluate the economic impact of the debt build-up, one should not only look at the behaviour of output but also other indicators like equity prices, housing prices, unemployment and current accounts, which took two to five years after the GFC to recover to pre-crisis norms. Thereafter, the global debt supercycle extended to Europe in the 2010s. In recent years, the supercycle has spread to China, which engaged in massive fiscal stimulus in 2009 that led to huge investments in real estate and infrastructure which were not unwound and have continued to this day. These investments are not only outsized by international standards, but they have also increased China's per capita living space to a level on par with many advanced economies. Debt-financed housing investment in turn led to a sharp run-up in house prices alongside an increase in household and local government debt, precipitating a housing crisis after the COVID-19 pandemic.

Professor Rogoff warned that high government debt levels could lower economic growth in the long run. It would reduce the government's capacity to fight recessions, crowd out private investment, and push up long-term interest rates. In turn, this could lead to political economy pressures on the central bank to keep interest rates low.

The question of whether secular stagnation, or the global debt supercycle, is the primary contributor to recent low growth has significant implications for macroeconomic policy. Proponents of secular stagnation have argued that because structural factors will continue to keep long-term interest rates low, higher debt is likely to be optimal and almost a free lunch since debt servicing costs will be persistently low. Under these conditions, using government debt to finance high-return infrastructure investments would seem to be particularly attractive, as it would facilitate higher economic growth. Therefore, governments in advanced countries can afford to finance additional spending by raising debt rather than increasing taxes. Alongside this view, there has been a shift in academic thinking towards relying much more on fiscal policy and creative ways have been proposed to use fiscal policy at the zero lower bound of interest rates. The debate has also extended to monetary policy, since quantitative easing is a form of fiscal policy that could be used to shorten the maturity structure of government debt (and keep debt servicing costs low).

To shed light on whether the decline in real interest rates since the GFC is likely to persist over the longer term, Professor Rogoff and his co-authors examine an extended historical dataset. Although interest rates had been on a downward secular trend since the 14th century, they have been lower than their long-term trend over recent decades. This observation is likely to have reflected very loose financial policies, rather than structural factors such as demographics and productivity. In fact, it was the zero lower bound that led to the wrong belief in low and stable real interest rates, inflation and exchange rates. Furthermore, the role of financial repression in keeping Treasury rates low may have been understated: without it, some recent research has shown that the US debt-to-GDP ratio would have risen to 144% instead of falling to 66% after the Second World War.

While Professor Rogoff conceded that there is significant uncertainty over the long-term path of real interest rates, he contends that there are good reasons why they would return to the previously higher levels.

- Government borrowing to finance healthcare expenditures for aging populations will raise interest rates.
- Increased geopolitical instability in the world would also force governments to increase defence expenditures with the same effect.
- The transition costs of green environmental policies would increase pressures on government budgets.
- If inflation is persistently higher in the post-pandemic period, term premia are also likely to increase.

In conclusion, Professor Rogoff asserted that instead of secular stagnation, the events before and after the Global Financial Crisis led to a persistent debt supercycle which has by now extended to all the major economies and remains unresolved today.

3 Modernising China

Speaking on the theme of “Modernising China”, the eminent historian Professor Wang Gungwu, University Professor at National University of Singapore, delivered an account of China’s history in the last two centuries. He traced the country’s modernisation journey back to the turmoil and humiliation of the Opium Wars of the 1840s, which triggered half a century and more of reform among the Mandarin elites of the country. To the Mandarins, China’s cultural foundations were sound but it needed to use Western learning (i.e., science and technology) to modernise, make China strong again and fend off enemies, starting with efforts to build a modern navy and lifting the ban on Chinese travelling overseas. However, this endeavour failed to save the Qing dynasty.

With the fall of the dynasty, the approach to modernising China shifted from reform to revolution, a concept that the Chinese understood to be a change of dynasty or regime. Sun Yat-sen’s 1911 revolution, overthrowing the Manchu dynasty, turned China into a “sovereign state" in the eyes of the world, but this did not achieve the objective of modernisation and political unification. Instead, it plunged China into a period of turmoil, with warlords and military factions ruling the different parts of the country until some stability returned with the Nationalist victory of 1928. With the added shock generated by the Japanese invasion of China beginning in 1931, disillusionment among young Chinese rose further. Instead of the limited approach to revolution that characterised the period between the fall of the Qing dynasty and the start of the Japanese invasion, the Chinese began to realise that a more drastic form of revolution was required to modernise China, requiring a total break with the country's Confucian past.

With this awakening, three ideas that were previously alien to Chinese culture took root. The first was democracy, which the Chinese interpreted in their own way, although the basic notion was widely accepted. The second was the equation of modernisation with Westernisation, meaning that China had to abandon its ancient civilisation and become Westernised. The third and most important was the ideology of nationalism. This notion had no precedent in China in light of its imperial history, but was felt to be needed to save China from conquest by Japan, even to the extent of drawing inspiration from the fascist states in Italy and Germany.

Increasingly, however, the population (especially the young) channelled their nationalist sentiment towards communism, viewing it as another form of Westernisation. The Communists appealed to the peasantry for support in their fight against the Japanese and later the Nationalists. Mao Zedong's most important achievement was gaining the sympathy and support of the peasant class in a form of "class struggle" against the landlords, the propertied class and the capitalists. To everyone's surprise, they won the civil war in 1949, even though the Nationalists were much better equipped and were supported by the Western powers. The Communist victory fully entrenched this second revolution in China, whereby the country started afresh and embarked on a total reset of the Chinese mentality, culture and social traditions that would cut China off from its past and change it altogether.

With the failure of the Great Leap Forward and the Cultural Revolution, however, economic growth and standards of living fell sharply. Amid dire economic conditions, Deng Xiaoping brought back the reform agenda. But this was a different type of reform, which emphasised that the 1949 revolution was correct but mistakes were made by Mao Zedong, which could be rectified through a more gradualist reform agenda. Deng's reforms succeeded in restoring the Chinese economy on its path towards convergence with the advanced economies. As a result, China has now reached a stage of modernisation where it can be selective in what to learn from the West. Of the changes that had transpired in the past few decades, Professor Wang was of the view that most of them could be characterised by the old doctrine of "Chinese foundations and Western learning". The current maxim is that "the present and the past are both usable" for progress, an idea that the Chinese have embraced fully. In this eclectic way, the Chinese people's national culture is modern, but remains identifiably Chinese through its links with the past.

4 Revisiting "Too-Big-to-Fail"

The failure of Credit Suisse (CS) in 2023 represented the first time that a global and systemically important bank collapsed after the "too-big-to-fail" (TBTF) framework was developed in the aftermath of the GFC. Few people foresaw the failure of a giant institution like CS, which subsequently led to questions over the credibility and effectiveness of the TBTF framework. In her policy note, Professor Beatrice Weder di Mauro, President of the Centre for

Economic Policy Research and Professor of International Economics at Geneva Graduate Institute, distilled the lessons to be learnt from the crisis.

The TBTF framework took the view that no bank should be too big to fail, from which it followed that the remedial measures to be taken were to focus on building capital (since the banking crisis was one of solvency) and on cross-border resolution. The first entailed increasing both the quantity and quality of capital buffers as part of new Basel banking regulations. Furthermore, banks' strength was to be assessed using both risk weights and leverage ratios. Regarding cross-border resolution, the issues concerned living wills, stress testing and international crisis management committees that would be set up to deal with crises in global banks. In Switzerland, the TBTF framework distinguishes between a viable bank and a non-viable bank. When the equity ratio of a viable bank diminishes to 7%, contingent bonds are automatically subjected to write-down and the bank is recapitalised as a going concern. Should the bank fail to recover, the supervisor activates the point of non-viability, leading to the write-down of bail-in bonds. Debt holders transition into new shareholders, and the restructured entity embarks on a phase of restructuring and downsizing.

In the case of CS, a deal was struck in March 2023 for UBS to buy CHF 3 billion worth of CS shares alongside a CHF 16 billion bail-in of contingent bonds. In addition, liquidity support of about CHF 250 billion was provided by the Swiss National Bank and an emergency law was enacted to make available a public liquidity backstop to insure the central bank against possible losses for funding in resolution. CS was the first test of the TBTF framework but the option chosen was a distress merger with UBS instead of a bail-in resolution. As a result, there were doubts about whether the TBTF framework would have worked. Recovery options did not work and although the bail-in of contingent bonds was activated, the point of non-viability was not.

Professor Weder di Mauro suggested two main lessons to be learnt from the CS episode—the bail-in resolution has to be more robust and there is a need for a more stringent recovery regime. With respect to the first, a liquidity backstop was not in place and had to be implemented through an emergency law. Second, a full bail-in over a short period of time is a very complex and challenging process. While a merger or partial sale of distressed assets might be preferable to a bail-in, such strategies often require more time for negotiation and implementation.

In view of these considerations, Professor Weder di Mauro proposed early intervention under a special recovery regime that could be automatically triggered by a set of indicators such as capital or market-based metrics, to avoid the problem of "too-little-too-late" whereby banks' management and regulators take a "wait-and-see" attitude. Bank supervisors should also be given intervention powers that surpass normal circumstances, including the ability to suspend calls on additional contingent bonds. Since the activation of the recovery regime may lead to a withdrawal of deposits, measures to mitigate the risk of runs are necessary, including mechanisms to restore confidence.

5 Sum-Up

In keeping with past editions of the Forum, AMPF 2024 focused on important issues framing the current backdrop for monetary policy and international financial conditions. While a consensus on the drivers of low interest rates over recent decades has not been reached, the Commissioned Paper nevertheless brought much empirical and historical evidence to bear on the issue. This is a useful exercise given the practical and policy importance of the debate. In addition, this year's forum tackled another issue of current relevance, namely whether AI will displace the work of the future. Again, there is no clear answer to the question at present, but the arguments and evidence adduced shed much light on the question. Finally, the last two sessions of the Forum dealt with the future of China's modernisation process and the lessons to be learnt from the first test of the TBTF framework. In doing so, they provided many insights to the participants of AMPF 2024.