

GLOBAL MACROPRUDENTIAL POLICY: NAVIGATING UNCERTAINTY IN A FRACTURED WORLD ECONOMY

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The authors express their heartfelt gratitude to Prof. Peter Drysdale (ANU), Prof. Shiro Armstrong (ANU), Prof. Sabyasachi Kar (IEG), Prof. Pravakar Sahoo (IEG), Dr. Sushil Kumar Sen (IEG), Prof. Basanta Kumar Pradhan (IGIDR), Mr. Jason Tabarias (ANU), Mr. Rojan Joshi (ANU), Mr. Owen Crofts (ANU) and Mr. Ganesh Sivamani (CSEP), for their comments, feedback, and suggestions. All errors are our own. The authors declare no conflict of interest.

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Abstract

The global economy confronts an unprecedented convergence of structural headwinds threatening medium-term growth and financial stability. This paper examines six critical dimensions of macroprudential policy: productivity enhancement through structural reform and technological adoption; restoration of a rules-based multilateral trading system; preservation of monetary policy credibility; rebuilding depleted fiscal and financial buffers; management of sovereign debt vulnerabilities; and addressing demographic shifts through labour market reform.

Synthesising academic literature, multilateral institutional research, and policy analysis, the paper argues that traditional macroeconomic tools prove insufficient in this "polycrisis"—a confluence of sluggish productivity growth, geopolitical fragmentation, trade protectionism, eroded policy buffers, and climate transition pressures. Fiscal buffers depleted by successive crises leave economies exposed to future shocks, while WTO paralysis undermines global value chain predictability. Developing economies face disproportionate vulnerabilities: unsustainable debt dynamics, limited green technology access, and restricted countercyclical capacity.

The paper recommends an integrated macroprudential approach combining domestic structural reforms with enhanced international cooperation in trade governance, climate financing, and debt restructuring. The international community must provide expanded debt relief and preferential green technology access to prevent widening development divides. Renewed prosperity requires political commitment to equitable reform and sustained global economic cooperation.

Keywords: Macroprudential policy; Geopolitical fragmentation; Sovereign debt vulnerability; Monetary policy credibility; Productivity stagnation; Trade protectionism; Demographic headwinds

Executive Summary

The global economy faces a confluence of structural headwinds that threaten medium-term growth prospects and financial stability. Sluggish productivity growth, escalating trade protectionism, geopolitical fragmentation, and depleted policy buffers have converged to create an environment of heightened vulnerability (IMF, 2024a; World Bank, 2024). Climate change imperatives add another layer of complexity, particularly for developing economies with limited access to green financing and technology (IPCC, 2023; OECD, 2023a). This policy brief examines six critical dimensions of macroprudential policy required to navigate these challenges: productivity enhancement through structural reform and technological adoption; restoration of a rules-based trading system; preservation of monetary policy credibility; rebuilding fiscal and financial buffers; managing sovereign debt vulnerabilities in constrained fiscal environments; and addressing demographic shifts through labour market reforms and migration policies.

The brief argues that traditional macroeconomic tools alone prove insufficient in this environment (Blanchard and Summers, 2019; Bernanke, 2022). Instead, a comprehensive macroprudential approach integrating structural, financial, and social policies offers the most promising pathway to resilience. Success requires coordinated international action, particularly in trade governance and climate financing, alongside domestic reforms tailored to specific country circumstances (G20, 2023; BIS, 2023). For developing economies facing the sharpest constraints, the international community must provide enhanced debt relief mechanisms and preferential access to green technologies to prevent widening of the global development divide (UNCTAD, 2024; Stiglitz and Rashid, 2023).

Introduction: The polycrisis context

The global economy has entered what some observers term a "polycrisis"—multiple, interacting disruptions that amplify one another's effects (Tooze, 2022; Lawrence et al., 2022). Growth forecasts across major economies remain subdued, with the International Monetary Fund projecting global growth to settle below historical averages (IMF, 2024a). This sluggishness stems not from cyclical factors amenable to traditional demand management but from deeper structural constraints: declining productivity growth, aging populations in advanced economies, policy uncertainty stemming from geopolitical realignment, and the massive resource reallocation required for climate transition (Summers, 2023; Aiyar et al., 2023).

Compounding these challenges, policy buffers lie eroded from successive crisis responses (Reinhart and Rogoff, 2009; BIS, 2023). Central banks in advanced economies spent much of the 2010s with policy rates near zero, while fiscal deficits expanded dramatically during the pandemic (Gourinchas et al., 2021). Developing economies face even tighter constraints, with many experiencing unsustainable debt dynamics and limited fiscal space for countercyclical measures (IMF, 2024b; Kose et al., 2022). The margin for policy error has narrowed considerably.

Geopolitical fragmentation threatens the post-1945 architecture of international economic cooperation (Baldwin, 2022; WTO, 2023). Trade wars, industrial policy competition, and sanctions regimes fragment global value chains and create inefficiencies. The shift from "just-in-time" to "just-in-case" supply chain management, while reducing vulnerabilities to specific disruptions, imposes costs through redundancy and reduced specialization gains (Javorcik, 2020; Freund et al., 2023).

Climate change operates simultaneously as a physical threat, a transition challenge, and a potential constraint on development (IPCC, 2023). Developing economies, which contributed least to historical emissions, face the highest adaptation costs and the greatest difficulty accessing green technologies and climate financing (Bhattacharya et al., 2022; Songwe et al., 2022). Without addressing this asymmetry, climate imperatives could perpetuate or worsen global inequality.

Against this backdrop, macroprudential policy must evolve beyond its traditional focus on financial system stability to encompass broader economic resilience. The following sections examine six critical policy domains.

I Productivity Enhancement: Structural Reform and Technological Adoption

Productivity growth has decelerated across advanced economies since the 2008 financial crisis, a phenomenon often termed "secular stagnation" (Summers, 2014; Gordon, 2016). Total factor productivity growth in OECD countries averaged less than one percent annually through the 2010s, half the rate of previous decades (OECD, 2023b). This slowdown predates recent shocks, suggesting deep structural causes (Cette et al., 2022; Brynjolfsson and McAfee, 2014).

Several factors inhibit productivity growth. Regulatory barriers protect incumbent firms from competition, particularly in services sectors (Gutierrez and Philippon, 2019). Land use

restrictions and occupational licensing requirements reduce labour mobility (Molloy et al., 2017; Kleiner and Krueger, 2013). Inadequate infrastructure—both physical and digital—constrains business efficiency (Calderón and Servén, 2008). Education systems fail to impart skills demanded by modern labour markets, creating mismatches that leave productive capacity underutilized (Autor, 2019; OECD, 2023c).

The productivity challenge proves even more acute in developing economies, where large informal sectors, weak institutions, and infrastructure gaps prevent firms from reaching efficient scale. Access to frontier technologies remains limited by intellectual property regimes, capital constraints, and human capital deficits.

Addressing these constraints requires comprehensive structural reforms. Product market liberalization should reduce barriers to entry, particularly in network industries and professional services (Conway and Nicoletti, 2006; Bourles et al., 2013). Empirical evidence suggests that countries with less restrictive product market regulation experience faster productivity growth. Competition policy must adapt to digital markets, where network effects and data advantages create natural tendencies toward concentration (Tirole, 2020; Furman et al., 2019).

Infrastructure investment represents both a demand-side stimulus and a supply-side productivity enhancer (Aschauer, 1989; Bom and Ligthart, 2014). However, fiscal constraints require careful prioritization. Digital infrastructure—broadband networks, data centres, digital payment systems—often delivers higher returns than traditional infrastructure, particularly in developing economies where leapfrogging opportunities exist (Hjort and Poulsen, 2019; Mensah and Traore, 2023). Public investment should focus on areas where private investment proves insufficient due to positive externalities or natural monopoly characteristics.

Education reform must address both quantity and quality. Universal secondary education remains unachieved in many developing countries, while even advanced economies struggle with skill mismatches. Vocational training programs linked to employer needs, continuous adult education, and STEM emphasis in curricula help align human capital formation with labour market demands. Governments should also facilitate private sector training through tax incentives and co-financing arrangements.

Technology diffusion from frontier to laggard firms represents a critical channel for aggregate productivity growth (Andrews et al., 2016; Akcigit and Ates, 2021). Many economies exhibit large within-sector productivity dispersion, with leading firms approaching global frontiers while most firms lag far behind. Policies promoting knowledge spillovers—research and development tax credits, university-industry collaboration, intellectual property frameworks balancing innovation incentives with diffusion—can accelerate catch-up (Hall et al., 2010; Bloom et al., 2019).

For developing economies, technology transfer proves essential. Current intellectual property regimes often impede access to productivity-enhancing technologies (Dani Rodrik, 2022; UNCTAD, 2023). International agreements should incorporate provisions for compulsory licensing and technology sharing, particularly for climate-related innovations. Development finance institutions should prioritize projects facilitating technology adoption and should provide technical assistance alongside financing.

II Restoring the Rules-Based Trading System

The multilateral trading system faces its gravest crisis since its inception (Hoekman, 2022; WTO, 2023). Unilateral tariff increases, export restrictions, subsidy competitions, and the weaponization of trade policy for geopolitical ends undermine the predictability that enabled global value chain development (Bown, 2022; Evenett and Fritz, 2023). The World Trade Organization's dispute settlement mechanism remains paralyzed, removing a crucial enforcement mechanism.

Protectionist pressures arise from multiple sources. Domestic political economy factors drive demands for trade barriers to protect declining industries and communities experiencing trade-induced displacement (Autor et al., 2020; Rodrik, 2018). Geopolitical competition encourages reshoring and friend-shoring to reduce dependencies on potential adversaries (Sullivan, 2023; Farrell and Newman, 2019). Industrial policy activism reflects beliefs that strategic sectors require government support to compete globally (Rodrik, 2023; Juhász et al., 2023).

However, the costs of protectionism mount quickly. Tariffs function as regressive consumption taxes, disproportionately burdening lower-income households (Amiti et al., 2019; Fajgelbaum et al., 2020). They also raise input costs for domestic producers, reducing competitiveness. Restrictions on service trade and investment impede productivity growth by limiting competition and technology transfer. Most fundamentally, protectionism sacrifices specialization gains that constitute the primary benefit of international trade.

Non-tariff barriers increasingly dominate trade restrictions. Regulatory divergence, discriminatory standards, burdensome customs procedures, and state subsidies distort trade flows while proving harder to discipline than tariffs (Ederington and Ruta, 2016; Fontagné et al., 2022). Services trade faces particularly high barriers despite comprising the majority of economic activity in advanced economies.

Revitalizing the trading system requires addressing both traditional and emerging challenges. Tariff reduction should resume through plurilateral negotiations when consensus proves unattainable. Disciplines on industrial subsidies must be strengthened, with enhanced transparency requirements and dispute settlement procedures. The WTO should prioritize restoring its dispute settlement system, even if this requires institutional reforms to address great power concerns.

Non-tariff barrier reduction demands regulatory cooperation. Mutual recognition agreements, where countries accept each other's standards when they achieve equivalent objectives, can reduce compliance costs without compromising legitimate regulatory goals. Harmonization efforts should focus on areas where network effects make common standards particularly valuable, such as digital trade, data governance, and technical standards for emerging technologies.

Trade agreements should incorporate adjustment assistance provisions to address distributional consequences (Rodrik, 2018; Autor et al., 2020). While trade creates net benefits, it generates concentrated costs for workers and communities in import-competing industries. Programs providing retraining, relocation assistance, and income support can mitigate adjustment costs while maintaining political support for openness. Evidence suggests that adjustment assistance

proves most effective when provided proactively rather than reactively (Kara Reynolds, 2021; Hyman, 2018).

Developing countries require special and differential treatment reflecting their structural constraints. Longer implementation periods, exemptions for food security measures, and flexibilities for industrial policy experimentation recognize developmental imperatives. However, these provisions should incorporate graduation mechanisms to prevent indefinite divergence from common rules.

Climate considerations must be integrated into trade governance. Border carbon adjustments, while protecting domestic climate policies from competitive disadvantage, risk becoming disguised protectionism. International coordination on carbon pricing and regulatory standards can reduce tensions while advancing climate objectives (Nordhaus, 2021; OECD, 2023d). Trade policy should also facilitate green technology diffusion through reduced tariffs on environmental goods and intellectual property flexibilities.

III Monetary Policy Credibility and Central Bank Independence

Central bank credibility, painstakingly built over decades, faces threats from multiple directions (Goodfriend, 2007; Balls et al., 2018). Prolonged periods of unconventional monetary policy blurred lines between monetary and fiscal policy (Bernanke, 2020; Borio, 2023). Pressure for central banks to support fiscal authorities, finance climate transitions, or pursue industrial policy objectives challenges institutional independence (Tucker, 2018; Dikau and Volz, 2021). In some jurisdictions, political interference has already compromised monetary policy autonomy.

Credibility matters because expectations shape economic outcomes (Sargent and Wallace, 1981; Woodford, 2003). When central banks enjoy credibility, inflation expectations remain anchored even when inflation temporarily overshoots targets. This anchoring provides space for countercyclical policy and reduces the output costs of disinflation (Bernanke, 2022; Gali, 2015). Conversely, credibility loss necessitates costly recession to re-establish monetary discipline.

Recent inflation episodes tested central bank credibility. Many central banks initially characterized inflation as transitory, maintaining accommodative policy longer than optimal (Summers, 2022; Gopinath, 2022). Subsequent aggressive tightening triggered financial stress and recession concerns. While inflation has moderated, the episode revealed vulnerabilities in policy frameworks and communication strategies.

Preserving monetary policy credibility requires reaffirming commitment to price stability as the primary objective. While central banks appropriately consider financial stability and may incorporate climate risks into prudential frameworks, these objectives should not compromise price stability mandates (BIS, 2011; Hanson et al., 2011; Svensson, 2018). Clear hierarchies of objectives prevent mission creep that dilutes accountability.

Institutional safeguards protect independence. Governance structures should insulate monetary policymakers from political pressure through long, non-renewable terms, restrictions on dismissal, and budgetary autonomy. Central bank communications should transparently

explain policy decisions and trade-offs, building public understanding and support for institutional independence.

Central banks face particular challenges in developing economies. Weaker institutions, thinner financial markets, and greater exposure to external shocks constrain policy space. Inflation targeting frameworks that work well in advanced economies may prove less suitable where supply shocks dominate and fiscal dominance threatens. These economies may require intermediate targets, such as exchange rate stabilization, until institutional capacity strengthens.

Financial stability considerations complicate monetary policy. The 2008 financial crisis demonstrated that price stability does not ensure financial stability; asset bubbles can develop despite low inflation. However, using interest rates simultaneously for price stability and financial stability creates instrument insufficiency problems. Macroprudential tools—capital requirements, loan-to-value limits, countercyclical buffers—should address financial stability, allowing monetary policy to focus on price stability.

The unwinding of unconventional monetary policy poses distinct challenges. Large central bank balance sheets, acquired through quantitative easing, create interest rate risk and potential fiscal implications. Exit strategies must balance normalizing balance sheets against financial stability risks and fiscal costs. Communication becomes crucial to prevent taper tantrums and market volatility.

Digital currencies present both opportunities and risks for central bank credibility (BIS, 2021; Carstens, 2021). Central bank digital currencies could enhance payment system efficiency and financial inclusion. However, poorly designed CBDCs risk bank disintermediation, privacy concerns, and operational vulnerabilities (Brunnermeier and Niepelt, 2019; Auer et al., 2022). Central banks should proceed deliberately, learning from pilot programs before large-scale implementation.

IV Rebuilding Adequate Policy Buffers

Depleted policy buffers leave economies vulnerable to shocks (IMF, 2024a; Obstfeld, 2023). Fiscal deficits expanded dramatically during the pandemic, pushing debt ratios to levels previously seen only during major wars (Gourinchas et al., 2021; Abbas et al., 2011). Interest rates, while having risen from pandemic lows, remain constrained relative to historical norms in many advanced economies. Foreign exchange reserves in some developing countries prove insufficient to weather capital flow volatility.

Adequate buffers serve multiple functions. They provide space for countercyclical policy during downturns, preventing destabilizing procyclical adjustments. They reassure markets about debt sustainability, reducing risk premiums and borrowing costs. They allow time for measured responses to shocks rather than forced fire sales and disorderly adjustments.

Rebuilding fiscal buffers requires sustained consolidation during favourable conditions. Growth-friendly consolidation emphasizes expenditure rationalization and tax base broadening over indiscriminate cuts or distortionary tax increases (Alesina et al., 2019; Guajardo et al., 2014). Reducing inefficient subsidies, particularly for fossil fuels, simultaneously improves

fiscal positions and climate outcomes (Coady et al., 2019; IMF, 2023). Tax expenditure reviews often identify provisions that cost revenue without achieving policy objectives.

However, fiscal consolidation entails short-term growth costs that complicate political economy. Gradual adjustment paths, clearly communicated and rule-based, can enhance credibility while minimizing output losses. Fiscal rules incorporating cyclical adjustments allow automatic stabilizers to operate while ensuring medium-term sustainability. Independent fiscal councils can monitor compliance and provide accountability (Debrun et al., 2017; Kopits, 2011).

Structural reforms complement fiscal consolidation by enhancing growth potential. Pension reforms addressing demographic pressures improve long-term fiscal sustainability. Labor market reforms increase employment, expanding the tax base. Product market liberalization boosts productivity, raising the denominator of debt-to-GDP ratios. These reforms prove politically difficult but fiscally essential.

For developing economies, external buffers matter as much as fiscal buffers. Foreign exchange reserves provide insurance against sudden stops in capital flows (Calvo, 1998; Aizenman and Lee, 2007). However, reserve accumulation imposes opportunity costs, as resources invested in low-yielding foreign assets could finance domestic development. The optimal reserve level balances insurance benefits against opportunity costs, typically expressed as covering several months of imports or short-term external debt.

Regional financing arrangements can reduce individual country reserve needs through risk pooling. The Chiang Mai Initiative in Asia and various African arrangements provide examples (Kawai and Lombardi, 2012; Haggard, 2013). However, these mechanisms often prove insufficient during systemic crises when multiple members face simultaneous pressures. Enhanced international monetary cooperation, through expanded IMF lending facilities, could reduce global demand for reserves while providing more effective crisis insurance.

Financial sector buffers require equal attention. Capital adequacy requirements ensure banks can absorb losses without threatening systemic stability. Countercyclical capital buffers, raised during booms and released during stress, provide macroprudential space (BCBS, 2017; Admati and Hellwig, 2013). Liquidity requirements ensure banks can meet short-term obligations without fire sales. Stress testing identifies vulnerabilities before they crystallize.

However, financial regulation faces a fundamental trade-off: safer financial systems provide less credit and intermediation services. Calibration must balance stability against efficiency. International coordination through the Basel framework prevents regulatory arbitrage while allowing national discretion for country-specific circumstances (Goodhart, 2011; Claessens et al., 2013).

V Managing Sovereign Debt Vulnerabilities in Constrained Fiscal Space

Sovereign debt vulnerabilities represent the most acute macroeconomic challenge for many developing countries (Reinhart and Rogoff, 2009; IMF, 2024b). Prohibitive debt servicing costs consume resources needed for development and social spending. Rollover risks create

vulnerability to market sentiment shifts. Multiple countries have already entered debt distress, unable to service obligations on current terms (UNCTAD, 2024; Kose et al., 2022).

Several factors contributed to current debt problems. Low interest rates following the 2008 financial crisis encouraged borrowing, including from commercial creditors offering less concessional terms than traditional official lenders (Gelpern et al., 2021; Horn et al., 2021). The pandemic necessitated emergency spending financed through debt. Rising interest rates and dollar appreciation dramatically increased debt servicing burdens (Avdjiev et al., 2020; IMF, 2024b). Weak governance in some countries led to borrowing financing unproductive expenditures rather than growth-enhancing investments.

Debt distress imposes severe costs. Governments cut essential services, infrastructure investment stalls, and poverty reduction reverses. Uncertainty depresses private investment. Attempting to inflate away debt proves tempting but destroys monetary credibility. Default damages creditworthiness for years, limiting future market access.

Addressing debt vulnerabilities requires country-specific approaches reflecting different circumstances. Countries with sustainable debt but liquidity pressures need temporary financing to smooth adjustment. The IMF's traditional role provides such support, though conditionality sometimes proves excessively procyclical. Enhanced lending facilities with more realistic growth assumptions and longer repayment periods could better balance sustainability and development.

Countries with unsustainable debt require restructuring. However, current restructuring mechanisms function poorly. Creditor coordination proves difficult with diverse creditor bases including bilateral creditors, multilateral institutions, and private bondholders. Holdout problems—where some creditors refuse restructuring hoping to recover full value—delay agreements and impose costs (Buchheit et al., 2013; Gelpern et al., 2021). The G20 Common Framework attempted to streamline restructuring but has processed cases slowly and without sufficient debt relief (Bhattacharya et al., 2022; Stiglitz and Rashid, 2023).

Several reforms could improve debt restructuring. Collective action clauses in bonds facilitate creditor coordination. Comparable treatment across creditor classes ensures fair burden-sharing (Krueger, 2002; Sobel, 2016). However, China's emergence as a major bilateral creditor complicates comparability given opacity around loan terms. Greater transparency regarding debt stocks and terms would help identify vulnerabilities earlier and facilitate restructuring when needed.

Debt-for-climate swaps offer innovative financing. Creditors reduce debt service obligations in exchange for debtor commitments to climate mitigation or adaptation investments (Rajan, 2023; Songwe et al., 2022). These arrangements can simultaneously address debt sustainability and climate imperatives. However, monitoring mechanisms must ensure funds genuinely support climate objectives rather than fungibly replacing other expenditures.

Preventing future debt crises requires improved debt management. Countries should establish debt management offices with expertise to evaluate borrowing terms and manage risks. Borrowing should finance productive investments generating returns exceeding borrowing costs. Lengthening debt maturity reduces rollover risk. Diversifying the creditor base prevents over-dependence on any single source.

Revenue mobilization deserves greater emphasis. Many developing countries collect tax revenues below levels comparable to their development level. Strengthening tax administration, reducing evasion, and broadening tax bases can sustainably improve fiscal positions. International tax cooperation, including minimum corporate tax rates and information exchange, prevents races to the bottom and base erosion (Cobham and Janský, 2020; Zucman, 2014; OECD, 2021).

VI Addressing Demographic Headwinds

Demographic shifts profoundly shape medium-term economic prospects. Advanced economies face aging populations as fertility rates fall below replacement and life expectancy rises (Bloom et al., 2015; Lee and Mason, 2011). Working-age population shares decline, reducing labor inputs to growth. Age-related spending on pensions and healthcare accelerates, straining fiscal sustainability (Turner, 2009; OECD, 2023e). Developing economies exhibit greater demographic diversity: some face similar aging pressures while others benefit from demographic dividends as working-age populations expand.

Population aging constrains potential growth through multiple channels. Labor force growth slows or reverses. Savings rates may decline as dissaving retirees constitute larger population shares. Productivity growth could suffer if aging workforces prove less adaptable to technological change, though evidence on age-productivity relationships remains mixed.

Increasing labour force participation offers the most direct response. Female labour force participation remains below male participation in many countries. Barriers include discriminatory laws, cultural norms, inadequate childcare, and gender wage gaps. Removing legal restrictions, providing subsidized childcare, ensuring equal pay for equal work, and offering parental leave can narrow participation gaps (Bertrand, 2018; Goldin, 2021; Blau and Kahn, 2017). Evidence suggests these measures pay for themselves through expanded tax bases and reduced dependency ratios.

Older worker participation should increase as life expectancy rises. Many countries retain mandatory retirement ages designed when life expectancies were decades shorter. Eliminating such mandates, while protecting workers unable to continue, extends working lives. Flexible retirement allowing gradual reduction in working hours eases transitions. Age discrimination laws prevent productive older workers from facing employment barriers.

Immigration offers another channel for expanding labour forces (Peri, 2016; Kerr and Kerr, 2017). Countries facing severe labour shortages could benefit from selective immigration attracting workers in high-demand occupations. However, immigration proves politically contentious and generates integration challenges. Successful immigration policy requires careful design balancing economic needs, security concerns, and social cohesion.

Immigrant integration determines whether immigration delivers economic benefits (Card, 2001; OECD, 2023f). Language training, credential recognition, and discrimination prevention help immigrants contribute productively. Settlement patterns matter: concentrating immigrants in specific neighbourhoods can create ghettos hindering integration, while thoughtful dispersal policies promote mixing and knowledge transfer. Infrastructure investments should accompany immigration to prevent local service strains generating backlash.

Skills mismatches waste productive capacity when workers lack competencies demanded by employers. Mismatches arise from educational systems disconnected from labour markets, rapid technological change rendering skills obsolete, and geographic immobility preventing workers from relocating to opportunity. Addressing mismatches requires coordination between educators and employers, continuous adult learning opportunities, and reducing barriers to geographic mobility.

Automation simultaneously threatens employment in routine occupations and creates opportunities in roles complementary to innovative technologies. Policy should facilitate transitions rather than resist technological change. Social insurance systems must adapt to more frequent career changes. Lifelong learning programs help workers acquire new skills (Acemoglu and Restrepo, 2019; Autor, 2019). Experimenting with universal basic income or negative income taxes could provide security during transitions, though fiscal costs and work incentive effects require careful evaluation.

Pension reform proves essential for fiscal sustainability. Pay-as-you-go systems, where current workers finance current retirees, face insolvency as dependency ratios rise. Responses include raising retirement ages, reducing benefit generosity, and increasing contribution rates. Politically, such reforms prove difficult since they impose visible costs on current workers and retirees (Gruber and Wise, 1999; Turner, 2009). Automatic indexation of retirement ages to life expectancy depoliticizes adjustment (OECD, 2023e; Queisser and Whitehouse, 2006). Funded pension systems, where workers save for their own retirement, shift demographic risk but introduce financial market risk and transition costs.

VII Conclusion: Toward Integrated Resilience

The challenges outlined above are interconnected, requiring integrated rather than siloed policy responses (IMF, 2024a; Blanchard and Summers, 2019). Productivity growth eases fiscal pressures by expanding tax bases. Effective trade systems facilitate technology diffusion supporting productivity. Monetary credibility anchors inflation expectations, reducing risk premiums on government debt. Demographic reforms expand labour forces and improve fiscal sustainability.

International cooperation proves essential (G20, 2023; BIS, 2023). Trade benefits depend on multilateral commitment to openness. Climate financing requires transfers from advanced to developing economies. Debt restructuring needs creditor coordination. Technology diffusion requires intellectual property frameworks balancing innovation and access (UNCTAD, 2023; Bhattacharya et al., 2022).

However, countries should not wait for international coordination before acting. Structural reforms, prudent macroeconomic management, and institutional strengthening deliver benefits regardless of global environment. Building resilience through diversified economies, strong institutions, and adequate buffers positions countries to weather shocks from external sources.

The path forward requires political courage to enact reforms imposing short-term costs for long-term gains. It requires honest communication about trade-offs rather than promising painless solutions. It requires inclusive growth ensuring that adjustment burdens do not fall

disproportionately on vulnerable populations (Rodrik, 2018; Stiglitz, 2019). Meeting these challenges will determine whether the global economy navigates current headwinds toward renewed prosperity or succumbs to stagnation and fragmentation.

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