Good evening. It is a great honor to be here to deliver this year’s Stavros Niarchos Foundation Lecture. I would like to thank Adam Posen and the Stavros Niarchos Foundation for so kindly inviting me—and a special thanks to Larry Summers for his warm words of introduction.

Over the past 35 years, the Peterson Institute has made its mark by working on policies that can help make globalization beneficial and sustainable. And, of course, the late Stavros Niarchos was thinking and acting globally long before the term globalization was coined.

I know I may be preaching to the choir tonight in rallying support for globalization—I guess we will find out during the Q&A.

Still, with so many questioning whether globalization and interconnectedness are worth the trouble, and some seeing only trouble, I think it is important to assess what more globalization can do to boost living standards. What will it take to reap the benefits more fully, spread those benefits more fairly, limit the costs and ward off the risks? Can we renew a spirit of internationalism, now that we live in a world where no single country can be the guardian of globalization?

**From Theory to Practice**

When I studied economics in the Seventies, we learned that the future of globalization was bright. Trade theory told us that high tariffs meant substantial potential gains from trade were available for all countries, rich and poor, and that while there would be winners and losers within countries, you could compensate the losers and still come out ahead.

While much of what was then called the third world was very poor, there were several newly industrializing countries, dubbed NICs, in Asia that were proving that with trade openness, integration and receptivity to foreign direct investment, a country could cross the great divide and join the ranks of the rich countries.

And of course we studied how just a generation before, our predecessors had had the wisdom to create a set of international institutions, the GATT, IMF and World Bank, to guide trade liberalization, globalization, and development along a stable path to ensure that politicians
and economists would not repeat the misguided policies that had disrupted the previous wave of globalization during the early 20th century. So in my own work as a graduate student, I set out to explore how poor countries might take advantage of globalization to raise their living standards and converge toward the advanced economies.

Working with Jeff Sachs, we did what graduate students do: we built a mathematical model, fancy for its time (with two countries, fully maximizing, infinite horizon, rational expectations, etc.). In that model, simply put,

- The poor country, which has cheap labor and inadequate capital, acquires the superior technology that the rich country has.
- With everyone rationally expecting greater things in the poor country, investment there takes off. People in the rich country save more to invest and take advantage of the new higher returns in the poor country (what we might now call “reach for yield”).
- And the poor country’s citizens anticipate they will be richer over time, because capital accumulation and new technology will raise productivity and wages. So they too save more and invest part of their new-found wealth (what we might now call “domestic resource mobilization”).
- The poor country runs a substantial current account deficit and imports needed capital that the rich country happily, and profitably, provides.
- Everyone gains: the poor country experiences a boom and living standards converge upward. Even the rich country gets richer as investors reap returns to capital higher than any available at home.

So, it was with that narrative in my head that I went off to the IMF for my first real job, to help promote globalization and convergence.

We are destined to spend our adult lives finding out whether the preconceptions of our youth were right after all. For economists, and certainly for me, that has meant finding out whether our graduate school models have any real world relevance.

Let me humbly tell you a bit about what I have found.

**Global Reality Bites**

I spent most of the 1980s at the IMF. Developing countries borrowed and rich countries lent, as the model suggested they should. But the end result was not always investment and growth.
For Latin America, the borrowing eventually led to a debt crisis and a “lost decade.” Instead of fostering growth, the IMF spent most of the decade trying to help our members—debtors and creditors—to resolve problems created by imprudent borrowing and poor use of resources.

Elsewhere, developing countries showed limited willingness and capacity to open up to competition. They had only a limited ability to attract foreign investment. The IMF ended up studying why some members failed to progress despite prolonged use of Fund resources. The Philippines, for example, had about 20 nearly consecutive IMF lending programs.

As the communist East Bloc fell apart, I left the Fund and went off to Poland, once more with Jeff Sachs. Looking back, it is tempting to believe it was natural, even inevitable, that those countries would advance along the transition path as they did. But in 1989, nothing seemed inevitable, at least nothing good.

In fact, the communist period had left these countries with what the IMF might today call “significant macroeconomic imbalances” and “structural problems”. But those labels hardly capture the Soviet legacy. There was a wholesale need to disassemble a decrepit economic system and create a market-based system in its place. As one Russian reformer saw the problem, it is easy to turn an aquarium into fish stew, but another thing to turn fish stew into an aquarium.

In the end, of course, it happened. Transition was not easy, nor was it complete—as we see in the continuing struggles of Ukraine. And it took a lot more than what the simple model called for:

- **People mattered.** Courageous politicians and reformers took on the challenge of designing reforms and explaining their consequences to a wary public.

- **Reform strategies mattered.** The best performers liberalized prices, stabilized their public finances, privatized state assets, and built strong governance frameworks.

- **Rejoining Europe mattered.** The prospect of rejoining Europe provided an essential motivation for policymakers to justify and implement reforms. And official external support—from Europe, the United States, and the IMF—helped bridge the growth chasm that emerged.

In many of these countries, living standards have risen rapidly over the past 25 years. Poland, for example, has grown more steadily than any other European country. It was the only one that avoided recession after the global financial crisis.
Then came the crises of the 1990s. Mexico proved the harbinger of a new phenomenon: a cautionary tale of the risks that accompany the potential rewards of reform and opening.

By this point, I was working for Larry Summers at the U.S. Treasury Department. We, like many others, had admired Mexico’s sensible policymaking and the accomplishment of NAFTA in 1994. But over that year, the scale of its financial problems became unmanageable. With capital fleeing and its exchange rate peg unmoored, the Mexican crisis became too severe and too big for the IMF to handle on its own. Direct loans from the United States to Mexico were needed.

IMF Managing Director Michel Camdessus recognized that this crisis was different - a crisis of global financial markets - and dubbed it “the first crisis of the 21st century”. It would not be the last.

When Thailand, Korea and Indonesia fell into crisis less than three years later, we learned that even countries with successful policies and access to foreign finance can develop vulnerabilities.

We also learned that global financial markets could focus on those vulnerabilities, move as a herd, and generate a reversal of capital flows—not only for one country, but for many other countries seen as similar. We were forced to re-examine our efforts to promote capital market openness and integration. Many countries came to fear the political and economic costs of financial sudden stops, recession, and banking sector stress. Emerging market countries also worried about market access and began to act more defensively—building up international reserves through intervention.

So they weakened their exchange rates and ran smaller current account deficits. They concluded that low reserves and sizable current account deficits created greater vulnerability to capital flow interruptions—and that sudden current account adjustment was just too painful.

The “Rise of China” and “Africa Rising”

While these events were unfolding, two remarkable growth stories were playing out: the “Rise of China” and “Africa Rising”. Both relied on globalization and integration, but each had its own special story.

The Rise of China included foreign direct investment, first permitted in the late 1970s, but which really took off in the 1990s.

Of course, the growth story was about much more than foreign investment. The new development model depended on features not contemplated in our simple model—policies
and practices, some unorthodox, that generated high savings and investment, sustained export competitiveness, current account surpluses, and a huge accumulation of reserves. China created an export machine that drew hundreds of millions out of subsistence farming and into the global economy. The result was 600 million people lifted out of poverty in a generation.

“Africa Rising” also required a combination of powerful historical forces. The end of communism had swept away ideological arguments over economic orientation. After two decades of disappointing growth and crippling debt, creditors—including the IMF—relieved the debt burden in return for improved governance and better policies.

A new generation of African leaders and policymakers, with more exposure to mainstream macroeconomic thinking, charted a new direction. And exports provided an engine of growth, powered by rising oil and commodity prices, and China’s booming demand. By 2008, 14 countries in sub-Saharan Africa achieved a decade or more of 5 percent annual growth. Nine exceeded 7 percent for a decade.

From Global Financial Crisis to New Mediocre

In 2009 Larry Summers offered me another job, to come to the White House to cover international economic policy. Those were the worst days of the global financial crisis. Global growth was heading off a cliff amid talk of another Great Depression. Markets had frozen up, and fear was spreading to emerging market economies, particularly in Central Europe. By March 2009, many saw the crisis spiraling out of control and most expected global inaction, as had happened in the 1930s.

Fortunately, that did not happen. Instead, internationalism prevailed at the G20 Leaders Summits in Pittsburgh and London. By bolstering the resources of the IMF and agreeing to act in concert to provide policy stimulus, a global economic collapse was avoided. Rather, as some of our Asian Executive Directors at the IMF like to say, we “only” experienced a North Atlantic Financial Crisis.

During the years since the global financial crisis, the future of globalization has darkened. Global growth has slowed, along with international trade. For many, vulnerability and insecurity have become more salient than the gains from interconnectedness, as those linkages have brought market volatility, powerful spillovers, and dislocations. Politics have soured. Whether justified or not, much of the resentment is focused on globalization.

The IMF correctly warned that recovery from the global financial crisis would be slower and weaker than from a simple cyclical slowdown. Of course, few at the time realized that we would face what Christine Lagarde has called a “new mediocre”.

Since 2011, it has been my privilege to serve as IMF First Deputy Managing Director. We at
the Fund have been part of the debate on the weak global recovery. Some see the legacy of crisis—debt-laden balance sheets, crisis-wary consumers and investors, overstretched monetary policy, and too-austere fiscal policy—as headwinds that perpetuate economic slack and discourage investment. Those legacies generate permanent negative effects, a hysteresis.

Others believe that low growth is a symptom of an increasing scarcity of profitable investments that began well before the 2008 crisis. Real interest rates have been falling for 15 years and, looking at very low interest rates on long-term bonds, markets appear to expect a long-lasting secular stagnation.

For the most part, these are theories that may explain and predict the sustained slowdown in advanced economies. So, what of the emerging world? We are seeing a slowdown in emerging and developing countries as well, and it looks increasingly likely that long-run, or potential, growth has fallen.

**Emerging and Developing Economies—Struggling to Catch Up**

Looking at today’s IMF medium-term forecasts, the emerging world, which had been on a path of catching up to the advanced world, is now converging, at best, at only two-thirds of the pace that we predicted just a decade ago.

Perhaps more worrying, IMF projections suggest that many major emerging economies are not headed for convergence at all. For many countries, even abstracting from currency movements, per capita income is either flat or falling as a share of U.S. per capita income.

Productivity gains and capital deepening look set to fall short, contributing to political strains as expectations of better jobs and higher living standards are not realized. Sadly, this now appears to be true of Brazil, Russia, Mexico, South Africa, and others.

This is a counterintuitive phenomenon.

The model I described earlier says that convergence should depend on accumulating capital, educating labor, and improving efficiency by acquiring technology. In principle, each of those should be easier now than ever.

Why? Because capital has become more mobile, and financial innovation has made it cheaper and easier to carve up and distribute risk across borders. At no point in history has knowledge been more available. One only has to look at the massive open online courses available at Harvard and MIT—and the IMF—to see the potential.

I was in Rwanda 10 days ago and visited a company the government has engaged to provide a laptop for every student in the country, for only $200 per laptop. As internet access grows, the costs of remoteness falls and opportunities open up. Technology has never been so
transportable and reproducible. This has potential to raise the productivity for millions. Of course, parents everywhere know that the internet also provides something not contemplated in the model, productivity-destroying apps like Angry Birds.

In any event, the ongoing slowdown and the lack of convergence seem at odds with the promise of globalization and increasing connectivity. Presuming a suitable local business and investment environment, globalization and the IT revolution should be creating more technology transfer, better educational opportunities, and more mobile capital.

Bear in mind that over the past decade, the bulk of emerging economies have better fiscal and monetary frameworks, improved educational levels and reduced inequality, and real progress on reform agendas. So why is convergence moving in the wrong direction?

The usual recipe is that each country needs to get its “own house in order.” At our Executive Board, we hear calls for “the O-H-I-O strategy”. There are three relevant components.

- **First, countries still have to reckon with the legacy of the global crisis:** slower growth in advanced economies and China; the challenges of diverging U.S. and Eurozone monetary policies, and the volatility of the financial market response.

- **Second, many countries have important adjustments to make.** Oil and commodity price declines have helped some but hurt others. Producer countries have to adjust to lower export and government revenues. The current excess global capacity in oil, commodities and, more broadly, manufactured goods could take years to work off. Those adjustments will produce distressed firms and financial institutions.

- **Third, much of the emerging and developing world have unfinished business.** They need to improve the legal, institutional, and policy foundations of their economies to be fully supportive of investment in infrastructure and in private companies.

This is all well and good; the OHIO strategy certainly is needed. However, it may not stand on its own. Key elements are likely to be strongly pro-cyclical, further deepening the slowdown in global growth that concerns us today.

What should worry us is that the international monetary and financial system is generating vulnerabilities that could worsen the situation. Scared by recent bouts of capital market volatility, many countries may conclude that they need even larger buffers—more reserve accumulation, stronger current account positions, and more self-insurance. All of these will be even more pro-cyclical.

**Collective Action**

So the time has come to re-examine our global architecture. We need to ask what can be done
to be more supportive of growth and convergence. This calls for collective action, or “C-A”. Let’s call it the “California strategy”.

So what elements of the architecture are worth revisiting?

**First,** there is a need for an international financial safety net that the emerging world believes is reliably available and financially sufficient. One that the emerging world regards as *their* safety net, where they have equal voice, and not where the rules of the game are written by others. This could involve better weaving together the patchwork of global and regional safety nets. It probably will require something new. The IMF is looking at this question and intends to play a constructive role.

**Second,** we ought to consider whether the short term and volatility of capital flows are problematic. There are, of course, natural incentives for capital flows to be concentrated in short-term debt instruments. Those flows, because of their reversibility, can be a useful disciplining force for debtors, creating the market incentive for positive reforms. But that reversibility also has costs, when capital flows suddenly stop. We should look again at whether the supervisory frameworks and tax systems of the source countries unduly encourage short-term, debt-creating flows.

I know that here on Think Tank Row in DC it is heretical to say so, but we ought to consider whether a more coordinated approach to capital flow measures and macro prudential policies in the capital destination countries may be warranted.

We ought to reassess tax policies across the global system to lessen the inherent debt bias, and thereby facilitate greater equity flows. And we need to be sure that financial institutions in advanced economies, particularly the nonbanks, have the right regulatory incentives to properly price the risks of short-term international debt and put sufficient capital behind those investments.

**Third,** we ought to look at how to permit a greater transfer of technology from the advanced countries. We should take a fresh look at property right protections, including whether protection of advanced economy “ideas” stifles global adaptation through overly generous patents and trademarks. There is an active global debate on this issue related to pharmaceuticals and medical treatments. TPP has drawn attention to this subject, opening up a broader debate on such questions and grabbing the attention of civil society.

These are complex issues, financially and politically. We are no longer just talking about removing tariff barriers and opening up to FDI. It is time for a new generation of reforms. Unfortunately, collective action in many of these areas has been hard to mobilize. The G20 acted decisively in the face of the global financial crisis. But now countries feel less urgency. Differences are proving hard to bridge. Global fora are too long on talk and too short on
action.

As just one example, despite four years of a broad agreement to mobilize finance and support for building global infrastructure, cross-border project lending is actually declining. There has been little progress carving a larger channel for wealthier country capital to travel to lower income countries. The model says this would be in everyone’s interest. It would offer greater returns to capital for the providers, essential in a world of zero or negative interest rates. It would offer more growth and jobs for the recipients. What better time for global infrastructure initiatives than today when capital is so cheap and available. But it is just not happening.

Turning to politics, I believe that now, more than ever, national leaders need to work together to fulfill the aspirations of their people. Dissatisfaction with national leaders is growing worldwide—especially in advanced economies—and resentment about economic prospects is rising.

Once we discount empty promises of easy solutions, the hard truth is that national leaders no longer have the power, acting alone, to deliver what their people want and need. We see this truth in so many issues today: from how best to promote the global recovery, how to safeguard banking systems and capital markets, what is needed to tackle climate change, and how to manage the issues surrounding migration in Europe. Global problems require global action, or at the very least, collective action.

In other words, a California strategy must go hand in hand with OHIO.

The IMF was established to promote international monetary and financial stability and growth. It is here to promote globalization for the common good.

We all need to work harder to convey to politicians and electorates the benefits of globalization and to help manage, as best we can, the spillovers and vulnerabilities that accompany it.

Greater efforts are needed to help emerging and developing economies get back on an accelerated convergence path. This would brighten the prospects of billions of people, serving as an engine of growth for the world. This is in everybody’s interest, including in the developed world. The IMF has a role to play in this effort.

**Looking on the Bright Side**

So what does a good scenario look like?

As Larry Summers and others have reminded us, China must inevitably slow. It will no longer be “super-charged.” But it certainly can continue to make an important contribution
as the biggest single contributor to global growth for some time. Don’t forget, in 2015, China’s growth was equivalent to adding an economy the size of Poland or Sweden to global GDP.

India is probably the only other country that has the potential to mount a transformation of similar scale and global consequence.

But there can be strength in numbers. With country action to boost growth potential, and action to make the international monetary system more supportive, I could imagine 10 to 15 smaller countries taking off: countries with young and dynamic populations; rapidly raising education standards; building institutions and learning lessons from others.

Together, these countries could become a new engine of growth. For example, six percent annual growth in 10 to 15 countries with a starting total GDP of 4 trillion dollars would add more to the global economy than the Eurozone growing at potential. A list of potential contributors could include Vietnam or Bangladesh, the Philippines or Indonesia, Peru or Colombia, and Ethiopia or Nigeria.

I can imagine your skepticism. But recall the story of Korea. Its success may seem obvious now, but in the early 1960s Korean living standards were on a par with countries in West Africa. There was little reason to expect what happened next. For 50 years, Korean growth has averaged 7 percent, and its standard of living has risen from less than 10 percent of US levels to 55 percent. With the right decisions, a generation from now, success stories we find hard to contemplate today may also seem as obvious.

**Political Economy Challenges**

To make that possible tomorrow, we will need to rise to today’s political economy challenges.

Most important, of course, is to actually secure the benefits of cooperation, integration, and a globalized system. That means continued encouragement and support for countries to move along the path of integration and reform.

But we must also work collectively to manage the spillovers and volatility that create setbacks and disillusionment.

Some old lessons remain relevant. A loss of faith in global solutions offers no way forward. We all know that protectionism in trade and finance are self-defeating. We are also learning new lessons, how economic inclusion, especially gender inclusion, and reduced income inequality can boost growth.

Finally, we need to do more to make the case for globalization and interconnectedness, and
convey to our citizens the opportunities of collaboration and integration. Too many people in the developed world see only a loss of jobs to lower wage destinations. Too many people fear that immigration is compromising their economic well-being.

Too few see clearly the pay-offs—poverty reduction, the innovation that comes from shared ideas, higher living standards from greater access to trade, and higher returns to the wealthy world from investment partnerships with developing countries.

Conclusion

Let me conclude by recalling an event from 1975. The United Kingdom was preparing its first-ever referendum on whether to remain part of the European Common Market. The UK government released a pamphlet which argued, in the characteristically understated British way, that “we cannot go it alone in the modern world”.

This statement is even truer today. Only by standing together can we foster a new form of globalization that works for all. We cannot go it alone.

Incidentally, in case you’re wondering, two-thirds of the U.K. electorate voted “yes” in that referendum.

I want to thank again the Peterson Institute and my hosts for this opportunity to speak here today. It has been a special honor.