Honoring Robert Mundell
Remarks on Financial and Trade Globalization, Its Future, and the Mundellian Vision
By Sebnem Kalemli-Ozcan, June 23, 2026

It is a particular kind of privilege to speak about the state of the international monetary system at a gathering for Robert Mundell, because almost everything I might say has to be said in vocabulary he invented. The trilemma, the optimum currency area, the open-economy policy-mix---these are not just contributions to the field; they are the field's grammar.

I want to use Mundell's own analytical apparatus to assess his own vision, which shows us that the most striking thing about his legacy is the relationship between his positive theory on how currency unions succeed and fail and his normative dream of single world currency.

Let me do this as I take the four questions Alberto asked the panel in turn.

1) Where we stand, and where we are heading

The conventional framing asks whether financial globalization is advancing or retreating; whether we are in an age of integration or an age of "slowbalisation". I think this framing is the wrong instrument for the question, and I want to propose a different one.

Globalization is not a dial you turn up or down or an on-off button. It is an architecture. The economically meaningful object is not the **level** of cross-border activity but the **topology** of it: who is connected to whom, through which hubs, with what degree of concentration, and how shocks propagate along those edges. Once you look at the system as a network rather than as a scalar, the apparent paradox of the last fifteen years resolves itself.

The headline numbers do show a retreat. Gross capital flows relative to global output peaked around the financial crisis and have never recovered their pre-2008 trajectory. Cross-border bank lending in particular pulled back sharply, and European banks retrenched, regulatory perimeters tightened, and the great expansion of wholesale interbank intermediation went into reverse. If you stop there, you tell a story about deglobalization.

But that is the wrong stopping point, because the system did **not deglobalize** --- it **reconfigured**. As banking flows retreated, market-based finance, portfolio debt, and the offshore dollar funding system grew to fill the space. Foreign direct investment evolved along with multinationals' own logic. And critically, the core of the network --- the dollar at the center of invoicing, safe-asset demand, and global funding ---did not weaken at all. It got stronger and more concentrated.

So the honest description of where we stand is not "less globalization". It is fragmentation at the periphery, concentration at the core. The edges of the network, that are trade and financial linkages, are being actively rewired by geopolitics using tariffs, friend-shoring, export controls, the weaponization of financial plumbing through sanctions. But the hub, U.S. at the center of financial system and China at the center of trade, is sticky, because hubs in a network are held in place by everyone else's choices, not by their own merit. The dollar's role is a coordination equilibrium, and coordination equilibria are extraordinarily difficult to dislodge from the outside.

Where are we heading? Toward a system that is simultaneously more multipolar and more concentrated---- which sounds contradictory only if you are still thinking in scalars. The political demand for diversification and autonomy and self-sufficiency are all real and rising; you can see it in reserve managers' behavior, in the growth of non-traditional reserve currencies, in central-bank gold accumulation. But this diversification is happening around a core that remains dollar-denominated. We are not converging toward a flat, integrated world, and we are not fracturing into autarkic blocs. We are heading toward a hub-and-spoke system under geopolitical stress ----denser financial linkages within blocs, thinner and more deliberately managed linkages across them, and a center that everyone complains about and no one can replace.

2) <u>**Opportunities and risks and what to do about each**</u>

Let me separate the genuine opportunities from the genuine risks, because the **network framing** that I have just described tells us they are often the <u>same feature seen from two sides.</u>

The opportunities are real. A more interconnected system is, in principle, a more complete one: deeper markets, broader access to capital, better diversification of idiosyncratic risk. The newest opportunity is technological. The digital rails now being built ----tokenised settlement, and stablecoins in particular ---genuinely lower the friction of cross-border payment, which has remained expensive and slow for decades. For the unbanked and for high-inflation economies, dollar-pegged digital tokens are already functioning as de facto monetary substitutes. And a more multipolar reserve system could reduce the single-point-of-failure character of a one-safe-asset world.

The risks are the same connectivity seen from the other side. A densely connected network with a dominant hub is efficient in tranquil times and dangerous in turbulent ones, <u>because the very links that share risk also transmit it. Three risks deserve naming:</u>

First, **synchronization**. The deepest empirical finding of the last two decades is Rey's work on the global financial cycle that financial integration has produced a common cycle in capital flows, leverage, and asset prices, driven disproportionately from the center. This is not risk-sharing; it is risk-spreading. It means that monetary conditions set for one economy are exported to all the others connected to it, which is a point I will return to, because it bears directly on Mundell.

Second, **fragility from the core**. The lesson of 2008 is that the crisis came from the center, not the periphery. Globalization's classic failure mode in the twentieth century was the emerging-market sudden stop. Its twenty-first-century failure is at the heart of the developed-world dollar funding system. The network's vulnerability lives where its concentration lives.

Third, the new **fragmentation risk**. The instrument that makes the dollar system powerful, namely the ability to exclude, is also the instrument that gives every potential adversary a reason to build an exit. Each use of financial sanctions by the United States raises the option value of an alternative, and that pushes diversification past the point where it is purely economic---into strategic insurance. Managed diversification is healthy. A disorderly scramble for the exits is not.

<u>How do we capitalize on the former while mitigating the latter</u>? The honest answer is that you cannot keep the upside of connectivity while engineering away the downside, because they are the same property. What you can do is <u>invest in the things that make a concentrated network resilient rather than merely efficient</u>: We learned few things on this domain: A credible global financial safety net so that the periphery does not have to self-insure through the very reserve accumulation that fuels global imbalances. Macroprudential policy and well-designed capital-flow management tools--- the integrated policy framework of the Fund. These tools treat the cycle as a global network property rather than a national one.

The deepest principle is this: in a system this interconnected, resilience is a public good, and public goods are chronically underprovided.

3) <u>**Three decades on outcomes against expectations**</u>

<u>This is the question that demands the most intellectual honesty:</u> the textbook case for financial globalization, as it was taught in the 1990s, has not materialized, and the ways in which it failed are more interesting than the ways in which it succeeded.

The neoclassical promise had two parts. Capital would flow downhill from rich, capital-abundant economies to poor, capital-scarce ones, equalizing returns and accelerating convergence. And integration would deliver consumption risk-sharing----countries would insure each other against idiosyncratic shocks by holding claims on one another, so that national consumption would track world income rather than national income.

Neither happened at the promised scale, and the gap between prediction and outcome generated the central puzzles of the field. Capital did not flow reliably downhill; the Lucas paradox held. The importance of institutions turns out to be a key factor here. The allocation puzzle from Gourinchas and Jeanne showed that among developing countries, capital flowed perversely toward the slower-growing, higher-saving economies rather than the fast-growing ones that the theory said should attract it. The global version of this was the great uphill flows of sovereigns in the 2000s: savings from China, into the United States.

And the risk-sharing gains were disappointing too. The quantity puzzles of international macroeconomics that consumption is less correlated across countries than output, exactly the reverse of what efficient risk-sharing predicts proved remarkably durable even as financial integration deepened. <u>We got the contagion without the insurance.</u> **Integration delivered a global financial cycle far more reliably than it delivered risk pooling.**

So **what has been the most surprising**? In ascending order of importance:

The least expected at the level of headlines, though perhaps it should not have been: the post-2008 retreat in <u>banking globalization</u> happened without an overall collapse in integration. <u>The system reroute around </u>it. That is a network property, and we did not have the right framework to anticipate it.

<u>More surprising is</u> that the <u>deepest crisis of the era originated in the core</u>. We spent the 1990s building an entire sub-field around emerging-market vulnerability, and then the system broke in the most sophisticated financial markets on earth. <u>Fragility, it turned out, scaled with complexity and concentration, not with underdevelopment.</u> We learned the importance of financial plumbing for macroeconomics because of the complexity of financial linkages of the center.

But the <u>single most surprising development</u> is the one most relevant to this audience: the **resilience and deepening of dollar dominance in the face of relative American economic decline**. As the US share of global output fell, in PPP terms, the dollar's share of trade invoicing, of international debt issuance, of safe-asset demand did not fall with it. The exorbitant privilege that Gourinchas and Rey documented did not erode; if anything it compounded. For sure, the dollar's share of allocated reserves has drifted down---from above 70% at the turn of the century to under 57% today----but read that number carefully: much of that gradual decline reflects valuation effects rather than active flight, and the dollar's role in global finance, in funding and invoicing and settlement, has if anything intensified. And hence, while US-to-world relative GDP has fallen since 1980 in PPP terms, in dollar terms, the US weight has been constant since 1980 at about 25%. The euro area share has declined which is a challenge for euro’s shot at being a reserve currency.

Financial hegemony decoupled from the size of the hegemon. That is not what most of us would have forecast in 1995. This most surprising fact explains why the network logic of safe assets, the self-reinforcing liquidity of incumbency is the central intellectual project the experience has handed us.

4) <u>Mundell's vision: most prescient, least convincing</u>

I want to draw the distinction I opened with, between Mundell the positive theorist and Mundell the normative visionary.

What seems most **prescient** is the analytical apparatus---and above all the **trilemma**. The proposition that an economy cannot simultaneously enjoy a fixed exchange rate, free capital mobility, and an independent monetary policy is the most durable organizing principle in open-economy macroeconomics, and the last thirty years have, if anything, sharpened its bite rather than blunted it. Consider the most important challenge to it: Rey's argument that under a global financial cycle, the trilemma collapses toward a dilemma---that even a floating exchange rate no longer buys full monetary autonomy, because capital mobility transmits the center’s financial conditions regardless of the exchange-rate regime. Notice what that critique actually does. **It does not refute Mundell; it intensifies his argument**. <u>It says the constraint is even tighter than he thought that the "independent monetary policy" corner is harder to reach than the original triangle implied</u>. A theory whose leading-edge critique is "the trade-off you identified is even more binding than you said; we need another tool" is a theory that still organizes our thinking.

The **optimum-currency-area framework** has aged just as well. The criteria he laid out--- factor mobility, especially labor mobility; fiscal transfers; symmetric shocks ---turned out to be exactly the dimensions along which the euro area would be tested. A monetary union without fiscal union and without labor mobility, facing asymmetric shocks, behaved precisely as OCA theory predicted it would: it transmitted stress it could not absorb. **The European crisis was, in a real sense, a triumphant out-of-sample validation of his 1961 paper.**

And here I would like to mention a bit of my own work as it speaks directly to this point. With Bent Sorensen and late Oved Yosha, I spent part of my early career asking whether the OCA criteria are fixed primitives or whether integration itself reshapes them. The answer is that they are endogenous, and that they move in tension. In our 2001, Journal of International Economics paper we showed empirically that regions and countries with more specialized production structures have output fluctuations that are less correlated with everyone else's; combined with our prior finding that capital-market integration causes that specialization, this means financial integration itself pushes shocks toward greater asymmetry; a channel that runs against the trade-integration channel Frankel and Rose had emphasized at the time. Our 2003, American Economic Review paper supplied the mechanism: the more a group can share risk, German regions or EU countries or US states, the more its members can 'afford' to specialize. Insurance buys specialization; specialization buys asymmetry and trade. And the empirical punchline is the one that matters most for Mundell's vision: regions within federations, share risk heavily and specialize heavily, while sovereign countries share almost no risk at all. The euro, on this reading, was not simply 'not yet an optimum currency area'; it actively adopts the integration that drives specialization and asymmetry while lacking the federal insurance that makes asymmetry survivable. The criteria did not fail. They were being reshaped, in real time, by the EU itself. That is the sense in which Mundell's framework was not just prescient but generative: it posed a question precise enough that the next generation could measure and quantify the answer.

There is a second mechanism, on the financial side, and it is in some ways the more damning. With Gita Gopinath, Loukas Karabarbounis and Carolina Villegas-Sanchez, I have studied what **the single currency did to the allocation of capital in Southern Europe**. The convergence of interest rates that accompanied the euro sent a flood of cheap capital into Spain, Italy and Portugal---exactly the 'downhill' flow the textbook promised. But the textbook also promised that the capital would find its most productive uses, and it did not. In economies with size-dependent financial frictions, the fall in the cost of capital drew investment toward firms with high net worth rather than high productivity; the dispersion of the return to capital across firms widened, and total factor productivity fell below its efficient level. The same pattern appears in Italy and Portugal and, tellingly, not in Germany, France or Norway, where financial markets are deeper. So the euro did not merely expose its members to asymmetric shocks they could not insure; the very capital it attracted was systematically misallocated, dragging down the productivity of the periphery it was meant to lift. Two mechanisms, then, one real, one financial, explain why monetary union has proved so much harder in practice than its architects hoped. Mundell, characteristically, had given us the framework within which we can think about these challenging issues.

And here is where I locate what seems **least convincing**: Mundell's normative vision of monetary consolidation, culminating in a single global currency. Mundell did not merely build OCA theory; he was the father of the euro and, in his later career, an advocate for fixed exchange rates and ultimately for a world currency. And I want to argue that his own analytical framework is the strongest case against his own dream.

Start with the simple observation that dollar dominance, even with all its support to world financial integration, is still a monetary hegemony. Mundell envisioned the world converging onto shared money, a federation. What we actually got is concentration onto a single national money, governed by one country's central bank in that country's interest, exported to everyone else as a constraint. In his 1999 Nobel address, he talked about the rise of American hegemony with the ills of 20th century, starting with WWI and Great Depression and the rest, caused by the American hegemony and its financial arm, the Federal Reserve. International politics followed America's economic mistakes and international monetary order followed these politics. That is not the cooperative monetary order he imagined.

Then, you have the contemporary forces that all point away from consolidation and world currency. Geopolitical fragmentation is pushing the system toward currency blocs and strategic diversification, not toward a single world central bank. The political logic of the moment is the assertion of monetary sovereignty, not its surrender.

And the digital-currency revolution, which a naïve reading might make us think that this revolution as a global currency enabler, since the technology finally makes a borderless money feasible, but in practice it is doing the precise opposite. Look at how it is actually being deployed. Stablecoins, now the fastest-growing form of cross-border digital money, are roughly 97% dollar-denominated; the US framework enacted in 2025 deliberately channels digital-dollar activity into privately issued, Treasury-backed tokens, with the explicit strategic aim of entrenching the dollar. Meanwhile China's e-CNY, and maybe even digital euro, are being built as an instrument of national monetary sovereignty, and in China's case explicitly to construct payment systems that can operate outside the dollar system. The technology that could in principle have delivered Mundell's single world money is instead being used to deepen dollar dominance and to fortify national monies. It is fragmenting the monetary order along sovereign lines, not unifying it.

Thus, Mundell's own OCA theory tells us the world is nowhere near an optimum currency area. Labour does not move freely across the globe; there is no global fiscal authority to transfer resources from booming regions to slumping ones; shocks are profoundly asymmetric across countries, affecting both demand and supply of goods and currencies. By Mundell's criteria a single global currency would be a catastrophe as it would do to the world what the euro did to its periphery, only with no possibility of a German fiscal backstop. And by the endogeneity result I described earlier, a global money would itself drive further specialization and manufacture more asymmetry over time, with no planetary fiscal union to absorb it. The man who gave us the tools to evaluate currency unions handed us, in those same tools, the decisive argument against the largest currency union he dreamed of.

So, Mundell-the-positive-theorist was more prescient than almost anyone in the history of the field. Mundell-the-normative-visionary overreached, and the most elegant proof of the overreach is that his own framework predicts it. The trilemma stands. The OCA criteria stand. The global currency does not and it fails by Mundell's own test.

If there is a unifying thread, it is that the **current international monetary system is best understood not only as Mundell's areas of geographic regions choosing exchange-rate regimes, fixed, float or managed float, but as a global network, of trade and financial linkages, in which monetary influence propagates along these global linkages that obey no geopolitical or geographic map.** The dollar zone is not a place; it is a topology. That is the one genuine departure I would make from the master's framing. But it is a departure made entirely with instruments he forged. And that is how we all are **<u>still thinking inside Robert Mundell's apparatus.</u>**

Thank you.