Economic Research:

Global Growth Challenges: Horses For Courses

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*(**Editor's Note:** The text below is based on, and expounds upon, remarks of McGraw Hill Financial's Chief Economist Paul Sheard at a panel on "Macro-economic policies to support a strong global growth" at a conference on "Stronger Global Economic Growth: Policies, Drivers and Institutions" organized by the Shanghai Development Research Foundation, the China MOF Think Tank on International Economics, the Reinventing Bretton Woods Committee, and the China Center for International Economic Exchange (Shanghai) in Shanghai, Feb. 28, 2016. Other panelists were: Erik Berglof, Professor, London School of Economics; Lawrence Goodman, President of the Center for Financial Stability; Jean Pierre Landau, Professor of Economics at Sciences Po (Paris); Catherine Mann, Chief Economist, OECD; Quan Heng, Deputy Director, Institute of Economics, Shanghai Academy of Social Sciences; Tatiana Valovaya, Minister, Integration and Macroeconomics, Eurasian Economic Commission. The views expressed here are those of McGraw Hill Financial's chief economist. While these views can help to inform the ratings process, sovereign and other ratings are based on the decisions of ratings committees, exercising their analytical judgment in accordance with publicly available ratings criteria.)*

In the past eight years since the global economy suffered a financial heart attack that thrust it into a sharp, deep recession, economic policy has been in the spotlight and has been hotly debated, as governments and central banks have intervened in unprecedented ways and on an unprecedented scale to stabilize, stimulate, and refashion markets and economies. Gone, for now at least, are the days when macroeconomic policy was largely a fine-tuning exercise of central banks, and certainly gone are the days when markets could be assumed to be self regulating. The recent slowdown in the global economy and recurrent bouts of market turbulence, giving rise to such policy actions as negative policy interest rates but also partly reacting to them, have caused renewed soul searching about appropriate policy choices. The growth and other challenges confronting the global economy demand policy action, but the policy debate is contested and contentious.

Overview

- In assigning policies to economic challenges, it is useful to distinguish five kinds of policies: demand management; supply side; regulatory; crisis management; and institution building.
- In the U.S., the need for supply-side policies is starting to gain primacy; the institutional framework of the eurozone constrains demand-management policies; the Abenomics agenda is coherent, but the implementation and policy content is problematic; and in China institution-building policies loom large.
- Demand-management policies and supply-side policies are complements, not substitutes; within the former, too much of the burden of stimulus has been put on monetary policy and not enough on fiscal policy.
- When governments can borrow or command resources in their own currency, the notion of "limited fiscal space" or "running out of fiscal ammunition" puts the cart before the horse.
- International policy coordination comes in at least three forms: rhetorical; spillover internalizing; and equilibrium shifting.

A Useful Policy Taxonomy

It is useful to distinguish five main types of policies that governments use to promote economic growth. I use the term "government" broadly here to include central banks.

Demand-management policies:

Governments use monetary and fiscal policies (together, "macroeconomic policy") to manage the level of "aggregate demand" to be in line with the potential of the economy to create output and incomes, thus also securing a low rate of overall inflation. If aggregate demand falls short of potential demand (there is a negative output gap), governments ease macroeconomic policies to stimulate economic activity; if it exceeds potential (there is a positive output gap), thus leading the economy to "overheat," governments tighten macroeconomic policies to rein in activity. To a first order, demand-management policies are not intended to increase the potential of the economy to supply additional output; only to ensure that demand is in line with supply. Monetary and fiscal policies, in essence, rest on sovereign power to influence the creation and circulation of "money" in the economy.

Supply-side policies:

These are policies aimed at improving the ability of the economy to produce output. The growth accounting framework of economics suggests that the capacity of the economy to produce more output--and thereby improve real standards of living--can be enhanced in three ways: by improving the supply of labor; by accumulating more capital (not just physical capital, but human, intellectual, and social capital, too); and by becoming more productive in the use of labor, capital, and other inputs. There are just two kinds of demand-management policies, which arguably are just two sides of the same "sovereign coin." In contrast, there is a veritable grab bag of possible supply-side policies, relating to the way labor, capital, and product markets operate and are regulated; to the nature of the innovation and research and development system; to the education and training system; to the rules of the games covering immigration; to corporate governance; to public administration; and more.

Regulatory policies:

These are policies that govern market conduct and set and enforce the rules of the game of the market system. All markets are subject to regulation of various kinds and to varying degrees.

Crisis (particularly financial crisis) management policies:

As recent history has provided a poignant reminder, and as economists of an earlier era such as Charles Kindleberger and Hyman Minsky argued, financial crises are a recurrent feature of market economies and the capitalist system. Whereas demand-management, supply-side, and regulatory policies are "business-as-usual" policies, occasionally governments need to take radical action to stem a financial crisis and put the financial system and economy on a sound footing again. Lender-of-last-resort actions by central banks, related actions by central banks to restore functioning to distressed financial markets or market segments ("credit easing"), and emergency policies to force banks to mark deflated assets to market and raise more capital either from the market or from the government itself are prime examples. It would be nice not to have financial crises, but it may be that financial crises are close to being a "design feature" of modern financial economies. From the national accounting identity, savings equals investment plus net lending to, or borrowing from, the rest of the world (and for the world as a whole savings equals investment,

full-stop). Investment is, by definition, illiquid, as are the savings that "finance" that investment. The financial system turns what are illiquid claims on investment (that is, savings) into liquid ones, but it is the financial claims not the underlying assets that are made liquid. If enough savers try to get "their money" back at the same time, that liquidity is prone to evaporate, revealing the underlying illiquidity that was there all the time. The government, via the central bank as lender of last resort, is the only entity that can satisfy that demand for liquidity because it is the only entity that, virtually without limit, can exchange hard assets (or now illiquid financial claims on hard assets) for money (central bank "liquidity"). No amount of legislation in the world banning "too big to fail" can change the basic fact that, in certain circumstances, financial liquidity can vanish at a moment's notice to reveal the underlying illiquidity of investment.

Institution-building policies:

All economies have myriad "institutions," or codified rules of the game, that form their skeletal structure and help them function. These include, but are far from limited to: the system of government and political representation; the legal system and system of property rights; the limited liability corporation and accounting standards; the rules governing corporate governance and the "market for corporate control"; the monetary and banking system; trade unions and the system of worker rights; and the regulatory system in all its forms. Countries at different stages of economic development differ in the breadth, depth, and strength of their institutions, and economic development, to a significant extent, is a process of institutional development, innovation, stress-testing, and maturation. Governments are always refining and from time to time (usually after a crisis) overhauling the institutional fabric of the economy, which, in a market economy, is a joint work with the private sector. But, for developing economies, institution-building policies loom particularly large.

There is some overlap of course between these different classes of policy and considerable interaction (synergies and complementarity) between them. Regulatory policies presuppose a certain amount of institutional development but can also contribute to it. Regulatory policies can be thought of more in terms of operating the "steady state," institutional building more as the process of getting to that steady state. Improving the effectiveness of regulation is one aspect of supply-side policies. Supply-side policies can both create the need for more aggregate demand and help to spur it. Good demand-management policies create a conducive environment for promoting supply-side policies. And so on.

Horses For Courses

Clearly the different kinds of policies are intended to address different policy challenges. The policy debate is often vague and confused on this point. Those engaged in the policy debate and in policymaking should be clear in conceptualizing, formulating, and communicating the policies they are employing and for what purpose.

For instance, the purpose of supply-side policies is to improve the ability of the economy to produce goods and services and the efficiency with which it does so. It is hard to argue against supply-side policies in the large. Every economy likely has scope for its supply-side performance to be improved, some more so than others. But if the pressing problem in an economy is that there is a serious deficiency of aggregate demand, macroeconomic policies to stimulate aggregate demand should be the first order of the day. Prescribing supply-side policies as the main cure for a

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deficiency of aggregate demand is misplaced, in the same way that trying to raise growth by using expansionary monetary and fiscal policy when the economy is already operating at full capacity would be: That would just result in overheating and inflation, and no long-run improvement in real growth. Using supply-side policies to try to stimulate aggregate demand, when demand is deficient, could even make things (a negative output gap and disinflationary conditions) worse, by increasing supply but not necessarily demand.

If the pressing problem facing an economy is a banking system left technically insolvent or heavily undercapitalized by the deflation of a credit-fueled asset price bubble, crisis-management policies are required, particularly policies aimed at quickly (or at least reasonably quickly) restoring the banking system to balance-sheet health: credible disclosure of underlying asset values; the resolution of nonperforming assets (on the asset side of the balance sheet of lenders); the elimination of debt overhang (on the liability side of the balance sheet of borrowers); and the recapitalization of banks to restore the capital eroded by this mark-to-market and asset and debt cleanup. None of this is likely to happen without strong intervention by the government.

If an economy is experiencing a banking crisis, it is also likely to be in recession. That calls for expansionary monetary and fiscal policies to raise aggregate demand. The supportive demand-management policies will alleviate the damage wrought by the bursting of the bubble, and this is a good thing--there is no point being masochistic about these things. But, when borrower and lender balance sheets are seriously and permanently impaired, demand-management policies should not be used, alone or in tandem with government guarantees of bank deposits and similar "financial stabilization" measures, instead of policies aimed at fixing the underlying problem.

This was the policy error that Japan made in the 1990s and the U.S. avoided in 2008-2009.

Equity and real estate prices in Japan started to collapse in 1990, yet it was not until 1999 that the government put in place a serious scheme to use public money to recapitalize the banking system (a small one was introduced in 1998), and even then deployment was slow, piecemeal, and insufficient. The key policy measure Japan implemented to deal with its banking crisis was announced in June 1995 and given legislative backing in early 1996: a government guarantee of all bank deposits (initially for five years but later extended for up to another four years), not just the half or so of bank deposits that were legally covered by deposit insurance at the time. This quelled financial instability, but did little to address the underlying problems, which festered, only to eventually resurface and force policymakers' hands years later.

In contrast, in the U.S., once the financial crisis erupted in September 2008, policymakers quickly put in place a large-scale ($700 billion) bank recapitalization scheme (the Troubled Asset Relief Program or TARP) and forced banks to disclosed the true (or truer) value of their distressed assets and to make up the capital shortfall.

And, if the economy is in a banking crisis, serious flaws in the regulatory and institutional framework that gave rise to the credit and asset price bubble whose bursting triggered the banking crisis will likely have been revealed. That calls for institutional-building policies, something that always ensues in the wake of a financial crisis.

If the policy aim is to raise potential growth and real living standards, then the primary focus should be on supply-side reforms and, particularly for emerging market economies, on institution building.

The golden rule of good policymaking is: horses for courses (1).

The U.S.: Supply-Side Policies Beckon

Let's look at some of the major economies and regions in the global economy using the taxonomy and framework above. First, the simplest story, the U.S.

The policy challenges in the U.S. partly argue for continued stimulatory demand-management policies but mainly for supply-side policies to increase potential growth and improve the resiliency of the economy. More contentiously, and most daunting to implement, institution-building policies are probably needed to address distributional issues relating to extreme and growing income and wealth inequality and the associated social and political fracture.

Real GDP in the U.S. has grown on average by 2.1% (quarter on quarter, seasonally-adjusted annualized terms) since the economy started growing in mid-2009. After falling by 4.2% in the Great Recession, real GDP is now almost 10% more than its precrisis peak. The unemployment rate, which peaked at 10% after the recession, is now back to 4.9%, and a broader measure of unemployment, which includes workers considered marginally attached to the labor force and those working part time who aspire to working full time, has fallen to 9.7%, after peaking at 17.1%. The annual rate of core PCE inflation, which fell to 0.9% at one point, is now 1.7% (core CPI inflation is 2.2%, up from a low of 0.6%). Demand-management policies, particularly monetary policy, still need to be aimed at eliminating the remaining economic slack (fully closing the output gap), but, given the lags in monetary policy and the extremes to which monetary policy has been pushed, it is understandable that the Federal Reserve would be starting to chart a course toward slowly "normalizing" monetary policy along the three expansionary margins: the policy interest rate, quantitative easing, and forward guidance about the expected future path of both.

The more pressing challenges for economic policy in the U.S. would appear to be on the supply- and institution-strengthening sides, centering on the need to: rebuild an aging transportation and urban infrastructure; fix the "broken" immigration system; overhaul the overly complex tax system; improve the quality of the education system and vocational training; and raise the effectiveness of government.

The Eurozone: Demand-Management Held Hostage To Institutions

When it comes to the eurozone, the need for demand-management policies has been and remains acute: Real GDP is still just (0.2%) below its precrisis peak level; unemployment at 10.5% is still very high; and inflation is low (the annual rate of core inflation is 0.7%). Appropriately, the European Central Bank (ECB) is now pursuing a very expansionary monetary policy. However, a dominant narrative in the eurozone policy debate over the past few years has downplayed the need for demand-management policies, even viewing such policies as counterproductive if not outright harmful, focusing instead on the primacy of supply-side policies.

Supply-side policies are beneficial and desirable in their own right, but are hardly the answer to an acute shortfall in aggregate demand triggered by a sharp and deep recession (real GDP in the eurozone fell by 5.8% between the first quarter of 2008 and the second quarter of 2009).

The biggest and most fundamental problem in the eurozone (and the larger European Union) relates to flaws in its economic and political architecture, notably the eurozone's design as a monetary union without a fiscal union (and only very weak political union), and this calls for institution-building policies. The eurozone being constructed as a monetary union but not a fiscal union deprived member states of the full use of the usual demand-management tools; by construction, an individual country in the eurozone did not have its own monetary policy, did not have its own exchange rate against other eurozone members, and, because of the Stability and Growth Pact, did not have much fiscal room for maneuver; moreover, being in a monetary union but not a fiscal or political union created a construction that mimicked borrowing in a foreign currency, meaning that the sovereign did not have a printing press (central bank) that could create at will the currency in which it borrowed.

Not surprisingly, eurozone policymakers and political leaders met these challenges with a range of institution-building policies. These included: the establishment and deployment of fiscal rescue funds (the European Financial Stability Facility and its permanent replacement, the European Stability Mechanism); the establishment of a banking union; innovative policies by the ECB, most notably the Outright Monetary Transaction framework, which was ostensibly crisis management but, by signaling to the market that the ECB stood behind member states, can be considered part institution-building policy; and various governance reforms (including a new Fiscal Compact).

But most institution-building remains aspirational in the form of a roadmap to establish a "genuine economic and monetary union," laid out in the June/December 2012 "four presidents' report" and the July 2015 "five presidents' report.

Abenomics: Coherent In Conception, Problematic In Implementation

In macroeconomic terms, Japan has been facing two big problems: mild chronic deflation, which has lasted for more than two decades, and steadily declining real potential growth, initially because of a slow-growing and now a slow-falling population. The GDP deflator (helped partly by the consumption tax hike) has increased 4.1% since its second-quarter 2013 trough, but is still 15% below its second-quarter 1994 peak level; quarterly real GDP growth in the past 15 years has averaged 0.8% year on year. Deflation and low real GDP growth together spell nominal stagnation and fiscal woes: Current nominal GDP is about the same as it was in the third quarter of 1994 and net (gross) government debt (a stock) in financial year 2015 is set to be the equivalent of about 1.28 (2.43) years of current nominal GDP (a flow).

The economic policy agenda of the three-and-a-quarter year old administration of Shinzo Abe maps into the policy taxonomy quite nicely. The first two arrows of aggressive monetary policy and "flexible" fiscal policy aimed at ending deflation and securing stable low inflation (of 2%) are textbook demand-management policies, even if the strong stated commitment by the Bank of Japan (BOJ) to end deflation and concomitant aggressive action are long overdue. The third arrow of Abenomics, the (real) "growth strategy," comprises a long list of supply-side policy measures. Monetary and fiscal policies to deal with deflation and eliminate the output gap; supply-side policies to lift real potential growth--this is a coherent policy mix.

However, there are two flies in the ointment. Eager to pursue fiscal consolidation to pay for the aging society, the fiscal

hawks gained the upper hand in the political control room and convinced Prime Minister Abe to go ahead with a planned hike in the consumption tax (to 8% from 5%) a little more than one year into the historic bid to end deflation. The result: a self-induced recession and serious setback to the stated attempt to reflate the economy by permanently raising the inflation expectations of the Japanese public (real GDP growth since second-quarter 2014 has averaged negative 0.7% quarter on quarter in seasonally-adjusted annualized terms). With the consumption tax set to be hiked again in a year's time (to 10%) unless the government does a volte-face, a similar fate is looming in one year's time.

Additionally, the growth strategy largely misdiagnosed the problem, implicitly treating the low real growth as mainly a productivity problem. While there is no doubt room to make the economy more efficient, Japan is hardly a productivity basket case. Japan's real potential growth rate is falling because the population is falling and is set to fall for as far as the eye can see. The falling population reflects two factors: a fertility rate (1.42 births per woman in 2014) that is way below the replacement rate (2.07) and a systemic aversion to embracing immigration. If the idea is to tangibly raise the overall potential growth rate (as opposed to the per capita growth rate) in the face of a steadily declining population, radical policies aimed at raising the fertility rate and encouraging immigration and guest workers are required.

Encouraging guest workers and immigration provides a quadfecta of benefits when it comes to raising potential growth: one, it directly raises the population and workforce; two, it raises the fertility rate directly because immigrants tend to be younger and to have higher fertility rates to begin with; three, by making it easy for child-care, housekeeping, and aged-care workers to reside in Japan, more women should be able to work and a higher labor-force participation rate to be sustained; fourth, via the same effect, the fertility rate for working women should be higher, too.

The Abe Administration's growth strategy has included a focus on increasing female labor-force participation, which appears to have been quite effective, and includes some relaxation of guest-worker visa rules, and the latest update (in November 2015) included an aspirational target of eventually raising the fertility rate to 1.8. Unfortunately, however, the pivotal area of immigration policy remains largely taboo.

China: Still Developing And In Transition

When applying the policy taxonomy to China, the key point to recognize is that China is still at a relatively early stage of its economic development and remains a "transitional economy" in that it is still evolving its economic, social, and political system. All five elements of policy are important for China, but, from a longer-term perspective, building the right institutions and managing that process relatively smoothly and successfully is the central challenge. China's political leaders should be, and certainly appear to be, focused on trying to establish the right platform for China to continue its recent historic 35-year process of economic transformation and development. The November 2013 Third Plenum "Decision" was all about laying out a vision for the necessary institution-building and the thirteenth five-year plan (2016-2020) puts some flesh on the bones of its implementation.

As China's actual and potential growth slows, demand-management policies are also important. Market participants are "trained" to pay particular attention to the course of monetary policy and therefore to the words and actions of the central bank. But when it comes to an emerging economy like China, it is important to realize that PBoC-watching is

not just another variant of Fed-, ECB- or BOJ-watching. Because China is still a developing and transitional economy, its monetary and financial system architecture is also at an early stage of development. The People's Bank of China operates in a very different institutional and market setting from the independent inflation-targeting central banks of the developed world. This always needs to be borne in mind, and the interpretation of policy communication and action filtered through that lens.

Given the large debt overhang from China's 2008-2010 credit-fueled investment boom--a dramatic Keynesian policy response that insulated China from the brunt of the collapse of export demand attending the Great Recession--policymakers would be well advised to have well-articulated and well-targeted crisis management plans at the ready, too. Digesting credit and debt overhangs is always fraught; doing so during a structural downshift in growth and when the shackles of a repressed financial and monetary system are being removed and those systems are being opened up to market forces makes it particularly so.

The Overburdening Of Monetary Policy

There has been a lot of talk in recent years of too much "burden" being placed on monetary policy and statements to the effect that "monetary policy cannot solve all economic problems" are frequently heard. What exactly does this mean? The policy taxonomy can help cast light on these arguments.

The argument that monetary policy cannot do the work that supply-side policies or "structural reforms" are supposed to do is true, of course, but smacks of being a straw man. No one (credible) ever suggested that the role of monetary policy is to raise real potential growth. Indeed, the whole theoretical foundation of modern central banking rests on the idea that, while monetary policy can influence the level of aggregate demand in the short- to medium-run, it cannot affect long-run real variables such as potential growth and the natural rate of unemployment; any sustained attempt to do so just ends up changing nominal not real variables (2). Raising real potential growth or lowering a too-high natural rate of unemployment, everyone agrees, is the job of supply-side policies, which falls in the purview of the government (3), not the central bank.

Two qualifications are in order, however. One is the general point that there is an indirect link between monetary policy and real variables: a favorable macroeconomic environment--keeping the economy humming along at full employment with low stable inflation--provides a conducive environment for carrying out supply-side reforms. Demand-management policy and supply-side policies are complements, not substitutes.

The second, more specific, point relates to the idea of "path dependence": the long-run is not independent of the series of short-runs that it comprises. Intuitively, path dependence is the insight that where the (real) economy ends up depends on where it is coming from. Demand-management policies DO affect the short-run, so, cumulatively, they affect the long-run too. The long-run neutrality of money is really just a limiting theoretical case, not a fool-proof guide to real-world policymaking, and certainly not a "get-out-jail-free" card for monetary and fiscal policymakers when it comes to worrying about long-run unemployment and potential growth.

There are two germane angles to the "overburdening" of monetary policy argument. One is the "perverse incentive" or political "moral hazard" idea that, by being very accommodative, monetary policy may take the pressure off

policymakers to "do their bit," that is, to implement politically painful but economically beneficial supply-side reforms. But two wrongs don't make a right: Central bankers should do no less and no more than whatever they need to do, within their legislative mandates, to achieve their mandated objectives. It is not their job to second guess the government and engage in a policy game with them.

The second, more compelling sense of monetary policy being overburdened is that, within the arena of demand management, too much weight has been put on monetary policy relative to fiscal policy. The post-financial crisis environment in the developed world has been one in which, from a starting point of there being a large shortfall in aggregate demand, powerful and persistent forces of debt deleveraging were unleashed. This describes an economic environment in which the efficacy of monetary policy would be expected to be greatly reduced but in which fiscal policy, centering on direct injections of aggregate demand via government spending on infrastructure and other public investment and consumption, could be quite effective.

Notwithstanding this configuration, a strong policy bias has existed in favor of using monetary policy rather than fiscal policy as the primary tool to stimulate aggregate demand. This has required monetary policy to be pushed past the point of the zero interest rate bound far into the uncharted territory of quantitative easing and negative policy rates. The very fact that, seven and a half years after the global economy was thrust into deep recession, several major developed world central banks either have their balance sheets in full-bore auto-pilot expansion mode or are implementing negative policy rates, thus pushing their yield curves out to 10 years or so to zero or into negative territory, would seem to be a compelling testament to this version of the overburdening of monetary policy thesis.

Fiscal Space Versus Fiscal Ammunition

In economic policy debates, the comment is often heard that one country or another has limited "fiscal space," as if there was a limited amount of fiscal "ammunition," and, once that fiscal ammunition was used up, fiscal policy had reached its limits. This may be the wrong way to frame or think about the matter.

Countries that appear to be running out of "fiscal space" will be ones running large budget deficits and racking up a large pile of government debt. A key consideration is whether the country in question is able to issue debt denominated in its own currency or not. If it can, it is hard to see why fiscal space would be finite.

Consider the following thought experiment. One arm of the government (the treasury) spends more than it takes in, thereby running a budget deficit, but another arm of the government (the central bank) is able to finance that budget deficit with the press of a keystroke (by buying directly or indirectly the associated debt securities issued). In fact, the central bank could obviate the need for the government to even issue debt securities to finance its deficit by allowing the government's account to go into overdraft: then budget deficits would automatically be "financed by," or result in, the creation of deposits in the banking system backed by reserves at the central bank.

Of course, it would be easy to imagine that such a state of affairs, if left unchecked for too long, would result in unbridled inflation. It is precisely because of the risk of such an outcome, and because history has bequeathed a litany of destructive inflationary episodes, that the institution of the separation of fiscal and monetary policy, underpinned by the sanctity of central bank independence, evolved.

When governments are able to borrow in their own currency, or command resources with their own currency, and aggregate demand falls short of aggregate supply, suggesting that inflation should not be a problem or imminent threat, there probably is "fiscal space." Limited fiscal space is probably a more applicable concept when governments, for whatever reason, are not able to borrow, or command resources, in their own currency.

The better way to think about this may be to ask where aggregate demand is in relation to aggregate supply and, if there is a clear deficiency of aggregate demand, not to give up the ghost on the grounds that there is no more fiscal space, but to ask which tool, fiscal or monetary policy, or combination of them, would be most effective in closing the gap quickly and in a sustainable way.

International Policy Coordination

There is a lot of talk of "international policy coordination," particularly around the time of G20 or G7/G8 meetings. But what exactly is international policy coordination, and why is it necessary? After all, an extreme form of Mundell's "impossible trinity" would suggest that, as long as countries allow their exchange rate to be flexible and allow capital to flow freely in and out of the country, they can maintain domestic monetary control. This is the intellectual basis of the standard policy framework of inflation targeting and floating exchange rates.

One answer immediately suggests itself: Not all countries operate flexible exchange rates and have completely open capital accounts, so the international monetary system as a whole does not conform to the tenets of the "impossible trinity": Monetary spillovers exist. Another is that scale may matter. Large and small countries coexist in the global economy: Relatively small adjustments in policy, capital flows, and market prices (such as exchange rates) in large countries may be transmitted as large shocks to small countries. A third is that a more sophisticated model that includes the financial system and endogenizes financial stability may allow for a role for destabilizing spillovers from monetary policy (4).

It is possible to distinguish at least three forms of policy coordination. One is where different countries agree to take policy actions that they would have taken anyway: In game-theory terms, the policy actions are a dominant strategy for all players. This could be called "weak form coordination" or perhaps "rhetorical coordination."

A second is where countries calibrate or fine tune their policies to take account of spillovers and feedback: The basic thrust of policies will not depend on whether they are coordinated or not, but the details of timing and degree might. In game-theory terms this might be akin to a game in which side contracts can improve the equilibrium outcome, but not fundamentally change it. This could be called "semi-strong form coordination" or perhaps "spillover-internalizing coordination."

The third kind is where countries are locked in a low-level equilibrium (think of a trade war, for instance) in which everyone would be better off if they were to take actions that are not in their narrow self-interest but which will make them collectively better off if taken together. In game-theory terms, this is a dual (or multiple) equilbria situation, but both (the good and the bad) equilibria are stable, and shifting from one to the other requires a coordinating device. This could be called "strong form coordination" or perhaps "equilibrium-shifting coordination."

In discussing international policy coordination, it is worth asking and keeping in mind which form of coordination is being indicated.

Related Research

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- Taking Stock Five Years On From The Great Financial Crisis, Oct. 2 2013
- Rethinking Monetary Policy: Lessons And Reminders From The Great Financial Crisis, April 3, 2013

Endnotes

(1) The theoretical version is captured by the so-called "Tinbergen rule": Policymakers need as many instruments as they have policy targets. The Tinbergen rule is named after the first recipient of the Nobel Prize in economics, Dutch economist Jan Tinbergen, who shared the prize with Norwegian economist Ragnar Frisch in 1969. These ideas have been around for a while.

(2) This is the idea of the long-run neutrality of money or the vertical long-run Phillips Curve.

(3) I am using the term "government" here in the more conventional sense, excluding the central bank.

(4) See, for instance, Helene Rey, 2013: "Dilemma not Trilemma: The Global Financial Cycle and Monetary Policy Independence," paper presented to Federal Reserve Bank of Kansas City Jackson Hole Economic Policy Symposium.

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