# Raghuram Rajan: Towards rules of the monetary game

Talk by Dr Raghuram Rajan, Governor of the Reserve Bank of India, at the IMF/Government of India Conference on "Advancing Asia: Investing for the Future", New Delhi, 12 March 2016.

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*This talk draws extensively on a paper entitled "Rules of the Monetary Game" with Dr. Prachi Mishra at the Reserve Bank of India.*

There are few areas of robust growth around the world, with the IMF repeatedly reducing its growth forecasts in recent quarters. This period of slow growth is particularly dangerous because both industrial countries and a number of emerging markets need high growth to quell rising domestic political tensions. Policies that attempt to divert growth from others rather than create new growth, or that create growth while fostering instability elsewhere, are more likely under these circumstances. Even as we create conditions for sustainable growth, we need new rules of the game, enforced impartially by multilateral organizations, to ensure countries adhere to international responsibilities. I propose to sketch how we could do this in this talk.

## Why is growth weak?

Why is the world finding it so hard to restore pre-Great Recession growth rates? The immediate answer is that the financial boom preceding the Great Recession left industrial countries with an overhang of debt, and debt, whether on governments, households, or banks, is holding back growth.[1] While the remedy may be to write down debt so as to revive demand from the indebted, it is debatable whether additional debt fueled demand is sustainable. At any rate, large-scale debt write-offs seem politically difficult even if they are economically warranted.

But perhaps the debt overhang points to a deeper cause; the debt-fueled demand before the Great Recession, which has led to the debt overhang now, hid a structural slowdown in global potential growth, perhaps because of the difficult-to-understand consequences of population ageing across the industrial world, and the slowdown in productivity growth.

Structural reforms, typically ones that increase competition, foster innovation, and drive institutional change, are the way to raise potential growth. But these hurt protected constituencies that have become accustomed to the rents they get from the status quo. Moreover, the gains to constituencies that are benefited are typically later and uncertain. No wonder Jean-Claude Juncker, then Luxembourg's prime minister, said at the height of the Euro crisis, "We all know what to do, we just don't know how to get re-elected after we've done it!"

## The growth imperative

If indeed fundamentals are such that that the industrial world has, and will, grow slowly for a while before new technologies and new markets come to the rescue, would it be politically easy to settle for slower growth? After all, per capita income is high in industrial countries, and a few years of slow growth would not be devastating at the aggregate level. Why is there so much of a political need for growth in industrial countries?

One reason is the need to fulfil government commitments such as debt and social security entitlements. Another reason is that growth is necessary for inter-generational equity,

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[1] See the interesting evidence in Atif Mian and Amir Sufi, House of Debt (Princeton University Press, New Jersey, 2014) and the cross-country evidence in Carmen Reinhart and Kenneth Rogoff, This Time is Different (Princeton University Press, New Jersey, 2008). For an illuminating overall view of the global financial crisis and the policy remedies, see Martin Wolf, The Shifts and the Shocks: What We've Learned and Have Still to Learn from the Financial Crisis (Penguin USA 2015).

especially because the young, who are most benefited from job creation, are the generations that will be working to pay off commitments to older generations. Given the young are also the cohorts that can take to the streets, growth is essential for social harmony. A third reason is that, within country, long periods of below par growth can lead the unemployed to become unemployable.

Growth is also extremely important for emerging markets and developing countries, where populations are typically younger, poorer, and social safety nets thinner. With everyone looking for growth, but limited political room for structural reforms and substantial time lags before they pay off, every country is looking for alternatives.

**The monetary dilemma**

Industrial country central bankers know that monetary policy cannot substitute for structural reforms and elevate growth potential. They have a different problem from the country's political authorities, though its roots may be common. Inflation is flirting with the lower limit of their inflation mandate and threatens to stay lower for long. With interest rates already very low, and with pundits constantly reminding them that "inflation is always and everywhere a monetary phenomenon" they have to go beyond ordinary monetary policy, or lose credibility and risk violating their domestic mandate.

No central banker can claim they are out of tools. For after all, if all else fails, there is the "helicopter drop", where the central bank prints money and literally sprays it on the streets to create inflation (more prosaically, it sends a check to every citizen, perhaps more to the poor who are more likely to spend). But before it reaches this pass of monetary financing of the fiscal deficit, there are a whole range of unconventional tools ranging from various forms of asset purchases termed "quantitative easing" to negative interest rates.

But as central bankers flirt with ever more unconventional policies, it is worth asking if these policies really move the economy towards the desired objective. Monetary policy works through the public's expectations. If ever more aggressive policy convinces the public that calamity is around the corner, it may tempt large segments to save rather than spend. The effect is magnified if there is a sense that the consequences of today's policies (distorted asset prices, high government debt, high private debt etc.) will have to be reversed in the future at great cost to the system.

Perhaps worse is if the public believes that policies will never change, and takes on leverage and positions in assets commensurate with that. While this may help the central bank achieve its objectives in the short run, the shifts in asset price when policy does inevitably change, with effects exacerbated by enhanced leverage, could create enormous dislocation.

While the jury is still out on the effects of unconventional monetary policy on the domestic economy, it seems fair to say that the benefits seem to be diminishing after years of effort, and the costs increasing. Also, if structural impediments are the primary cause of slow growth, one could ask if unconventional monetary policy, by giving the public the impression that something is being done, actually takes the pressure off politicians to undertake the required policy actions – by stating monetary policy is the only game in town, central bankers make it the only game in town. Unfortunately, given their domestic inflation mandate, central bankers cannot but try anything that could work. And this leads to an important consequence of their policies that is neglected, the external spillovers effects.

**Spillovers from monetary policy**

All monetary policies have external spillover effects. If a country reduces domestic interest rates, its exchange rate also typically depreciates, helping exports. The key, however, is that under normal circumstances, the "demand creating" effects of lower interest rates on domestic consumption and investment tend to be substantial, and the "demand switching" effects of the lower exchange rate in enhancing external demand for the country's goods are likely to be

relatively small. Indeed, one could argue that the spillovers to the rest of the world could be positive on net, as the enhanced domestic demand draws in substantial imports, offsetting the higher exports.

Matters are less clear in the circumstances we find ourselves in today, and with the unconventional policies countries are adopting. For instance, if the interest rate sensitive segments of the economy are constrained by existing debt, lower rates may have little effect on enhancing domestic demand, but continue to have demand switching effects through the exchange rate.

Similarly, the unconventional "quantitative easing" policy of buying assets such as long term bonds from domestic players may certainly lower long rates but may not have an effect on domestic investment if aggregate capacity utilization is low. Indeed, as argued earlier, savers may respond to the increased distortion in asset prices by saving more. And if certain domestic institutional investors such as pension funds and insurance companies need long term bonds to meet their future claims, they may respond by buying such bonds in less distorted markets abroad. Such a search for yield will depreciate the exchange rate. The primary effect of this policy on domestic demand may be through the "demand switching" effects of a lower exchange rate rather than through a demand creating channel.

Of course, if all countries engage in demand switching policies, we could have a race to the bottom, with no one any better off. Nevertheless, countries may find it hard to get out of such policies because the immediate effect for the country that exits might be a serious appreciation of the exchange rate and a fall in domestic activity.

The bottom line is that simply because a policy is called monetary, unconventional or otherwise, it may not be beneficial on net for the world. That all monetary policies have external spillovers does not mean that they are all justified. What matters is the net spillovers. One source of spillovers is through the trade channel, the relative magnitude of demand creating versus demand switching effects. Another source of spillovers is through cross border capital flows, and their effect on financial stability elsewhere.

Of course, a country's international responsibilities in this regard are murky, while the central bank's domestic mandate is explicit. This leads to a possibly serious asymmetry in responsibility. If the central bank is in danger of falling below the lower bound of its inflation mandate, for example, it is required to adopt all possible policies to get inflation back on target, no matter what their external effect. Indeed, it can even intervene directly in the exchange rate in a sustained and unidirectional way, though internationally this could be seen as an abdication of international responsibility according to the old standards. In the current state of affairs, industrial country central banks find all sorts of ways to justify their policies in international fora, without acknowledging the unmentionable – that the exchange rate may be the primary channel of transmission, and that adverse capital flow spillovers may be sizeable. Of course, central banks consider "spillbacks" to their policies from abroad, but these may be a small fraction of overall spillovers. In what follows, I will examine sensible rules of monetary behavior assuming the domestic mandate does not trump international responsibility.

## Rules of the game

What would be the basis for the new rules? As described elsewhere, the state of theoretical models and empirical work do not allow for clear cut identification of spillovers and their consequences.[2] Rather than wait for clear identification, which may be a long while coming, perhaps as a start policies could be broadly rated based on analytical inputs and discussion. To use a driving analogy, polices that are generally seen to have few adverse spillovers, and are even to be encouraged by the global community should be rated Green, policies that

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[2] See Prachi Mishra and Raghuram Rajan, "Rules of the Monetary Game", 2016, mimeo.

should be used temporarily and with care could be rated Orange, and policies that should be avoided at all times could be rated Red. To establish such ratings, the effects of any policy have to be seen over time, rather than at a point in time.

In general, policies that are likely to have net adverse outside spillovers over time could be rated red and should be avoided. Such policies obviously include those that have small positive effects in the home country (where the policy action originates) combined with large negative effects in the foreign country (where the spillovers occur). For example, if unconventional monetary policy actions lead to small positive effects on exports to emerging economies (EMs) and a feeble recovery in the source country but large capital outflows and asset price bubbles in the EMs, these policies could be rated Red. Global welfare would decrease with this policy.

If a policy has positive effects on both home and foreign countries, and therefore on global welfare, it would definitely be rated Green. Conventional monetary policy would typically fall in this category, as it would raise output in the home economy, and create demand for exports from the foreign economy. A Green rating for such policies would, however, assume that the stage of the financial and credit cycle in the home and foreign economies is such that financial stability risks from low interest rates are likely to be limited.

A policy could also be rated Green if it acts as a booster shot and can jump-start a large home economy, but creates temporary negative spillovers for the foreign economy. Even if there are temporary adverse spillovers on foreign countries, the policy, through its effect on home economy growth and demand for foreign goods, can eventually provide offsetting large positive spillovers to the rest of the world. Of course, it is important that the home economy, after receiving the booster shot and picking up growth, not follow policies (such as holding down its exchange rate) that minimize positive spillovers to other countries. A policy rated Red on a static basis could thus be deemed Green based on implicit commitments over time.

It is possible to visualize other policies that have large positive effects for the originating country (because of the value of the policy or because of the country's relative size) and sustained small negative effects for the rest of the world. Global welfare, crudely speaking, may go up with the policy, even though welfare outside the originating country goes down. While it is hard to rate such policies without going into specifics, these may correctly belong in the Orange category – permissible for some time but not on a sustained basis. Even conventional monetary policies to raise growth in the home economy could fall in the Orange category if countries are at a stage of financial cycle where low interest rates lead to significant financial stability risks in the home and foreign economies.

Clearly, foreign countries may have policy room to respond, and that should be taken into account. Perhaps the right way to measure spillovers to the foreign country is to measure their welfare without the policy under question` and their welfare after the policy is implemented and response initiated. So, for instance, a home country A at the zero lower bound may initiate Quantitative Easing (QE), and a foreign country B may respond by cutting interest rates to avoid capital inflows and exchange rate appreciation. The spillover effects of QE would be based on B's welfare if QE was not undertaken versus B's welfare after QE is initiated and it responds.

Overall, whether policies are rated Red, Green, or Orange would depend on a number of factors such as the time dimension; stage of the financial and business cycle in the home and foreign countries; whether the policy action constitutes a booster shot to jump start the economy or gives only a mild boost and has to be employed for a sustained period; whether standard transmission channels are clogged to warrant the use of unconventional policies; whether the foreign country has room to adopt buffering policies; whether the spillovers impact poor countries which have weak institutions and less room to respond, etc.

## Moving forward

The next crucial question is: who should measure and analyze spillovers, what would be an appropriate forum to discuss spillover effects from specific policies, and the ratings of these policies? How should we proceed?

International Discussion

Given the constraints and political difficulties under which international organizations operate, it may be appropriate to start with a group of eminent academics with reasonable representation across the globe, and have them measure and analyze the spillovers, and grade policies.

Perhaps the next step would be an agreement to discuss policies and their international spillover effects at meetings such as those of the IMF Board, the IMFC, the BIS and the G-20. The discussion would be based on background papers, which would be commissioned from both traditional sources like the IMF, as well as non-traditional sources like the group of academics and EM central banks.

These papers would attempt to isolate the nature of spillovers as well as their magnitude, and attempt a preliminary classification of policy actions. Almost surely, there will be a lot of fuzziness about which color to attribute to a wide range of recent policies. But discussion can help participants understand both how the policies could be classified if we had better models and data, as well as how the models and data gathering can be improved.

Country Responsibilities before Formal Rules

When policies are being discussed so as to get better understanding, no policies that affect the international monetary system should be off the table. Importantly, simply denoting a policy with the label "monetary" should not give it an automatic free pass because it falls under the central bank's domestic mandate. What will be important is neither the policymaker's mandate, professed intent, or instruments, but actual channels of transmission and outcomes, including spillovers.

Policymakers will respond to the background papers by stating and explaining their policy actions, attempting to persuade the international community they fall in the Green and Orange zones.

## International conference

Perhaps free and frank discussion may be enough to get countries to adopt responsible policies. If not, as the international community builds understanding on what constitutes sensible rules of the game, and how to label policies in that context, perhaps an international conference may be warranted to see how the community's understanding of beneficial rules can be implemented. At that time, a discussion of how a central bank's international responsibilities fit in with its domestic mandate may be warranted. While recognizing the political difficulty of altering any central bank's mandate, the conference will have to deliberate on how international responsibilities can be woven into existing mandates. It will also have to decide whether a new international agreement along the lines of Bretton Woods is needed, or whether much can be accomplished by small changes in the International Monetary Fund's Articles of Agreement.

## Role of the fund

What role would the Fund play? The obligations of members and the authority of the Fund are derived from the Articles of Agreement. Section 1 of Article IV makes clear that IMF members are under general obligation "to collaborate with other members of the Fund to assure orderly exchange arrangements and to promote a stable system of exchange rates". The meaning of "general obligation" is unclear in the Articles but could be "relied upon as a basis for the Fund

to call on its members to take specific actions or to refrain from taking specific actions" (IMF, 2006). Article IV further states that "In particular, each member shall … (iii) avoid manipulating exchange rates or the international monetary system in order to prevent effective balance of payments adjustment or to gain unfair competitive advantage over other members …..". Further, The Principles for the Guidance of Members' Exchange Rate Policies (originally 1977, amended in 2007) notes that " … C. Members should take into account in their intervention policies the interests of other members, including those in whose currency they intervene".

Although the Articles of Agreement or The Principles do not define "manipulation" in any detail, IMF (2007) narrows the scope of manipulation by noting that "manipulation of the exchange rate is only carried through policies that are targeted at – and actually affect – the level of exchange rate. Moreover, manipulation may cause the exchange rate to move or may prevent such movement."

In practice, it may be difficult to determine if a policy is targeted at attaining a level of exchange rate. Direct policy actions such as intervention in the foreign exchange market, or indirect policies such as monetary, fiscal, and trade policies or regulations of capital movements, regardless of the intent or purpose, can affect the level of the exchange rate, and can be interpreted as "manipulation". The interpretation of the Articles of Agreement could perhaps be broadened in scope to include a wider range of policies, which can primarily have effects on the exchange rates, and therefore beggar-thy-neighbor consequences.

While the Articles of Agreement include members' obligations in relation to exchange rate policies, global financial stability implications of country specific policies are not touched upon anywhere in the Articles. Members' obligations are considered only in relation to domestic growth objectives. For example, based on the Articles, a country with a weak economy can pursue loose monetary policies to stimulate output and employment. Despite the implications of such policies for financial stability in other countries, the country would argue that its policies are in line with Article IV, Section 1(i) which allows each member to "(i) … direct its economic and financial policies toward the objective of fostering orderly economic growth with reasonable price stability …". More generally, the Fund's Articles may need altering based on the discussion of the rules of the game.

Moreover, although broader surveillance by the Fund of its members' exchange rate policies, and other policies with significant financial sector spillovers, and perhaps public statements about such policies can have signaling effects, countries are not obligated to follow Fund advice unless in a program. The more pertinent question, therefore, might be what can the Fund really do once its Executive Board determines that a particular country is in violation of its obligations under the new rules of the game? Hopefully, the clear focus on the downsides of the particular country's actions for the rest of the world will lead to political and economic pressures from around the world that make the country cease and desist. The clearer the eventual rules of the game, the more likely this outcome.

## Conclusion

Given the importance of spillovers from monetary policies, especially in the face of globally low inflation, it is important we start building a global consensus on how to get better outcomes for the world. Nevertheless, with economic analysis of these issues at an early stage, it is unlikely we will get strong policy prescriptions soon, let alone international agreement on them, especially given that a number of country authorities like central banks have explicit domestic mandates.

This paper therefore suggests a period of focused discussion, first outside international meetings, then within international meetings. Such a discussion need not take place in an environment of finger pointing and defensiveness, but as an attempt to understand what can be reasonable, and not overly intrusive, rules of conduct.

As consensus builds on the rules of conduct, we can contemplate the next step of whether to codify them through international agreement, see how the Articles of multilateral watchdogs like the IMF will have to be altered, and how country authorities will interpret or alter domestic mandates to incorporate international responsibilities.

The international community has a choice. We can pretend all is well with the global financial non-system and hope that nothing goes spectacularly wrong. Or we can start building a system for the integrated world of the twenty first century. I do hope we can consider some initial steps. Thank you.