



Bruce Edwards:

Global warming is wreaking havoc on so many levels, and the clock is ticking. But climate action is costly, especially for those countries that have been bearing the brunt of nature's wrath.

Raphael Lam:

Most of the emerging markets, especially developing countries, will find the cost of transition very challenging. The debt is already high, the debt servicing cost is increasing, so therefore, countries or governments would face a policy trilemma between achieving climate goals on one hand... (fade)

Christine Richmond:

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Bruce Edwards:

So the good news is the world actually came together to acknowledge the climate problem back in 2015 and set some climate goals. But the bad news is achieving those goals is stretching government finances to the limit, beyond the limit in some cases. And that's where fiscal policy and climate mitigation come together, and why the IMF's Fiscal Affairs Department is working hard to help countries manage their limited resources.

Raphael Lam:

My name is Raphael Lam. I'm the deputy division chief in the Fiscal Affairs Department of the Fund, and our division basically is the one who oversees the annual publications of the IMF Fiscal Monitor.

Christine Richmond:

I'm Christine Richmond, and I'm also a deputy division chief in the Fiscal Affairs Department, working in the climate policy division. So we coordinate all of the climate activities within the FAD, and in particular, a lot of the work with COP, and external participants as well.

Bruce Edwards:

So Christine, when we talk about climate goals, what countries would make the biggest difference in terms of getting carbon emissions down to where they need to be?

Christine Richmond:

Well, when we're talking about the big emitters, we're talking about the big countries. So that includes China, the European Union, India and the United States. And together, they account for about 60% of global emissions. But countries like China, and India, and other emerging market economies- their share of emissions is actually growing quite rapidly, and we expect by 2035, their share is going to increase to 70%.

Bruce Edwards:

Wow, that's significant.



Christine Richmond:

It's a lot. Yes. But I think countries do recognize that they need to do something if we want to achieve the 2015 Paris Agreement goal of trying to hold the global average temperature increased to well below two degrees Celsius. Countries are trying to achieve these emission objectives in various different ways, but by our assessment, these current efforts are insufficient. So we estimate that based on their existing and planned mitigation policies, we're only going to achieve an average of 13% reduction in emissions across G20 countries. And what we need to see is about 25 to 50% reduction in emissions by 2030, so we need to do more.

Bruce Edwards:

And Raphael, this paper is all about what countries are up against in hitting these climate goals, and obviously big challenges. And you describe what you call a trilemma of challenges, so it's not just fiscal, there's a debt element, there's also the political aspect to all this. Are all of these countries facing this trilemma to the same degree, do you think?

Raphael Lam:

So climate actions presents the policymakers with a very difficult set of trade-offs. So as Christine mentioned, a lot of the countries are pursuing policies to reduce emissions, mostly fuel spending in terms of green subsidies or investment, but relying mostly on those measures, and scaling them up to meet the climate ambition goals would be increasingly costly, meaning that possibly raising debt by as much as 50%, in our estimate, by mid-century.

So certainly, this is not the way to go. But at the same time, if we prolong the business-as-usual scenarios, basically would leave the global economy more vulnerable to climate risk as far as the global warming phenomenon. So certainly, countries have the option to raise revenue to decrease their debt burden, for example, through carbon pricing, but relying on some of these revenue measures alone will also cross political red lines, meaning that the economy or the citizens may not be able to afford it.

So therefore, countries or governments would face a policy trilemma between achieving climate goals on one hand, fiscal sustainability on the other, as well as the political feasibility. In other words, pursuing two objectives, what usually comes at the expense or the cost of partially sacrificing the third. And therefore, it is—we call it a policy trilemma faced by a lot of the governments. Certainly, these policy tradeoffs varies across countries, depending where they are in terms of the debt level, depending on their constituencies. So we find that countries that have high debt, or even rising interest rates, they would find the policy trilemma much more challenging than others.

Bruce Edwards:

So debt obviously a big problem, do you think that debt is really the biggest problem when it comes to countries trying to implement any of this policy advice that you have in the paper?

Raphael Lam:

Yeah, the state of the public finances certainly is an important factor to consider. So when government pursues these climate policies, they will need to consider the overall budget constraints, meaning that making sure that the policies are affordable, and will not significantly add to debt. For example, our estimate shows



that if you make certain types of revenue and spending policies in an appropriate rate, you could actually contain debt level increases, at the same time, achieving the climate goals. Countries with low debt certainly have the policy space to accommodate though, spending during the green transition.

However, most of the emerging markets as well as the developing countries will find the cost of transition very challenging. The debt is already high, the debt servicing cost is increasing, so if we continue to spend on the climate policies, that will not be feasible, considering also other pressing development needs. So in that sense, it is important for those countries to improve spending efficiency, but at the same time, also build tax capacity to raise revenues. The challenges would also call for greater multilateral collaborations for concessional financing coming from different institutions. So as you know, the Fund, the IMF has put out this Resilience and Sustainability Trust, with the aim to provide the long-term financing for countries to adjust to these challenges.

Bruce Edwards:

And so Christine, what are you suggesting countries do to survive the energy transition, given all these existing fiscal pressures?

Christine Richmond:

The energy transition is going to be difficult for all groups, really. But every country, every region, households, firms, communities, are going to be impacted in different ways. And so this really comes back to the trilemma that Raphael just mentioned, and it's important to weigh the political feasibility, the debt sustainability, and the climate goals altogether. What we're seeing right now is the political feasibility is becoming more of a binding constraint. We've seen recent announcements by the UK, by Canada, to scale back some of their climate policies, to cushion the negative fiscal impacts on segments of the population. So we know that different groups are going to be impacted, and fiscal policy does have a role to cushion these impacts.

Now, I'm going to focus just on one specific group of countries, and that's the fossil fuel exporting countries, because they actually face additional challenges, because their economies are really reliant on the extractive revenues, much more so than other countries which have a diversified revenue base. So they're using this extractive revenue to finance their economic development, and they need to also, on the other hand, reduce their greenhouse gas emissions, and they need to still continue to supply fossil fuel resources to other countries as the whole globe transitions to a lower carbon footprint. So it's really a balancing act that this group of countries in particular is facing.

But we do think that fiscal policy has a role to play, and we think that the first thing that these countries need to do is to reduce and eliminate their explicit fossil fuel subsidies. They're very large. On average, 5.1% of GDP, and these should be gradually eliminated, and at the same time, they should then gradually phase in emissions pricing policies, which we can talk a bit about later. Secondly, this group of countries needs to build large fiscal buffers to prepare for this inevitable phasing out that we're going to see sometime in the future. They need to build a stronger fiscal framework so that they can better manage their resource wealth, and deal with this uncertainty that they're going to be facing.

Bruce Edwards:

So when you say increase their buffers, how are they supposed to do that? I mean, they're all having these revenue challenges, right?



Christine Richmond:

The IMF has a lot of advice specifically for this group of countries on how to build their buffers. And Raphael's division in particular has done work on this in the past. It's about first understanding that whatever you get in shouldn't necessarily be spent. And thinking about what kind of spending is really happening. Are you spending for the longer term for the country to invest in education, in health, diversification of the economy, so that you are going to reap the benefits over the medium-term? Or are you really just spending on salaries and things that don't necessarily have a long-term impact? We, in FAD, work a lot with this group of countries to help them build the expertise, the institutions, to help them navigate all of these challenges along the way.

Bruce Edwards:

So obviously the private sector is going to have a lot to do with this when we're talking about increasing revenues. Governments can generally only do that to a certain degree, there's a lot more investment that needs to go towards climate technologies. Is there enough private investment in terms of these technologies? And if there isn't, how do you encourage more of that private investment?

Raphael Lam:

Yeah, certainly the government cannot meet the climate challenges by itself. We see that the private sector actually has an important role to play, they have to fulfill the bulk of the decarbonization efforts as far as meeting a lot of the climate financing needs. So the good news here is that about 90% of the emission reductions that can be achieved through the existing commercially-proven technologies by 2030. So in that sense, the keys would be to deliver, or making sure that those no carbon technologies will be able to be applied or adopted by the firms itself. So in the Fiscal Monitor chapter, we outlined that there may be three broad ways that the governments can encourage private investment.

Number one is the regulations. Certainly, the regulatory policies, for example, to require firms to set or monitor the climate targets would usually reinforce their investment in terms of energy efficiency, in terms of reducing the pollution. And that particular, we find the impact is bigger for energy-intensive sectors. And that is important because the regulations actually foster the firms to make the transition.

The second element is to provide fiscal incentives. We have seen countries starting to do it. For instance, The U.S. has rolled out this Inflation Reduction Act. The European Union has these Green Deal industrial policies. So those would encourage firms to undertake some of the low-carbon technology investment. But at the same time, we need to be mindful of the potential consequences across borders, and policy certainty, as well as the better targeting would help to reach the broader set of the firms so that most of the firms will be able to participate, as well as make movement, or transitions to the green technologies.

The third element is how to catalyze private-sector financing. For example, governments can use subsidies, can improve the climate information architecture, and those would help the private sector to channel the resources to finance the climate investment. However, some instruments, for example, government credit guarantees may be associated with large fiscal risk, so that is important to consider how effective they are with the associated cost. So this would mean that we need to use a mix of the policy instruments in order to kind of encourage the firms to undertake the necessary investment in the technologies as far as providing the necessary climate financing.

Bruce Edwards:



And so Christine, you mentioned cutting subsidies, energy subsidies. So the study says carbon pricing is a really important part of making any of this happen. How does carbon pricing play into this exactly?

Christine Richmond:

Yeah, like you just mentioned, carbon pricing really should be at the center of a country's climate policies. And I think it's a really interesting instrument, because it can do so much. As an economist, we're all excited because it's the most efficient instrument that's available. But what's really great about it is that it's going to promote a full range of behavioral responses, to reduce energy use, shift to low-carbon fuels, and linking to what Raphael just discussed, it can also incentivize the private sector to innovate in, and adopt new low-carbon technologies. What's nice about carbon pricing as well is that in the short to medium term, carbon pricing can raise substantial revenues, that then can be used to finance other policies, maybe related to the climate agenda, but also in a broader sense, to help countries reach their economic and distributional objectives, which are going to be important when we think about getting public sector buy-in for new measures and changes in policies.

I honestly think it's quite remarkable to think of where carbon pricing has gone over the last decade. We've seen a big pickup in the interest by countries to actually undertake these kinds of policies. Right now, we have 49 countries that have carbon pricing initiatives in place, and that's more than double what we had only 10 years ago. And there are at least 25 additional countries planning to introduce carbon pricing.

So it's very exciting because the IMF is working alongside these countries to help make sure that they are done in the best possible way, to have the social protection element in it, have the revenue-raising element in it, and also achieving the climate agenda, hopefully triangulating across the trilemma, and making it all work. Obviously, one reality is with carbon pricing, along with any new tax that a government would want to introduce, is that it's not popular, necessarily. So there are political hurdles to introducing carbon pricing. But there are several examples that have been very successful that other countries can look to. For example, we have Sweden, Chile, and Singapore, which we highlight in the Fiscal Monitor, where these governments have been able to successfully introduce carbon taxes. And other countries can learn from these examples, and see what worked, what doesn't work, and take into account their country's specific circumstances.

Bruce Edwards:

And do you think meetings, events like the upcoming COP28 that's going to be in Dubai, I guess, does this work towards helping to build a global consensus on carbon pricing?

Raphael Lam:

Yeah, certainly it is a very challenging environment for countries to agree on the climate issues, which basically- they're affected in different ways. But we do see that there are efforts that are building up gradually. It may not happen overnight, but certainly, as Christine mentioned, there are progresses along the way, along different international forums that discuss the different types of arrangements. And recently, we have also seen that the African Union has become a permanent member of the G20 economies, so that would also kind of involve them as a stakeholder to make progress towards the climate transition.

Bruce Edwards:

Raphael Lam and Christine Richmond are both deputy heads in the IMF Fiscal Affairs Department. Thank you so much.



Raphael Lam:

Yeah, thank you very much.

Christine Richmond:

Thank you for having us.

Bruce Edwards:

Rafael Lam works on the Fiscal Monitor, which is published twice a year, and Christine Richmond works on climate policy, both in the IMF's Fiscal Affairs Department.

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I'm Bruce Edwards. Thanks for listening.