

Which developed country policies matter most to development?¹

Commitment to Development Index (CDI) Review,
commissioned by the Center of Global Development (CGD)

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I) Introduction

The Commitment to Development Index (CDI) created by CGD measures and compares the policies of high-income countries across seven policy ‘components’ - these are aid, finance, technology, environment, trade, security and migration. Each component is a weighted score of a range of quantitative measures of policies, and their contribution to international development.

A very important merit of this index is that it looks at a wide range of key policies of high income countries and thus goes well beyond the narrow focus on impact of aid, which is too often adopted and plays too large a role in policy discussions and international dialogue. In this sense, the CDI is both valuable and fairly unique in its broad approach to high-income countries policies’ spillovers on emerging and developing countries’ development.

The questions which this, and two other accompanying reports, are asked to address are:

Are we measuring the policies that matter most to development, and how can we improve the CDI in terms of measured actors and policies? If you were to create your own Index of high-income countries' policy efforts and their spillover effects on other countries, what would this Index look like? As regards the second question, in this report we would like to provide some initial ideas and elements towards it.

More specifically, this report will examine two aspects, of which the first one (a) will receive most attention

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- a) An assessment of whether the 27 CDI (and other) countries can be objectively assessed using an indicator on the degree to which their macroeconomic or financial policy supports or hinders global development.
- b) A review of the coverage of the CDI's overall approach – in particular, whether the country coverage should be expanded. A review of the environment component, and whether it could be improved in measuring policy contribution and spill-over effects of powerful development actors will also be briefly discussed.

In particular, it would seem that –though the CDI has many important and positive features-, it lacks the dimension of macroeconomic and financial policy in the high income and other large (especially China) countries, and their major effect on global development. This seems an important omission, and it would seem very desirable to include some aspects of macroeconomic policy (especially monetary and fiscal policies) in the CDI. However, as we discuss below, there are some challenges about how to do so, particularly as the impact is far more meaningful for the large economies, than the small ones, (though this is also a problem with the other components used, though perhaps to a somewhat smaller degree); also it may be difficult to rank the policies, as the desirability of policies varies with the broad circumstances, e.g. the stage in the economic cycle.

Furthermore, the financial policy dimension seems incomplete in the CDI, in that it does not include aspects relevant to global financial stability, such as appropriate, strong and comprehensive financial regulation, which is so crucial to global development. Finally, the environment policy dimension may require some additions.

In the next section (II), we will focus on the important macro-economic policy dimension.

II) Adding a macro-economic policy component to the CDI; rationale, theoretical and implementation issues.

A. Monetary policies.

It has been clear for a long time that macro-economic policies in the major industrialized economies have significant effects on the rest of the world, and specifically on the emerging and developing economies (EEDs), through a number of channels. For example, there is widespread consensus that monetary policies in major

economies, and especially the US, have a large effect on capital flows to and from EEDs, (for early discussions see for example, Calvo, Leiderman and Reinhart, 1996; Calvo and Reinhart, 1999 and Ffrench-Davis and Griffith-Jones, 1995). Thus low US interest rates have contributed to major capital flows, especially to emerging economies; these have mixed effects, as in the short term, they boost growth and development, and thus may reduce poverty, but may distort the economy, by overheating it, by leading to overvalued exchange rates, and may increase vulnerability to future crises, by leading to large current account deficits and increased debt. On the other hand, when US interest rates have gone up, especially but not only if the increases are large, there very often follow “sudden stops” of capital flows, or even more seriously important reversals of capital flows, that often lead to developmentally costly debt and financial crises, which reduce output and investment, increase unemployment and poverty.

The task of evaluating the impact of developed economies macro-economic and financial policies on EEDs is made more difficult currently because since the 2007/2009 financial crisis, there have been major changes in the nature of the policies deployed. For example, the nature of monetary policy has changed in a significant way in the US, Eurozone, Japan and the UK, due to the use of quantitative easing policies (QE), also called Unconventional Monetary Policies (UMPs). QE policies in the US included in the period after the collapse of Lehman Brothers in September 2008: (i) an extension of liquidity operations to support banks and markets, and (ii) large-scale asset purchases (LSAP) of debt, as well as mortgage-backed securities (MBS) and increasingly after 2010, Treasury securities. These asset purchases were on an unprecedented scale.

Currently, particularly the US, but to a far more limited extent other major developed economies, are engaging in a process of so-called “normalization of monetary policy”. (see more detailed discussion below). It should be stressed that the normalization of monetary policy has practically only started in the U.S. and to a far smaller degree the UK; even the U.S. has a long way to go in raising interest rates. Therefore focus on analysis of impact of monetary normalization can legitimately, for the time being focus mainly on the US. As regards the Eurozone and Japan, normalization of monetary policy, especially as regards increasing interest rates, is still fairly far away. This raises the importance of using macro-prudential regulatory policies to try to curb excessive credit creation in countries that are not yet normalizing monetary policy.

A key problem is that it is as yet relatively unclear on what the best path for this “normalization of monetary policy” should be, and even more on what the impact of this reversal on the rest of the world, and in particular on EEDs, will be. We will return to these issues later.

B. The EEDE and developed countries' Central Bankers' view

We will first focus on establishing that macroeconomic policies have large spillover effects on the rest of the world, and specifically on the EEDs. This is an issue, which has been raised with particular strength by senior policy-makers in emerging economies themselves, (see for example Mishra and Rajan (2015), for a thoughtful analysis, with Rajan then being the Governor of the Central Bank of India and by Mantegna, then Finance Minister of Brazil, who somewhat colorfully spoke about "currency wars" (Wheatley, J. and Garnham, 2010).

Very importantly, the problem has also been clearly acknowledged by Stanley Fisher (2016), then Vice Chairman of the Board of Governors of the Federal Reserve Board, (Fed) though both Fisher and other senior officials of the Fed and the European Central Bank have emphasized that domestic mandates are key for the Central Banks of the U.S. and the Eurozone. The issue of international spillovers has also been carefully analyzed by the International Monetary Fund, which has been dedicating specific publications to their analysis, as we discuss below.

As Mishra and Rajan, op cit point out the importance of such spillovers on the rest of the world is particularly significant in a context of a global environment characterized by a more integrated world with large capital flows, high levels of public and private debt, quite important long-term unemployment and sustained low inflation. In this context they point out that the pressure to avoid a consistent breach of the lower inflation bound and the need to restore growth to reduce domestic unemployment caused developed countries' Central Banks to place more of a burden on unconventional monetary policies (UMP). This was also combined with a reluctance, especially in the Eurozone to use fiscal policy more actively.

These unconventional monetary policy measures may have large adverse spillover effects on other countries. A key problem is that the domestic mandates of most central banks may not legally allow them to take spillovers into account, and may force them to undertake aggressive policies so long as they have some small positive domestic effect. Mishra and Rajan, op cit as well as other analysts point out that a consequence of this is that the world may embark on a sub-optimal collective path.

All monetary policies have external spillover effects. If a country reduces domestic interest rates, its exchange rate also typically depreciates, helping exports (the reverse is true when interest rates go up). The key however is that under normal circumstances, the "demand creating" effects of a lower interest rate on domestic consumption and investment (which will then generate higher demand for imports, including from

EEDEs) can be meaningful in relation to the “demand switching” effects of the lower exchange rate in enhancing external demand for the country’s goods. Indeed, one could argue that the spillovers to the rest of the world could be net positive.

After the 2007/2009 financial crisis, and with the unconventional monetary policies developed countries were adopting, things were less clear. For example, if the interest rate sensitive segments of their economy were constrained by factors like high levels of debt, or unwillingness to borrow due to uncertainty, lower rates may have had little effect on enhancing domestic demand, but continued to have demand switching effects through the exchange rate. Moreover, the consequences of unconventional policies over the medium term need not be benign if very major monetary easing, and very low interest rates in developed economies results-or contribute to- major capital flows increases and debt build up, in EEDEs, which may end in tears in the future.

Thus key is that unconventional expansionary monetary policies in developed economies may have not been net beneficial for the world as a whole, and for EEDEs. What matters is the relative magnitude of demand creating versus demand switching effects, and the magnitude of other net financial sector spillovers, including buildup of financial instability risks, that is, the net total spillovers (see for example Borio, 2009).

As briefly mentioned, a central contributor to policymakers of high income countries putting lower weight on international spillovers is that central banks of developed economies (as in other countries) tend to have purely domestic mandates. If for example, they are in danger of violating the lower bound of their inflation mandate, they are required to adopt all possible policies to get inflation back on target, whatever their external effect. Even if external spillovers may be significantly adverse, under current rules, their domestic mandates may give them no other options.

It is interesting that Stanley Fischer, then Deputy Chairman of the US Fed (2015), perhaps the senior Fed policy-maker, with most exposure to issues from a development perspective, recognized this dilemma clearly. He said: “In a progressively integrating world economy and financial system, a central bank cannot ignore developments beyond its country's borders, and the Fed is no exception. This is true even though the Fed's statutory objectives are defined as specific goals for the U.S. economy, -maximum sustainable employment and price stability. Hence, at first blush, it may seem that there is little need for Fed policymakers to pay attention to developments outside the United States.”

Fisher then recognizes: “But such an inference would be incorrect. The state of the U.S. economy is significantly affected by the state of the world economy. A wide range of foreign shocks affects U.S. domestic spending, production, prices, and financial conditions. ...The most recent available data show 47 percent of total U.S. exports going

to EME destinations. And of course, actions taken by the Federal Reserve influence economic conditions abroad. Because these international effects in turn spill back on the evolution of the U.S. economy, we cannot make sensible monetary policy choices without taking them into account.”

It is interesting that Stan Fischer, after recognizing that economic and financial developments in the US have global spill-overs, then asks what is the Fed’s responsibility to the global economy.

He stresses first and foremost, the need to keep the US own house in order. Economic and financial volatility in the US will have sizable and significant spill-overs. Sharp declines in U.S. output or large deviations of U.S. inflation from its target level would have adverse effects on the global economy. Thus, achieving domestic mandates of maximum sustainable employment and price stability, the Federal Reserve will also minimize adverse spill-overs and maximize the beneficial effect of the U.S. economy on the global economy.

To achieve this objective, financial stability needs to be taken into account. Efforts to stabilize the U.S. financial system also have positive spill-over effects abroad. But these financial stability responsibilities do not stop at borders, given the size and openness of US capital markets and the unique position of the U.S. dollar for financial transactions. The global financial crisis highlighted the extent of borrowing and lending in U.S. dollars by foreign financial institutions. When these institutions came under pressure, their actions contributed to the strains in both foreign and domestic dollar funding markets. The US developed swap facilities with some central banks in countries to facilitate the provision of dollar liquidity to these markets. This was valuable, but limited to very few emerging economies. Indeed, the extent to which major economies like the US provide swap arrangements to a diversity of emerging and developing economies could be one criteria for evaluating their contribution to development in EEMEs, and relevant for the CDI.

As regards monetary policy normalization, Fischer (2015) argued that the reduction of financial and economic vulnerabilities in recent years by emerging economies should increase their resilience to any market stresses that do result from normalization. Another reason for confidence is the decision of the Federal Reserve to normalize gradually over many years. That said, if the US economy grows faster than expected, US monetary policy will likely tighten more rapidly and this could cause potential problems in emerging countries (Fischer, 2016). In such cases, Fischer hypothesized that countries would be forced to raise interest rates and would see larger depreciations of their currency. Only if increased exports from increased US demand and the weaker domestic currency can offset their own tightened financial conditions,

can GDP in the emerging country rise. However, he warned that in some cases the deterioration of a country's balance sheet and the increase in risk spreads may hurt emerging economies as their currency weakens and they adopt tight monetary policies to keep inflation rates in check.

Like Fischer, Powell, the current Governor of the Fed, (2018) believes the most effective path monetary policy should take remains that of gradual normalization, and he thinks such a strategy will be manageable for emerging market economies. In line with the Federal Reserve System's mandate to focus on strengthening the US economy through meeting unemployment and inflation objectives, Powell's justification for this strategy does not consider global spillovers. This is a cause of major concern for EEMEs. The focus of the rationale set out by Powell, opcit, for a gradual tightening of monetary policy is to prevent a shortening of economic expansion and reducing job growth (if monetary policy tightening occurs too rapidly), as well as to prevent the overheating of the US economy (if monetary accommodation remains in place for too long). Whilst this pragmatism is welcome, as pointed out, it is a source of major concern, for EEMEs, that Governor Powell does not consider international spillovers.

In terms of international spillovers to emerging economies from the monetary policies of the European Central Bank (ECB), current President Mario Draghi spoke on the subject. Draghi (2016) was clear that spillovers from monetary policy exist, particularly as such policies are dictated by the central bank's national mandate, however like figures at the Federal Reserve, he claimed policies that secure domestic economic and financial stability also help foreign economies through improved trade and financial linkages. Draghi also recognized the inevitability of negative spillovers, particularly when economies are at different stages of their business cycles. He highlighted the pressures of capital flows to emerging countries (unlike Powell he does not play these down) as an example of a destabilizing spillover in the period of highly expansionary monetary policy.

It is positive that previous Fed Governor Janet Yellen acknowledged spillovers to other economies from US monetary policy in the tightening stage were unavoidable, but

argued that with stronger financial systems among emerging economies and clear and effective communication from the Federal Reserve, US monetary tightening would be a smooth process for these economies (Yellen, 2017). This is proving not to be the case.

It is important that even Fischer (2016) had put limits to the international responsibility of the Fed, by saying it is not unbounded. Fischer in conclusion reemphasizes that the Fed mandate, like that of virtually all central banks, focuses on domestic objectives. As Fisher himself recognizes, this ignores or gives little role to the fact that that external spillovers may be significantly adverse, but is based on the purely domestic mandate.

Mishra and Rajan, op cit have made interesting proposals to help overcome this emphasis on a purely domestic mandate by countries agreeing on a set of new rules or principles, which describe the limits of acceptable behavior, which could lead to higher welfare in all the countries. This does not mean countries have to coordinate policies, just follow some rules.

Furthermore, these policies are rated, which could give some basis for measuring policies, so as to be possibly included in the CDI.

C. Rating monetary policy?

According to Mishra and Rajan, op cit policies could be broadly rated based on analytical inputs and discussion. Policies that have few adverse spillovers, and are even to be encouraged by the global community should be rated **green**, policies that should be used temporarily and with care could be rated **orange**, and policies that should be avoided at all times could be rated **red**.

In general, policies that 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 foreign countries (where spillovers occur). For example, if unconventional monetary policy actions lead to a feeble recovery in some of the advanced countries leading to small positive effects on exports from EEDs, but large capital flows to, and asset price bubbles in, the EMs, these policies could be rated red, because 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. It would seem conventional monetary policy would fall in this category, as it would raise output in the home economy, and create demand for exports from EEDs. 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 EEDs. Even if there are temporary adverse spillovers on EEDs, the policy through its effect on home economy growth and demand for foreign goods, can eventually provide offsetting large positive spillovers to them. A policy rated red on a static basis could thus be deemed green based on commitments over time. This also means that policies should be rated over the medium term rather than on the basis of one-shot static effects.

On the other hand, policies that initially have net positive effects but pose risks for the future could be rated orange. It is hard to rate such policies without going into specifics, but they may 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.

Following Mishra and Rajan, *op cit*, it could be argued that whether policies are rated red, green, or orange would depend on a number of factors, such as the time dimension; stage of 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 the spillovers impact poor countries with weak institutions and less room to respond, etc. The impact on poorer countries could be given higher weighting.

There is a fast growing empirical literature on estimating spillovers (see more below). A large body of the literature, however, seems to have focused on analyzing the international transmission of outcome variables like government bond yields or exchange rates, rather than measuring cross-border spillovers from specific policies. Where studies have tried to measure spillovers from specific policies, identifying the spillover effects remains hard.

Given this, it might be better to use any modeling analysis only as a basis of discussion to rate policies. Experience, and ex-post analysis, can help better rating of policies.

It is clear that the international spillovers of domestic macroeconomic policies in developed economies especially relatively large ones is important. An attempt for some broad quantification of the impact of macroeconomic policies on EEDs via the CDI

would be extremely valuable. This could contribute to and interact with later discussions in institutions like the IMF, and to help build a consensus on possible rules of conduct. More ambitiously, at a later stage, there could be a discussion whether there should be a next step of codifying them through international agreement, seeing if and how the Articles of multilateral institutions like the IMF could be altered, and how country authorities will interpret or alter domestic mandates to incorporate international responsibilities.

The key question, therefore, might become what could 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, both in terms of macroeconomic and financial stability effects, could lead to political and economic pressures from around the world that could make the country modify its policies.

D. IMF analysis

The IMF has itself been very usefully analyzing spillovers, analysis to which we now turn. We first look at monetary policy in advanced economies, (see for example IMF, 2018), but now in the phase of normalization, and their impact on EEDs. As discussed, since the global financial crisis, accommodative monetary policy has played a central role to ensuring a sustainable global economic recovery. But with inflation well below target and buoyant market sentiment, central banks in advanced economies have faced a difficult balancing act of keeping interest rates low to support the economy and addressing financial vulnerabilities, that can be exacerbated by very loose monetary policies, that could put growth at risk in the medium term.

Although still-easy financial conditions support economic growth in the near term, they may also contribute to a buildup of financial imbalances, excessive risk taking, and mispricing of risks. The IMF, 2018, op cit has developed a growth-at-risk (GaR) approach—which links financial conditions to the distribution of future GDP growth outcomes; this provides a framework for assessing the inter-temporal trade-off between supporting growth in the near term and putting financial stability and future growth at risk over the medium term. The key steps in this approach are as follows: First, a model of output growth is estimated as a function of current economic and financial conditions. Second, this model is used to forecast conditional distributions of growth for different horizons. Finally, to gauge the impact of financial conditions on growth prospects, changes in the forecasted severely adverse growth outcomes for different horizons are compared with previous forecasts. Changes in financial conditions that result in a deterioration in severely adverse growth forecasts can be

interpreted as financial vulnerabilities potentially increasing toward critical levels. This means that these vulnerabilities could magnify the severity of an economic downturn in the future, even without necessarily leading to a systemic financial crisis.

The latest IMF GaR model (IMF, 2018, op cit) forecasts that, under current financial conditions, the severely adverse outcome is for global growth to fall to about 3 percent or less over the following year. At the same time, the latest IMF GaR forecasts show how easy financial conditions risked (as of March 2018) fueling financial vulnerabilities that may put medium-term growth at risk. The GaR model forecasted that, under the severely adverse scenario, global growth would be negative three years from now, given the inter-temporal trade-off between the near-term and the medium-term growth prospects amid easy financial conditions. Continued easing of financial conditions in recent years had tilted the curve, improved economic prospects in the near term while worsening the medium-term growth outlook. A comparison of GaR severely adverse medium-term growth forecasts since the 1990s suggests that risks to medium-term growth stemming from the current easy financial conditions are well above historical norms.

Furthermore, as central banks continue to normalize monetary policy, financial vulnerabilities foreshadow a bumpy road ahead. High leverage and other balance sheet mismatches tend to amplify the impact of shocks on the financial system and the broader economy. Leverage in the *nonfinancial sector* has been rising in many major economies, both developed and EDEs, implying that aggregate debt-service ratios could deteriorate quickly once financial conditions tighten

The key point here, from a CDI perspective, is that instruments like the GaR could provide some further useful elements for quantifying the impact of developed economies monetary policies on growth and financial stability in EDEs. It would need to be disaggregated however to distinguish between the impact of different developed economies monetary policies. However, currently, the problem is not serious, as the only major developed economy that has seriously engaged in significant monetary normalization is the US.

Returning to the concerns over the impact of a tightening of monetary conditions in developed economies on EDEs, policymakers may face increasing challenges to ensuring a smooth normalization path. Substantial medium-term financial vulnerabilities have built up during the period of prolonged monetary accommodation, including in EDEs. As central banks withdraw accommodation by raising short-term interest rates and shrinking their balance sheets, an increase of term premiums or spreads, for example of bonds may cause an abrupt tightening of financial conditions,

including in particular in EEMs, trends which have already started to show a couple of years ago for developing economies, especially in Sub Saharan Africa and in mid-2018, with problems in Turkey and Argentina threatening to spread to the rest of the emerging economies.

The problems are not limited to increases in interest rates and spreads. A continued sharp appreciation of the US dollar, as has been occurring could pose challenges to some emerging and developing economies. Borrowers that have credit in foreign currency would see the domestic currency value of their liabilities rise, making it more challenging to service and repay debt. As in the past, episodes of risk aversion could be accompanied by capital outflows, reduce productive investment, and put growth at risk in EEMs.

Many emerging economies have continued to improve their net foreign currency positions, thus reducing their exposures to currency depreciations. Aggregate measures of net external balances may, however, mask vulnerabilities arising from offsetting gross positions and imbalances at a sectorial level. Furthermore, the share of non-investment-grade issuance has risen significantly in recent periods, which may be particularly risky.

Furthermore, according to IMF, 2018, *op cit*, and other sources, exposure to less committed, potentially “flighty,” investors is growing, which makes countries more susceptible to a reversal in capital flows. The growing role of fickle investors is evidenced by an upward trend in the “investor base risk index” based on Arslanalp and Tsuda (2012) Foreign investor participation helps deepen capital markets, but high shares of foreign ownership can also increase vulnerability to interest rate and rollover risks. Foreign ownership of sovereign bonds remains high among several emerging market economies. Nonbank investors, such as mutual funds are potential sources of volatility because they are associated with increased sensitivity of flows to global financial conditions (see for example, Williams, Converse, and Levy-Yeyati, 2018). These investment funds now own nearly one-sixth of fixed-income assets included in emerging market benchmark indices, and more than a third in some countries.

The reduction in portfolio flows to emerging markets expected to result from monetary policy normalization in the United States in the coming years could put countries with weak fundamentals at risk. Assuming the Federal Reserve’s balance sheet normalization proceeds as announced and the federal funds rate is raised to 3.6 percent by early 2020, as projected in the April 2018 IMF WEO, the IMF estimates that portfolio flows to emerging markets could be reduced by an average of \$40 billion a year in 2018–19. This estimate assumes a smooth normalization process in which there is no increase in investor risk aversion. If, instead, the policy tightening process

were accompanied by a rise in risk aversion on the order of magnitude observed after the Renimbi devaluation of August 2015, portfolio flows could be reduced by a total of \$60 billion a year over the same period, equivalent to one-quarter of annual inflows.

Countries that have not addressed vulnerabilities (such as low foreign reserve adequacy) during the favorable period could be particularly at risk of a reversal in capital flows from rapid tightening of global financial conditions. Moreover, countries with fixed exchange rates at different stages of the economic cycle face the risk that rising interest rates could weigh on growth and aggravate financial stability risks. Commodity producers could be further affected if monetary tightening is accompanied by weakening commodity prices.

E. Debt problems in low-income countries worsen

Debt burdens have increased and affordability has deteriorated over the past few years among low-income borrowers and other small non-investment-grade issuers. Public and external debt burdens for many borrowers decreased from 2007 to 2014, especially in countries that benefited from debt relief efforts. In recent years, however, public debt vulnerabilities have increased because of revenue declines for commodity-exporting countries, exchange rate depreciations, and rising interest rate costs attributable to higher shares of non-concessional debt, as well as increases in international interest rates and spreads for those countries.

More than 45 percent of low-income countries were at high risk of, or already in, debt distress as measured by IMF debt sustainability ratings in 2017 while several countries have debt-to-GDP levels close to what they were when debt relief was granted (IMF, 2018). In addition, vulnerabilities are on the rise not just in the current set of low-income countries but also in countries that have “graduated” from low-income country status. Should debt and financial crises happen in low-income countries, these would be particularly harmful to poor people in those countries in the short term, and have very negative effects on future development prospects of those countries.

The increase in private and non-Paris Club creditors has led to a substantial change in creditor composition over the past decade. Among countries surveyed by the IMF, the combined share of external financing provided by commercial creditors to countries in this category increased from 7.5 percent to 15 percent between 2007 and 2016, and financing from non-Paris Club creditors has risen from 18.5 to 37 percent. Among non-Paris Club creditors, China has taken a key role in providing external financing. This change in debt composition has been more pronounced in several heavily indebted poor countries (HIPCs) that have received debt relief and are now in debt difficulty. The shift to a more diverse composition of creditors can make debt resolution more complex.

The involvement of new non–Paris Club official, as well as private creditors remains relatively untested.

The higher share of private sector creditors could make low-income countries and other vulnerable emerging market borrowers more sensitive to a tightening of global financial conditions. The increase in the share of Eurobonds and commercial loans with shorter maturities can expose issuers to higher rollover and interest rate risk. It is unclear, but unlikely (as recent trends have shown) whether such loans and bonds will remain available if financial conditions tighten significantly, particularly for first-time and low-rated issuers. Part of this new debt is held by investors who do not specialize in this sector and may choose to allocate their funds elsewhere if higher-yielding opportunities become more abundant in more traditional hard currency assets (for example, US high yield).

F. Fiscal policies

An important focus of IMF analysis of spillovers has been on fiscal ones, to which it has dedicated a series of publications (see for example IMF 2017); these publications build on quite an extensive academic literature on the topic. The global financial crisis rekindled the debate on the potential of fiscal policy to affect economic activity in other economies through cross-border spillovers. During the crisis, with substantial economic slack and monetary policy at the effective lower bound in many countries, fiscal stimulus was widely advocated, not least because of the expected positive spillovers, which are higher when monetary policy is loose and interest rates are low. (see for example Blanchard, Erceg, and Lindd 2015).

More recently, global effects of fiscal policy have been discussed, for example, in connection with changes—either pursued or contemplated—in the macroeconomic policy mix in the United States and other developed economies. In the case of the US, there is concern that the significant decline in taxes could not only expand fiscal deficit excessively, but also lead to a sharp increase of the debt to GDP ratios; indeed, it is estimated that the US debt to GDP could reach as high as 110% by 2028, the highest in US history. Though US Treasury Bill markets are very deep, such high levels of debt could, -especially if interest rates increase-, pose risks to future financial stability in the US, and therefore to the rest of the world.

There is also an ongoing debate on whether European countries with excess external surpluses should raise fiscal spending, in part to support growth elsewhere. Indeed, Germany has had for several years, current account surpluses of around 8% of GDP; Netherlands has had even higher current account surpluses of around 10% of GDP. This has a net deflationary effect on the rest of the Eurozone, but also on the rest of the

world, including on EEDs. This further means that such countries have the fiscal space to pursue quite significantly higher fiscal spending, that if channeled to public investment, may not even increase these countries debt to GDP ratios, as higher public investment would lead to more rapid GDP growth; in any case, these ratios are fairly low. Such more expansionary fiscal policies in Germany have been advocated for example by Peter Bofinger in his proposal for a Lighthouse Initiative. (as discussed in Griffith-Jones, 2017)

The mentioned empirical work at the IMF (2017) looks at the spillover effects of five major economies (US, Japan, UK, Germany and France) on 55 developed and emerging economies that represent 85% of global GDP. Indeed, as the IMF rightly points out, fiscal shocks are relevant only if coming from large economies.

The IMF main quantitative findings are: Economic slack and policy constraints, like monetary policy at the effective lower bound, imply larger spillovers from fiscal policy, but such spillovers are relatively smaller in normal times. The type of fiscal policy instrument also matters; thus government spending has larger and more persistent impact than changes in tax, especially over a longer horizon. This latter conclusion is both based on the empirical analysis, but is also intuitive- spillovers from a spending shock are directly triggered by the public sector's decision to consume and/or invest, whereas spillovers from a tax shock hinge on the saving, consumption, and investment decisions of many private agents in the source economy.

The cyclical conditions in the source country of the fiscal shock influence the level of the impact. Spillovers are larger if there is economic slack in the source or recipient country. Furthermore, US fiscal shocks have global impact, but have larger effects in Western Hemisphere (Latin America and the Caribbean) and Asia; Germany and France have smaller effects, and are particularly relevant for Europe. Japanese fiscal shocks have larger effects in Asia. These differences are mainly explained by the nature of trade linkages, though both trade and finance channels are significant.

Empirical results are interesting. According to IMF estimates, an increase in 1% of US GDP devoted to government spending increases GDP in other countries by around 0.33%, whereas the same increase in Germany leads to half the impact on the rest of the world, that is by 0.15% of GDP. The regional impact varies a great deal, as the effect of an increase in 1% of US GDP devoted to government spending increases GDP in Latin America and Canada by 0.84%, whereas the same increase in Germany increases GDP in Latin America and Canada by a mere 0.02% of GDP.

Finally, the IMF, op cit estimates indicate that there is a large range of spillover estimates depending on cyclical and/or policy conditions. For example, a 1 percent of

US GDP government spending shock would increase the average recipient country GDP by only 0.15 percent in normal times over the first year, but about 0.4 percent if there is slack and 0.61 percent if interest rates are at the effective lower bound. A 1 percent of German GDP spending shock would increase the average recipient country GDP by 0.07 percent in normal times, 0.18 percent during a period of slack, and 0.27 percent with monetary policy constraints.

III) Financial policies in developed economies

A. Introduction

The finance component of the CDI Index has a number of important elements, included in two broad categories: a) countries' transparency in finance and b) efforts to support investment in EEDs.

There seem to be two problems, the first smaller one (which we discuss below) relates to the fact that the evaluation of international investment agreements could be broadened a bit, to include additional issues of limits for policy space for EEDs in these agreements, such as freedom to manage their capital account.

However, a much more central issue is that the finance component should include some element on policies to support financial stability, particularly in developed economies, given their high cost to the real economy and their potential major spillover effects on EEDs, as well as the high cost of financial crises in those economies.

B. Financial stability

The pursuit of financial stability relates particularly to crisis prevention, area which has attracted significant policy attention since the 2007/9 financial crisis. Here two major issues arise:

a) Has the major effort at strengthening regulation in developed economies (eg the US Dodd Frank Bill), and similar efforts for example in the European Union, been sufficient to prevent, or make less likely another major financial crises in them?

b) Are the efforts at de-regulation, and further liberalization of finance in developed economies, especially currently in the U.S, increasing risk of future financial crises in those economies?

This seems an important issue for inclusion in the CDI because if crises happen in developed economies, it will most probably lead to negative spillovers for EEDs, either because these EEDs suffer financial and/or Balance of payments crises themselves as

a result, or suffer from negative effects via different channels including: access to volume or costs of capital flows, negative impact on volumes and prices of their exports, and/or on remittances.

The former (EEDs having crises) is of course more serious in terms of negative impacts on development, but the latter will still be very damaging, including for their growth, investment, employment and poverty reduction prospects. (see Griffith-Jones and Ocampo, 2009, for an initial evaluation of the impact of 2007/8 crisis on EEDs; see also Essers D, 2013, and many others).

This shows the importance for EEDs of good and effective financial regulation and supervision in developed economies, that reduces the likelihood of future crises and/or makes them relatively smaller if they do happen.

To include the issue of financial stability in the finance component of the CDI will require creating some indicators on quality of both regulation and supervision, of banks and non-banks, in different developed economies. Two elements which should perhaps be particularly emphasized are whether financial regulation in that country has a clear and robust macro-prudential element and the extent to which financial regulation and supervision is as comprehensive as possible, covering as many categories of financial institutions and instruments as possible; the latter, comprehensiveness in regulation and supervision is important, as it avoids financial institutions bypassing regulations by creating alternative, less regulated institutions or mechanisms.

A possibly very useful input for evaluation of financial regulation and supervision in developed economies could be the IMF Financial Sector Assessment Programmes (FSAPs), which are since the 2007/8 financial crisis also systematically being produced for developed economies, including major ones. Institutions like the Bank for International Settlements, as well as specialist academics, could also provide valuable inputs into defining indicators for what good financial regulation and supervision in developed economies are .

C. International investment agreements (IIAs)

The CDI rightly includes international investment agreements in its finance component. It defines the issues accurately as: “To attract and facilitate foreign direct investments (FDI), IIAs offer foreign investors legal security and protection against most of the risks that may occur. However, there are concerns that these agreements protect the interest of the investors as opposed to the general interests of the recipient countries such as human rights or the protection of the environment. Therefore, IIAs need to find an equilibrium between ensuring that countries retain their right to regulate for pursuing public policy interests (including sustainable development objectives) while contributing to a favourable investment climate and protecting foreign investors from unjustified discrimination measures by the host state.”

It may be useful to include in this analysis of the right by developing countries to regulate for pursuing public policy interests areas like the right to manage as freely as

possible its capital account, in ways to protect growth and employment, and other policy objectives of EEDs.

In this context, it is important to highlight that the G-20 adopted, during its 2011 Summit, a set of 'coherent conclusions for the management of capital flows' (G-20 Cannes Summit Final Declaration, 2011), but the most important multilateral effort to rethink the role of these regulations was by the IMF in 2011 and 2012, presenting an 'institutional view', which was approved by the IMF Executive Board (IMF 2012). This was backed by significant research by IMF staff (see, in particular, Ostry et al. 2010, 2011, 2012). As a result, the IMF has recognized that capital flows carry risks and that, under certain circumstances, capital flows should be regulated to moderate both surges and sudden stops in external financing.

The IMF institutional view clearly recognizes that there is no obligation to adopt capital account convertibility under the IMF Articles of Agreement. Countries have therefore full freedom to manage their capital account (Ocampo, 2017).

A serious problem is that the policy space provided under the IMF Articles of Agreement, and the decision by the IMF is being eroded by trade and investment agreements. Often these agreements prohibit the use of capital account regulations, and those treaties that have exceptions for measures to manage balance of payments crises only allow them to be temporary in nature.

Indeed, many trade and investment treaties lack the appropriate safeguards on capital account management (Gallagher and Stanley 2012). This is true if countries have made commitments on financial service liberalization within the WTO and OECD but more importantly, and more relevant in the CDI context, is true of several regional and bilateral agreements. For example, in treaties with the US, it is stated that all forms of capital must flow 'freely and without delay' among trade and investment partners.

IMF provisions reflect largely the historical evidence, as well as much rigorous academic empirical analysis on the costs of capital account liberalization, and benefits of capital account management. Furthermore, the IMF is the main international institution dealing with issues, such as capital flows. Unfortunately, bilateral investment and trade agreements do not reflect the new agreed consensus. There is therefore an urgent need for an "aggiornamento" of the views reflected in in bilateral investment and trade deals.

The policy recommendation therefore is that neither bilateral investment or trade deals should contain provisions which limit the ability of individual countries to freely manage their capital accounts, and thus regulate capital flows, if they feel that such capital flows could undermine their national policy objectives, especially in areas of growth and employment, as well as reducing the risk of financial instability and thus future financial, as well as currency, crises.

In terms of the CDI, it would be useful to include in the section on the IIAs, an evaluation of the extent to which these IIAs are consistent with the "institutional view" of the IMF,

and therefore do not restrict, or do not restrict excessively the ability of EEDs to manage their capital accounts.

IV) Some additional issues

There are two additional issues, which seem important to flag, even though developing them falls outside the scope of the paper.

The first is whether in the environment component, there should be an additional category that examines the efforts that developed countries' governments make to promote investment in the green economy in EEDs, via for example investment in renewable energy but also in other sectors. This can be done via non-concessional official bilateral flows, for example channelled through national development banks, but also via encouraging private investment from the developed country (for example foreign direct investment) in climate change mitigation and adaptation activities in EEDs. Such foreign direct investment can be encouraged by mechanisms like special public guarantees, or others.

The second is the country coverage of the CDI. The CDI has rightly focussed on the impact of high-income countries' policies on EEDs' development prospects. However, increasingly emerging economies, and particularly China, represent a larger part of the global economy. Furthermore, China's growth, its policies and its linkages (for example in areas such as trade, finance, environment, technology) with the rest of EEDs are growing significantly. To take one example, China is the major trading partner of many EEDs.

Therefore, the policies that China adopts have a major impact on the rest of the EEDs' development. On the other hand, it is not yet high-income, though may become so in a few years. Also there may be difficulties in accessing data and information more generally about Chinese policies. However, the question needs to be asked whether it would not be valuable to add China to the countries CDI evaluates. At first glance, it would seem a good step.

V) Conclusions

A very important merit of the CDI index is that it looks at a wide range of key policies of high income countries and thus goes well beyond the narrow focus on impact of aid, which is too often adopted and plays too large a role in policy discussions and international dialogue. In this sense, the CDI is both valuable and fairly unique in its broad approach to high-income countries policies' spillovers on emerging and developing countries' development.

it would seem that –though the CDI has many important and positive features-, it lacks the dimension of macroeconomic and financial policy in the high income and other large (especially China) countries, and their major effect on global development, via spillovers of these policies. This seems an important omission, and it would seem very desirable to include some aspects of macroeconomic policy (especially monetary and fiscal policies) in the CDI.

Furthermore, the financial policy dimension seems incomplete in the CDI, in that it does not include aspects relevant to global financial stability, such as appropriate, strong and comprehensive financial regulation, which is so crucial to help reduce risk of financial crises, key for global development.

As regards monetary policy, there have been major changes in monetary policy instruments since the 2007/9 crisis, which-if anything- have increased their impact on EEEs, via important spillovers. Expansionary monetary policy (especially but not only unconventional one) in developed economies has both demand creating and demand switching effects on their own economies, with significant impacts on EEEs. Furthermore, it can help generate large capital outflows, including to EEEs, leading to major debt build up. As a result the net total global spillovers of expansionary monetary policy may not always be positive.

A key problem is that the mandates of Central Banks are only focused on domestic objectives; this is especially problematic in the case of major developed economies, given the large spillovers they have on the rest of the world and specifically on EEEs.

Drawing on Mishra and Rajan, op cit an interesting suggestion for the CDI is to rate macro-economic policies, according to their net global impact,(including in the home country) in three categories, green, orange and red. In general, policies that 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 foreign countries (where spillovers occur). For example, if unconventional monetary policy actions lead to a feeble recovery in some of the advanced countries implying small positive effects on exports from EEEs, but large capital flows to, and asset price bubbles in, the EMs, these policies could be rated red, because 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. It would seem conventional monetary policy would fall in this category, as it would raise output in the home economy, and create demand for exports from EEEs. 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.

Therefore, the policy should be rated, taking accounts its features and impact, but also the stage of the financial and business cycle, especially in the developed economy.

In the case of monetary normalization or consolidation, (as is now occurring, especially in the US, and will take place later in Europe and Japan), the impact of these policies seems to lead to a strengthening of the US dollar and an increase of US interest rates; this contributes to lower capital inflows to EEDs, possible outflows from them, and likely increases of spreads on their borrowing. It may make Balance of Payments crises more likely, especially for more vulnerable economies, for example with high levels of foreign currency denominated debt. On the other hand, monetary normalization will reduce the risk of future crises, as will discourage further debt build up

Again these policies could be rated, examining their net global impact, into red, green and orange.

It is also important than in the aftermath of the 2007/09 crises, the US Fed extended swap facilities to different countries (mainly developed, but also a few select emerging economies, like South Korea and Singapur). This is very positive, as it reduces risks of Balance of Payments problems or even crises in the countries benefiting from them. Therefore, whether a developed country gives swap facilities to EEDs, and to what extent,(eg number of countries) in times of need, should also be reflected in the CDI monetary policy indicator.

The IMF has developed a growth-at-risk (GaR) approach—which links financial conditions to the distribution of future GDP growth outcomes; this provides a framework for assessing the inter-temporal trade-off between supporting growth in the near term and putting financial stability and future growth at risk over the medium term.

From a CDI perspective, instruments like the GaR could provide some further useful elements for quantifying the impact of developed economies monetary policies on growth and financial stability in EEDs. It would need to be disaggregated however to distinguish between the impact of different developed economies monetary policies. However, currently, the problem is not big presently , as the only major developed economy that has seriously engaged in significant monetary normalization is the US.

Drawing on extensive academic literature, the IMF has also developed models to

examine the impact of fiscal policies on the rest of the world. They conclude, for example that: economic slack and policy constraints, like monetary policy at the effective lower bound, imply larger spillovers from fiscal policy, but such spillovers are relatively smaller in normal times. The type of fiscal policy instrument also matters; thus government spending has larger and more persistent impact than changes in tax, especially over a longer horizon.

Such elements could also be included in a CDI index, again, looking at the phase of the financial and business cycle in the developed economy. Thus, fiscal policy could be considered too expansionary currently in the US, as the US economy is growing rather rapidly, government debt to GDP is high, etc, which could pose future risks to financial stability in the US and worldwide. On the other hand, fiscal policy could be considered not expansionary enough in Germany, given the country's large current account surplus and relatively low public debt to GDP ratio.

As regard the financial component, it seems important to add the financial stability dimension to CDI. This would involve some indicators of the quality, strength and comprehensiveness of financial regulation in the developed economy. Again, IMF could be helpful, as IMF FSAPs could provide an initial indicator of attempts of countries to reduce risks of financial instability.

Finally, as regards country coverage, it seems useful to broaden the CDI, to include China, and possibly other large emerging economies.

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