Talking Points for Otaviano Canuto on Growth and Productivity Post-Crisis

G-24 Deputies Meeting

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Thank you Mister Chairman. Many thanks for this opportunity to speak with you about the prospects for growth and productivity post-crisis in a medium and long term perspective.

Thomas Helbling has provided an excellent overview of the current global economic situation and the near term outlook. Growth in advanced economies, in particular, remains depressed below pre-crisis rates. This may be attributed in part to factors such as private sector deleveraging, fiscal consolidation and the specific problems of the Euro Area. Some analysts point to the potential for an even more protracted slowdown in advanced economies - a so-called "Great Stagnation" - due not only to cyclical or crisis-related factors, but also to demographics , a weakening of innovation and a slowing in total factor productivity growth in advanced economies.

Given the difficult conditions in advanced countries, what are the prospects for growth and productivity in developing countries? What policies might help developing countries achieve rapid productivity growth, which is an essential foundation for eliminating extreme poverty and for creating shared prosperity?

It's useful to start by looking at some long-run historical trends on productivity. For this purpose I simply use real GDP per capita. This is a rather broad measure but, for the observations I want to make, other more precise measures such as output per worker and total factor productivity (TFP) tell a similar story. **[Slide 2]** The first panel here shows per-capita GDP growth rates for the G-24 countries and for advanced economies since 1960. With so many years of data the picture is a bit confusing, so the second panel shows the underlying trends.

I want to make 3 observations. First, we confirm what appears to be a long-term decline in advanced economy productivity growth (solid red), though it remains to be seen how much recovery there might be once the effects of the crisis are finally behind us. Second, if we take a GDP-weighted average of productivity growth in the G-24 (solid blue) we see a very strong

acceleration in the 2000s, which has fallen only slightly since the crisis. Obviously this measure gives a large weight to big fast growing G-24 economies like China. Third, we can get a better idea of the *diversity* of experiences in the G-24 by looking at a simple average, which weights each member country equally. (Dashed blue). Here we see that, while G-24 productivity growth did accelerate in the 1990s and in the 2000s before the crisis, the underlying trend even at the peak was more modest - about 3-4% a year - and has declined more significantly after the crisis, into the 2-3% range.

I conclude that the productivity acceleration in developing countries is real enough, but that it is fragile and could be vulnerable in a context of global uncertainty and volatility. The role of strong policies and institutions to support productivity growth is likely to be even more important than normal in this difficult environment.

But now let's use the same data to draw a more optimistic conclusion. **[Slide 3].** Let's look at per-capita GDP in the G-24 relative to the high income countries. There are many interesting observations that one could make but I will focus on just one: whichever way you measure G-24 per capita GDP - whether GDP weighted or as a simple average - it remains less than 20 percent of average per-capita GDP in advanced countries. In other words, broadly speaking, productivity levels in developing countries remain far below those in advanced countries, which reflect the global frontier in terms of knowledge and technology. Thus, even if productivity *growth* in advanced countries slows or stagnates, there remains plenty of scope for developing countries to "catch-up" to the much higher *level* of productivity in advanced countries, by absorbing existing technologies and ideas.

Let's also highlight two other potential sources of productivity growth. **[Slide 4]**. The first is productivity growth driven by *structural change*. Developing countries are marked by large differences in the levels of productivity across different sectors of their economies. In general the poorer the economy the larger the gaps. When labor and other resources move from low to high productivity sectors the economy grows even if there is no productivity growth *within* sectors. How big might such effects be? The chart shows the results of one exercise to illustrate how much higher productivity in African countries would be if the share of employment in different sectors was the same as in advanced countries. In some cases such as Ethiopia, Malawi and Senegal, economy-wide productivity was estimated as being as much as

six, seven and eleven times higher respectively. Of course such rough estimates should not be taken too literally, but they do illustrate the significant scope for productivity growth from structural change.

Lastly, consider the potential for growth due to large gaps in productivity across firms *within* sectors in developing countries. Labor and other resources are often misallocated so that they are not in their most productive uses, due to policy and institutional distortions and barriers of various kinds. One study asked how much productivity in developing countries would be higher if the level of efficiency of resource use *within* sectors was the same as in the U.S. The result was that total factor productivity in India and China, for example, would be 30-60 percent higher. Output gains could be twice as large if capital accumulated in response to the TFP gains.[1]

So here are three *potential* sources of productivity growth - "catch-up" growth by absorbing ideas from advanced countries, structural change across sectors, and better resource allocation within sectors. What will it take to turn this potential into reality?

Let's admit that we don't have all of the answers to those questions. If we did, development would be a lot easier than it actually is. Nevertheless there are some basic points that we can usefully make.

First, it's hard to overstress the role of the government in maintaining macroeconomic stability. Improved macro conditions were a key reason why developing countries came through the global financial crisis much more robustly than in previous crises, and this remains essential in the continued highly uncertain and volatile world environment we continue to face.

Second, if we want to foster "catch-up" growth by absorbing advanced knowledge, then growing *openness* evidently remains crucial - openness to trade, to FDI, to movement of skilled workers, to communications and the flow of ideas in general. Despite much progress over recent decades, barriers to foreign trade and investment remain relatively high in many developing countries, so there is a potent source of productivity growth from continued reform on this front.

[1] Hsieh and Klenow. (2009) Misallocation and Manufacturing TFP in China and India.

Third, there is a major agenda to address domestic distortions, barriers to entry and regulations in product or factor markets that reduce or prevent competition, protect monopoly profits and rents of politically well-connected "insiders" at the expense of much larger numbers of "outsiders", and, in general, prevent the movement of resources to their most productive uses across and within sectors. It is hard to generalize about which domestic distortions and barriers are the most important. They will tend to differ across countries and also across sectors. Nevertheless, building up domestic capacity to undertake a strong competition agenda is an important priority for policy makers.

So far I have stressed the role of government in maintaining macroeconomic stability and in removing various policy barriers to the effective functioning of markets. But of course, almost by definition, developing countries are also subject to a host of *market failures*, for example inadequate provision of public goods, or externalities of various kinds. The benefits of openness to global knowledge will be blunted, for example, if a country has low absorptive capacity due to poor education. Lack of an adequate transport infrastructure may be the greatest impediment of all to competition and efficient resource allocation. It is also the case that market outcomes may lead to an unequal distribution of income, wealth or opportunities - one that does not fit with the society's normative sense of justice or fairness. Public action may then also be needed to achieve more equitable outcomes.

Fiscal policy is a critical instrument available to government to address key market failures and, in this way, promote long-run growth and equity. **[Slide 5]**. At the World Bank we have been working on this agenda under the name "Fiscal Policy for Growth and Development". Here we assume that the government recognizes the importance of fiscal sustainability and macro stability, and and instead turn our focus onto the role of fiscal policy in achieving other development goals, such as long-run growth, equity and the management of risks. This exhibit provides a conceptual framework for thinking about these issues. I do not have the time to discuss this general framework but I encourage you to look at the reference given at the bottom of the slide.

Let me use my remaining time to instead touch on some important specific aspects of fiscal policy for growth and development.

First, there is a growing body of evidence that the composition and quality of taxation and public spending - what and how to tax, what to spend public money on and how to spend it - these have significant implications for growth and equity outcomes. Let me focus in particular on the benefits of well-managed spending on critical public goods such as basic infrastructure, education, law and order, and so on, the supply of which also raises the productivity of capital in the private sector. I note here the timeliness and importance of the G-24 discussion on Infrastructure Development and Long Term Financing.

The aspect of public spending on which I want to focus is the importance of fiscal frameworks and institutions to ensure that public revenues get allocated to high priority objectives and are efficiently spent to achieve results. **[Slide 6].** The Bank is working with countries on this agenda at a number of levels. At a broader more macro level, a strategic approach to budgeting - possibly through the use of Medium Term Expenditure Frameworks – can help ensure an adequate, stable flow of resources to high priority areas. The exhibit shows some empirical work documenting the positive impact of MTEFs in reducing overall expenditure volatility and volatility of health spending in particular, as well as some evidence on improved efficiency in achieving health objectives. These visual displays are not particularly clear, I must admit, but the reference also provides econometric evidence supporting these points.

We are also working with countries to develop more focused, 'micro' diagnostics for public investment management, working out what are the 'must have' features for high quality project appraisal, selection, budgeting, implementation and so on. Recent empirical work has attempted to make estimates of the public capital stock in developing countries adjusted for the *quality* of public investment.[2] This makes an enormous difference. The quality adjusted stock of public capital is less than half of traditional estimates and has been falling for decades as a share of GDP. Most importantly, when you take the quality of public investment into account, the returns to public capital may be at least twice as high as when you do not. Quality adjusted public capital is also shown to significantly increase the returns to private capital. Indeed, as the great welfare economist Arnold Harberger pointed out, reforms to strengthen the quality of public investment - what has been called "investing to invest" - is one of the few types of reform

[2] Gupta et al (2011). "Efficiency Adjusted Public Capital and Growth". IMF, Washington, D.C.

that can actually permanently raise the economy's long-run growth rate, as opposed to having a one-time effect on the level of output.

Let me turn to one specific set of countries where fiscal policy is likely to play an especially important role, natural resource rich developing countries, many of which are also low income countries. **[Slide 7].** Resource revenues to these countries are booming, due both to high commodity prices and to often massive new mineral discoveries. Properly managed, this huge windfall can help dramatically accelerate growth, the elimination of extreme poverty and the creation of shared prosperity. But, mismanaged, it can also open the door to the notorious 'natural resource curse', with prolonged economic stagnation and rising poverty. As experience of previous commodity booms shows, resource rich developing countries have often been affected by problems of misappropriation of revenues, too little saving, mismanagement and waste of what they did save and invest, and repeated boom-bust cycles.

Recent empirical work documents that the quality of governance and institutions is a key factor deciding whether natural resources are a blessing or a curse. And within that the quality of fiscal institutions and policies is of particular importance. The exhibit shows the natural resource management value chain and the importance of fiscal decisions and institutions at each stage - be it from the kinds of tax and royalty regimes countries put into place to encourage exploration and extraction, to the budget institutions such as Natural Resource Funds for safeguarding and managing resource revenues, to critical policy decisions about how to consume or invest these revenues, to, finally, high quality public investment management to ensure that resource revenues get translated into high yielding public investments. All this is now an important agenda for the World Bank, the IMF and other development partners.

Let me finally say a little about the direct implications of fiscal systems for equity and distributive outcomes. From what we have already discussed it is clear that well-designed fiscal policy can have a big impact in reducing poverty and creating shared prosperity through its positive impacts on long-term growth. Nevertheless we also know that the inclusiveness of growth can vary a lot, depending on complex structural and other factors. The incidence of fiscal policy can have significant implications for the inclusiveness of growth. The pattern of taxes, subsidies and government spending can affect different social groups very differently, can be

progressive or regressive, and can have big direct impacts on income distribution, inequality and poverty outcomes. **[Exhibit 8].**

This exhibit shows how fiscal incidence affects inequality in several LAC economies. The exhibit shows how the Gini coefficient of inequality changes over different concepts of income, each showing the impact of a different aspect of the fiscal system. Take Brazil, where there is quite high inequality in market incomes. The first few aspects of the fiscal system - things like direct and indirect taxes and subsidies generally reduce inequality, but not by very much. The really big impact comes at the fourth stage, which shows the impact of in-kind transfers, in particular public spending on education and health. This is important because, of course, we also expect this kind of spending to strengthen human capital and hence long-term growth. Overall, the fiscal system is estimated to reduce inequality in Brazil by almost one quarter.

We need to learn far more about these kinds of effects across a wide range of countries. To this end the World Bank is developing its diagnostic and analytical capabilities to help assess the impact of tax and public spending policies on poverty and inequality across different regions of the world.

Colleagues, thanks once again for the chance to speak with you about these important issues. Developing countries and the G-24 face important challenges but also opportunities in ensuring rapid productivity growth, elimination of poverty and the creation of shared prosperity in the difficult post-crisis world. We at the World Bank look forward to working with you in meeting these challenges.