

## Notes

### Potential output and investment in a late-crisis world

Talk at Bruegel, 29<sup>th</sup> April 2015

**Participants:** **Roberto Garcia-Saltos**, deputy division chief, Economic Modeling Division of IMF Research Department, **Daniel Leigh**, deputy division chief, IMF Research Department and **Zsolt Darvas**, senior fellow, Bruegel.

Roberto Garcia-Saltos discussed potential output before and during the crisis, as well as where it is headed in the next few years. Before the crisis, potential output growth was dropping in advanced economics (AES) due to lower total factor productivity (TFP) and lower potential employment growth. At the same time, it was increasing in emerging market economics (EMS) due to global supply chain developments and a shifting of resources to high productivity sectors. During the crisis, however, both AES and EMS saw a decline in potential output growth due to less capital investment, aging populations and lower TFP growth. Garcia-Saltos noted that over the next 5 years, with no potential employment growth (due to demographics) and a slow recovery of the investment-capital ratio, potential output growth will likely remain below pre-crisis rates.

Daniel Leigh then continued the discussion by noting that the private investment holdup problem is mainly an issue for AES. He also clarified that it is not all the result of a post-bubble drop in housing investment since housing only accounts for 1/5 of all private investment. He pointed out that although compared to historical recessions the fall in investment has been much worse, the fall in output has been commensurately bad. Furthermore, by using fiscal consolidation as an instrumental variable they measured that a fall in output of 1% usually corresponds to a 2.5% drop in business investment suggesting that the current lack of business investment is not historically unusual. This finding holds on a country-by-country basis, except for those countries that saw high borrowing spreads in 2011 and that are now experiencing lower investment levels than the regression predicts. Accounting for financing constraints, however, closes the gap. Leigh noted that they also looked at micro-level data and found that firms that typically face financing issues have cut back on investment more, as well as firms whose stocks are correlated with an uncertainty index.

Zsolt Darvas raised some issues with the methodology for estimating potential output, specifically noting that it depends on NAIRU and TFP which themselves can be difficult to measure, and that not all capital can really be treated equally. As an example he pointed to large revisions in the output gap estimates by the IMF. He also noted that a discussion on the right policy initiatives to boost potential output would be welcome.

In response, the speakers noted that they had created their own macro model separate from the IMF estimates to determine potential output. In terms of policy responses, addressing the low wage problem could address low demand and reforms to boost labour force participation could in the long run help boost potential output with unclear outcomes for the short run.

*Event notes by Allison Mandra, research intern*