

The following demonstrates the calculation of output loss associated with the default in 1999 for Pakistan using the growth accounting approach proposed by Zarazaga (2012). Using data from the Penn World Table, the annually capital-to-output ratio is calculated by dividing the capital stock at current PPPs by the output-side real GDP at current PPPs. The data shows that the capital-to-output ratio during the run-up to the default, which is 1998, had reached 1.3735, while it dropped to 1.3673 in 1999, and 1.3613 in 2000. Following Zarazaga (2012), I assume a production function of the form $y_t = h_t^\alpha k_t^{1-\alpha}$, where y_t denotes output, k_t denotes physical capital, and h_t denotes employment. According to previous calibration, $\alpha = 0.4$, which implies that by the relationship $\frac{y_t}{h_t} = \left(\frac{k_t}{y_t}\right)^{3/2}$. This means that if the capital-to-output ratio has not decreased between 1999 and 2000, the output per worker in 2000 would have been $[(1.3673 - 1.3613)^{3/2} - 1] \times 100 = 0.662\%$ higher. Thus on average, the output per worker was $0.662\% / 2 = 0.331\%$ lower than it would have been if the capital-to-output ratio were not fallen. If we ascribe all the fall in capital-to-output ratio, we conclude that the output cost of the default for Pakistan in 1999 is 0.331% per year per worker, which is quite subtle.

