

Using the Metzler Diagram to explain Ben Bernanke's Savings Glut Speech

In 2005 the Governor Benanke gave a speech entitled, “The Global Savings Glut and the U.S. Current account deficit¹”. In the speech, he argued that the major cause of the U.S. current account deficit was not due to US domestic policy, but rather ‘excess savings’ in East Asian and Middle Eastern economies.

“I will argue that over the past decade a combination of diverse forces has created a significant increase in the global supply of saving--a global saving glut--which helps to explain both the increase in the U.S. current account deficit and the relatively low level of long-term real interest rates in the world today.” (Bernanke, 2005)

We can use a two country version of the Metzler diagram to illustrate Bernanke's argument. First, remember that the current account (CA) identity for country i can be written as a function of savings S minus investment (I):

$$CA^i = S^i - I^i \quad (1)$$

However, in the global economy the sum of current accounts must equal zero, e.g.

$$CA^{US} + CA^{Rest\ of\ the\ World} = 0 \quad (2)$$

The two-country Metzler diagram exploits these two facts. Suppose the US and the Rest of the World (ROW) both had current accounts in balance in 1996.

FIGURE 1: The World in 1996

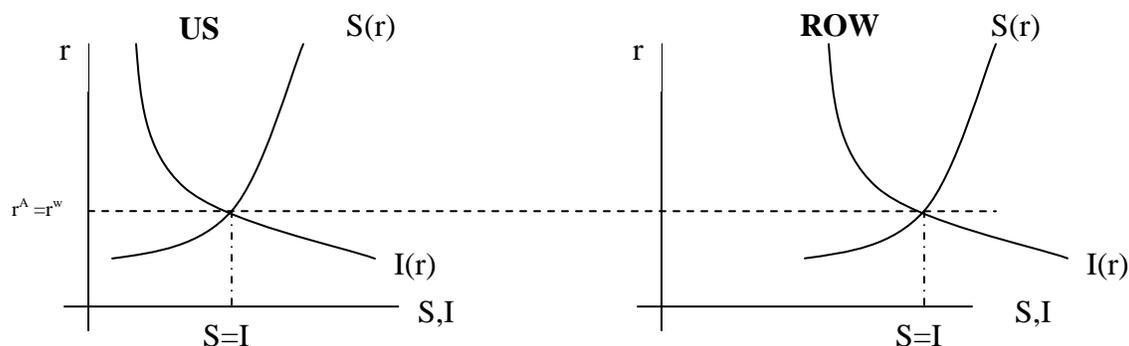


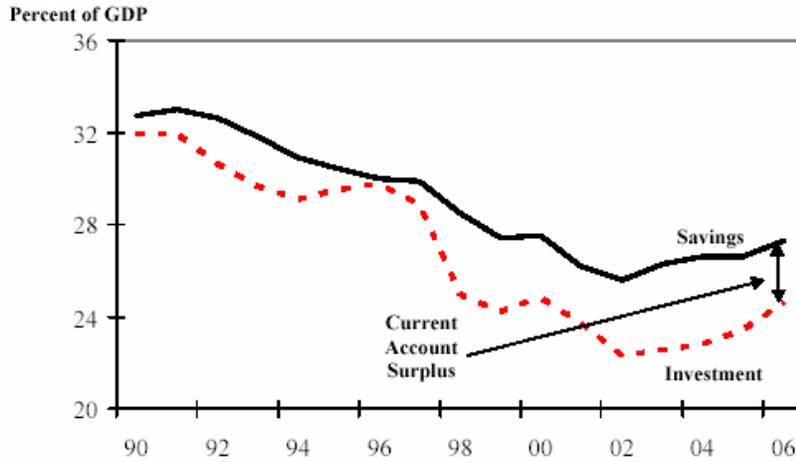
Figure 1 shows that in 1996 the world interest rate (r^w) equaled the autarky interest rate (r^A) in both economies. Thus $S = I$ in both economies, and neither had a current account deficit².

However, following the East Asian financial crisis in 1997, investment in East Asian and oil producing countries dropped significantly relative to savings in these countries (Figure 2).

¹ Transcript available at <http://www.federalreserve.gov/boarddocs/speeches/2005/200503102/default.htm>

² The US actually had a relatively small current account deficit of 1.5% of GDP in 1996. In 2006, the current account deficit increased to 7% of GDP.

FIGURE 2: Savings and investment in Asia (excluding China)



Source: IMF April 2006 *World Economic Outlook*, OECD, authors' calculations. 2006 values are based on IMF *WEO* and OECD forecasts.

We can represent this autonomous decline in investment relative to savings using the two country Metzler diagram. This decline in investment is a leftward shift of the ROW investment schedule (At every given interest rate, investment in ROW is lower after 1997).

FIGURE 3: The World after 1997

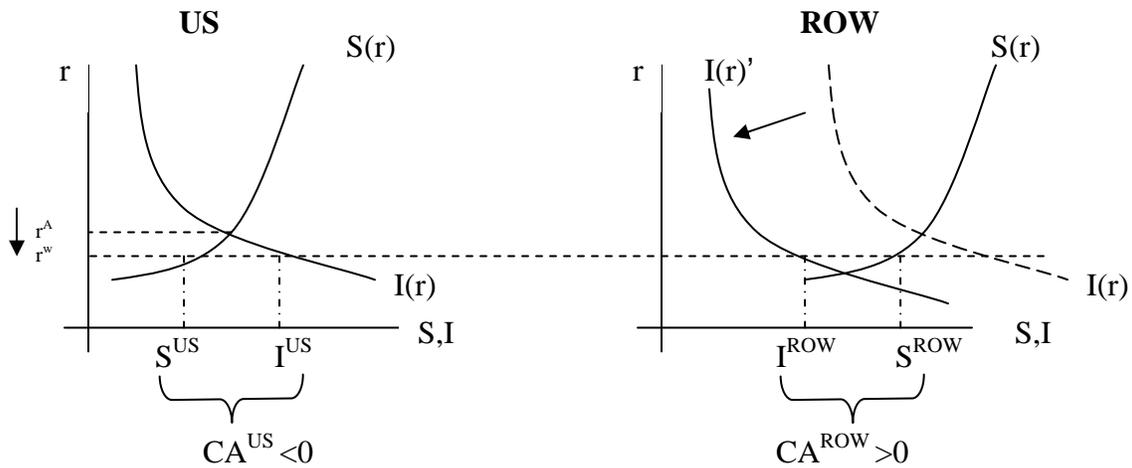


Figure 3 shows that the leftward shift of the ROW investment schedule causes the world interest rate r^w shifts down until the World current account identity holds, $CA^{US} + CA^{ROW} = 0$.

Thus Bernanke argues the 'savings-glut' (excess of domestic savings over investment) in Asia following the 1997 East Asian financial crisis caused the world interest rate to fall and the US current account deficit to increase. All this occurred without any change to US policy.