The US Current Account Deficit and Its Exchange Rate Consequences

By Ali Al-Eyd Ray Barrell and Olga Pomerantz

The emerging deficit

- The US current account (as a % of GDP) has been progressively deteriorating for more than a decade
- It is not clear how much is a structural demand for US assets by foreigners



Funding and its impact Capital flows as a percent of requirement



Funding US Government debt



Recent change in national saving comes from increase in government borrowing

- The federal deficit now absorbs ³/₄ of the private saving generated by the US economy
- Net private savings have been declining since the 1990s, while national savings as a whole began to deteriorate substantially only in 2001



What economic adjustments might help to correct these imbalances?

- An increase in national savings
- A reduction in the government deficit
- A decline in value of US dollar

Question: Will these adjustments be

- Policy driven (not likely to happen),
- Market driven (more likely to happen)

US Imbalances

- Changes in the dollar often have small long run current account effects (Barrell et al 2005a)
 - When driven by temporary shifts in risk premia
 - Movements in the monetary policy stance
- Large permanent changes in premia can have an effect (Blanchard et al 2005)
- Obstfeld and Rogoff (2004) suggest a real exchange rate fall of 34% would be needed
- Gourinchas and Rey (2005) show 30% of any adjustment comes through valuation effects

Savings Simulations

- We raise the saving ratio by 0.8 a year in 2005 and 2006
 - Consumption might fall because of worries about debt (the intercept shifts)
 - We reduce consumption by around 1% endogenously to raise the saving rate

Impacts of a US Saving Increase (% diff from base)							
	US GDP	EL GDP	US Inflation	EL Inflation			
2005	-0.23	-0.12	0.31	-0.19			
2006	-0.78	-0.16	0.68	-0.12			
2007	-1.30	-0.15	0.51	-0.11			
2008	-1.67	-0.13	0.23	-0.11			
2009	-1.86	-0.11	-0.08	-0.11			
2010	-1.87	-0.10	-0.36	-0.11			

Increased Saving

 Raising the personal sector saving rate by 2.5 percentage points in the long run improves the current account by 1 percentage point of GDP



Effects of saving changes on GDP

- Raising US saving reduces US growth for 4 years
 - A fall of 0.5 percentage points in long term real interest rates increases investment
 - The US effective exchange rate declines 2.5% and absorbs some of the shock
- Euro Area GDP growth slows for one year
 - The euro dollar exchange rate initially appreciates 5%
 - Lower real rates increase investment slowly and output ends up above baseline

Reducing the US Government deficit

- We raising direct taxes by enough to reduce the government deficit by 2% of GDP
- Reduced personal incomes reduces consumption
- There is no good evidence that consumers offset future taxes changes completely

	Impacts of a US Tax Increase (% diff from base)				
	US GDP	EL GDP	US Inflation	EL Inflation	
2005	-0.37	-0.13	0.23	-0.16	
2006	-0.75	-0.16	0.48	-0.10	
2007	-1.05	-0.13	0.35	-0.10	
2008	-1.29	-0.10	0.17	-0.09	
2009	-1.42	-0.08	-0.02	-0.09	
2010	-1.44	-0.07	-0.21	-0.09	

Increased Taxes

- Raising taxes by 2 per cent of GDP in the long run improves the current account by almost 1% of GDP in the long run.
- Lower real rates increase investment



Impacts of US changes

- In both experiments US consumption is one per cent below base in the first year and 1.5 percent below in the second
 - The current balance slowly improves
 - Forward looking long real rates fall
 - The exchange rate falls depending on the monetary policy response
- Output in the Euro Area falls below baseline in the fist year and does not recover for 4 years

Developing a market based correction

- Are US imbalances sustainable?
 - Real domestic economy: little savings, rising consumption, falling investment share
 - Investment choice of international investors: US external financial obligations large and growing – increasing in risk
- How long will foreign savings sustain large imbalances at such low rates of return, especially given the exchange rate risk from a falling dollar?
- Is there a link between a country's net asset position and excess risk associated with its currency?

Do persistent imbalances affect the risk premium on US assets?

- Will a permanent risk premium give rise to a sustained improvement in the US current account deficit?
- What is the transmission mechanism from risk premium to correction in current account?
- We can examine through NiGEM which has forward looking exchange rates and financial markets as well as covering the major economies

Estimating Risk Premia

- We define the bilateral risk premium as
 rp(t) =1- (RX(t)/RX(t+1))*((1+ra(t))/(1+rh(t)))
- We assume bilateral premia depend on the pair of net asset positions (NAR)

Table 1. Results from a multivariate regression model of the risk premiumUS-UKUS-EAUK-EA

NARUS	-0.0013	-0.0013	
	(3.13)	(3.13)	
NARUK	0.0006		-0.0006
	(8.36)		(8.36)
NAREA		0.0014	0.0014
		(8.67)	(8.67)

1980Q1–2004Q3 Std. error 0.041 0.047 0.035 Note: we used a dummy variable for 1992Q3 in the UK equations to exclude the ERM crisis episode from the sterling exchange rate.

A small sustained change in the dollar risk premium

- We can raise the US risk premium by 0.02 per cent a quarter, requiring a higher rate of return on US assets
 - The dollar exchange rate depreciates by over 3% and continues to depreciate by 0.2% pa
 - The US long real rate rises by 0.45 percentage points
 - Current balances move in the right direction and the US eventually improves by 0.30% GDP
- A 30% fall in the dollar induced by a risk premium shock would improve the current account by 3% of GDP

Transmission mechanism: adjustment through rates of return

- A sustained improvement in the US current account deficit can come through a permanent increase in national savings
 - Emergence of risk premium drives up US long real interest rates relative to others
 - Domestic demand is suppressed through wealth and investment channels
 - A compression in aggregate demand moves to correct some of national savings imbalance and therefore some of the external deficit
 - External adjustment is dependent upon duration of downward adjustment in domestic absorption

The Impact of higher risk premia on the US economy



Findings

- A permanent risk premium of 0.8 percent per year gives rise to a sustained improvement in the external balance of about 0.3 percent
- Valuation effects on long term assets give about a quarter of the effect
- The impact on the Euro Area is limited, although the euro dollar rate rises by more than 3 %
- GDP growth is reduced by less than 0.1% a year for a couple of years, and output then recovers

Conclusion

- Savings changes redistribute demand around the world. Increased (decreased) saving lowers (raises) world demand
- Increased (lower) saving lowers (raises) long term real interest rates and this has an offsetting effect on demand
- The effects depend on the monetary policy response, and they can be doubled or halved from those presented here