Implications of the crisis for international currencies

Richard Portes
London Business School and CEPR

Central Bank of the Republic of Turkey
Conference on 'Globalisation, Inflation and Monetary Policy'
Istanbul, 21 November 2008

Road map I: the fundamentals

- Determinants of international currency status
  - Network externalities
  - Key role of *financial markets*: interplay between vehicle currency and asset currency functions
- Dollar and euro pre-crisis
  - reserve holding
  - anchor currency role
  - invoicing/quotation
  - investment currency
  - vehicle currency
  - world banker role
- Global imbalances at root of crisis and still threaten dollar dominance

Road map II: crisis and change

- New features: financial markets, capital flows, exchange rates
- Will crisis be a ‘tipping point’?
- ‘Small’ currencies squeezed out?
- Can euro now challenge dollar?

Markets choose international currencies, *network externalities* important

- But models with network externalities have multiple equilibria (Portes and Rey 1998)
- Might shift if expectations and transactions costs change and if there are high elasticities of substitution between assets denominated in alternative major currencies

Financial globalisation and international currencies

- Cross-border financial flows up much faster than trade
- Asset trade (including with emerging markets) dominated by major international currencies
- Resulting customer-dealer transactions in FX markets → large volumes of intra-dealer transactions
- FX markets have expanded dramatically, also international use of derivatives etc.
- Hence ***international role of a currency today much more related to financial than trade flows*** (relative to 1990, say)

International currency *roles are linked*

- Choice of reserve currency depends on currency stability (store of value, unit of account), size of economy, role in world trade
- Financial market determinants of vehicle currency
- Vehicle currency influences composition of reserves for countries that manage exchange rate
- Size, depth and liquidity of financial markets also key in choice of investment currency

Dollar dominance in reserve holding

- Confirmed by Bretton Woods
- Maintained/explained by ‘network externalities’
- But does that make sense for central banks?
- And diversification motive works the other way – especially if there are alternative assets tradeable in large, liquid and deep financial markets
- And increasing use of euro as pegging or ‘anchor’ currency may change incentives for reserve holders

Central bank diversification

- Across assets – including activities of SWFs
- Across currencies
- Factors relevant to the currencies: inflation, ER volatility
- Regionalism – distance matters
- Inertia (persistence) – and fear of capital loss

Anchor currency role

- Switch from $ to basket pegs (Russia, Libya, China, maybe GCC)
- De facto anchoring – some switch towards €, comparing 2005-6 with 1994-8

Private use: invoicing

- Data scant, but € gradually rising, especially when one party is an EU country
- Attractiveness of currency for invoicing affected by ER risk, volatility of inflation, capital market development, absence of capital controls – so € now attractive alternative
- Network externalities surely relevant here
- $ used for reference-priced and exchange-traded goods – won't change without a major shock

Investment currency

- Transaction costs now lower for €-denominated than for $-denominated corporate bonds, close for government bonds (Biais *et al.*, Dunne *et al.*)
- Bid-ask spreads in FX markets now similar (very close to zero)
- €-area financial development now comparable to US and UK, superior to Japan
- Bund is world's most important hedging instrument
- But euro-area government bond market still has separate issuers, and corporate bond and equity markets much smaller than US

Issuing (quotation) currency

- € issuance exceeds $ in international markets since 2001, and € ahead of $ in outstanding stocks since 2004
- € has brought significant increase in liquidity of international debt markets (Bobba *et al*. 2007)

Other private-sector use

- Optimal *hedging* strategies (Campbell *et al.* 2007): bondholders should be in $ (which appreciates when global bond prices fall), equity holders in € as well as $ (both negatively correlated with global equity returns)
- Physical currency use: $ still dominant, usage outside US 3 times greater than € outside EMU
- But €-denominated deposits held by non-€-area residents growing rapidly

Vehicle currency in FX markets

- BIS (2007) shows $ still dominant (appears in 86.3% of transactions, down from 88.7% in 2004)
- € at 37.0% (37.2% in 2004)
- $ also dominates OTC FX derivatives
- But € exceeds $ in market for OTC interest rate derivatives

US is still ‘world banker’ with ‘exorbitant privilege’

- US borrows short, lends long, and earns excess returns on all asset classes (Gourinchas-Rey)
- Since 1999, euro zone investors have not earned consistent excess returns
- Like the US, the euro zone obtains a positive valuation effect when euro depreciates and suffers a valuation loss when it appreciates (assets in foreign currencies, most liabilities in euro)
- Euro area assets and liabilities are a higher percentage of GDP than for US – more highly leveraged
- But US does more maturity transformation

Global imbalances at root of crisis – and threaten dollar's dominance

- Unprecedented that main international currency is issued by country in substantial, continuing CA deficit, with NIIP << 0
- UK pre-1914 also borrowed short and lent long, but it ran a large CA surplus and was big net creditor
- In recent period, US deficits created international liquidity on unprecedented scale, led to low interest rates, search for yield, ...

Crisis and change

- Fall in perceived advantages of US financial markets and instruments (but Gruber and Kamin (2008) say no previous evidence for ‘superior US assets’ story)
- Exchange rate showed no significant ‘safe haven’ effect in August 2007 – a 3% appreciation of $ wrt € over 10 days, then € rise resumed
- But € down from $1.60 to $1.25 since 15 July
- Still, this is more likely due to deleveraging and unwinding of carry trades than safe haven response (€ *rose* 6% during 11-24 Sept)

Will crisis be a ‘tipping point’?

- Some evidence from a century ago that network externalities didn’t fully dominate even in vehicle currency role, inertia not as great as previously believed (Eichengreen-Flandreau 2008a)
- And in interwar period, network effects didn’t apply in reserve currency role (E-F 2008b)
- Indeed, during that last period of financial crisis, there was *switching:* $ overtook £ in mid-1920s, then with $ devaluation of 1933, £ regained dominance! – then came war, the greatest shock
- So no big obstacle to ‘tipping’ after all?

Will ‘small’ currencies be squeezed out?

- As in interwar period, we have two highly liquid financial markets without capital controls – reserve holders split between them
- Smaller currencies offer less stability, can’t compete (even if, as for £, financial markets are highly developed)
- Examples: French franc interwar, yen in 1990s, Swiss franc and sterling now, yuan now and in future
- Indeed, serious threats to international currencies that are small compared to the size of their international financial sectors (sterling, Swiss franc)
- But if both $ and € unattractive, reserve holders can switch into real assets (*e.g.,* SWFs)

Can € now challenge $? – structural factors

- Financial stability and regulation – fragmentation of regulatory authority
- Unclear LLR authority
- But crisis may force more clarity, closer coordination, more common policies
- And ECB has handled market liquidity problems at least as well as Fed
- € area (with UK) led on bank recapitalisation and market reliquification
- Meanwhile, global and European influence of US banks has fallen

But might crisis threaten euro area itself?

- Expansion of euro area in question – won't greater vulnerability of East European economies and others keep them out?
- But evidence to the contrary from DK, IS, H, P – even in UK, EMU back on the table
- Will some existing members (have to) exit? – Italy, Spain, Ireland, Greece all seem in danger, sovereign spreads over bunds are up, CDS spreads up too
- But exiting would be worse than staying in – the 'mother of all financial crises' – even better to default in rather than out, if it came to that

Summing up

- Network externalities are important but not decisive – no big obstacle to ‘tipping point’
- Euro clearly gaining ground, except in vehicle currency role
- US is still the ‘world banker’, but on an increasingly precarious base
- Global imbalances at root of crisis, still threaten dollar dominance
- Fall in perceived advantages of US financial markets and instruments

- No evidence of safe haven effects in crisis
- Small currencies are threatened
- The supposed ‘structural weaknesses’ of the euro area are overstated as impediments to international currency role
- The euro area won’t disintegrate
- Overall, the crisis may have strengthened the euro’s challenge to the dollar’s dominant international status