

## **Gresham College**

"New Learning"

# **Taking Modern Money Apart**

Professor Edward J Nell, Malcolm B Smith Professor of Economics at the New School for Social Research, New York

read by, and with introduction by,

Professor Michael Mainelli, Gresham College & Z/Yen Group

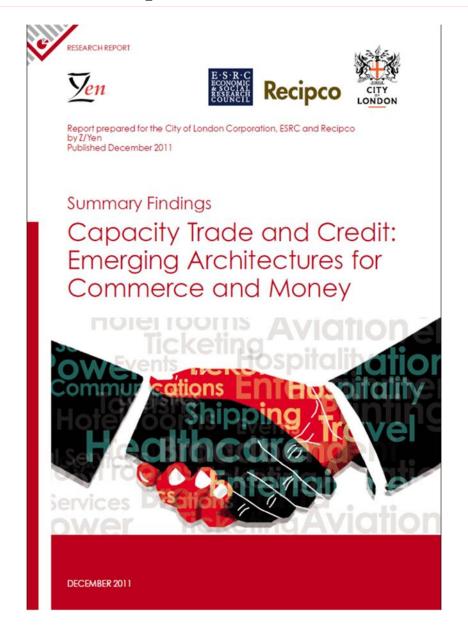
13 June 2013







## **Report Overview**



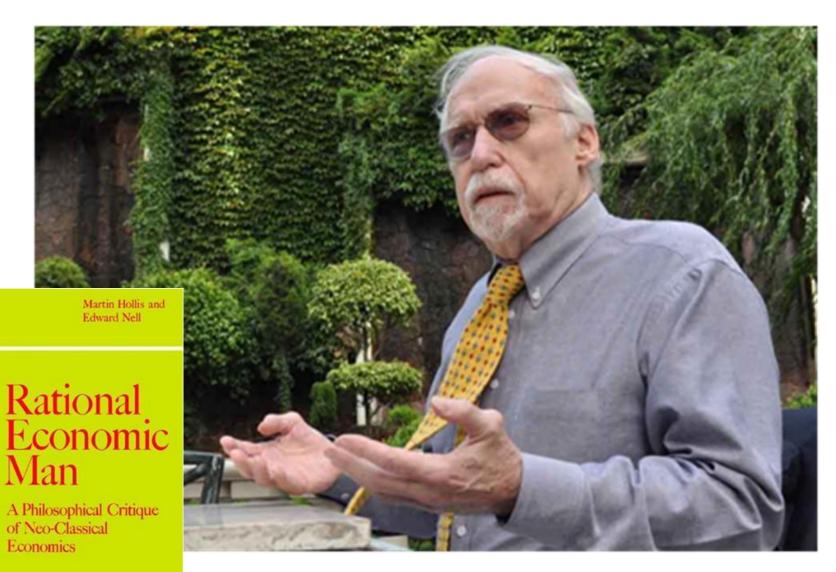


# Multilateral Reciprocal Trade Is Big

Goods/Services	Location	Value (US\$)
Communication equipment	Europe	1,500,000
Rubber	Europe	1,320,000
Communication equipment	Europe	6,000,000
Software upgrade	Europe	7,000,000
Rechargeable batteries	Europe	650,000
Transport planning	Philippines	60,000
Coconut oil	USA	15,000,000
Copper cathodes	Singapore, China	15,000,000
Public relations	Philippines	100,000
Coconut oil	South Africa	1,900,000
Cordless phones	USA	5,800,000
Radar detectors	USA, Netherlands	1,500,000
Garments	Europe	7,800,000



# **Tonight's Speaker**



Consequential

**Edward J Nell** 



## **Taking Modern Money Apart**



"unity of an accounting system, a medium of circulation and a store of value"



# **Money As A Unity**



Money Is A Unity Of Accounting, Medium Of Exchange And Store Of Value



#### **Outline**

Money is a unity of accounting, medium of exchange and store of value

But the medium of exchange function and the store of value function don't work well together because together they set up positive feedback loops that can create bubbles or crash markets

If the medium of exchange could be separated from the store of value, these instabilities could be controlled

Technically, this separation could be done today, given the advances in communications and information technologies

But not politically...

However, the non-financial private sector is interested in getting rid of unnecessary costs - Forex costs, hedging, costs of finance

Hence, current proposals for Capacity Exchanges



#### 1. Hoarding Instability In A Coinage System

## $MV = \Pi Y$

where:

M signifies the amount of gold, silver, etc., required to carry out all transactions in money;

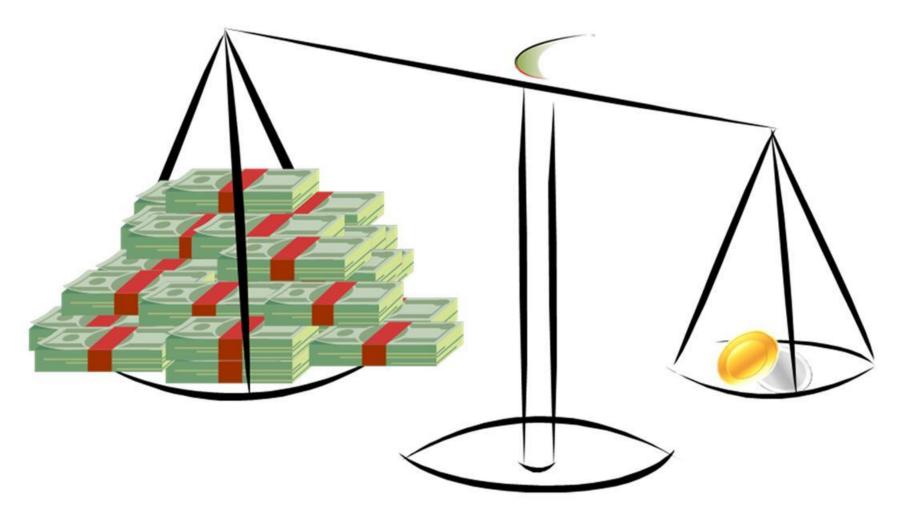
V is the number of times this money had to be exchanged;

so that  $\Pi$  would then be the price level (with  $1/\Pi$  being the value of money), and

Y is the national income or national product, the total amount to be transacted in money.



## 2. Instability of Convertible Paper Money



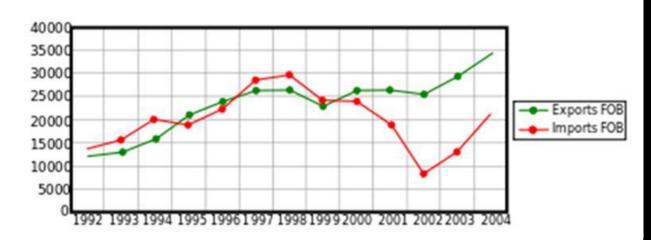
[Source: www.optimalmrm.com]



# 3. Forex Instability



[Source: www.fxpips.com]





# 4. Futures Instability





#### 5 & 6. Wicksell Instabilities I&II



Asset & Money Arbitrage

Capital Arbitrage



#### 7. Instability Between Present And Future

present = f(expected future), f'>0 expected future =  $\phi$  (present),  $\phi$ '>0





# 8. Separating Medium Of Exchange And Store Of Value



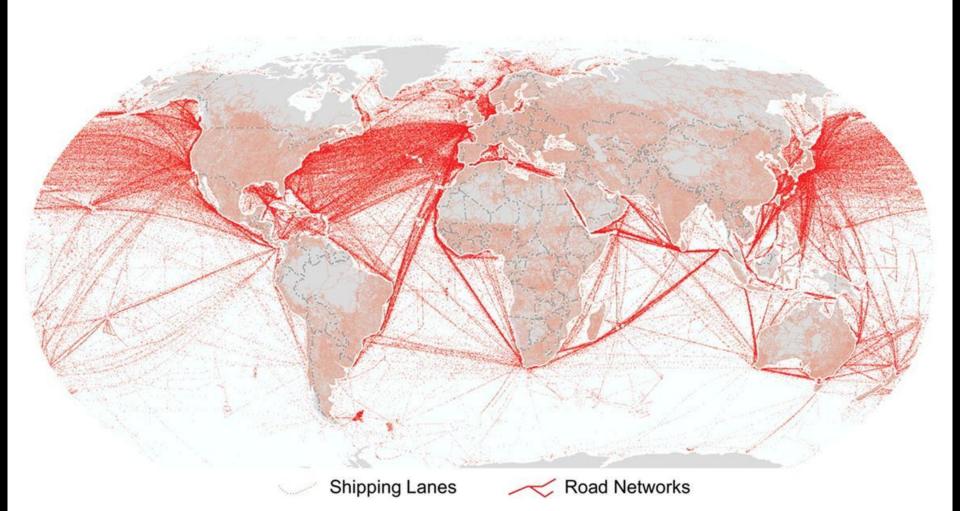


# What Is A Capacity Exchange?

A membership-based system within which companies can trade available capacity in the form of goods, services and infrastructure within and across industries, using common tender as a medium of exchange.



# **Capacity Exchanges**





## **Summary & Conclusion**

Money is a unity of accounting, medium of exchange and store of value

But the medium of exchange function and the store of value function don't work well together because together they set up positive feedback loops that can create bubbles or crash markets

If the medium of exchange could be separated from the store of value, these instabilities could be controlled

Technically, this separation could be done today, given the advances in communications and information technologies

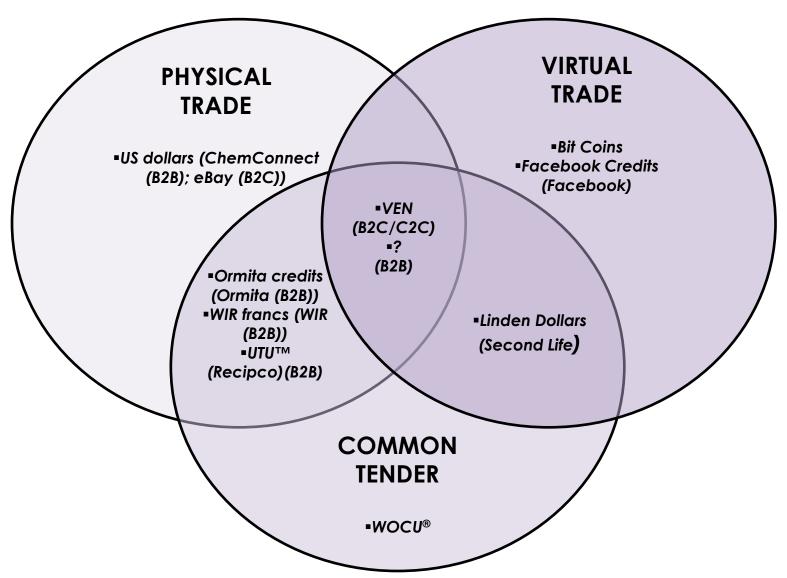
But not politically...

However, the non-financial private sector is interested in getting rid of unnecessary costs - Forex costs, hedging, costs of finance

Hence, current proposals for Capacity Exchanges

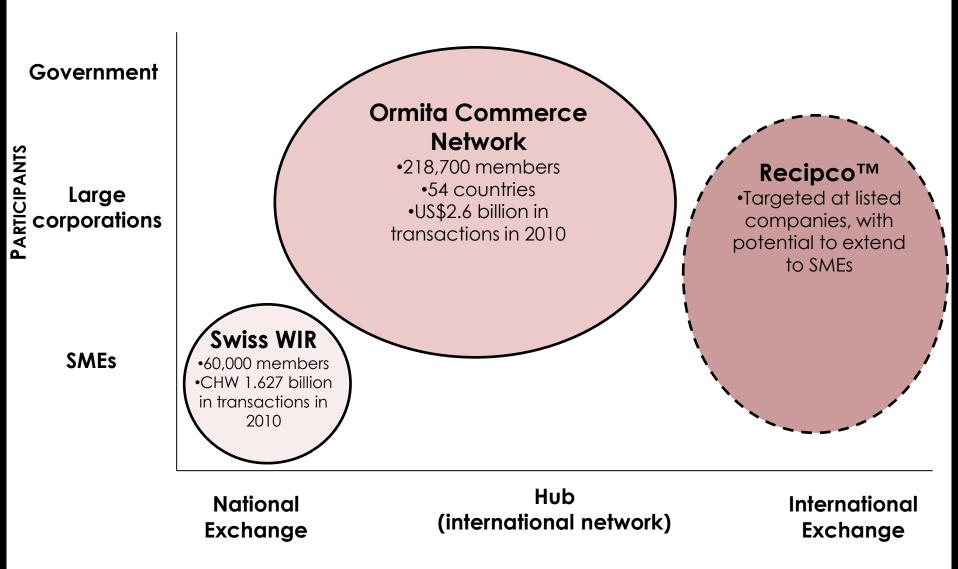


#### **Common Tender and Trade**





#### **Capacity Exchange Landscape**



**SCALE** 



# **Options & Benefits**

	Option 1 Small - several UK exchange start-ups	Option 2 National - UK capacity exchange	Option 3  Multinational - capacity exchanges based in the UK
Direct benefits			
Exchange jobs	25 to 100	70 to 300	200 to 500
Increased credit	£20 million to £250 million	£15 billion to £80 billion	£25 billion to £160 billion
Wider markets -	£2 million to £25 million	£5 billion to £20 billion	£10 billion to £60 billion
increased sales			
Capacity utilisation	£250 million to £3 billion	£8 billion to £20 billion	£50 billion to £200 billion
Participants' jobs	100 to 200	50,000 to 150,000	200,000 to 650,000
Hedging savings	nil	nil	£5 million to £30 million
Wider benefits			
Improving in-kind	unlikely	likely,	likely
donation			
effectiveness			
Less volatile economy	nil	£50 million to £1 billion	£100 million to £2 billion
Sustainability benefits			
Reduced wastage	small	high	high
Reduced storage	nil	small	small



## **Taking Modern Money Apart**

# Thank you!



