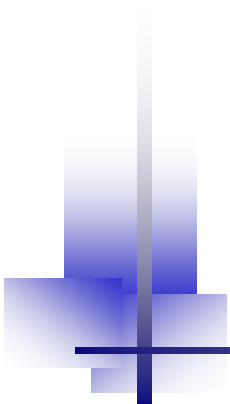


Modern Monetary Theory



Where does money come from?

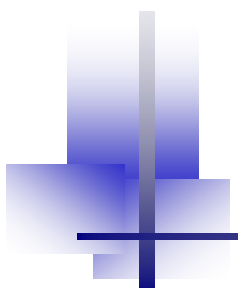
Where does it go to?

Singapore, 30 August 2010

**Frank
Ashe**

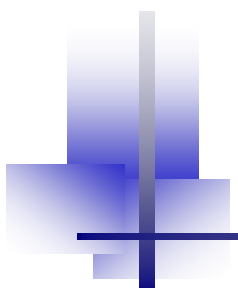
frank@quantstrat.com.au

Quantitative
Strategies



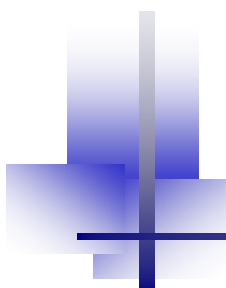
No kangaroos

- Don't jump to your own conclusions
- **Very, very, very contentious**
- Don't argue with conclusions, argue with the assumptions and logic
- Listen to what I say, not what you imagine I say



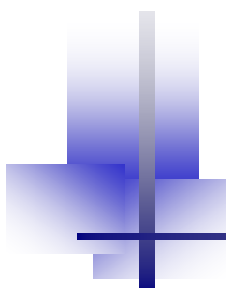
Institutions

- Central Banks vs Treasury Departments
 - Laws, MOUs, HOAs
 - Bond markets
-
- All very important, but only conventions



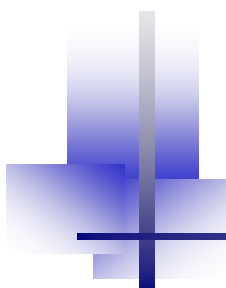
Modern Monetary Theory

- There ain't no theory
- Stock/flow consistent analysis of money and credit flows
- Watch carefully – I won't make many assumptions
 - Unlike almost all other analyses of money
 - Lots of theories – some incomprehensible



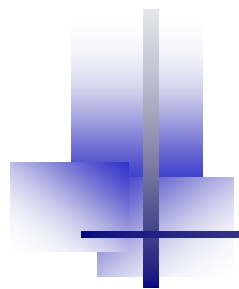
Credit creation

- I'm a bank and lend you \$1bn
 - \$1bn asset – IOU
 - \$1bn liability – account that you can draw down
 - Books still balance

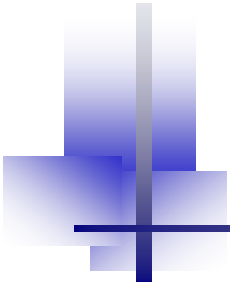


You buy something

- If your counterparty banks with me then I shift the liability to them
- If ctpy banks with XYZ then reserve acct transfer occurs
- Apart from leakage into newly created cash, the \$1bn is always in the banking system
 - As a whole the banking system doesn't need to borrow money to finance its lending

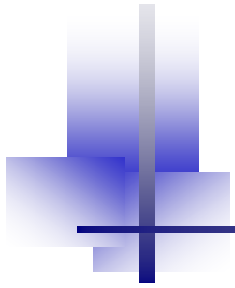


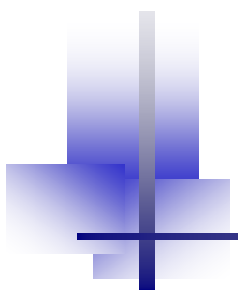
**As a whole the
banking system
doesn't need to
borrow money to
finance its lending**
lending creates its own deposits



What brakes exist?

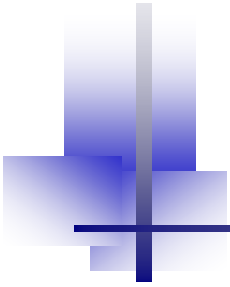
- Regulators
- Capital requirements
- Risk management
- Market
- Shareholders
- Board
- Auditors
- Rating Agencies





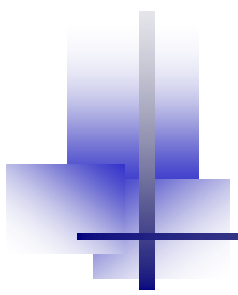
GET REAL!

- Take a look at UBS
- There were no brakes until the balance sheet imploded
- Evidence based theory



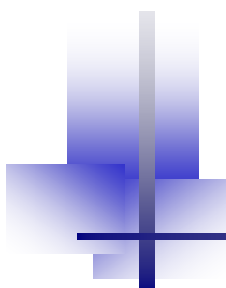
Banking - fundamentally unstable

- When we are all happy we keep dancing till the music stops
- When the music stops, we are depressed, we all do nothing



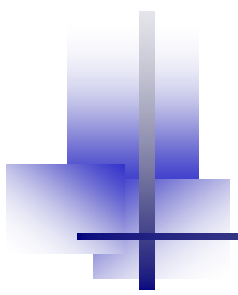
Ideas and Jargon!

- These credit arrangements are called horizontal transactions
- There is no creation of net credit
- No net saving of financial assets is possible
 - Real assets may increase
 - Financial assets match with liabilities



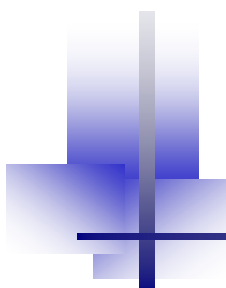
What are vertical transactions?

- I'm from the government, I'm here to help you
- Jargon:
 - Banks have reserve accounts (RA) with RBA
 - Govt payments and receipts operate through RAs – these are the vertical transactions
 - RAs and physical cash are High Powered Money (HPM)
 - Sovereign states issue their own money and have a floating currency



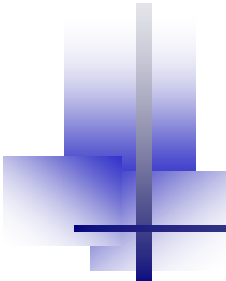
Fiat Money

- Net Government transactions:
 - Buying goods and services
 - Collecting taxes and fees
- Neutral Government transactions
 - Borrowing – exchanges one government obligation for another



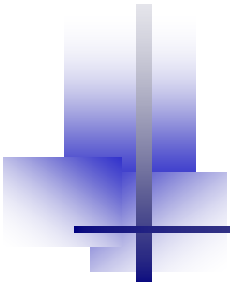
Net Government Financial Transactions

- Buying goods and services
 - Creation of HPM by increasing RAs by price of goods
- Collecting taxes and fees
 - Destruction of HPM by decreasing RAs by amount collected



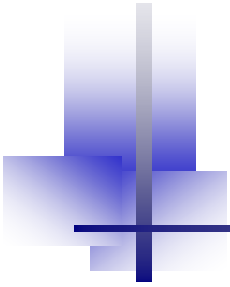
Where does the HPM go?

- Nowhere!
- For accounting purposes you might have a Government account
 - This is purely for show, nothing exists in the account



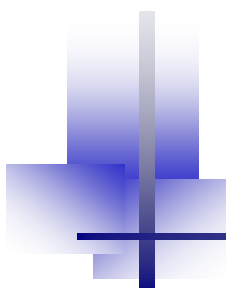
Net financial assets

- When governments **spend** money they **create** net financial assets in the private sector
- When governments **collect** money they **destroy** net financial assets in the private sector
 - Government deficits create net financial assets
 - Government surpluses destroy net financial assets



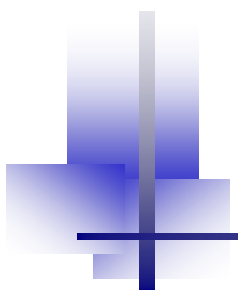
Three corollaries

- Taxes aren't revenue raised for government consumption
- Money to pay taxes comes from government spending
- A string of government surpluses will exhaust private savings, eventually leading to higher private debt levels



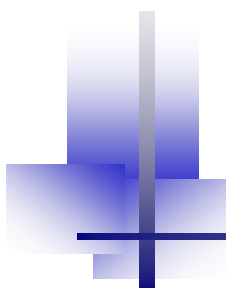
How should we discuss budgets?

- Sovereign governments can always pay their bills by creation of HPM
 - Default is never necessary
- Governments don't have to finance spending
- The effect on the economy is real
- Is government spending consistent with economic activity?



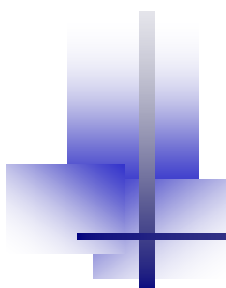
Real activity

- Government spending uses real goods and services
- If these are fully utilised then more government spending will increase prices
- If underutilised then more government spending may not affect prices



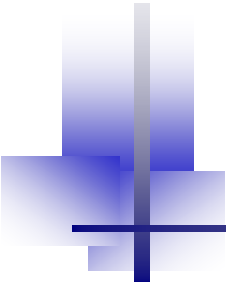
Too low economic activity

- Underutilised resources
- Possible Government action:
 - Increase spending
 - Reduce taxation, fees
 - Increase deficit
 - Create net financial assets



Too high economic activity

- Possible Government action:
 - Reduce spending
 - Increase taxation, fees
 - Reduction in deficit, maybe even run a surplus
 - A surplus may destroy net financial assets created during previous cycle



Real economy

The debate on
budget surplus or
deficit should be
up here ...

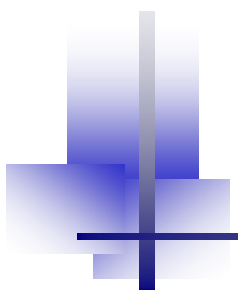
Taxes

Spending

Financing

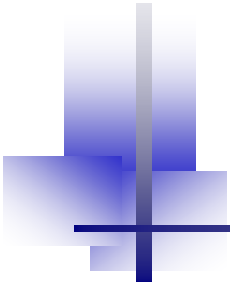
Government

... not
down here
Strategies



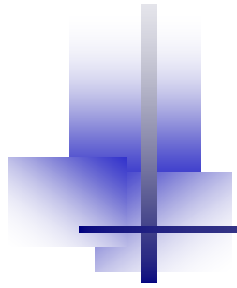
Government borrowing

- Government surpluses increase RAs
- If Reserve Banks pay target interest rate on RAs then no great problem
- Government borrowing trades RA HPM for longer maturity asset
 - No decrease in net government liabilities
 - Equivalent to entering a fixed-for-floating interest rate swap with RB
 - Except for credit risk on fixed receiver



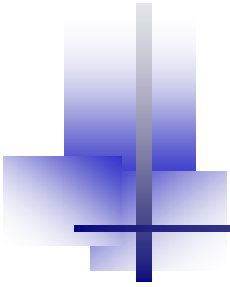
Corollary for Borrowing

- Sovereign governments don't have to borrow
- Government borrowing is a service to banks to help them with risk-free maturity profile structuring



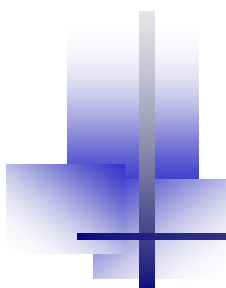
Relax

Take a deep breath



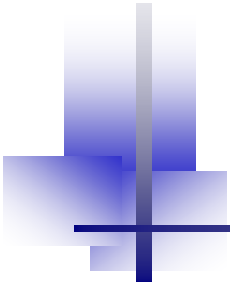
What's the point?

- Almost all arguments on government deficits are plain wrong
- They're usually based on gold standard thinking
- We've been off the gold standard for 40 years



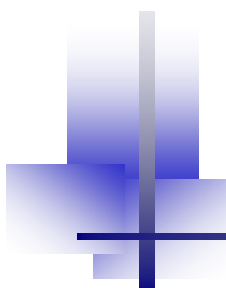
What's the point? (ii)

- If we don't debate properly we'll reach very sub-optimal policies
- Individual and corporate actions may be driven by the wrong argument



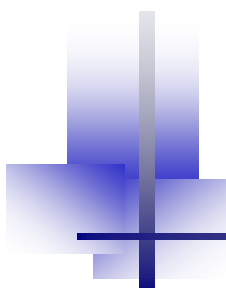
Example

- Japan's position is in line with MMT
- High government deficit with underutilised resources means:
 - Low interest rates
 - Possible deflation
 - No problem with borrowing
- Note what's been happening to major interest rate markets recently?



Conclusion

- What is the risk to your firm of having the wrong understanding of money and credit?
- What is the risk to government policy of wrong understanding?
- How can we change the debate?



References

- See: Ashe, *A Kindergarten Guide to Modern Monetary Theory* on Financial Services Conference website
- Bill Mitchell's blog
<http://bilbo.economicoutlook.net/blog/>
 - Instead of writing working papers he's putting his ideas up on his blog
 - This is almost a lecture a day!