

Money and Finance after 2008

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Chair "Energy and Prosperity"

IDDRI

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Introduction

- 1945-1973 — specific global balance:
The US had a commercial surplus.
The Marshall plan helped Germany and Japan in recovering from WWII and absorbing the North-American surplus.

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What about the
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The US had a commercial surplus.
The Marshall plan helped Germany and Japan in recovering from WWII and absorbing the North-American surplus.
- **1973-2008** — post-Bretton-Woods new balance:
The US commercial balance now exhibits a deficit (consumer of first resort).
Emerging countries (esp. China) accumulate a surplus which is recycled in the US and UK courtesy of **financial** markets.
The “global Minotaure” (Varoufakis).

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- Dream of a “post-industrial” Western society which would content itself with providing financial services.
- Since the subprime crisis **2007-20...**, the balance is **broken**.
Wall-Street does no more succeed in attracting capital.
Deflationary pressure on Western wages no more compensated by households’ private debt.
Hence public debts skyrocket (Japan, US, Eurozone).

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- Who will consume Chinese products ?

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- Why is the “global Minotaure” cycle non-sustainable?

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- Why is the “global Minotaure” cycle non-sustainable?
- Can/should Finance help resurrect the Minotaure ?

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- Can/should Finance help resurrect the Minotaure ?
- What misunderstanding of the economic rôle of money underlies the post-industrial fantasma?

What about the market Inefficiency hypothesis ?

Incomplete markets

- Markets are said to be **efficient** whenever they allocate risk and capital in a first-best Pareto-optimal way.

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Complete Markets populated by perfectly rational people are first-best efficient.
(Debreu (1959))

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- Do you think that markets will ever be complete ?

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- When markets are incomplete, first-best efficiency is no more the relevant concept.

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- **Second-best** efficiency is the right notion.

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 - Second-best efficiency is the right notion.
 - Incomplete markets are generically not even second-best efficient.
- (Geanakoplos and Polemarchakis (1986))

Too bad... The invisible hand is invisible because **it does not exist** even within the core of mainstream economic theory!

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- **Sunspots** (Roger Guesnerie, Collège de France)

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The tweet of April 23 2013 (Associated Press) : - 115 G € in 3' !
- Sunspots never happen in complete markets.
Incomplete markets can never be immune against sunspots.
Example: Greece in January 2010 (via CDS).

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- Financial innovation reduces incompleteness.

Does it reduce market inefficiency ?

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- Andrew Lo's (MIT) econometric demonstration: financial markets are **efficient**.
- Fama's hesitations...

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Non-arbitrage \Rightarrow unambiguous pricing theory for new assets.
Uniqueness of the risk-neutral probability.

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Non-arbitrage \Rightarrow unambiguous pricing theory for new assets.
Uniqueness of the risk-neutral probability.
- When markets are **incomplete**,
Non-arbitrage $\Rightarrow [a; b]$ of possible prices for each asset.
- Pricing theory fails when markets are incomplete.

Application

Marked-to-market principle of Fair Value in the IFRS accounting norms ?

- Does **not** lead to a unique fair value.

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- Strong need for a reform of the accounting standards.
- Salamanca school (16th century): market prices need not be fair.

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Real DSGE and RBC models made the following predictions after 2008: Increases government borrowing would lead to higher interest rates on government debt because of crowding out.

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Real DSGE and RBC models made the following predictions after 2008: Increases government borrowing would lead to higher interest rates on government debt because of crowding out. Increases in the money supply would lead to inflation.

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Fiscal stimulus has zero effect in an ideal world and negative effect in practice (because of decreased confidence). **They all turn out to be wrong!**

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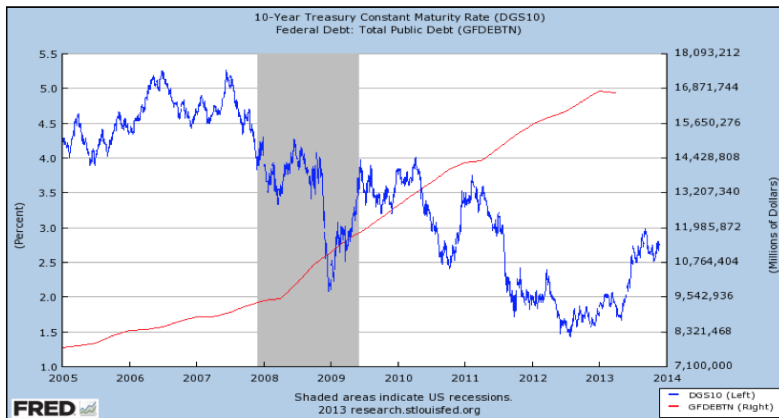


Figure: Government borrowing and interest rates.

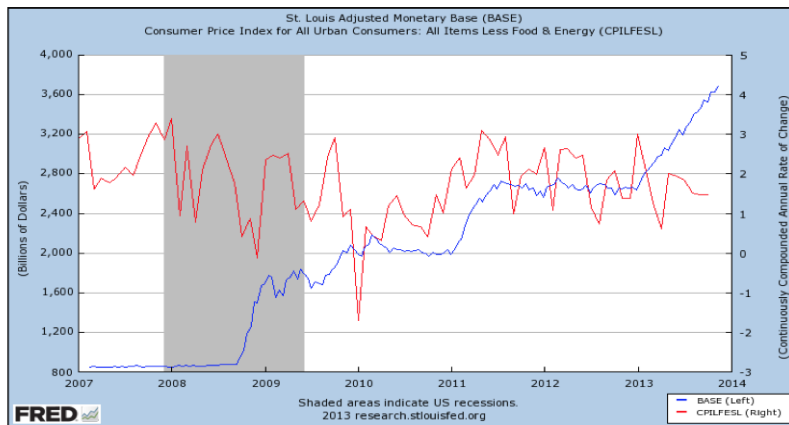


Figure: Monetary base and inflation.

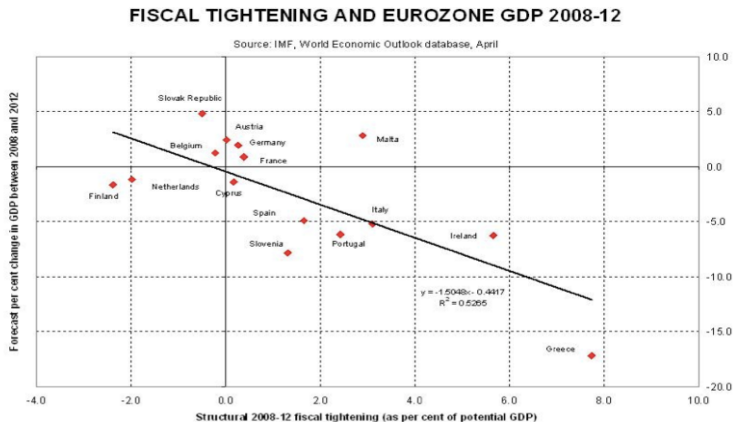


Figure: Fiscal tightening and GDP.

How can we check for the presence of money in a model ?

- Non-homogeneity with respect to prices. Dubey Geanakoplos (2003), Drèze Polemarchakis (2003), Giraud Tsomocos (2010), etc.

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 \neq RBC, most DSGE.

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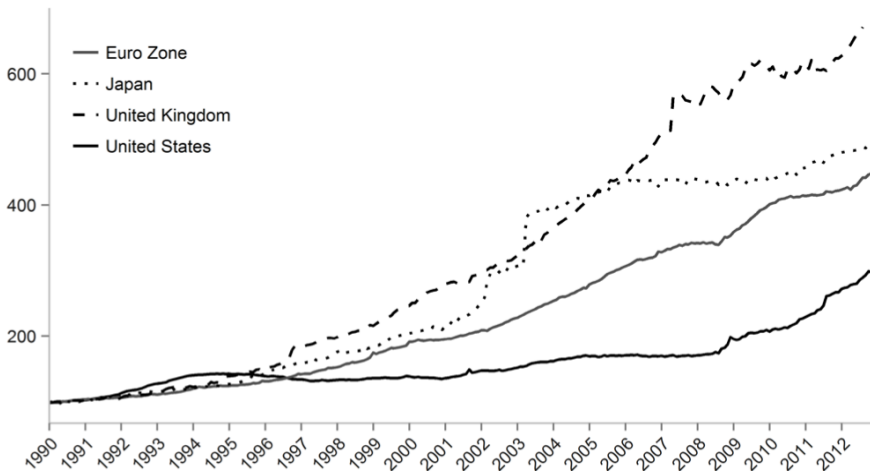
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- Money creation should be **endogenous**:
Giraud (2013), Kumhof (2015).

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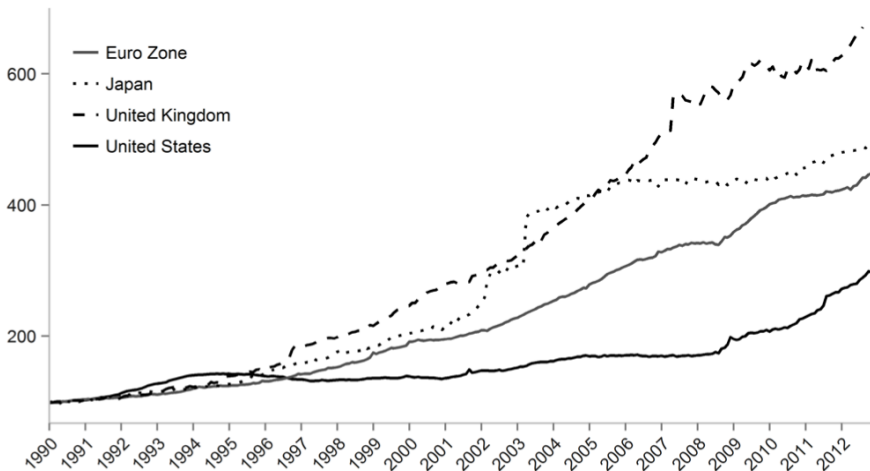
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Money Supply M1 (Index 1990 = 100)



Source : Ecwin, IMF IFS, Bank of England, ECB

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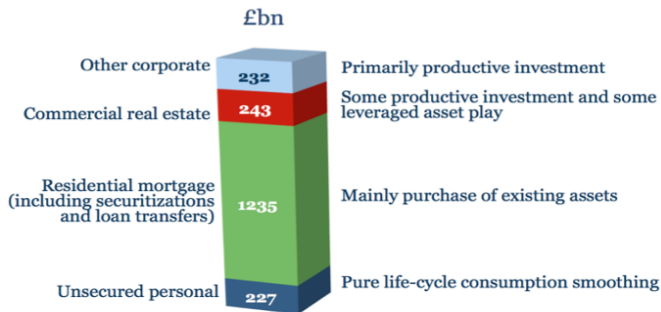
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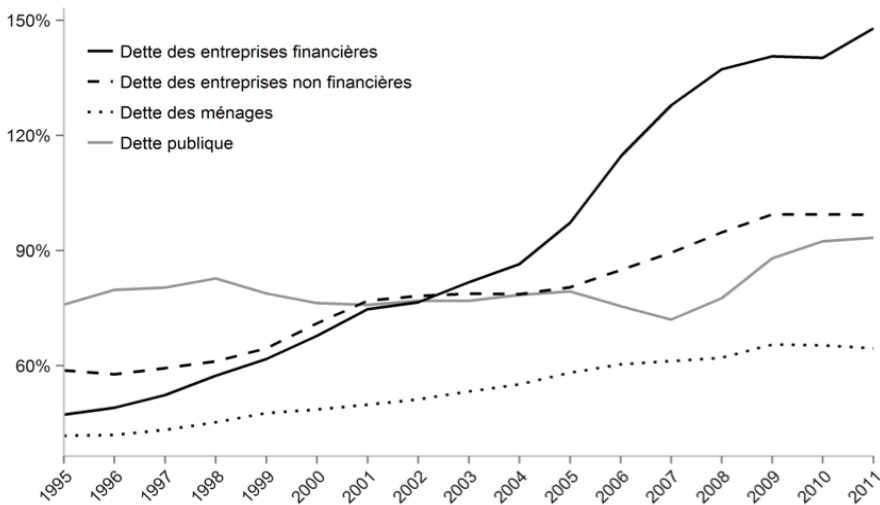
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- Liquidity creation \neq Money creation.
- Households have debts!
 \neq representative consumer.
- Accounting equation $I = S$ should incorporate banking credit.
 \neq IS-LM and *all* neo-classical models.

Categories of bank debt: UK, 2009





*La dette publique est une version non-consolidée de la dette publique au sens de Maastricht.

Pour les autres secteurs, les instruments pris en compte sont les crédits et les titres hormis les actions.

Source : Eurostat

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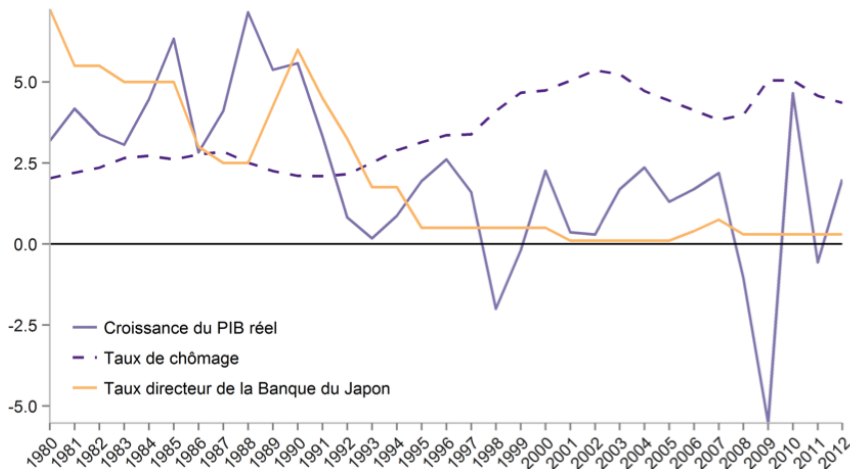
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- **Deflation** should be possible.
(\neq Aghion, Acemoglu, etc.)
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Keynes (1936), Minsky (1975, 1977, 1982, 1993), Krugman
Eggertson (2012).

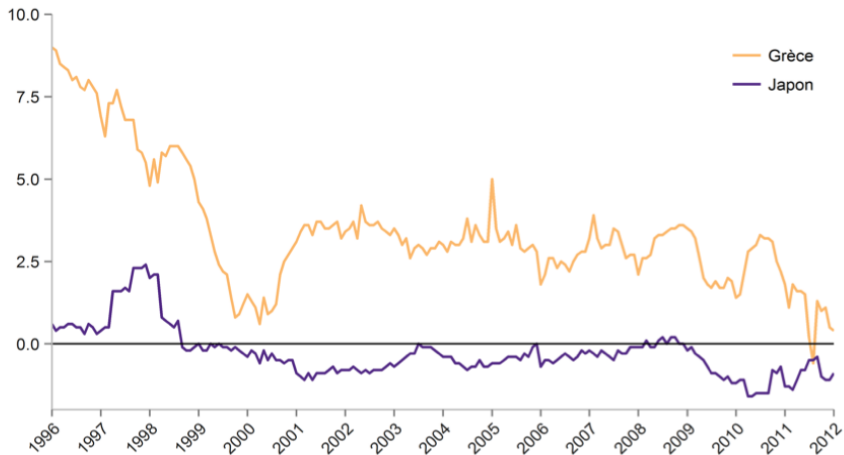
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- Krugman versus Aghion on the Eurozone.

Croissance, chômage et taux d'intérêts au Japon



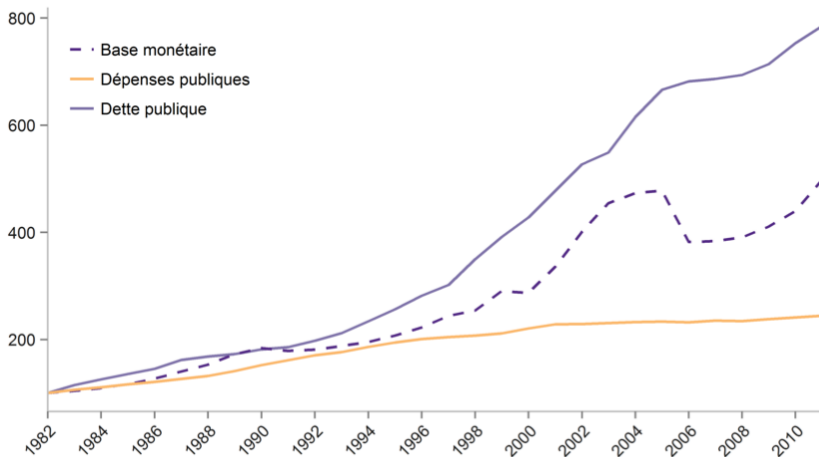
Sources : IMF International Financial Statistics, IMF World Economic Outlook

L'inflation, en glissement annuel



Sources : Eurostat, Ministères des Affaires Intérieures et des Communications - Japon

Évolution des dépenses publiques, de l'endettement public et de la masse monétaire au Japon - Base 100 en 1982



Sources : Bank of Japan; Ministry of Finance, Japan

On financial markets,

- Speculative bubbles should be possible.

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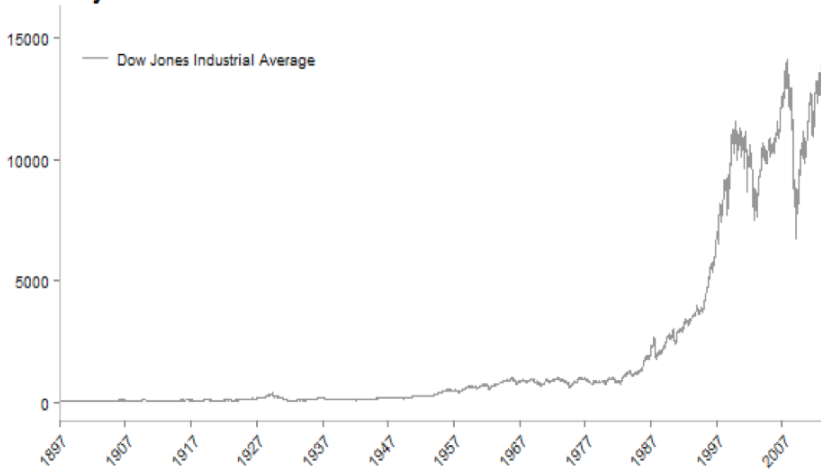
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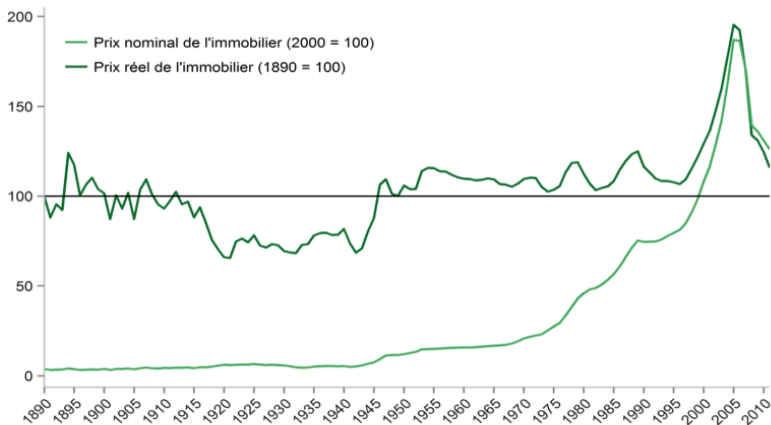
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- But not just as a “black swan”.
Giraud & Kockerols (2015)
Report for the European Parliament on the Cost of the next
Banking Crisis within the European Banking Union.

Dow Jones Moyennes hebdomadaires



Prix de l'immobilier - États-Unis



Sources : Robert J. Shiller - Yale University

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Alternatives

One alternative: Stock-flow consistent models with Lotka-Volterra dynamics.

- Stock-flow consistency : accounting rigor. Godley & Lavoie (2007)

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Knightian uncertainty and entropy: Giraud (2015).

