FROM ECONOMICS AS FICTION TO FICTION LED FINANCE CAPITALISM

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INTRODUCTION

- ✓ The present crisis means an epochal change
  - ➢ The end of the finance led growth regime in the US and UK
  - ➢ The disarray of policy makers facing a crisis they do not understand
  - ➢ The day of reckoning for new classical macroeconomics and mathematical finance

✓The general interpretation proposed by this lecture

- The failure of a positivist approach to economics.
- Time and money: the two black holes of modern theorizing.
- Hence a misunderstanding of the logic of finance, more led by story telling than quants contribution.
- Long range implication for socioeconomic analysis: a fictional turn?

OUTLOOK OF THE PRESENTATION

1. From English political economy to American economics

2. The subprime and then Euro crises: the failed hope of a "hard" science

3. The general equilibrium theory does not sustain "invisible hand" fiction

4. Contemporary economic theory as exercises in economic fiction

5. The symmetric failure of mathematical finance: The future is not pure repetition of the past

6. The radical originality of finance: exchange of promises open to radical uncertainty, hence story telling

7. Towards a fictional turn of socioeconomic research ?

I. FROM BRITISH POLITICAL ECONOMY TO AMERICAN ECONOMICS

1. Political economy was mainly a British discipline and art

➢ The political economy : historical perspective and conceptual discussion

Source:
Dictionary of Political Economy, Vol. III,
p. 222-223

PROFIT, originally a vague word signifying any kind of gain to obtain which some expense or risk must be incurred, has had various narrower significations attributed to it by the definitions of economists.

Adam SMITH, when classifying the national income under the three heads of wages of labour, profits of stock, and rent of land, says that wages are "confounded with profit" when the term "profits" is applied to the whole of the gains of a working farmer or of an independent artisan. A part of these gains, he explains, is wages due to the farmer as labourer or overseer, and to the independent artisan as journeyman. Though he does not lay down any rule on the subject, it may be gathered from his refutation of the proposition that profits "are only a different name for the wages of a particular sort of labour," that he would decide how much of the gains of any particular capitalist is true profit by means of a comparison of the total with the amount earned by non-capitalists by performing similar labour (*W. of N.* bk. i. ch. vi.). RICARDO, James MILL, and

➢ English economist : an eclectic and literary

N., bk. i. ch. vi.). RICARDO, James MILL, and MALTHUS in his *Political Economy* did not subject the idea of profits to analysis. But Malthus in his *Definitions* (1827) divides "the gross profits of capital independent of monopoly" into (1) "net profits" or "interest," and (2) "the profits of industry, skill, and enterprise" (Definitions 34 and 35). M'CULLOCH, in the 2nd ed. of his *Principles*, makes the same division of "gross profits" into (1) net profits or interest, and (2) "wages or remuneration of the capitalist for his skill and trouble in superintending" the employment of his capital, and "compensation for such risks as it might not be possible to provide against by an insurance" (p. 506). J. S. MILL (*Unsettled Questions*, pp. 107-109, and *Principles*, bk. ii. ch. xv. § 1) treats profits as including the whole of the gains of the capitalist, whether due to the mere possession of capital, or to that and the performance of labour and the undergoing of risk. FAWCETT (*Manual*, bk. ii. ch. v.), JEVONS (*Primer*, p. 52), Marshall (*Principles*, vol. i. 1st ed. p. 142, 3rd ed. p. 156) adopt the same course. Some writers, however, *e.g.* ROGERS (*Manual*, ch. xi.), B. PRICE (*Practical Political Economy*, ch. v.), C. L. Shadwell (*System*, p. 158), follow Adam Smith's plan of regarding as profits proper only that portion of the capitalist's gain which he may be supposed able to obtain without personal labour and if fully insured against risk, while F. A. WALKER, on the other hand, desires to apply the term "profits" only to the other portion of the entrepreneur's gain, namely, that which is over after deducting interest on all the capital he employs, whether it belongs to himself or to another person (*Political Economy*, 1885, p. 247). In practical life the term "profits" is used in all three senses with almost equal frequency. It would be applied without hesitation (1) to the total gain of an individual capitalist employing none but his own capital, and personally performing all necessary labour of management (Mill's profits), (2) to the gains of a joint-stock company or private firm in the case of which all labour of management was paid for by fixed salaries (Adam Smith's true profit), and (3) to the net gain of an entrepreneur employing no capital of his own (Walker's profit).

Source: *Dictionary of Political Economy* (1894), Vol. III, p. 221-223

2. After the two world wars, the centre of gravity of the profession migrates to the US:

- Initially an hybridization of German historical school into an institutionnalist school
- The interwar: analysing and measuring the business cycle
- After WWII, an American brand of Keynesian and radical political economy
- Since the 1960s, emergence of economic analysis and then economics

American economic science: quantification and

Kalecki has a macroeconomic theory of pricing which yields a determinate share of profits in total output. He does this by exploiting the marginal revenue equals marginal cost conditions of equilibrium for the neoclassical firm. By then exploiting the simple idea that the ratio of price to marginal revenue departs from one to the extent that the price elasticity of demand is below infinity he connects price to marginal cost via the demand elasticity. Thus

$$p = mc(1 + \eta^{-1}) \tag{3}$$

where mc is the marginal cost and η is the elasticity of demand. The coefficient $(1 + \eta^{-1})$ is called the degree of monopoly. To the extent that η^{-1} departs from zero, the firm is a monopolistic one.

This is a partial equilibrium, microtheoretic derivation of the p/mc ratio and its generalization to a macroeconomic level has proved to contain problems (Mitra, 1954). The main problem is that if (3) is supposed to refer to a specific firm, its elasticity of demand is not a constant but a function of the firm's own and its rivals' strategies. A determinate and tractable aggregation procedure for many jointly dependent p/mc ratios is not possible. It has however been found possible and empirically fruitful to interpret pricing decision as a mark-up above average cost.

$$p = (1 + k)ac \tag{4}$$

where ac is average cost and k is the mark-up ratio. The similarity of (4) to Keynes's Fundamental Equation in (1) is striking i.e. $\pi = k/(1+k)$. But while (1) is an identity, (4) could be thought of as an equation where the profits come from producers' price setting behaviour.

But how are these profits sustained or in Marx's terminology realized? This is where the aggregate demand relations become important. It would be through the spending behaviour of the profit receivers that profits can be sustained. This was already clear in Keynes' invocation of the widow's cruse parable whereby a Wicksellian cumulative dynamic process can sustain growing profits as long as capitalist spend (i.e. dis-save) while keeping up their investment expenditure. By starting with the Marxian SER, Kalecki was able to derive this as an *equilibrium* relation.

Kalecki's macroeconomic theory is best seen in terms of Kaldor's generalization. Kaldor takes the two class/two good model and integrates profits into a theory of growth and distribution. Let R be total profits $(\equiv \pi Y)$ and W be the total wage bill $(= wL)$. Then

$$Y = R + W \tag{5}$$

$$I = S = s_w W + s_c R \tag{6}$$

Equation (5) is a national income identity, whereas (6) combines the Saving–Investment equality with a decomposition of total savings into workers' savings $(s_w W)$ and capitalists' savings $(s_c R)$ with the $s_c s_w$ being saving propensities and $s_c > s_w$. From (5) and (6), we can derive

$$R/Y = \pi = (s_c - s_w)^{-1}(I/Y) - s_w(s_c - s_w)^{-1} \tag{7a}$$

and

$$R/K = \rho = (s_c - s_w)^{-1}(I/K) - s_w(s_c - s_w)^{-1}(Y/K) \tag{7b}$$

Source: *The New Palgrave. A Dictionary of Economics* (1988), Vol. III, p. 1018-1019.

➢ The new style: a possibility of test and selection of theories.

The restriction that $s_w = 0$ is of course arbitrary and thus makes the result under (8b) somewhat unrealistic. Pasinetti (1962) generalized the Kaldor argument by allowing workers as well as capitalists to save and own capital. Thus total capital K could be held either by capitalists K_c or by workers K_w but since capitalists make output and investment decisions workers were assumed to have loaned K_w to capitalists. In terms of the distinction we made above capital as productive equipment is *controlled* by capitalists but capital as a financial asset is *owned* by both workers and capitalists, and capitalists pay workers a rate of interest i on the loaned capital. Thus instead of (7a) and (7b), we get

$$R/Y = \pi = (s_c - s_w)^{-1}[(I/Y - s_w) + r(s_w s_c (I/K)^{-1} - s_w (Y/K)^{-1}] \quad (9a)$$

$$R/K = \rho = (s_c - s_w)^{-1}[(I/K - s_w (Y/K)) + r(s_w s_c (I/K)^{-1} - s_w)] \quad (9b)$$

If we now put $r = \rho$, (9a) and (9b) degenerates to

$$\pi = s_c^{-1}(I/K) \quad (10a)$$

$$\rho = s_c^{-1}(I/K) \quad (10b)$$

The Pasinetti result has been derived by an alternative route by Samuelson and Modigliani (1966) who do use a neoclassical aggregate production function. Their purpose was to point out that the Pasinetti result was a special case of a more general result and that a dual to Pasinetti's theorem – an anti-Pasinetti theorem – could be derived from a slightly alternative formulation. All the assumptions of Pasinetti's theory are retained except that profits and wages are now derived from the marginal productivity conditions and a constant return to scale, two factor production function.

Let the production function be

$$\bar{Y} = f(\bar{K}) \qquad f' > 0, \quad f'' > 0 \quad (11)$$

Here $\bar{Y} = Y/L$, $\bar{K} = K/L$, i.e. output per worker and capital per worker. By the standard rules of marginal productivity theory we have that wage and rate of profit are determined as

$$\rho = f'(\bar{K}) \quad (12a)$$

$$w = f - \bar{K} f'(\bar{K}) \quad (12b)$$

In the production function, there is no distinction as to who owns the total capital stock – capitalists or workers. The savings augment the amount of capital owned by workers and capitalists,

$$S_c = \dot{K}_c = s_c f'(K) K_c \quad (13a)$$

$$S_w = \dot{K}_w = s_w [Y - f'(K) K_c] \quad (13b)$$

Source: *The New Palgrave. A Dictionary of Economics* (1988), Vol. III, p. 1018-1019.

3. Two key inspirations for the rising industry of economics

- **Paul Samuelson (1947)** ***The foundations of economic analysis***

  Import the mathematical techniques of physics and apply them to key economic issues and move towards an integrated science .

- **Milton Friedman(1953)** ***Essays in Positive Economics,***

  "Truly important and significant hypotheses will be found to have "assumptions" that are wildly inaccurate descriptive representations of reality, and, in general, the more significant the theory, the more unrealistic the assumptions (in this sense)"

The tension between these two visions helps to understand the present state of economic discipline: from hard science to economic fiction

II. The subprime and then Euro crises: the failed hope of a hard science

1. The pride of economists: their discipline is progressively becoming a science.

2. Economics has moved away humanities and other social disciplines in the direction of a natural science approach.

- ✓ *Invention of new concepts ...*
- ✓ *Their standardisation and large diffusion*
- ✓ *Intensive use of quantification…*
- ✓ *Hence mathematisation and formalisation*

- ✓ *From grand visions to theories…*
- ✓ *…From theories to a series of models…*
- ✓ *…Tested by the development of specific and powerful techniques*
- ✓ *Professionalization of economists training*
- ✓ *Organization of large international networks…*
- ✓ *…Explosion of academic reviews*

3. The pride of economists: their discipline is progressively becoming a science.

- ✓ *Natural scientists looking at economics recognise their tools and style of reasoning*
- ✓ *Rational choice theory is exported to many other social sciences such as sociology, history, political analysis.*
- ✓ *This scientific style makes economists the top advisers of governments, Central Banks,…*
- ✓ *Economists attribute themselves the merits of a fast and non-inflationary growth in the 2000s.*

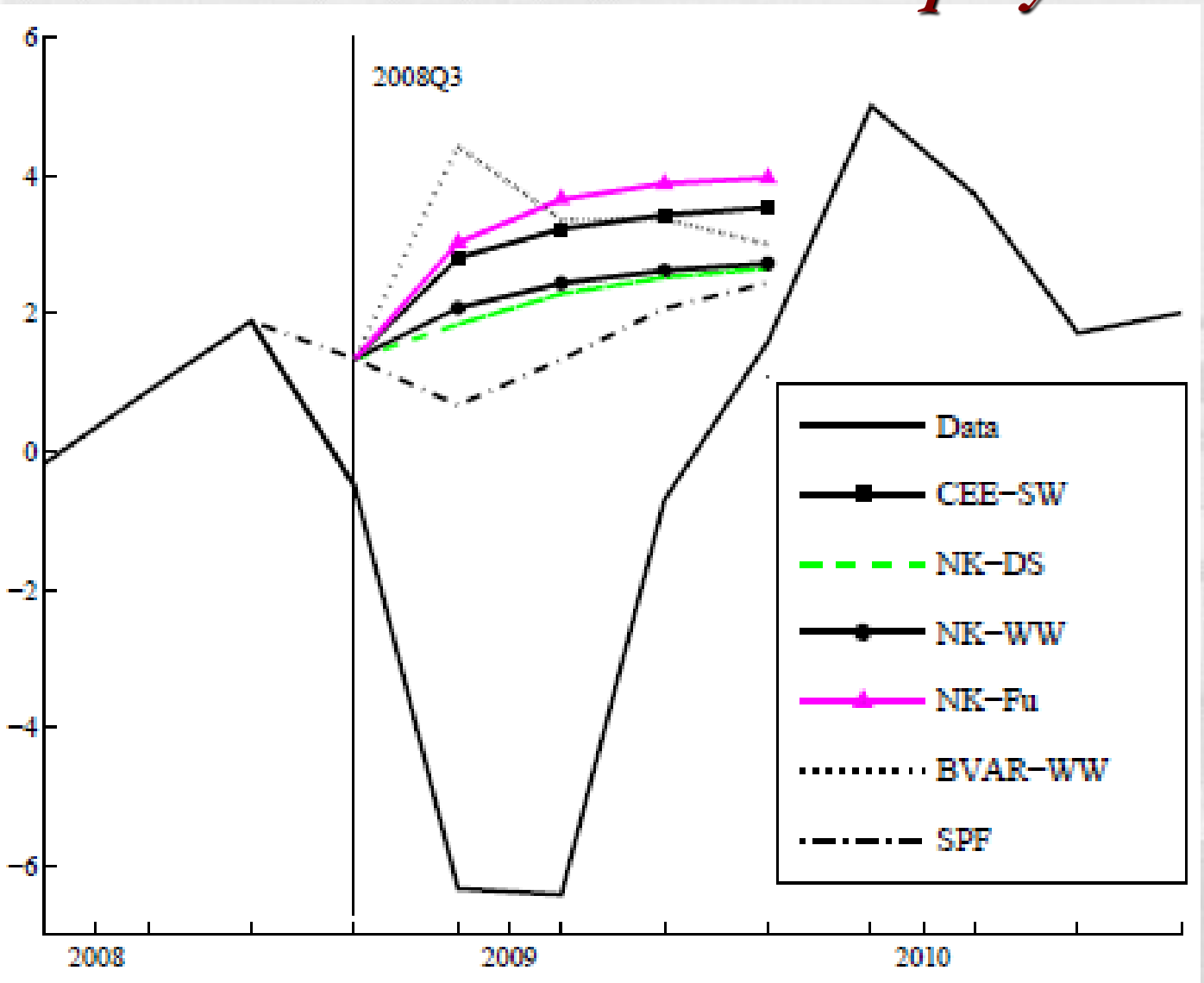
4. The present crisis is dissipating these illusions.

- ✓ ***The inability to predict any of the recessions since the 80s.***

  - ➢ **An example: OECD *Economic Outlook* from 1984 to 2007.**

    The forecasts published on June each year have never been able to anticipate a recession that came in the following quarter.

✓ ***The macroeconomic profession was unable to anticipate the brutal downturn associated with Lehman Brothers' bankruptcy.***

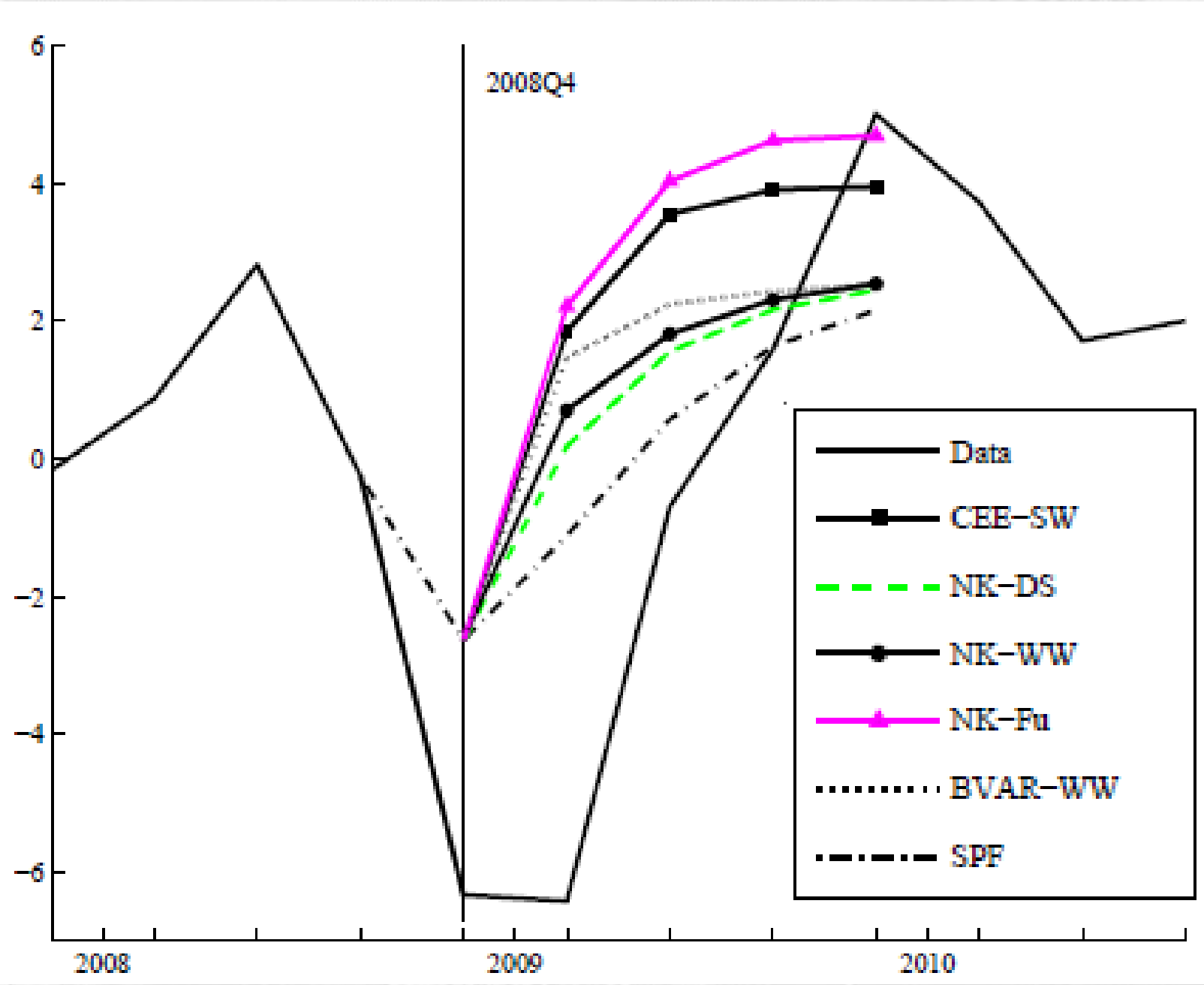


Output forecast made on third quarter 2008

Source:

Volker Wieland (2010), Model comparison and Robustness: A proposal for policy analysis after the financial crisis, WP Goethe Uiversity Frankfurt, November 28th.

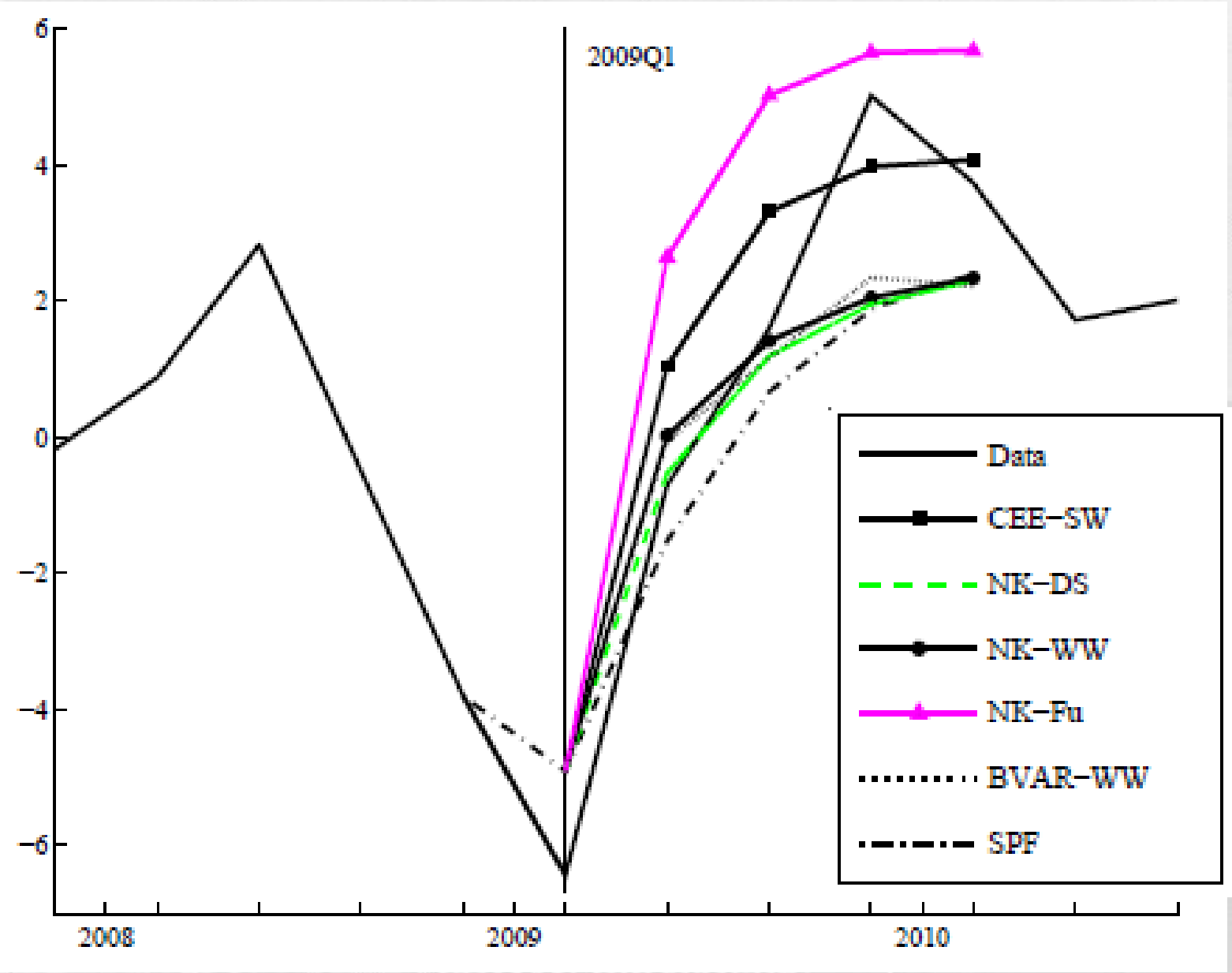
➢ It will be a mild and short recession



Output forecast made in the fourth quarter 2008

Source: Volker Wieland (2010), *ibidem*

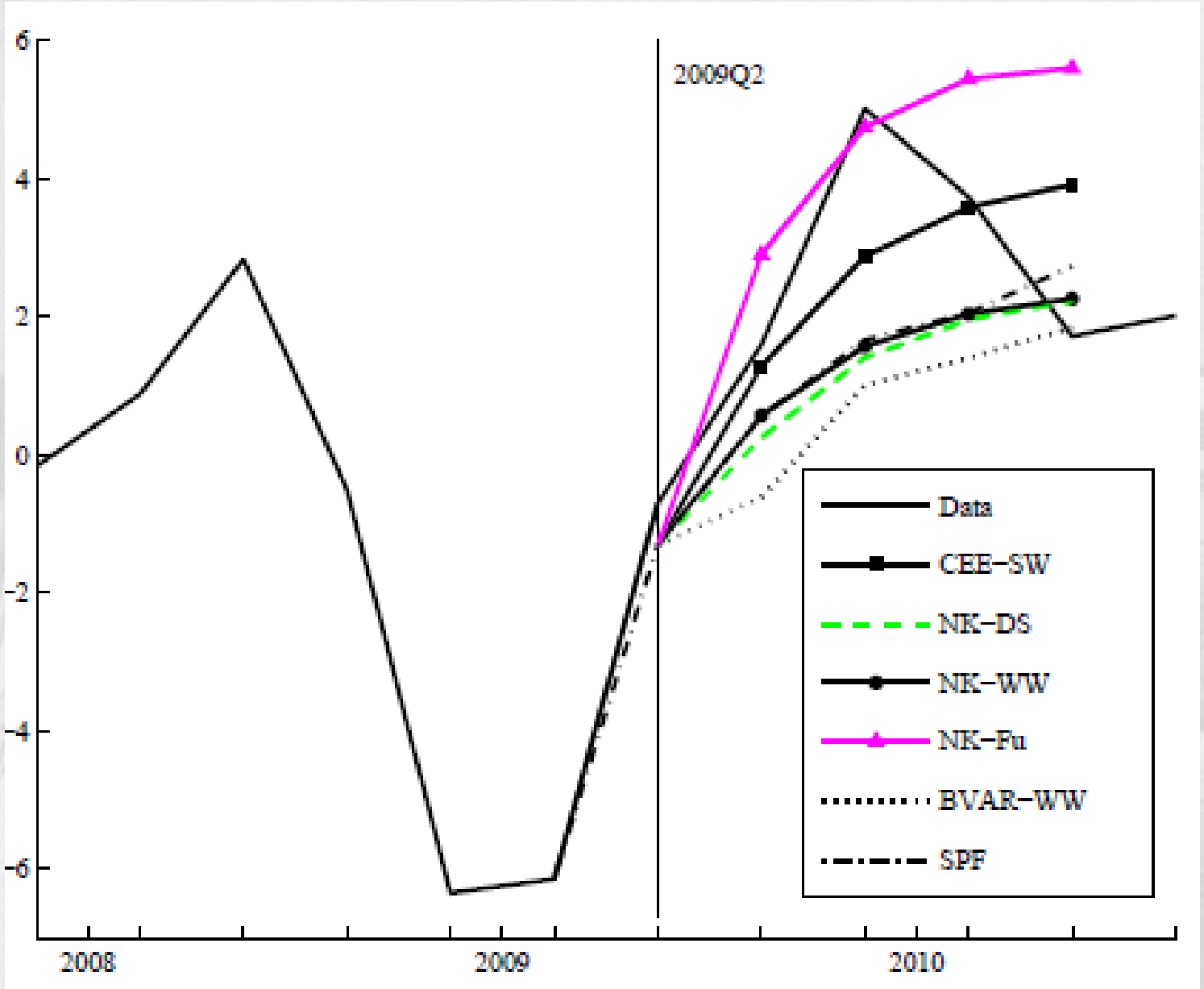
➢ The recession is deeper, but the recovery stronger



Output forecast made in the first quarter 2009

Source: Volker Wieland (2010), *ibidem*

- **At least the recovery is correctly forecasted, but not the subsequent slowdown**



Output forecast made in the second quarter 2009

Source:
Volker Wieland (2010), *ibidem*

✓ ***A second function of models: to detect causalities in order to assess the impact of an exogenous change***

Macroeconomists disagree about the impact of the recent fiscal stimulus

- **Keynesian models: the multiplier is about 1.6**
- **DSGE typical models: this multiplier is much lower than 1, around 0.3**
- **Pure Ricardian equivalence hypothesis: private consumption reduction strictly compensates extra public spending, the multiplier is equal to 0**
- **During a severe financial crisis, the overindebtness may trigger highly pessimistic expectations: the multiplier is negative.**

✓ ***But what role is left for theories and modelling?***

- Forecasting: a longstanding illusion
- Explaining the functioning of contemporary economies: no consensus even for some basic mechanisms
- Simply a thought experiment: creating abstract economic worlds in order to assess the relations between their configurations and their static or dynamic properties.

THEORETICAL MODELS AS ECONOMIC FICTIONS

III. THE CORE FAILURE : GENERAL EQUILIBRIUM THEORY DOES NOT CONFIRM THE INVISIBLE HAND FICTION

1. The "coup de force" of General Equilibrium Theory

- ✓ *Typically a huge barter economy coordinated by a benevolent auctioneer*
- ✓ *Only drastic and numerous conditions allow the existence of an equilibrium*
- ✓ *Money is only a numeraire and vanishes at the equilibrium*

➢The generalization of GET has failed

Table – In contemporary economies, as many market failures as efficient markets

THE HYPOTHESES OF THE TWO WELFARE THEOREMS	STYLIZED FEATURES OF CONTEMPORARY ECONOMIES	CONSEQUENCES UPON MARKET FUNCTIONING
1. De facto, complete centralization of transactions, no need for money	1. Largely decentralized exchanges allowed by money and credit	1. Multiplicity...or absence of any equilibrium. Efficiency is no more warranted
2. Atomistic competition among very numerous agents	2. Imperfect competition via product differentiation is the rule	2. Market equilibria are no more efficient
3. The list of goods is finite, their quality is known	3. Producers are better informed than consumers, products innovation is crucial	3. Markets do not clear: unemployment and over capacities
4. Purely private goods, without any external effect	4. Existence of many public goods and external effects (security, education, R&D,...)	4. Competitive markets imply an under-investment in collective goods
5. Constant returns to scale and fixed technologies	5. Learning by doing, by using and increasing dynamic re-returns to scale are significant	5. Imperfect competition is the rule, inefficient techniques can persist, multiplicity of path dependent equilibria
6. All contingent future markets exist	6. Only few financial markets allow intertemporal transactions	6. Existing markets cannot deliver an adequate coordination: inefficient equilibria are the rule
7. Equity principles have not any influence upon efficiency	7. Workers loyalty and commitment are linked to a fair treatment	7. Markets do not clear; unemployment can persist

The belief in self regulated markets has been eroded but not destroyed after the subprime crisis

Table – The promises and the deliveries of the free marketers

	PROMISE	OUTCOME
1. Capital labor relation	° Deregulation will allow full employment	° No clear impact
2. Forms of competition	° Deregulation will bring, more efficiency by the entry of new producers	° Re-regulation, less producers: from one national oligopolistic form of competition to another more internationalized
3. Monetary regime	° Control of monetary base is possible	° Monetary innovation prevents this control
	° It provides price stability, without departing from full-employment	° Price stability, but mass employment
4. State	° Minimal State will enhance growth and productivity	° Lack of public investment ° Poor private productivity due to the lack of education and infrastructures
5. International regime	° Smooth currency and exchange rates adjustments	° Large ups and downs of exchange rates
	° External disequilibria will not more exist	° Unprecedented and stable polarization of deficit and surplus countries
	° Complete autonomy of national economic policies	° Stronger constraints upon the national degree of anatomy in economic policy choices.

IV. CONTEMPORARY THEORY: EXERCISES IN ECONOMIC FICTIONS

1. General Theory has failed, economies are so complex that they have to be drastically simplified to be understood.

   - A basic reference

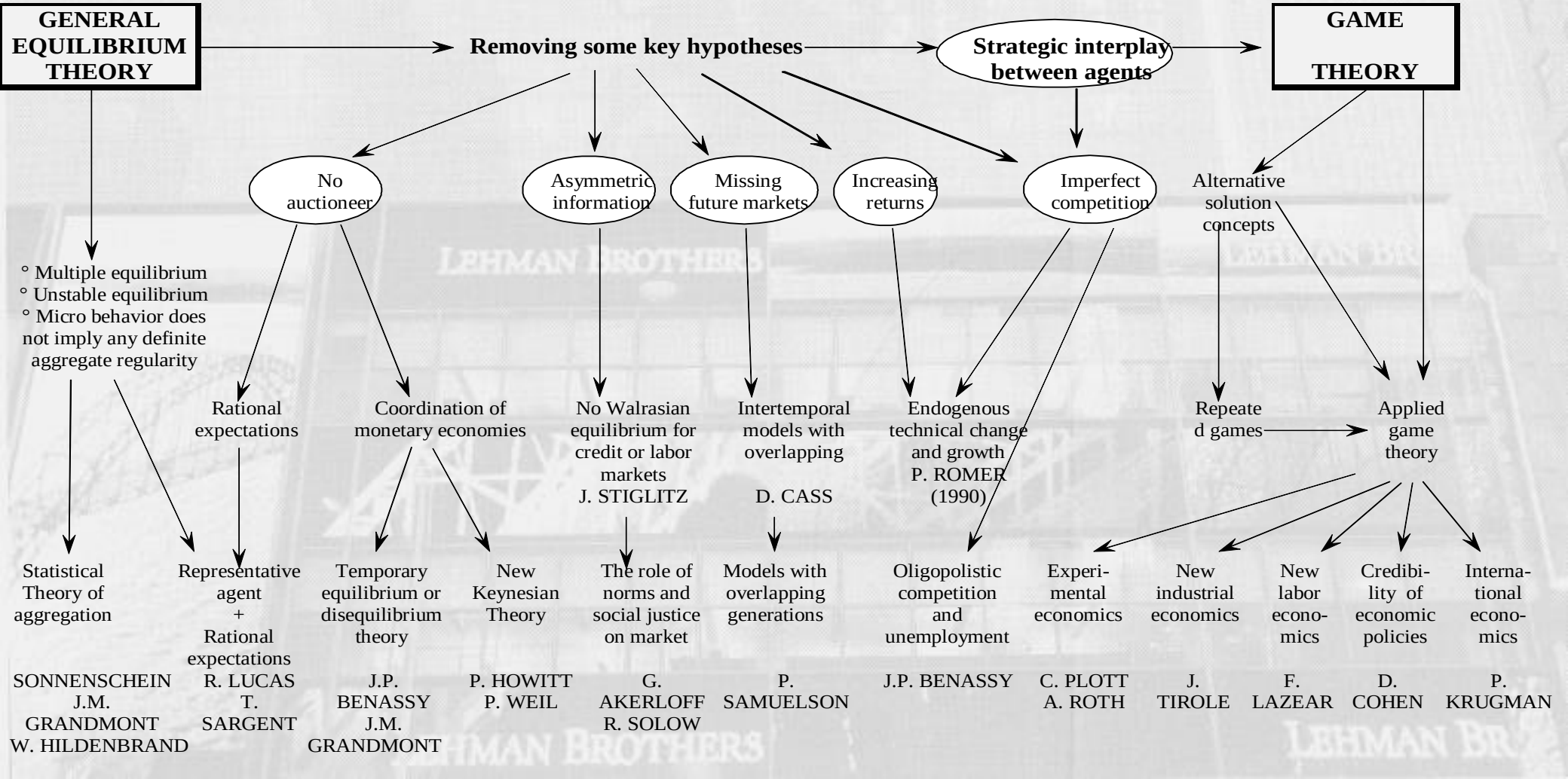
     Ingrao B., Israel G. 1990. *The Invisible Hand. Economic Equilibrium in the History of Science*, Cambridge MA: MIT Press

2. A succession of ad hoc hypotheses: as many worlds as theoreticians…and not any falsification in Karl Popper's meaning

- ***The direct consequence of the impossibility to generalise General Equilibrium by removing all of the seven core hypotheses***
- ***Removing each of them opens a specific class of theory and model.***
- ***At the extreme, for Game Theory "Everything goes": the folk's theorem.***

➢Each theoretician invents his own imaginary world in which his hypotheses apply

Diagram 1 – From general equilibrium theory to game theory: analyses by domains but not any theory for the complete economic system



➢ The three limits of this strategy

✓ ***On the same issue, each sub-field develops independently and therefore the profession as a whole presents contradictory results and recommendations***

- First example: Keynesian versus Real Business Cycles models on taxation and public spending
- Second example: the impact of securitization on financial stability, positive for quants, negative for asymmetric information theoreticians

- The contradictory nature of “economic knowledge is widely perceived outside the profession, for instance by novelists

“L’intérêt d’Hélène pour l’économie avait beaucoup décru au fil des ans. De plus en plus, les théories qui tentaient d’expliquer les phénomènes économiques, de prévoir leurs évolutions, lui apparaissaient également inconsistances, hasardeuses, elle était de plus en plus tentée de les assimiler à du charlatanisme pur et simple. Il était même surprenant qu’on attribue un prix Nobel d’économie, comme si cette discipline pouvait se prévaloir de la même rigueur intellectuelle que la chimie ou que la physique.” **p. 327.**

“The interest of Helen for economics had been eroding drastically over the years. Increasingly, theories attempting to explain economic phenomena, predict their evolution, appeared to her equally inconsistent, and dubious, she was tempted to equate them to a typical quackery. It was even surprising to give a Nobel Prize in economics, as if the discipline could claim the same intellectual rigor as chemistry or physics.”

Michel Houllebecq. 2010. *La carte et le territoire*, Flammarion: Paris

➢ *A quite imperfect process for assessing the respective validity of these theories: organising a tournament at AEA.*

Source: http://www.vanderbilt.edu/AEA/images/Market_Madness_Bracket.jpg

✓ ***None of the ad hoc models is tested rigorously: no example of any theory falsified and rejected by negative empirical results***

- First example: new endogenous growth theory is assuming unitary increasing returns to scale, the probability of which is 0.
- Second example: the pricing of options assume that rates of return follow a Gaussian law, whereas they obey to a Student distribution

3. A second magic bullet: the concatenation of all the future into present time

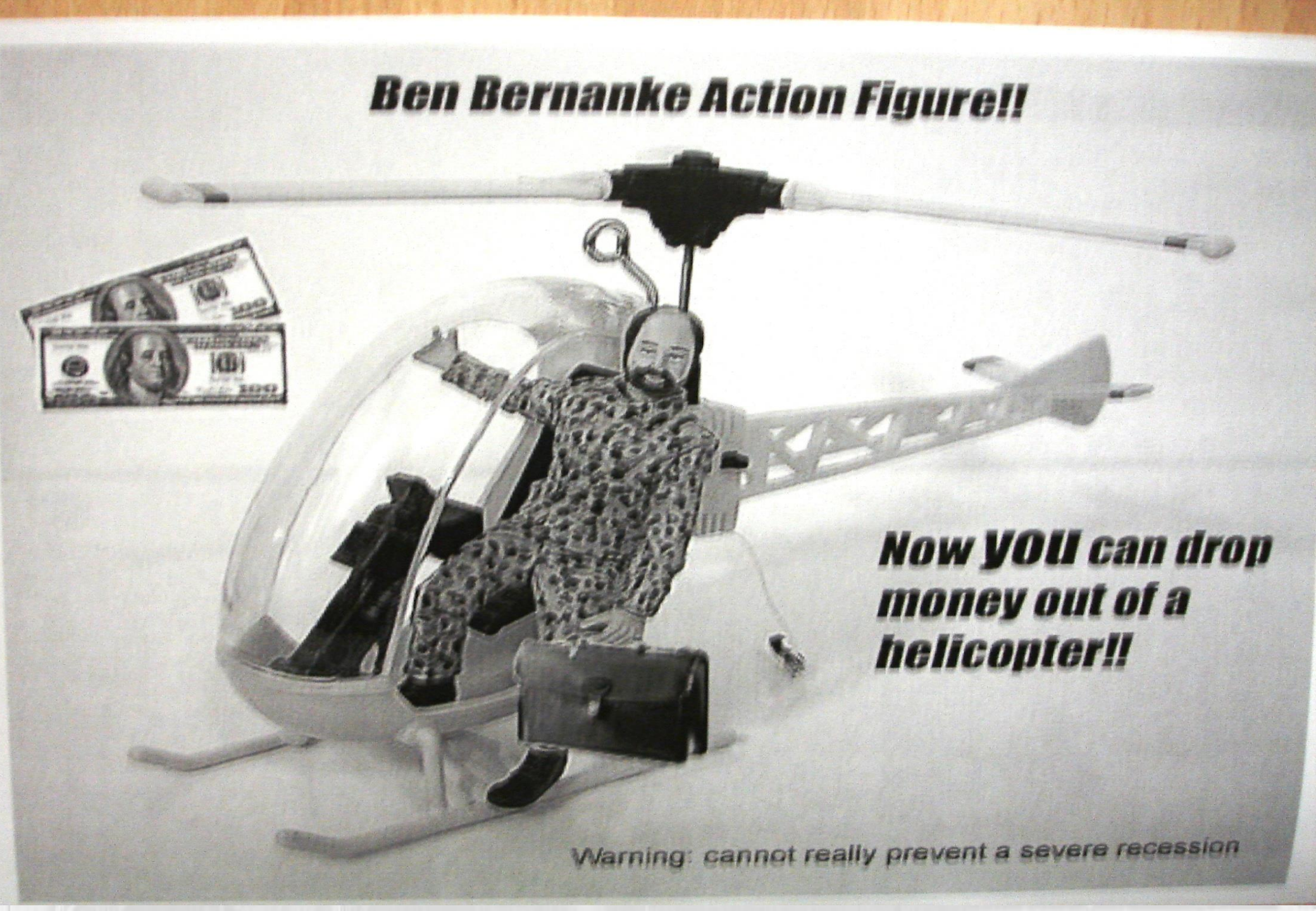
- ✓ *All contingent markets exist*
- ✓ *Agents are so clever that they can plan their lifelong decisions today*
- ✓ *History is only the consequence of the precise sequence of stochastic events that trigger the implementation of these contingent contracts*

4. The absence of money makes crises impossible

- ✓ *They are thus the consequence of negative shocks upon the same stable equilibrium*
- ✓ *If not so, crises derive from the blocking of pure market adjustments*
- ✓ *Consequently, governments should foster deregulation, decentralisation, opening to the world economy, labour market flexibility…*

5. **This totally unrealistic and false framework has been adopted by the majority of contemporary macroeconomists**

- ✓ ***Unemployment is uniquely voluntary***
- ✓ ***No credit nor stock market are present***
- ✓ ***The agents never go bankrupt because they anticipate completely the long term consequences of their strategies***
- ✓ ***The money is directly distributed by the Central Bank to all agents***


Ben Bernanke Action Figure!!
Now YOU can drop money out of a helicopter!!
Warning: cannot really prevent a severe recession

V. A SYMETRIC FAILURE OF MATHEMATICAL FINANCE

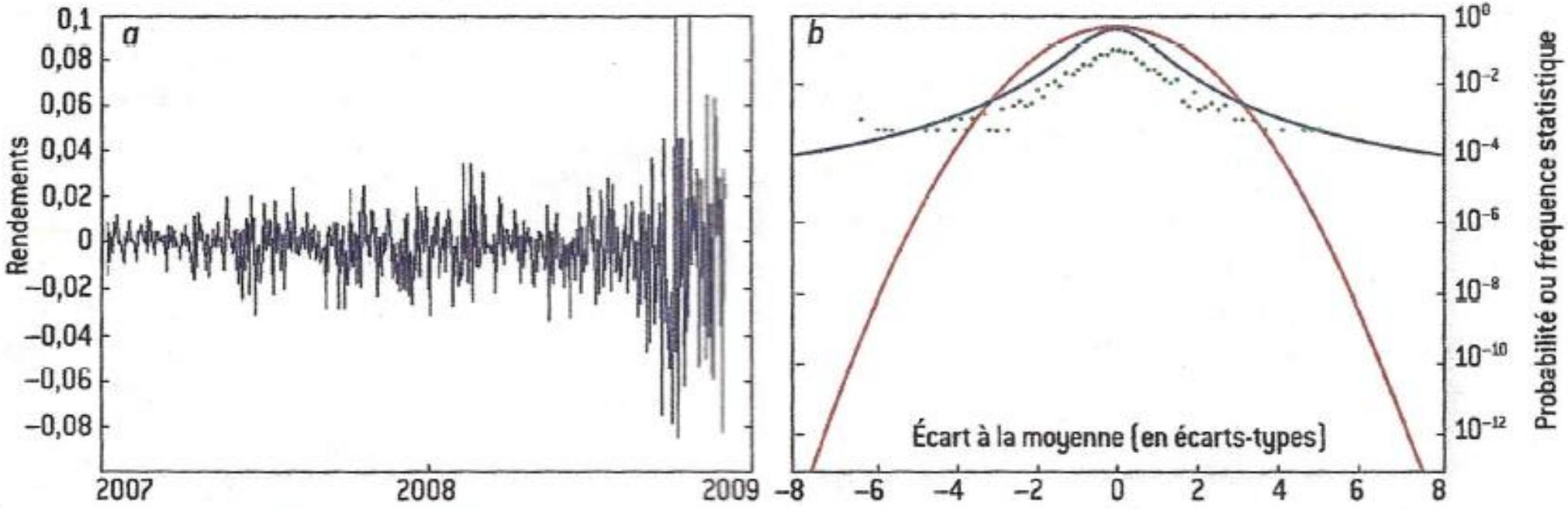
1. The consequence of scientific advances in probability theory and the related hubris

   - Extract relevant information from past transactions
   - Create new financial instruments using these advances
   - An hidden hypothesis: the future will reproduce the past

2. The initial success hides the source of crisis

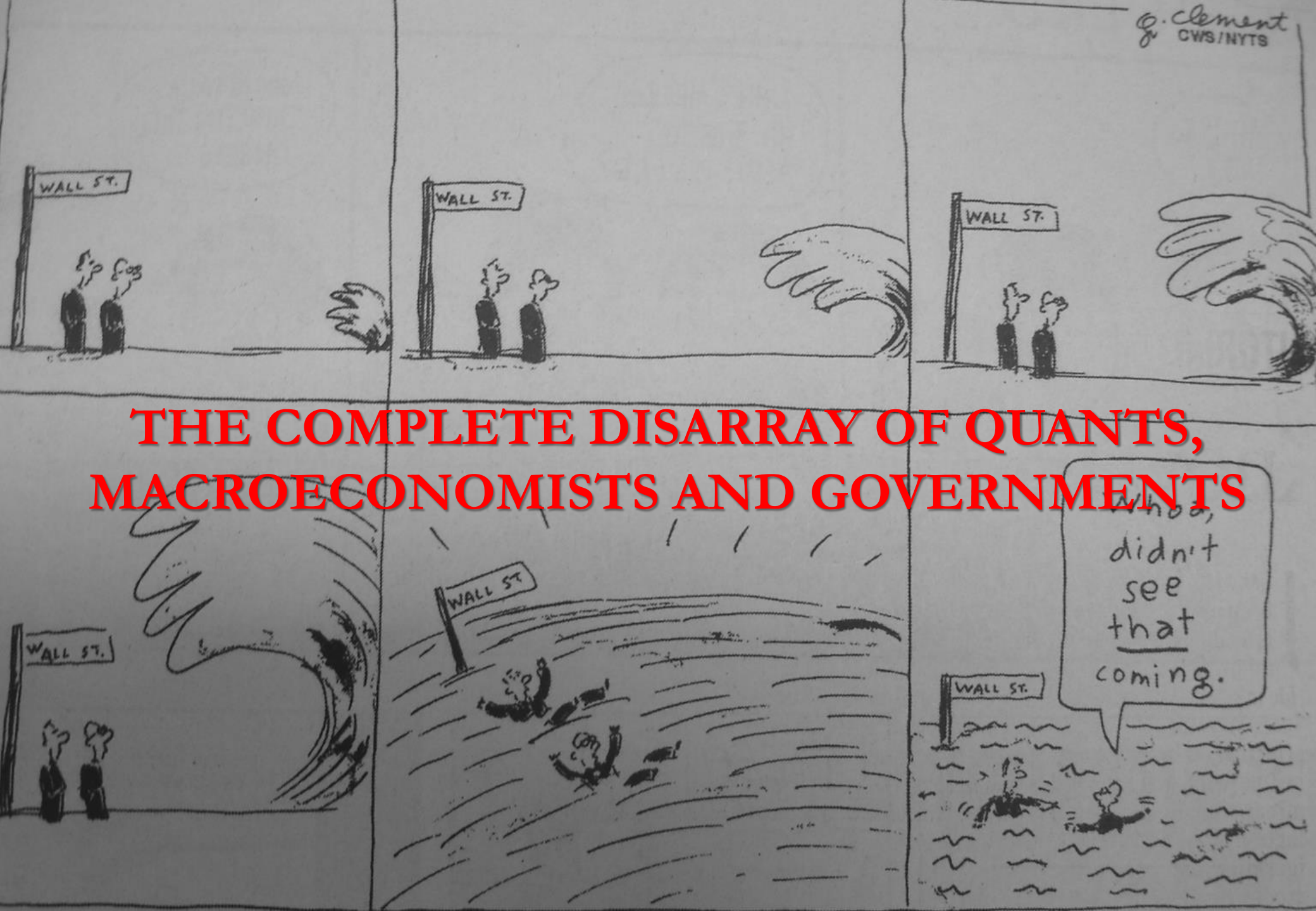
- ✓ *A totally new field fed by the entry of mathematicians, physicists, and rocket scientists*
- ✓ *A lot of stochastic processes analysis but no economic foundations*
- ✓ *All the pricing of sophisticated new products assumes that rates of return follow a Gaussian law*
- ✓ *Whereas they obey to a Student distribution*

The benign neglect of Popper's falsification strategy: postulating a Gaussian law instead of a Student for stock market rates of return



1. LES RENDEMENTS JOURNALIERS de l'indice Dow Jones en 2007 et 2008 *(a)* ont une distribution statistique *(les points dans b)* qui est plus proche d'une loi « à queues épaisses », telle la loi de Student de paramètre 3 *(en bleu)*, que d'une loi gaussienne *(en rouge)*. Les trois distributions représentées ont le même écart-type et la même moyenne.

Source : Cont Rama (2009), "Risques financiers: quelle modélisation mathématique?", *Pour la Science*, n° 375, Janvier, p. 25.



THE COMPLETE DISARRAY OF QUANTS, MACROECONOMISTS AND GOVERNMENTS

VI. The radical originality of finance: exchanges of promises open to radical uncertainty, hence story telling

1. Confusing appearance and essence

- Finance is frequently supposed to be run on **pure and perfect markets**: aggregation of supply demand, now automated price formation by ICT
- **The Walrasian model** was directly inspired by the **stock market**, generalised at the economy wide level
- The only problem: within transactions over **promises upon future value creation**, the nature and the quality of the good is unknown and largely uncertain

2. Financial markets do not have the "good" properties of typical goods

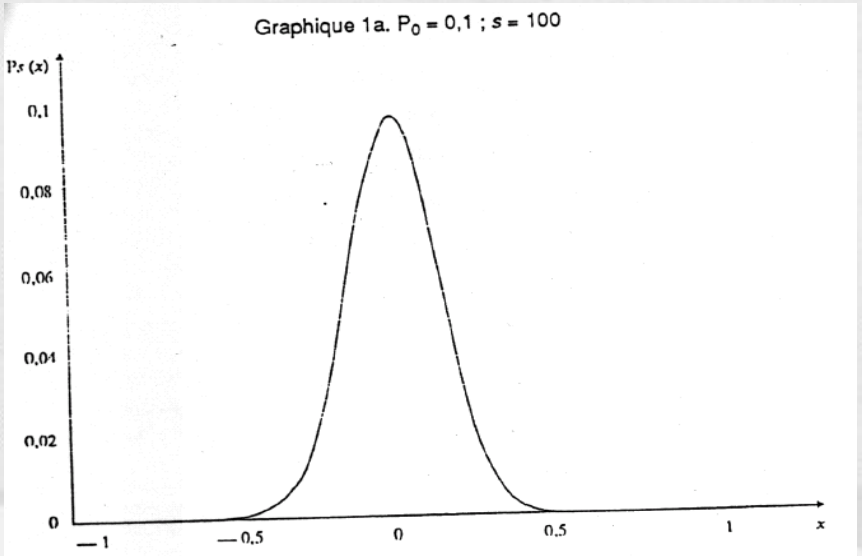
- Markets for « credence » goods, as opposed to search goods or experience goods (Spencer)
- Crucial role of uncertainty which leads to conventions, imitative behaviour, bubbles and instability (Keynes, Shiller, Orléan)
- Two prices : fundamental (theoretical) price and market (psychological) price

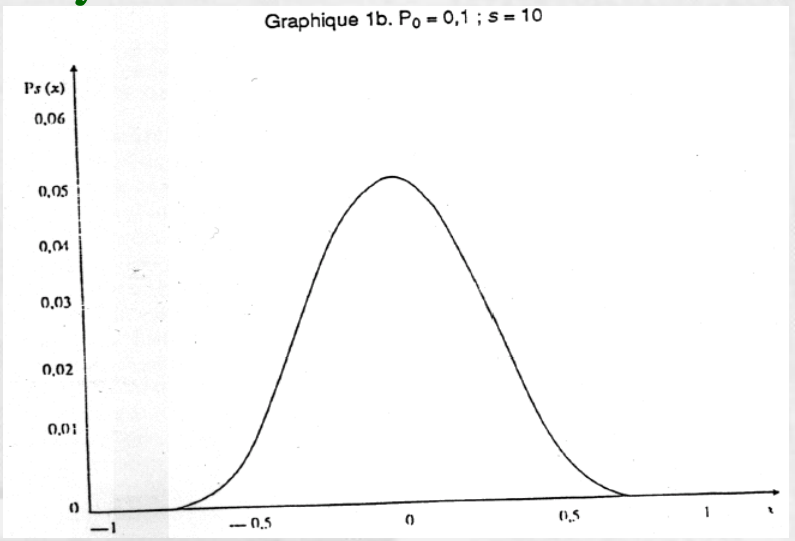
- When uncertainty increases, traders consider the market price more than their own valuation of stock…

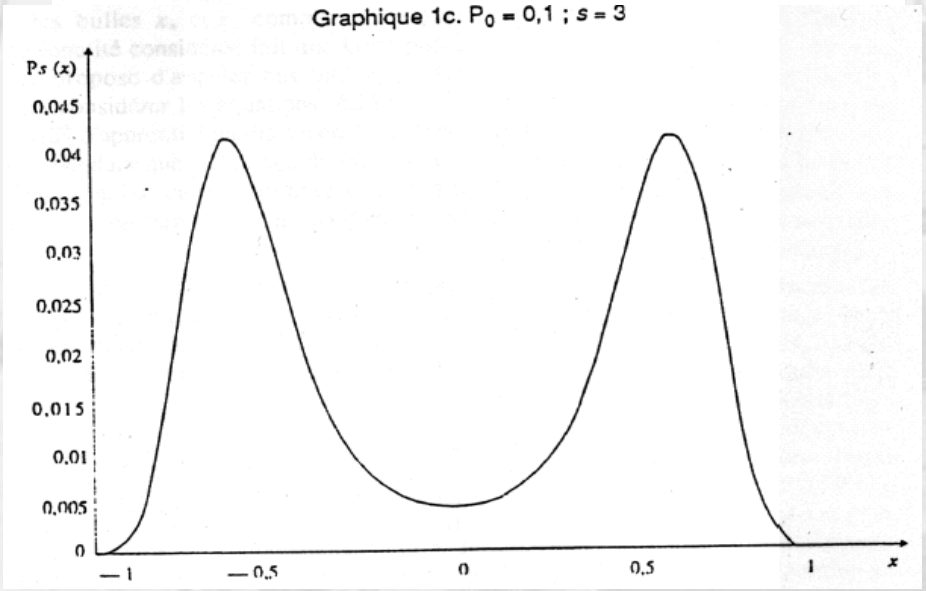
- Thus, this rational mimesis removes the stock market out of fundamental value towards two extreme valuations, bear and bull.

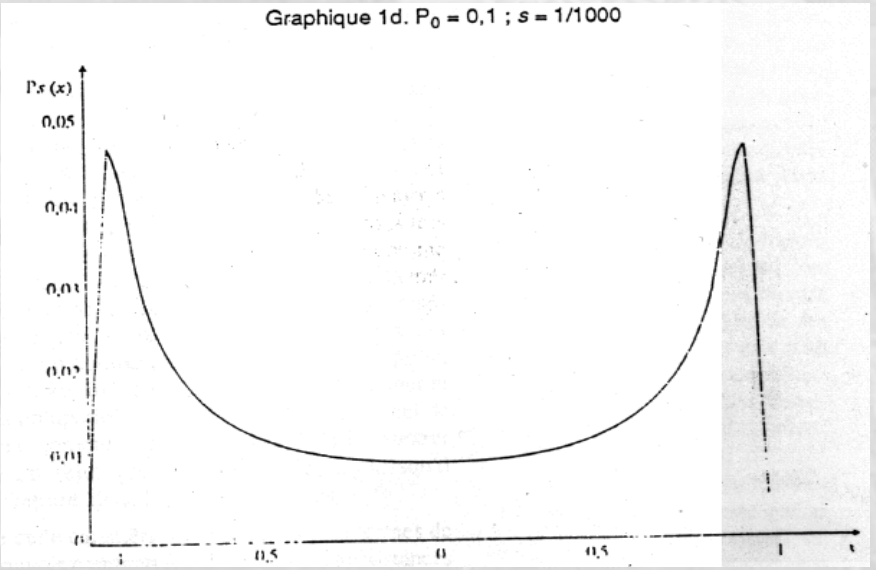
…On stock markets, bear and bull periods alternate

Figure 2 - Distribution of probability when traders are more and more uncertain about the quality of their valuation







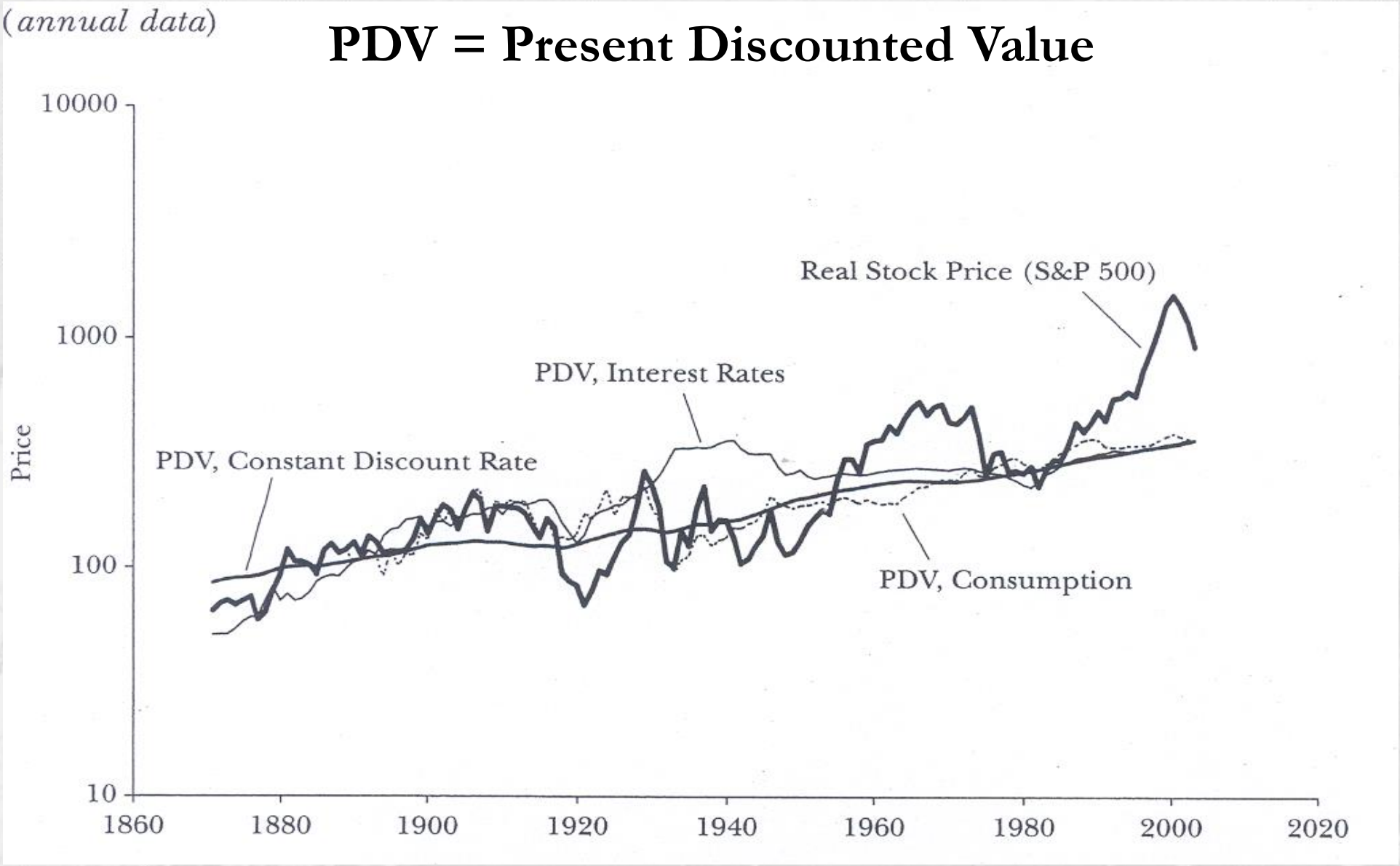


Source : André Orléan (1990)

3. The dual paradox of financial markets

- A precise and real time valuation of assets but always erroneous compared with the *ex-post* fundamental value
- Up to a threshold for liquidity, speculation is leading the market and no more enterprise valuation
- Consequently the equivalent of a casino game is governing the allocation of the capital, that may become dramatically inefficient

Figure 1 – US Stock market valuation never converges towards fundamental value



Source: Shiller (2003), p. 86.

4. The emergence of ad hoc conventions is managing, imperfectly, this instability

- This key concept was introduced by John-Maynard Keynes but had no legacy in conventional economics

- Unfortunately, these conventions are largely arbitrary:
  - ✓ A new customer for cellular phone at the end of the 90s: 4000 French Francs!
  - ✓ The start-ups of the Silicon Valley will replace mature industries
  - ✓ Invest in the BRICs

5. The viability of financial markets is up to their monitoring by a complex set of rules, organizations and institutions

VII. Towards a fictional turn of socioeconomics?

1. **The revolt against Rational Expectations Hypothesis (REH)**
   - ✓ ***An unrealistic analytic and computational ability of typical agents***
   - ✓ ***Even the Central bankers do no master the core macroeconomic mechanisms through which they act***
   - ✓ ***In a non-ergodic world with major structural changes, REH is irrelevant.***

2. A return back to John-Maynard Keynes ideas

- ✓ *The world is too complex to be submitted to a pure Cartesian analytical framework*
- ✓ *The subjectivity is intrinsic to investment and financial decisions*
- ✓ *Facing uncertainty, and not only risk, agents have to form ad hoc representations of the future*
- ✓ *Hence, the attractive but fuzzy concept of animal spirit*

Robert Shiller, George Akerlof: *Animal spirits*

3. Storytelling is at the core of modern finance

- ✓ *Unable to anticipate the future, why not to create it by imagination?*
- ✓ *A method for compacting a complex set of information into an attractive and nice story*
- ✓ *The possible point of departure for conventions upon new and uncertain emerging industries*
  - Internet, Biotech… Facebook!

Scott WEST, 2000, *Storyselling for financial advisors*
Nigel THRIFT, 2001, "It is the romance…"
Julie FROUD & alii, 2012, "Stories and interests in finance"

4. A new concern for socioeconomic research

- ✓ *Facing fundamental uncertainty, actors anchor their decisions in fiction*
- ✓ *Fictionality is a leading mechanism in many markets*
- ✓ *Fictionality entitles creativity and economic dynamism*
- ✓ *It applies to future and spot prices of natural resources, stock market, investment and consumption*

Jens BECKERT, 2011, Imagined futures, Fictionality in economic action.

5. In search for a general theory of value that would apply simultaneously to economy and other fields of social life

- ✓ *The present nomenclatures of goods and services do not describe the state of nature but are social constructions*
- ✓ *Away from objective theory of value*
- ✓ *Some features of the financial market apply also to many other fields*
- ✓ *A possible path for unifying balkanized social sciences*

André ORLEAN, 2011, *L'empire de la valeur*

6. Crises as broken promises

- ✓ *Financial bubbles first prosper and then burst out under the divergences between hopes and reality*
- ✓ *The Japanese lost decade: actors have taken seriously the false representation of uninformed outsider observers*
- ✓ *The Internet crisis: an over optimism about the time of maturation of ICT*
- ✓ *The subprime crisis: the false promise of an alleviation of poverty by pure financial innovations*

7. When conflicting representations clash: the return of radical uncertainty.

- ✓ *In the US and UK: in the absence of fiscal federalism by default of political union, the Euro is bound to collapse.*

- ✓ *In continental Europe the Euro is irreversible because it has been costly to implement and its failure will be catastrophic for the EU*

- ✓ *The winner is … the group of investors that control the larger pool of capital*

CONCLUSION

C1. The present economic and financial turmoil (absence of vigorous recovery in the US, uncertain fate of the Euro, Chinese changing economic strategy) is also the expression of the intellectual crisis of a positivist approach to macroeconomics and finance

C2. The evolution and impact of finance cannot be assessed within a framework that is confusing typical goods and services markets and financial transactions that deal with exchanges of promises

C3. The present crisis can be interpreted as the accumulation and then collapse of a series of false promises: securitisation as a prosperity and stabilizing device, intrinsic efficiency of deregulation, the Euro as an incentive for institutional reforms and faster innovations…. The severity and probable length of the related systemic crisis is the consequence of this synchronisation in daring promises

C4. The fiction embedded into the walrassian general equilibrium theory has dramatically failed: none of its predictions have been fulfilled well before Lehman Brothers collapse. Milton Friedman's "as if" hypothesis has been falsified. *De facto* this was the imposition of a normative model, not the first step towards a positivist approach to economics.

C5. Therefore, contemporary economists prefer building ad hoc models, they intellectually master, with the hope that one day their specific economic fiction will either fit with the observations or be adopted by a government that will reform the society to convert this abstraction into a really existing economy.

C6. Mathematical finance, built upon the hypothesis that the past determines the future, has entered into crisis due to the victory of fiction led finance and then the collapse of unrealistic promises. Fiction is emerging as a reduction in systemic complexity and radical uncertainty.

C7. This crisis of economics and mathematical finance opens a new research agenda for socio economic research. First an aggiornamento of the methodology of economics is to be favoured according to a "divination turn". Second, the valuation of financial assets based on story telling and fiction may open to a general theory of value that would be pertinent across various social science disciplines.

Some readings

- **Boyer Robert (2000) "Is a finance-led growth regime a viable alternative to Fordism?A preliminary analysis", *Economy and Society*, Vol. 29, n° 1, February, p. 111-145.**
- **Boyer Robert (2008), *History Repeating for Economists. An anticipated Financial Crisis*, Prisme n° 13, November, Cournot Centre for Economic Research, Paris. http://www.centrecournot.org/prismepdf/Prisme_13_EN.pdf**
- **Boyer Robert (2011), *Les financiers détruiront-ils le capitalisme ?* Economica, Paris**
- **Boyer Robert, Dehove Mario and Dominique Plihon (2004), *Les crises financières*, Rapport du Conseil d'analyse Economique, n° 50, La documentation française, Paris.**

Thanks for your attention and patience

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