

A perspective on John Maynard Keynes and how to understand financial crises

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"Political economics and the Weimar disaster," *Journal of Institutional and Theoretical Economics* 160: 187-209 (2004)

<http://home.uchicago.edu/~rmyerson/research/weimar.pdf>

"A model of moral-hazard credit cycles" (2010)

<http://home.uchicago.edu/~rmyerson/research/bankers.pdf>

These notes:

<http://home.uchicago.edu/~rmyerson/research/keynes10.pdf>

Some views of Keynes and his ideas

"[Keynes's] qualifications to speak on the economic aspects [of the 1919 Peace Treaty] were indisputable... [but] on the other and vastly more important side of the problem he could judge no better than many others." Winston Churchill

"Comments from Chicago economists are the product of a Dark Age of macroeconomics in which hard-won knowledge has been forgotten."

"Economists mistook beauty, clad in impressive-looking mathematics, for truth."

"Here's what I think economists have to do. First, they have to face up to the inconvenient reality that financial markets fall far short of perfection, that they are subject to extraordinary delusions and madness of crowds.

Second, they have to admit that Keynesian economics remains the best framework we have for making sense of recessions and depressions.

Third, they'll have to do their best to incorporate the realities of finance into macroeconomics." Paul Krugman (NYTimes, Sept. 6, 2009)

"To get anything like the current slump into their models, New Keynesians are forced to introduce some kind of fudge factor that for reasons unspecified temporarily depresses private spending. If the analysis of where we are now rests on this fudge factor, how much confidence can we have in the models' predictions about where we are going?" Paul Krugman (same article)

Reconsidering Keynes's role in the 1919 treaty

When Keynes wrote *General Theory of Employment, Interest and Money* (1936), he was already the most famous economist of his time, for his *Economic Consequences of the Peace* (1920) and *A Revision of the Treaty* (1922).

Consequences of the Peace was a brilliant polemic against folly of the Versailles peace conference, focusing on the reparations bill for about $3.3 \times \text{GDP}_{1913}$.

Keynes seemed to understand everything and foresee the whole disaster:

"Who believes that the Allies will, over a period of one or two generations, exert adequate force over the German government to extract continuing fruits on a vast scale from forced labor?"

In 1922 Keynes recommended annual reparations of 3% prewar GDP for 30 years. The 1929 Young plan offered similar terms and withdrawal from Rhineland, but the Nazis' rise to national power began after that.

Lloyd George (1938): Germany also had plans to seize valuable assets and property if they won WW1, *"but they had not hit on the idea of levying a tribute for 30 to 40 years on the profits and earnings of the Allied peoples.*

Mr. Keynes is the sole patentee and promoter of that method of extraction."

Why did Keynes miss the point on reparations?

Keynes proposed extending reparations over decades to avoid macroeconomic shock from vast short-term capital flows and imports from Germany. (Wagner 1874)

Keynes spoke of Germany's ability to pay, but never of incentive to pay (Ritschl). Incentives to pay sovereign debt were lacking (contrast France 1871).

Odious payments: In the politics of property-rights protection, leaders' reputations depend on their defending legitimate rights, opposing illegitimate theft.

We see reparation fulfillment was not a subgame perfect equilibrium (Selten); depression and extremism became costly signals in a war-of-attrition game.

Macroeconomics could crowd out strategic incentive analysis for Keynes, given the limits of economic analysis in his time.

Game theory today gives economists a general tool for analysis of incentives in any social structure: economic or political.

Extending the scope of our analytical frameworks may matter.

Building a General Theory without information economics

In *General Theory*, Keynes's breadth of vision again seems all-encompassing. But do his conclusions really take account of all these insights and arguments? (When he finally considers flexible wages in ch 19, he assumes output prices move with wages, showing only that deflation will not increase labor demand.) Might his price-theoretic framework constrain what he can analytically use?

Many important topics are "psychological" constants to Keynes but now have been brought within economic analysis by using rationality assumptions:

- expectations in long-term asset pricing (with risk and asymmetric learning)
- wage bargaining (with cheap labor jeopardizing back-loaded moral-hazard rents)
- demand for liquidity, financial intermediation (costly monitoring of investments).

Keynes's *General Theory* discusses of saving and investment at length without seriously considering financial intermediation or bank failures (but his 1930 *Treatise* considered how the banking system can control the rate of investment).

"20 years ago, there was no microeconomic theory of banking, for the simple reason that the general equilibrium model was unable to explain the role of banks. Since then, a new asymmetric-information paradigm has emerged that has been useful in explaining the role of banks and pointing out weaknesses of the banking sector that may require public intervention." X. Freixas and J.-C. Rochet (1997)

Moral hazard in financial intermediaries was central in the crisis

Problems of moral hazard in banks and other financial institutions were evident at many stages of the recent financial crisis.

My "Model of moral-hazard credit cycles" shows how macroeconomic fluctuations can be driven purely by moral hazard in financial intermediation.

Other factors are omitted: no money, no long-term illiquid assets, no shocks.

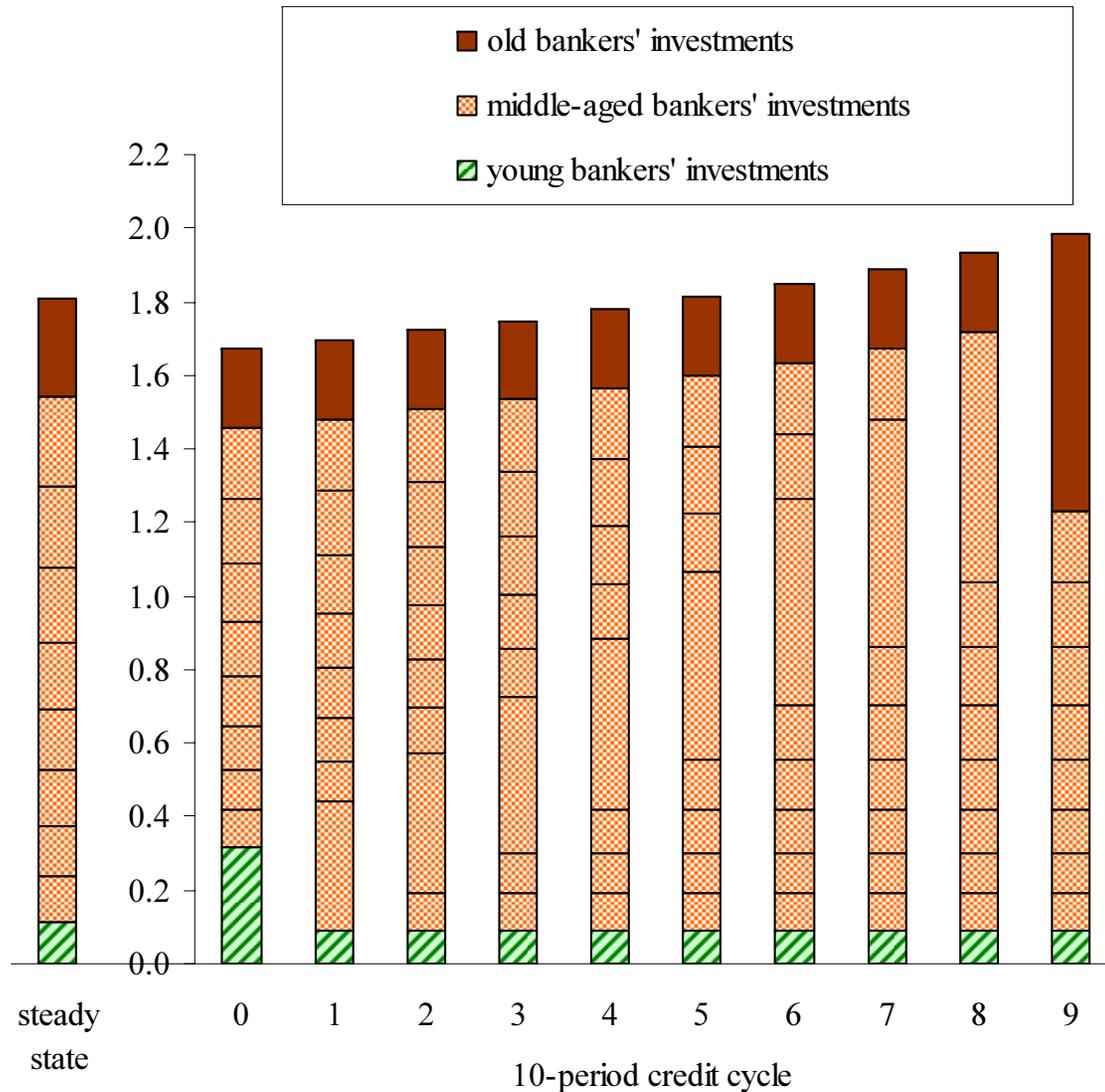
Assumption: investors can find good investments only through bankers.

Moral hazard: bankers could profit by diverting funds to bad investments that have lower probability of success. Bankers live long but finite lives.

Incentive-efficient contracts offer **increasing responsibilities** and **big late-career rewards** for bankers who consistently deliver successful investments.

Bankers' contractual positions are the dynamic state of this macroeconomic model, and it yields solutions with dynamic cycles of booms and busts.

Investment amounts handled by different cohorts of bankers over a 10-period credit cycle, with non-young bankers' investments at time 0 being 80% of steady state. (parameters: $\rho=0.1$, $n=10$, $\alpha=0.95$, $\beta=0.6$, $\gamma=0.05$, $\eta=0$, $\psi=1.74$, $\pi = 0.233$).



Financial moral hazard can drive macroeconomic fluctuations

We have a model of macroeconomic fluctuations in which the aggregate contractual positions of bankers form the dynamic state that can change over time.

In recessions, investment is limited by scarcity of trusted financial intermediaries.

Competitive recruitment of new bankers cannot fully remedy such undersupply, because bankers can be efficiently hired only with long-term contracts in which their responsibilities are expected to grow during their careers.

So a large adjustment to reach steady-state financial capacity in one period would create oversupply in future periods.

Thus, a financial recovery must drive uphill into the next boom, which in turn contains the seeds of the next recession.

In this model, a tax on workers to subsidize bankers may benefit workers by more than the tax, but some of their gains are at the expense of past investors.

Conclusion: reconsidering Krugman's critique

Any scholar must follow his/her own best judgment what our field needs most. Paul Krugman's credentials are second to none for judging where the next big advance will be in macroeconomics, but still I would judge it differently:

I'd agree on the third point, that economists need to incorporate the realities of finance into macroeconomics.

But we are unlikely to do this by using an old Keynesian theory that was developed when economists had no analytical models of banking or financial markets.

In Keynes' day, differences among traders' information were "market imperfections," but now economists regularly analyze problems of trust among people with different information.

In particular, when information is costly, members of a crowd may rationally choose to rely on the expertise of others, whose temptation to mislead must be countered by the greater long-run rewards from maintaining a good reputation.

A collapse in the supply of such good reputations would indeed be a crisis.

With game theory and price theory, economists today can analyze the institutional and regulatory frameworks in which these vital financial reputations are developed and maintained.

If there is a key to taming financial crises, it may be here.