Two Essays in Quantitative Economic Policy:

The 1937 Recession -- Consumption and Inequality

Bard Summer Research Institute 2016

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To Kill an Expansion: 1937

Background:

- 1937 is atypical: a recession within a depression, downturn is very steep but very brief. Unemployment increased to 20% and industrial production fell by 32%, undoing all the gains from the 1933- recovery.
- The period is difficult to analyze because of the short sample, the general lack of data, and the many policy changes (support and relief programs, change in Federal Reserve requirements / sterilization procedures, social security taxes, Roosevelt's balance of the budget, etc.)
- Strong ongoing debate on the cause(s) of 1937: fiscal policy (Brown 1956) or monetary forces (Romer, 1992), timing issues.

Data Contribution and Analysis:

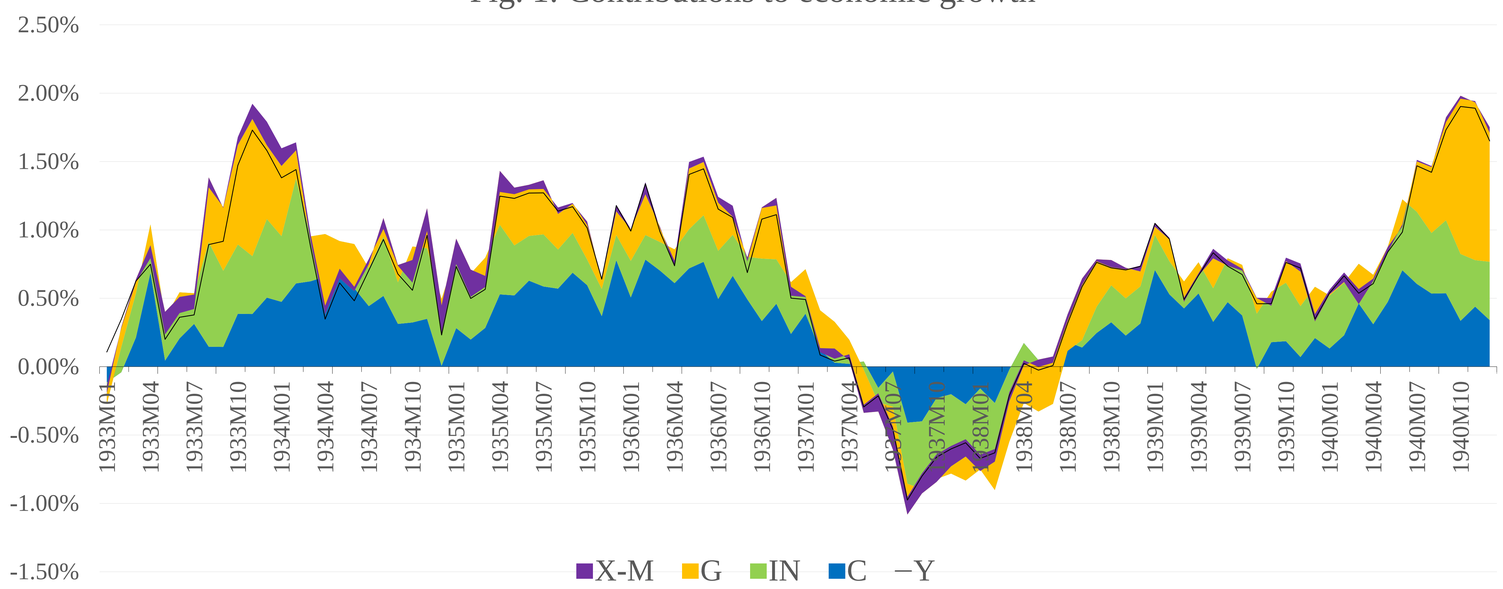
- Building up our own dataset: major expansion of the dataset developed by Gordon and Krenn (2010) by including variables from various sources: NYTimes, NBER Macrohistory database, academic research, etc.
- Major indicators added to the dataset include: uncertainty proxies, public works employment, as well as change in inventories, savings rate, and indebtedness.
- New dataset includes 20+ monthly indicators allowing a precise analysis of the 1935M01-1940M07 turnaround

Main Findings:

- Time matters: the *slowdown* of the economy took place prior to the implementation of the fiscal tightening and the monetary contractions of 1937, so that policy mistakes by the Federal Reserve, Treasury and the Roosevelt Administration piled on an already weak economy. The 1936 slowdown was driven mostly by consumption (see Fig. 1).
- Fiscal contraction was not that large whereas the contraction of the monetary base left the interest rates unchanged, casting doubt on the purely fiscal or monetary causes of the 1937 recession.
- Uncertainty has had effects on the downturn as well, indicating a policy-driven slump (multiplier effect) working through consumption expectation channel.
- We find that consumption c_t and the consumption slowdown in the later part of 1936 is significantly and quantitatively (***) explained by the fiscal balance and measures of uncertainty, not the monetary stance.

$$\Delta log c_t = \beta_0 + \boldsymbol{BX_t} + \boldsymbol{\Gamma X_t^{***}} + \varepsilon_t$$

Fig. 1: Contributions to economic growth



Inequality *and* and *in* Consumption

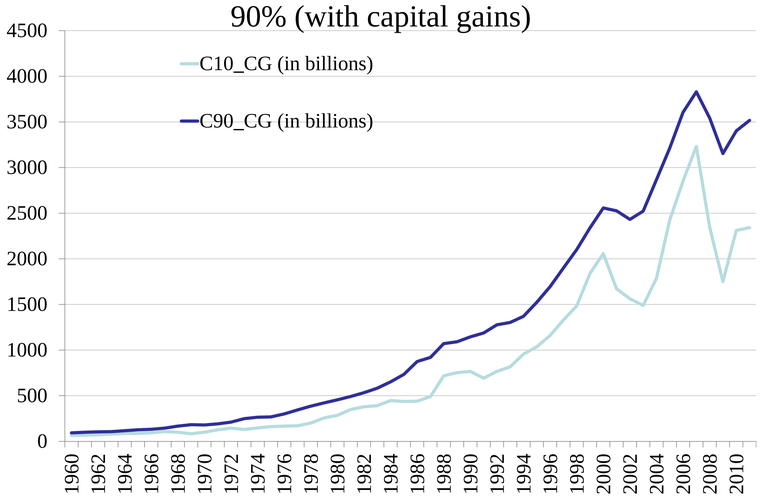
Hypothesis:

The traditional Keynesian consumption function $C_t = \alpha_0 + \alpha_1 Y_t^d + \varepsilon_t$ does not fully explain individual economic behavior. One can account for psychological and sociological effects, such as individuals being influenced by emulation and demonstration effects (Duesenberry, 1949) –the "keeping up with the Joneses" effect. Our contention is that those phenomena are reinforced in the presence of high and rising inequality.

In our preferred specification, we model consumption of an individual the bottom 90% (income group p), calculated as

$C_{i,t} = Y_{i,t}(1 - t_{i,t})(1 - s_{i,t})\ \forall i = p, q$, with tax and savings rates from WTID (2016).

Fig. 2: Consumption of top 10% and bottom 90% (with capital gains)



Model:

(1) autonomous consumption, i.e. consumption in the absence of an individual's own income, β_0

(2) the average disposable income of group p, $Y_{p,t}^d$

(3) the consumption of group q, (the consumption of the top 90-99% and 1%) capturing our demonstration effect of interest, $C_{99,t}$, $C_{1,t}$

(4) borrowing by group p which may be needed to finance the emulation effect, B_t^R and B_t^{NR}, taken as total revolving and non-revolving borrowing.

Preferred method:

$$\Delta log C_{p,t} = \beta_0 + \beta_1 \Delta log Y_{p,t}^d + \beta_3 \Delta \log C_{q,t} + \beta_4 \Delta log B_t^R + \beta_5 \Delta log B_t^{NR} + \varepsilon_t$$

estimation by OLS and breaking OLS time series on log-differenced, stationary data.

Main Findings:

- Construction of a proprietary dataset (Fig. 2)
- Estimation results inconclusive on the whole sample with OLS, but indicate an emulation effect at the macro level whereby the bottom 90% consumption is statistically and quantitatively related to the consumption of the top 10-1% and credit.
- Inequality and rising top incomes are destabilizing. Failure to reduce inequality or the next asset price bubble could lead to further instability.