



Stock-Flow-Consistent Modeling

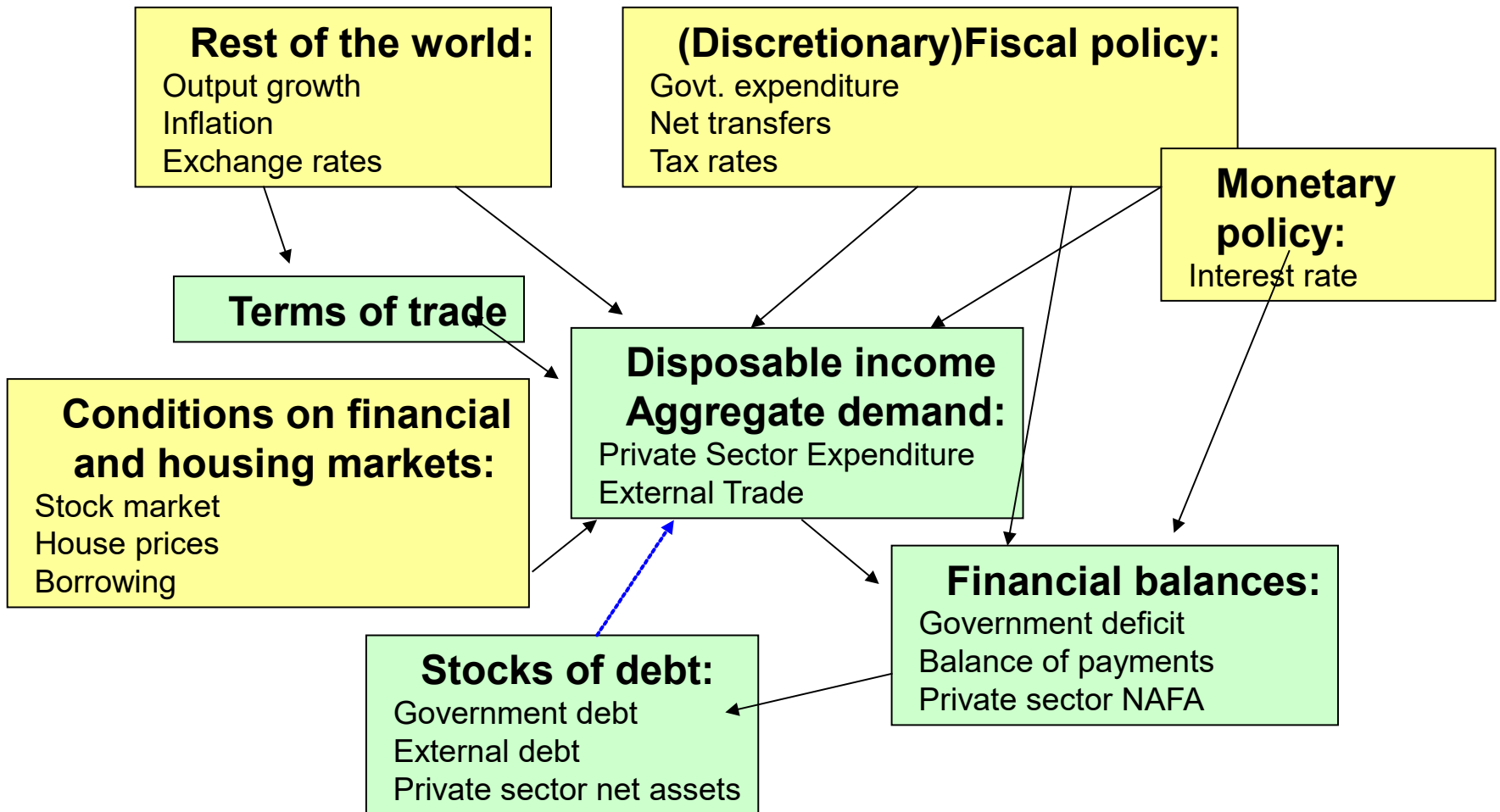
Lecture 7: The Levy US model

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The SAM of the Levy model

	Production	Private sector	Government	Rest of the World	Capital Account	Total
1. Production		Private expenditure	Government expenditure	Exports		Aggregate demand
2. Private sector	Wages		Govt. transfers to private s.	Net income payments		Private s. Income
3. Government	Net indirect taxes and s.c.	Direct taxes and s.c.				Govt. receipts
4. Rest of the World	Imports	Private s. net transfers to RoW	Govt. net transfers to RoW			Payments to RoW
7. Capital Account		Net Acq. of Fin. Assets	Govt. surplus	-BoP		0
TOTAL	Value of output	Private s. income	Govt. outlays	Receipts from RoW	0	

Main principles of SFC models



Estimation strategy

Our crucial equation is the private sector expenditure function, which – under a standard assumption in *new Cambridge* models *a la* Godley – implies a long-run stock-flow norm.

$$PX_t = c_0 + c_1 YD_t + c_2 FA_{t-1} + Z_t$$

Where Z is a vector of stationary variables which influence the propensity to spend out of income

Level of disaggregation

More specifically, Z includes:

- The “real” price of equities
- The “real” price of housing
- Household borrowing
- Business borrowing

Seven unsustainable processes (plus one!)

- 1) the fall in private saving into ever deeper negative territory;
- 2) the rise in the flow of net lending to the private sector;
- 3) the rise in the growth rate of the real money stock;
- 4) the rise in asset prices at a rate that far exceeds the growth of profits (or of GDP);
- 5) [the rise in the budget surplus;]
- 6) the rise in the current account deficit;
- 7) the increase in the United States' net foreign indebtedness relative to GDP.
(Godley 1999:2)
- 8) the shift in the distribution of income (Zezza, 2007; 2008)

Financial balances

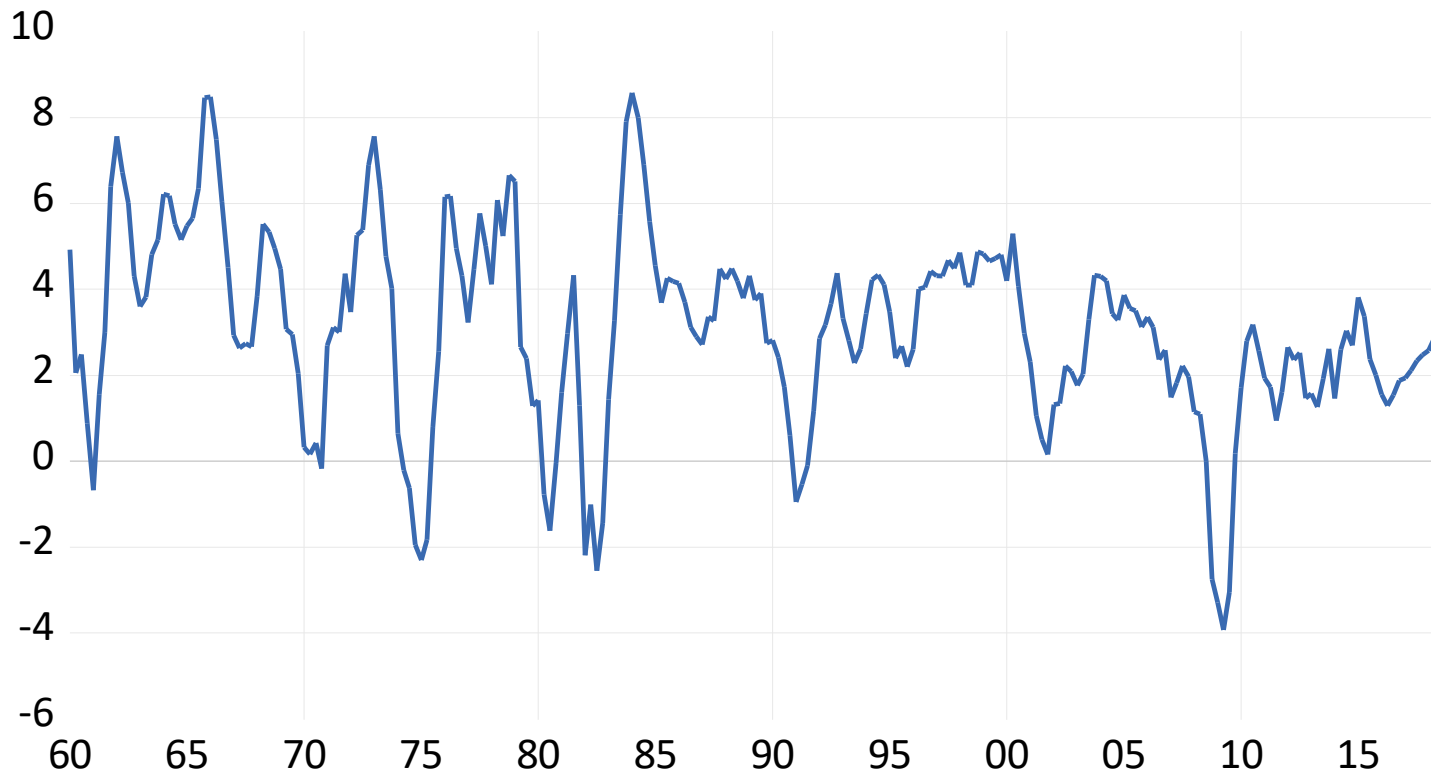
Five of the processes above are related to the analysis of financial balances, which gives clues to where the economy is going in the medium term. From national accounting it is easy to show that financial balances are linked through the identity between saving and investment, or

$$(Sh - Ir) + (P - Ik - In) = GD + BP$$

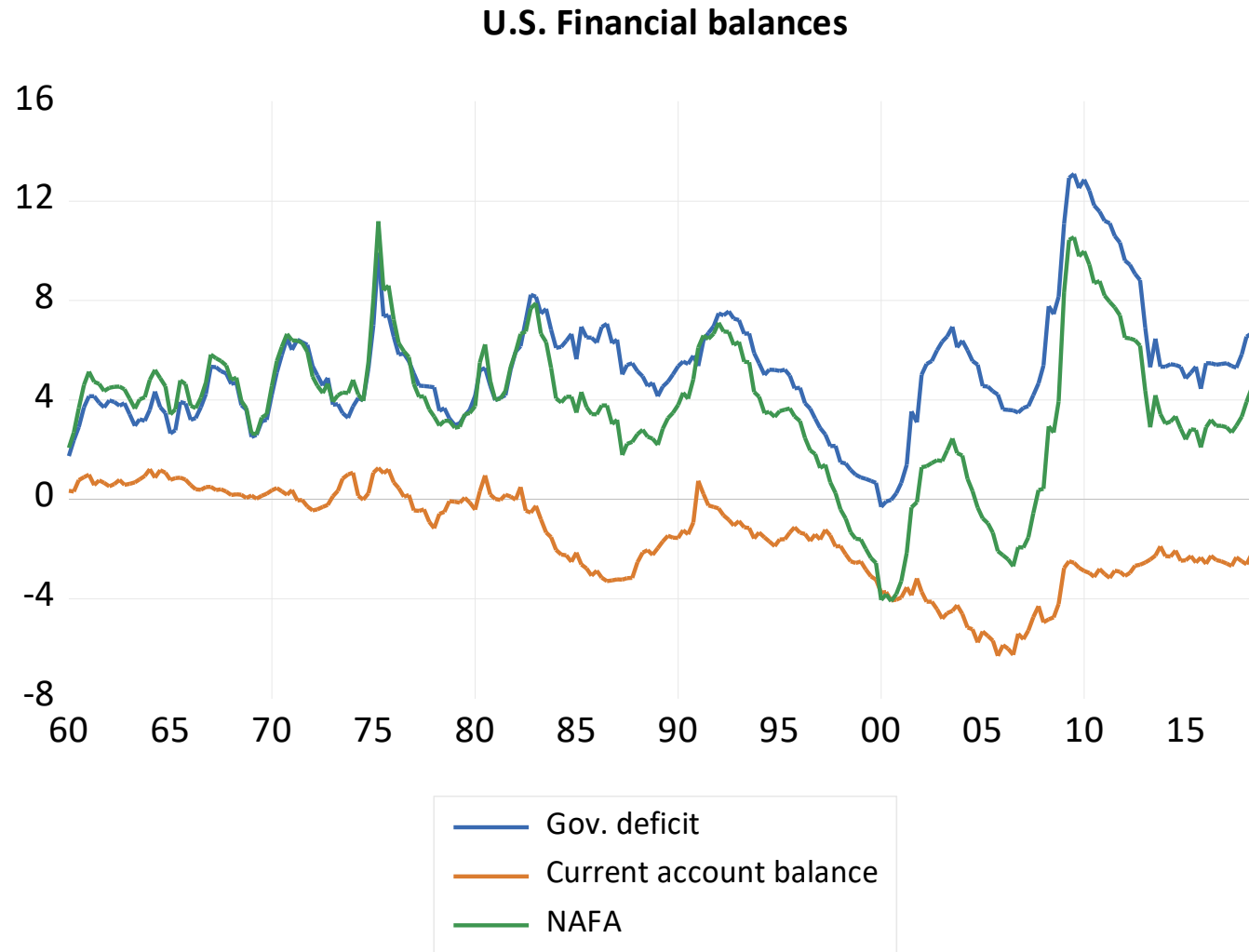
Where Sh = household saving; Ir = residential investment; P = undistributed profits; Ik = non-residential investment; In = change in inventories; GD = government deficit; BP = balance of payments on current account

U.S. Real GDP growth

Year % Change Gross domestic product

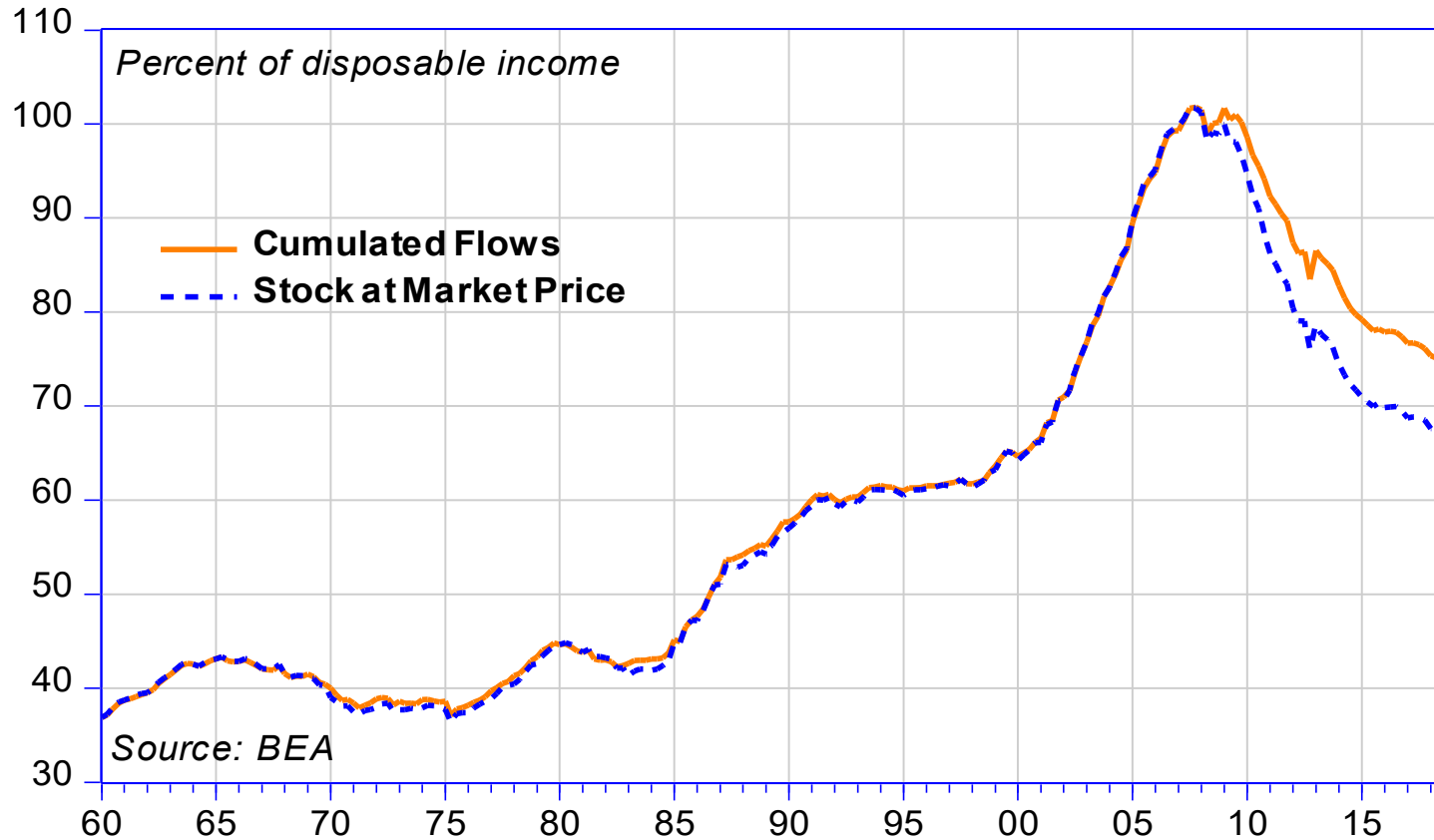


U.S. Financial balances



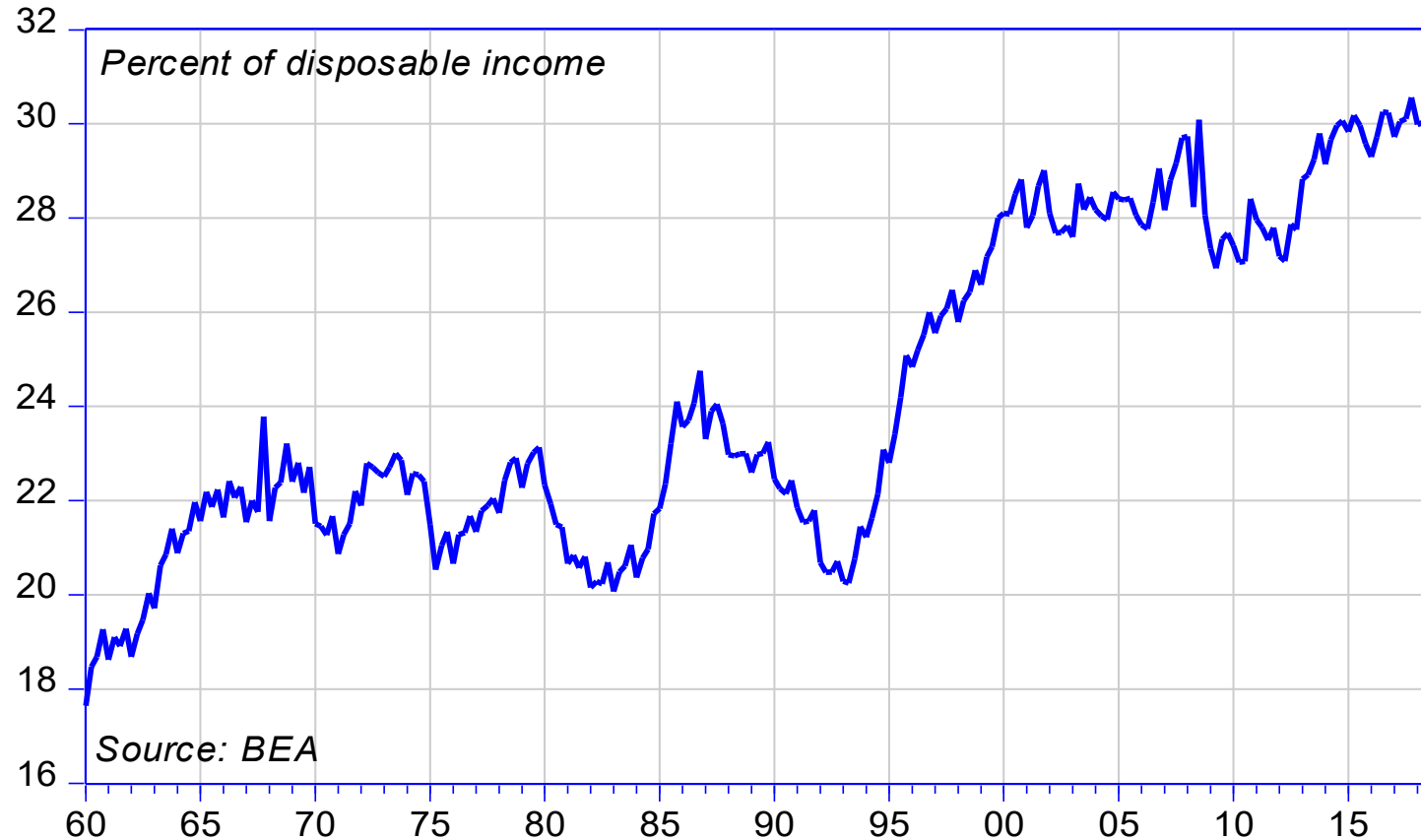
Household debt

Household Mortgages



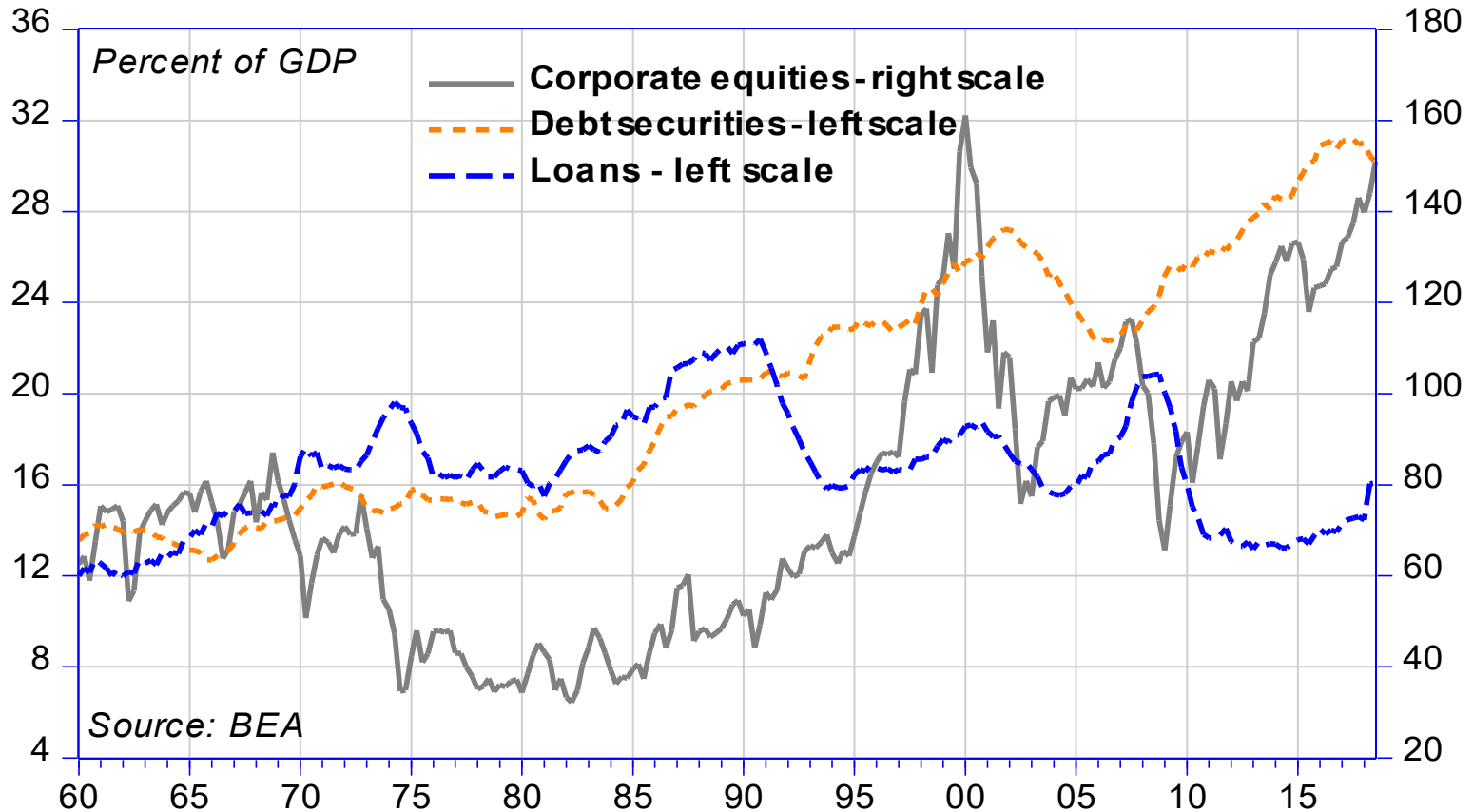
Household debt

Household Short-Term Loans



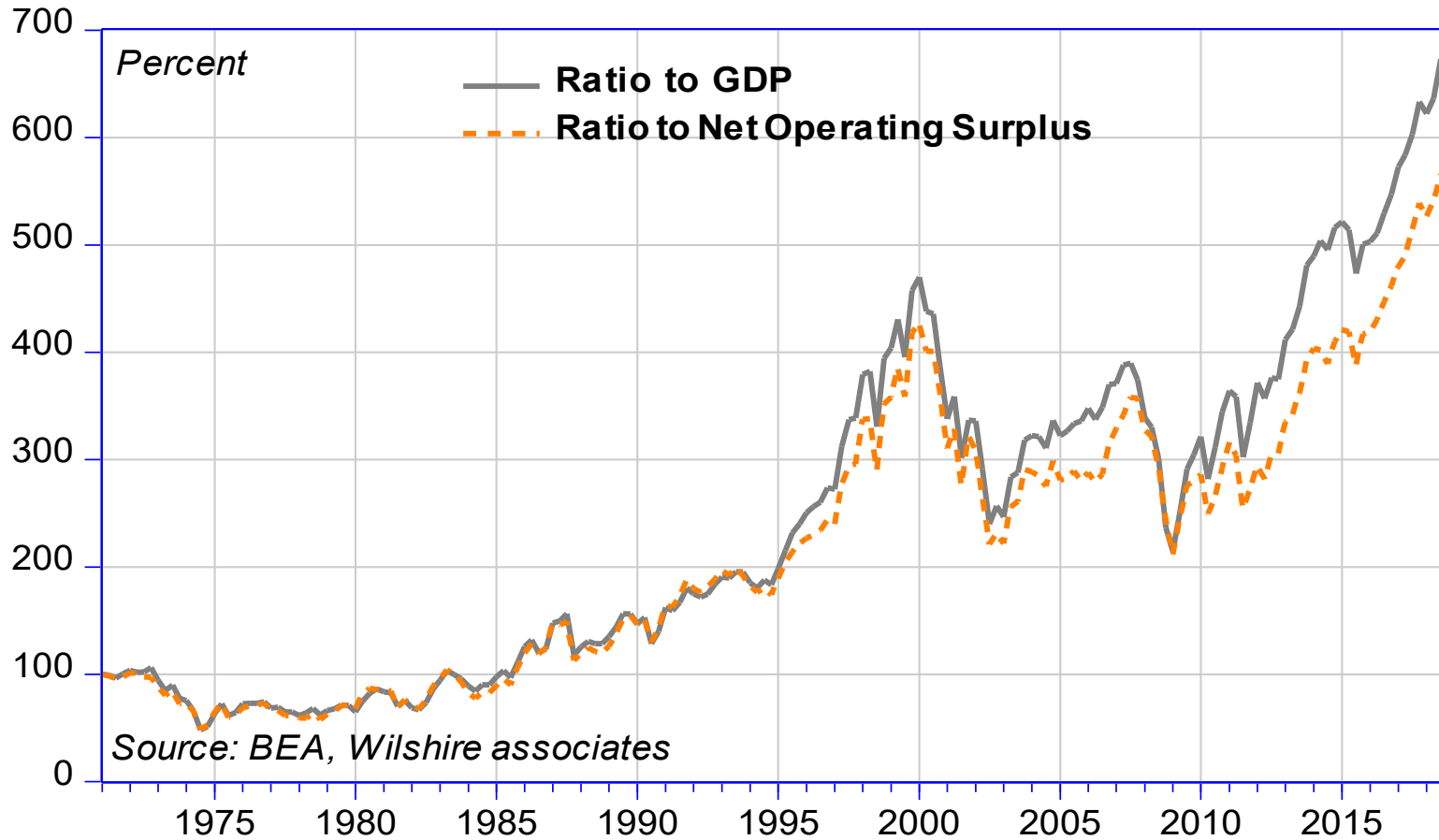
Debt of firms

Liabilities of Non-financial Corporations

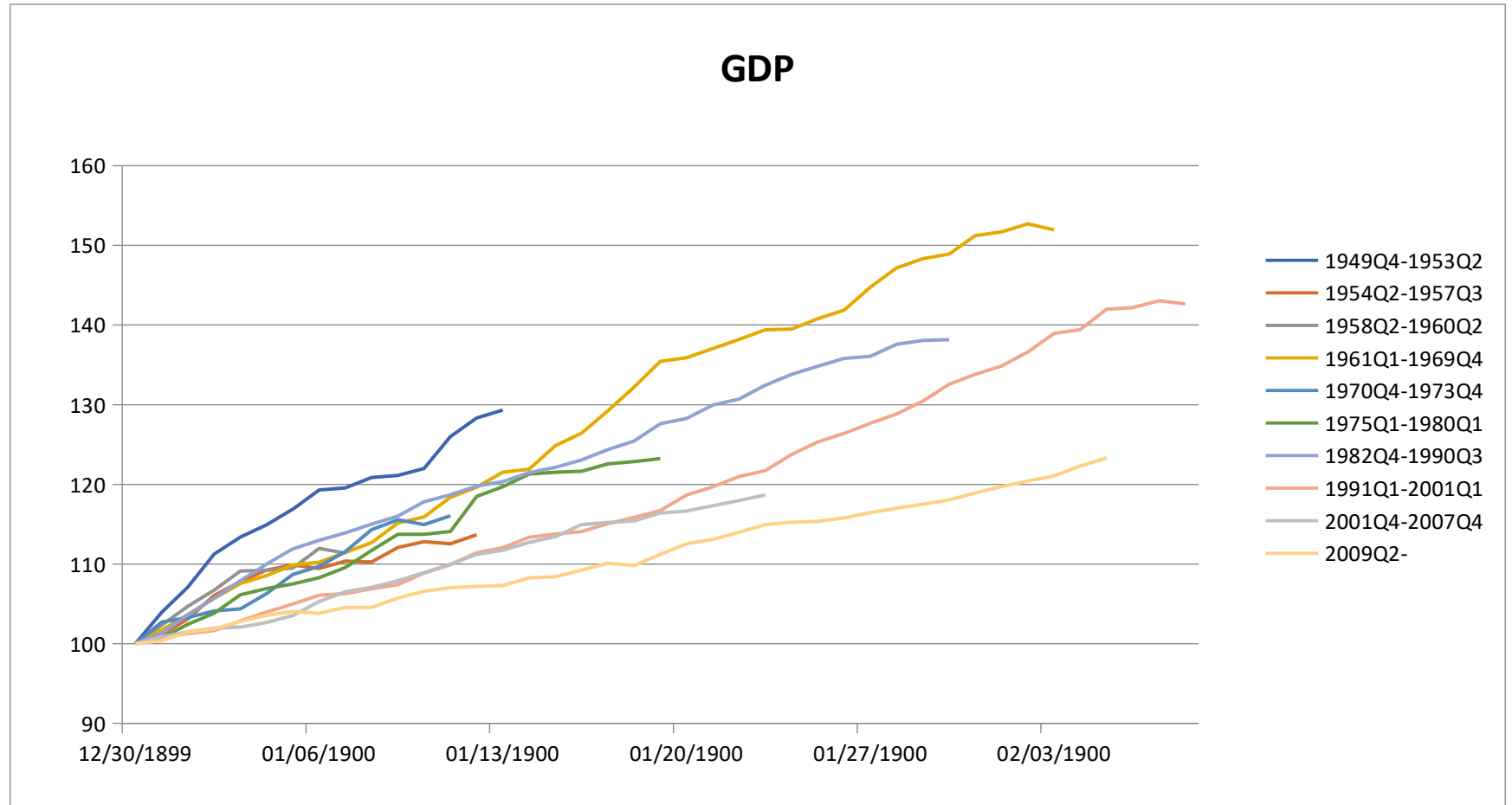


Stock market

Stock Market Capitalization

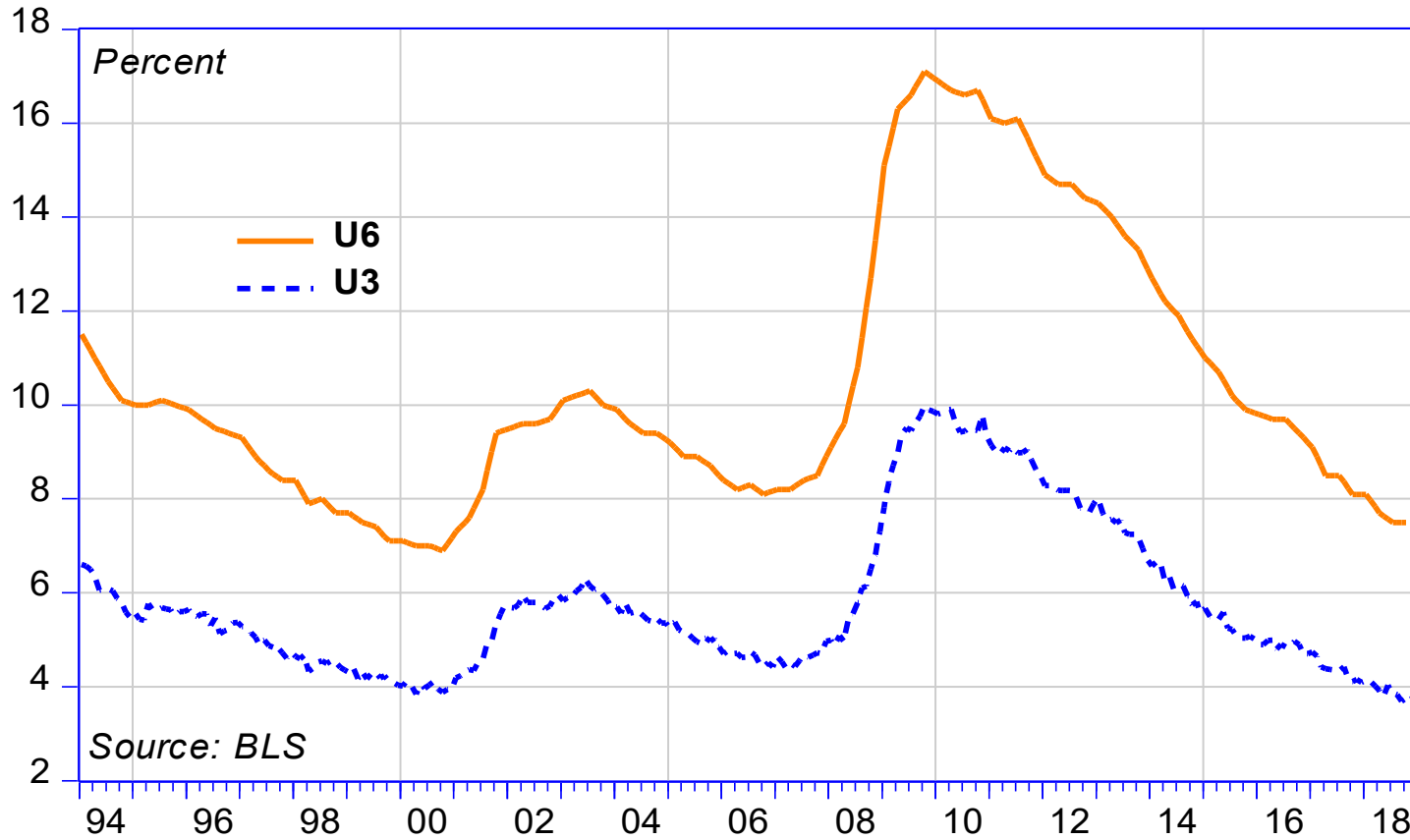


US. Post-recession GDP growth



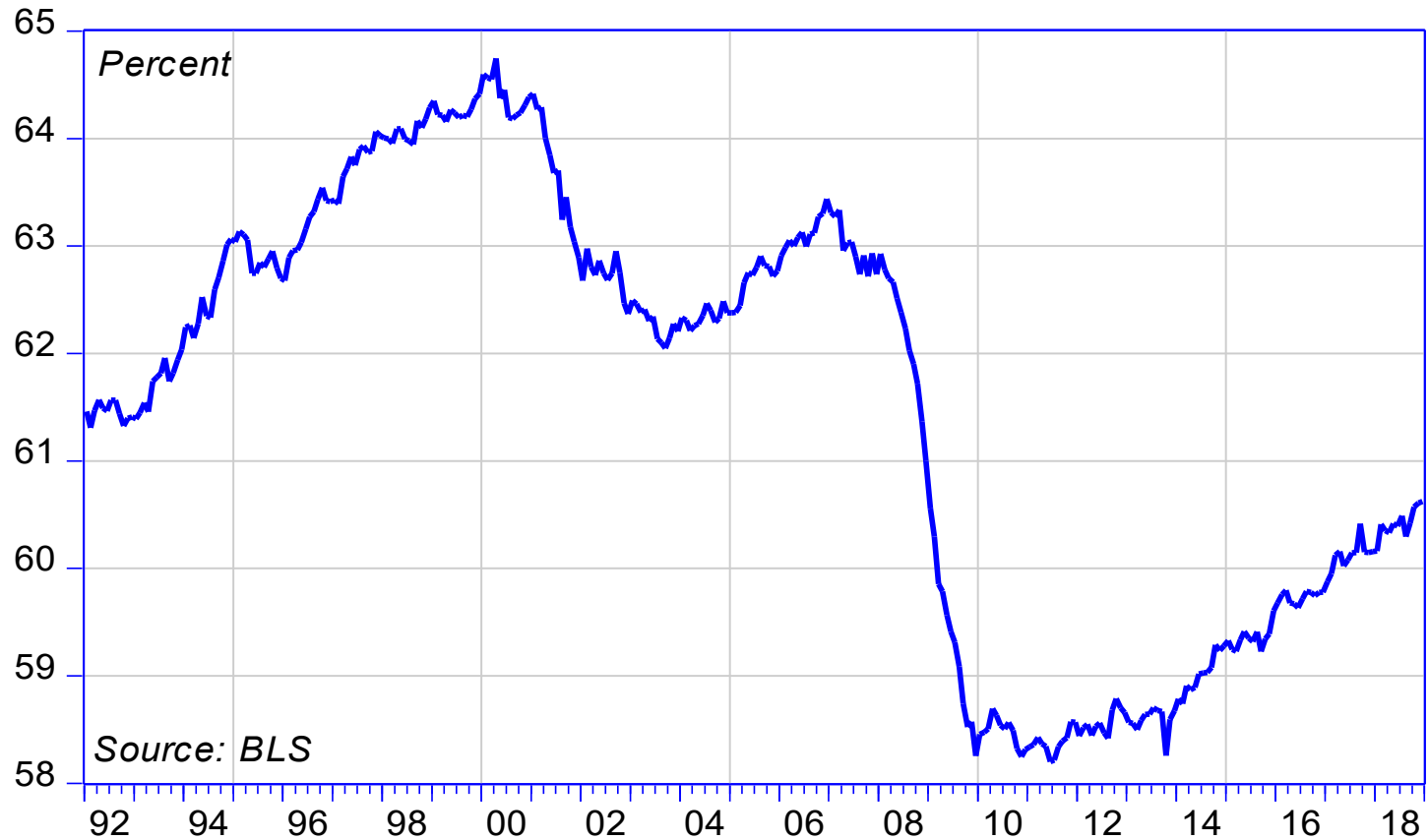
Unemployment

Unemployment rate



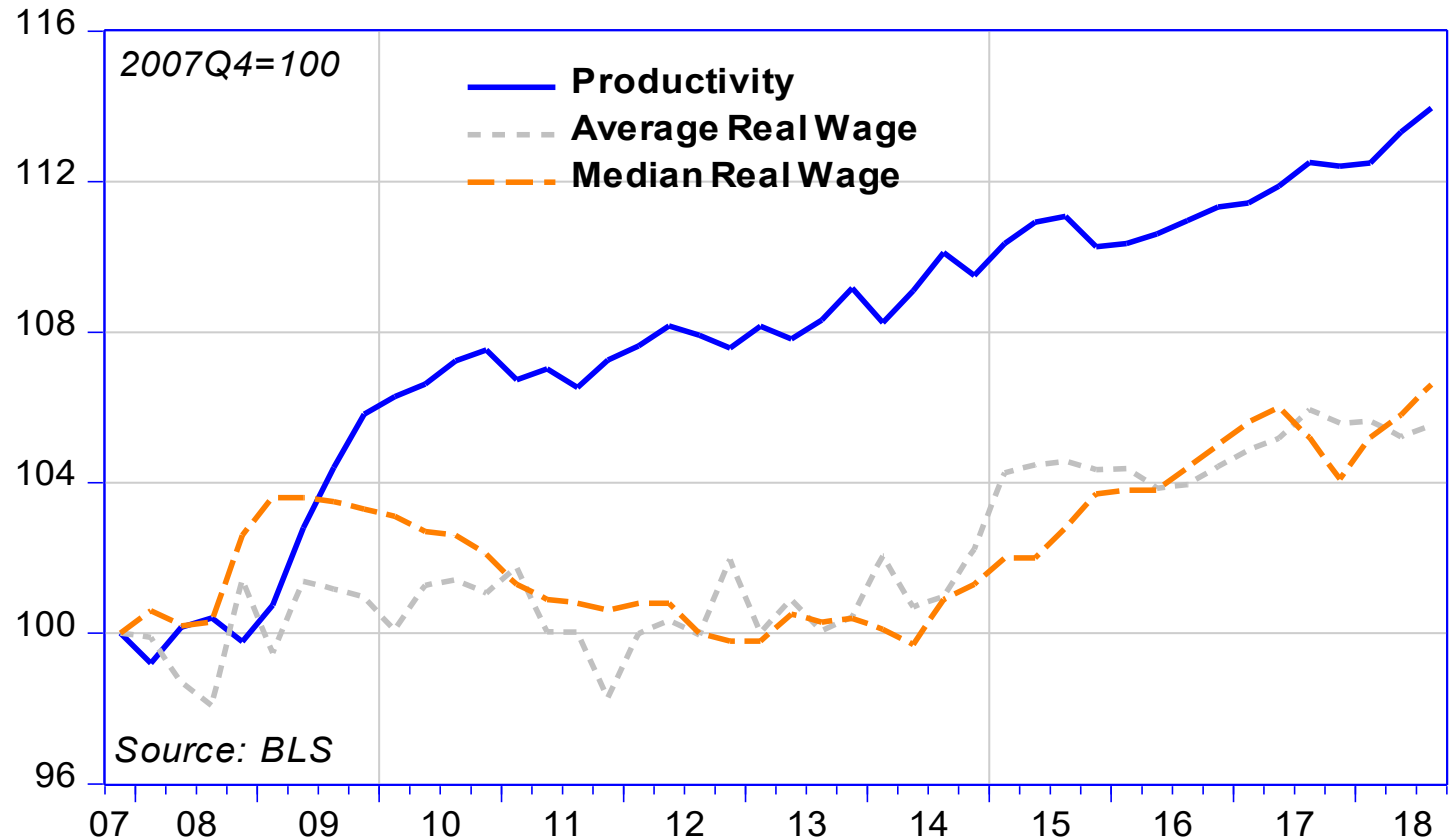
Employment rate

Civilian Employment-Population Ratio



Productivity and wages

Productivity and Real Wages



Projections

