Macroeconomics	Saving Equals Investment	Macroeconomics Saving Eq.	quals Investment
		No Government	
Accounting Identity: Saving Equals Investment		Consider first an economy without government. Saving is	
A fundamental macroeconomic acco	unting identity is that	national income minus consumption,	
saving equals investment.		s = ni - c.	(1)
By definition, saving is income minu	-	National income equals national product,	
Investment refers to physical investment investment.	ent, not financial	ni = np.	(2)
That saving equals investment follow	s from the national	National product is consumption plus investment,	
income equals national product ident	ity.	np = c + i.	(3)
		np - c + i.	(3)
1		2	
Macroeconomics	Saving Equals Investment	Macroeconomics Saving Eq.	quals Investment
It follows that saving equals investme	ant.	Government	
It follows that saving equals investment:		With government, to show that saving equals inves	tment is
s = ni - c, by  (1),		harder.	
, ,			stificities
= np - c, by (	2),		
= np - c,  by  ( $= (c+i) - c,$	2),	harder.	
= np - c,  by  (i) $= (c+i) - c, 1$ $= i,$	2),	harder.  Government expenditure refers to government pure	chases of
= np - c,  by  ( $= (c+i) - c,$	2),	harder.  Government expenditure refers to government pure goods and services.	chases of
= np - c,  by  (i) $= (c+i) - c, 1$ $= i,$	2),	harder.  Government expenditure refers to government pure goods and services.  Taxes includes transfer payments and the interest of	chases of
= np - c,  by  (i) $= (c+i) - c, 1$ $= i,$	2),	harder.  Government expenditure refers to government pure goods and services.  Taxes includes transfer payments and the interest of	chases of
= np - c, by ( $= (c + i) - c$ , 1 $= i$ , as desired.	2),	harder.  Government expenditure refers to government pure goods and services.  Taxes includes transfer payments and the interest of government debt as negative taxes.	chases of
= np - c,  by  ( $= (c+i) - c, $ $= i,$ as desired.	2), by (3)	harder.  Government expenditure refers to government pure goods and services.  Taxes includes transfer payments and the interest of government debt as negative taxes.	chases of
= np - c,  by  ( $= (c+i) - c, $ $= i,$ as desired.	2), by (3)	harder.  Government expenditure refers to government pure goods and services.  Taxes includes transfer payments and the interest of government debt as negative taxes.	chases of
= np - c,  by  ( $= (c + i) - c, $ $= i,$ as desired.  3  Macroeconomics	2), by (3)  Saving Equals Investment	harder.  Government expenditure refers to government pure goods and services.  Taxes includes transfer payments and the interest of government debt as negative taxes.	chases of
= np - c,  by  ( $= (c + i) - c, $ $= i,$ as desired.  3  Macroeconomics  By definition, government saving is the expenditure,	2), by (3)  Saving Equals Investment  Eaxes minus government	harder.  Government expenditure refers to government pure goods and services.  Taxes includes transfer payments and the interest of government debt as negative taxes.  4  Macroeconomics  Saving Eq.	chases of
= np - c,  by  ( $= (c + i) - c, $ $= i,$ as desired.  3  Macroeconomics  By definition, government saving is the expenditure, $gs = t - g.$	2), by (3)  Saving Equals Investment  axes minus government  (4)	harder.  Government expenditure refers to government pure goods and services.  Taxes includes transfer payments and the interest of government debt as negative taxes.  4  Macroeconomics  Saving Eq.  National income equals national product, $ni = np$ .	chases of on quals Investment (6)
= np - c,  by  ( $= (c + i) - c, $ $= i,$ as desired.  3  Macroeconomics  By definition, government saving is the expenditure,	2), by (3)  Saving Equals Investment  axes minus government  (4) e minus taxes. Private	harder.  Government expenditure refers to government pure goods and services.  Taxes includes transfer payments and the interest of government debt as negative taxes.  4  Macroeconomics Saving Eq.  National income equals national product,	chases of on quals Investment (6)
= np - c,  by  ( $= (c+i) - c,  is  $ $= i,$ as desired.  3  Macroeconomics  By definition, government saving is the expenditure, $gs = t - g.$ Disposable income is national income saving is disposable income minus constant of the expenditure of the expenditure.	Saving Equals Investment  Saving Equals Investment  axes minus government  (4)  the minus taxes. Private consumption,	harder.  Government expenditure refers to government pure goods and services.  Taxes includes transfer payments and the interest of government debt as negative taxes.  4  Macroeconomics  Saving Eq.  National income equals national product, $ni = np$ .  National product is consumption plus investment product, government expenditure,	chases of on quals Investment  (6)
= np - c,  by  ( $= (c + i) - c,  $ $= i,$ as desired.  3  Macroeconomics  By definition, government saving is the expenditure, $gs = t - g.$ Disposable income is national income	Saving Equals Investment  Exacts minus government  (4)  The minus taxes. Private consumption,	harder.  Government expenditure refers to government pure goods and services.  Taxes includes transfer payments and the interest of government debt as negative taxes.  4  Macroeconomics  Saving Eq.  National income equals national product, $ni = np$ .  National product is consumption plus investment p	chases of on quals Investment (6)

Macroeconomics	Saving Equals Investment	Macroeconomics Sav	ing Equals Investment	
Total saving is private saving plus government saving:		Example		
s = ps + gs = (ni - t - c) + (t - g), by (4) and (5). = ni - c - g = np - c - g, by (6) = (c + i + g) - c - g, by (7) = i, as desired.		Consider an initial economic state in which a student buys a football for \$1. Of course saving equals investment.		
		Contrast this situation to an alternative economic state, in which the student does not buy the football. The sporting goods store still has the football, and the student has his dollar. Otherwise the alternative state is identical to the initial state.  What has happened to saving and investment?		
7	7		8	
Macroeconomics	Saving Equals Investment	Macroeconomics Sav	ing Equals Investment	
The saving of the student has increased \$1.		Investment has also increased by \$1. The store has extra inventory of \$1, and inventory accumulation counts as investment.		
9		10		
Perishable Good  Consider a second example, like the first, except that the good is perishable.  In the initial state the student buys lettuce for \$1.  In the alternative state, the student does not buy the lettuce, so the lettuce rots and is thrown out.		As in the first example, the saving of the student has increased \$1.		
What has happened to saving and in	vestment?			
11		12		

Macroeconomics	Saving Equals Investment	Macroeconomics	Saving Equals Investment
There is no change in the inventory of the has not increased but is unchanged.	e store, so investment	The income of the storekeeper has falle saving has fallen by \$1.  Overall total saving is unchanged, as the storekeeper offsets the extra saving by Investment is unchanged.	ne reduced saving of the
13		14	
Macroeconomics	Saving Equals Investment		
Saving Versus Sav  Saving is a flow, a rate of saving per unit per year.			

Savings is a stock, the result of the flow of saving. Savings rise

15

gradually as saving occurs.