

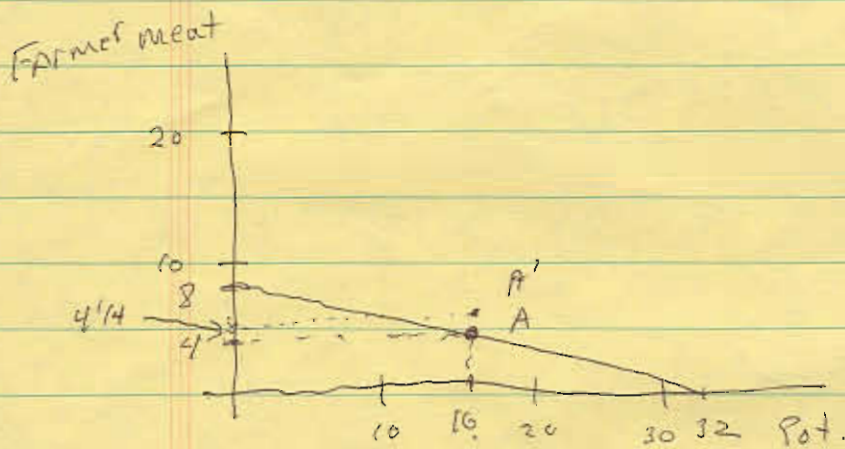
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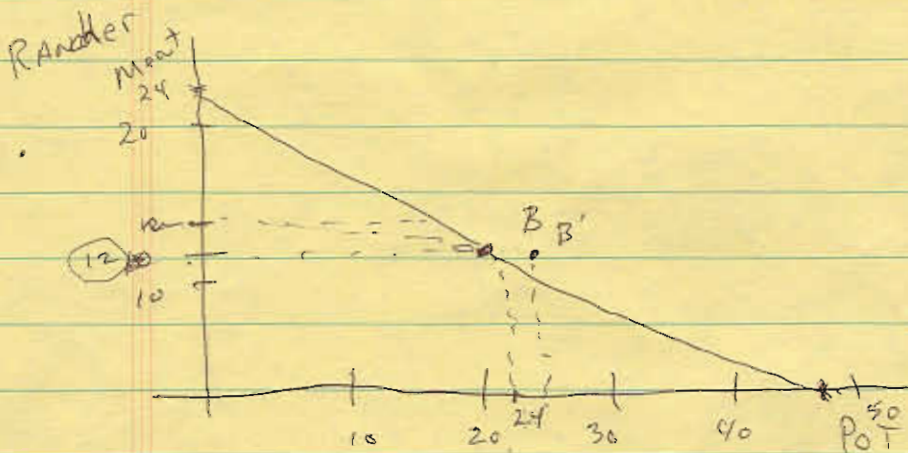
LECTURE 2

Interdependence & GAINS FROM

8 hrs.	TRADE		Prod. 9/L	
	meat	Potatoes	Meat	Potatoes
FARMER	8 oz	32 oz	10 oz	40 oz
RANCHER	24 oz	48 oz	30 oz	60 oz



Prod. Poss. Curve



Farmer $P^m = \text{price of meat} = P/m = 32/8 = 4 \text{ oz}$

Rancher $P^m = P/m = 48/24 = 2 \text{ oz} *$

Rancher has a Comparative Advantage in meat

$P^P = M/P = 1/P^M$

F $P^P = 1/4$ oz * Comp. Adv.

R $P^P = 1/2$ oz

"INTERNATIONAL" TRADE

FARMER CAN "buy" meat internally at $P^M = 40z$

$P^M < 40z$

RANCHER CAN "buy" potatoes internally at $20z$

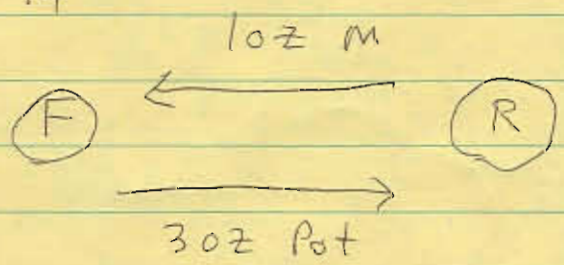
$P^M > 20z$

$2 < P^M < 4$

since $P^P = 1/P^M$

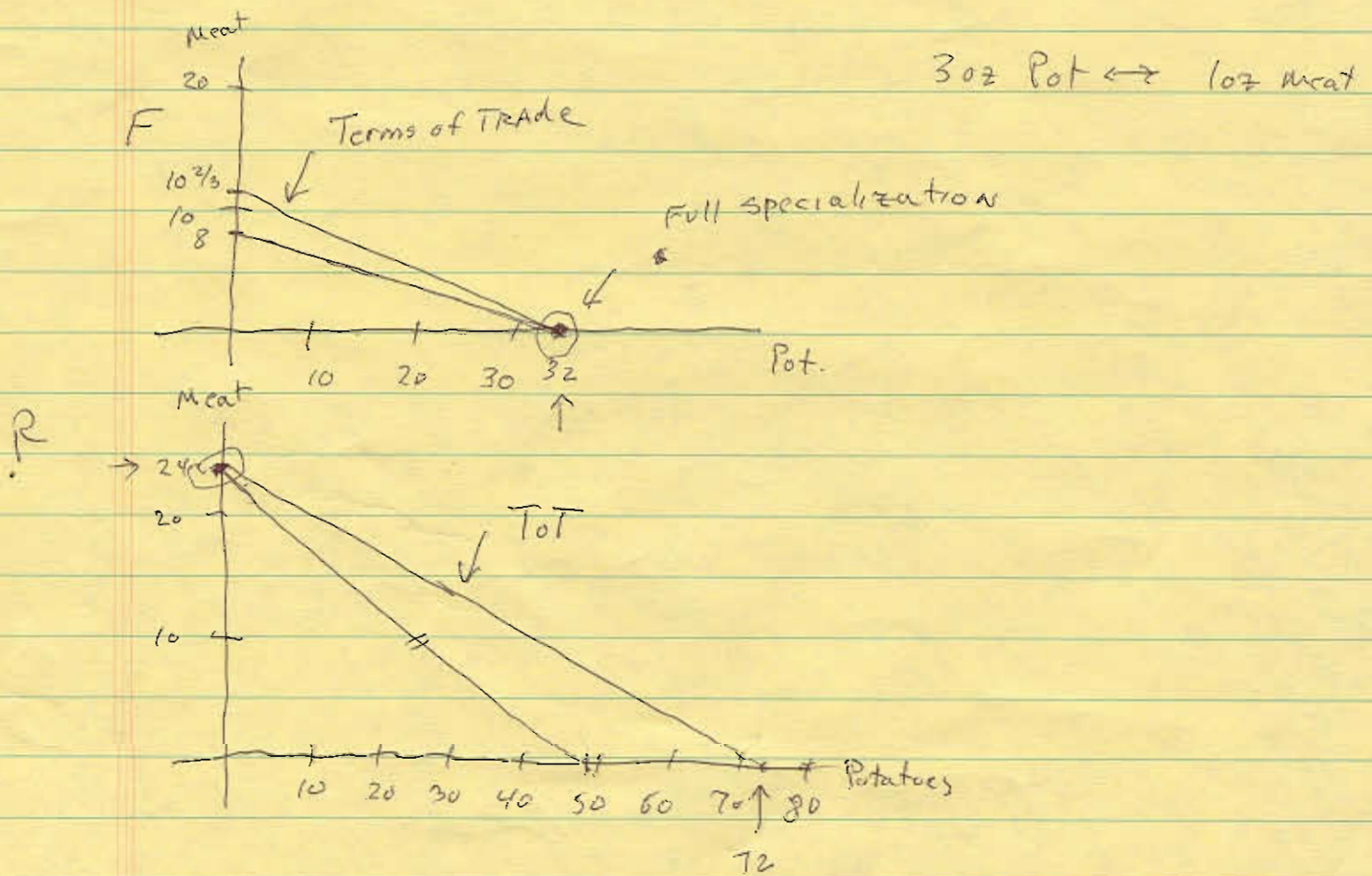
$1/2 > P^P > 1/4$

Suppose $P^M = 3$



F	4oz M	16oz P	
	-3/4oz M	+3oz P	(3oz Potatoes)
	+1oz M ←		(3/4 hr)
	<hr/> 4 1/4 oz M	<hr/> 16 oz P	

R	12oz M	24oz P.
(1/3 hr.)	+1oz M	-2oz P
		+3oz P
	<hr/> 12oz M	<hr/> 25oz P.



January 19, 2007

Bernanke Raises Prospect of 'Debt Spiral'

Warning Could Bolster Attempts to Overhaul Entitlement Programs

By GREG IP

January 19, 2007; Page A2

WASHINGTON -- Federal Reserve Chairman Ben Bernanke warned that rising health-care and Social Security spending could create a "vicious cycle" of rising debt and interest payments and an eventual fiscal crisis.

MORE ON THE FED

- Full text of speech to Senate Budget Committee¹
- Fed Chairman May Face Heat At Hearings²
01/13/07
- Bernanke Set to Speak to Budget Committee³
01/10/07
- Bernanke Defends Fed's Dual Role⁴
01/05/07
- Fed Worry Tests Rosy Outlook⁵
01/04/07



Bernanke

Though Mr. Bernanke lacks the stature of his predecessor, Alan Greenspan, his strong language, coupled with what appears to be a growing respect for his views from lawmakers in both parties, could add impetus to efforts to overhaul entitlement programs, principally Social Security, Medicare and Medicaid.

WALL STREET JOURNAL VIDEO



6 Watch Federal Reserve Chairman Ben Bernanke's opening remarks⁷ to the Senate Budget Committee.
(15:20)

QUESTION OF THE DAY



8 What do you think of Fed Chairman Bernanke's dire warnings on the budget deficit?⁹

They currently amount to almost half of federal noninterest spending and 9% of gross domestic product, or the value of all goods and services produced in a nation. The Congressional Budget Office, assuming no change in the programs, extension

of Mr. Bush's tax cuts and continued moderate growth in health-care spending, projects that will rise to 75% of spending and 19% of GDP by 2050.

Mr. Bernanke's advice, delivered at a hearing of the Senate Budget

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THEMES FROM REMARKS, Q&A

On the deficit:

As you know, the deficit in the unified federal budget declined for a second year in fiscal year 2006... Unfortunately, we are experiencing what seems likely to be the calm before the storm. In particular, spending on entitlement programs will begin to climb quickly during the next decade.

On Social Security and Medicaid:

The large projected increases in future entitlement spending have two principal sources. First, the United States has entered what is likely to be a long period of demographic transition... The second cause of rising entitlement spending is the expected continued increase in medical costs per beneficiary... Unfortunately, economic growth alone is unlikely to solve the nation's impending fiscal problems.

On the consumer price index:

We do think...that standard CPI does overstate true inflation – if we could measure true inflation – by some amount between one-half and one percentage point.

On tax cuts:

The general view is tax cuts don't pay for themselves.

On hedge-fund regulation:

That system has worked pretty well so far, I think it's always worth reviewing and thinking about.

Committee yesterday, comes days before President Bush's State of the Union address and weeks before his 2008 budget request. In the first six years of his presidency, Mr. Bush expanded Medicare significantly while cutting taxes repeatedly. He is seeking to preserve those tax cuts in the face of a Democratic-controlled Congress, while seeking -- through Treasury Secretary Henry Paulson -- to revive an overhaul of Social Security.

[Full text of prepared remarks](#)¹³

Since taking office last year, Mr. Bernanke has met extensively with members of both parties, and the outreach appears to be paying off. Budget Committee Chairman Sen. Kent Conrad of North Dakota yesterday thanked Mr. Bernanke for insights he provided over lunch a few weeks ago. "You've sent a very clear message and one that I hope people are paying close attention to," Mr. Conrad said. The panel's senior Republican, Judd Gregg of New Hampshire, called Mr. Bernanke's testimony "a clarion call."

The bipartisan praise also reflects the fact that Mr. Bernanke's diagnosis was generally uncontroversial. While that protects the Fed's reputation for political independence, it may limit Mr. Bernanke's impact on the fiscal debate. Mr. Greenspan was influential in part because he made specific recommendations, such as the passage of tax cuts in 2001. Democrats often cited his support for Paygo -- a budget rule meant to keep tax cuts and new entitlement programs from boosting the deficit -- in making it a key plank in their fiscal platform.

WASHINGTON WIRE



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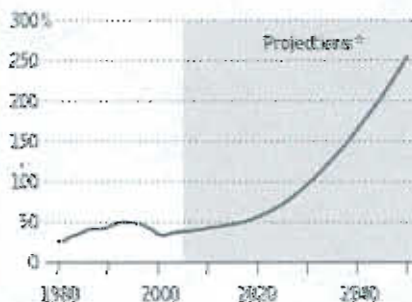
See the expanded online version of [Washington Wire](#)¹¹. The Journal's Washington bureau updates the Wire during the day -- every weekday -- with analysis, news and buzz from inside and outside the Beltway.

Mr. Bernanke steered clear of specifics on entitlement overhaul in his testimony and anything that could be construed as criticism of President Bush, for whom Mr. Bernanke previously served as an adviser. Despite senators' praise, it is unclear whether his advice will have much direct impact.

The Fed chief noted that last year's budget deficit, spending and revenue were, as shares of GDP, close to averages that have prevailed since 1960. That is a point the White House often makes to deflect charges that its tax cuts have led to dangerously large deficits. Mr. Bernanke said this was the "calm before the storm." Spending on Social Security, Medicare, and Medicaid are about to ramp up, he said, as the population ages.

Debt Prognosis

The Federal Reserve chairman cautioned yesterday that if the U.S. doesn't curtail spending, federal debt could rise to dangerous levels. Federal debt as a percentage of gross domestic product:



While breaking no new ground, Mr. Bernanke's testimony was notable for its emphasis on the consequences of a rising national debt -- the sum of all annual budget deficits -- rather than the annual deficit alone. The debt, he noted, would reach almost 100% of GDP by 2030 according to the Congressional Budget Office, a level previously reached only during World War II. The annual interest on that debt would be 4.6% of GDP, triple the current level.

"A vicious cycle may develop in which large deficits lead to rapid growth in debt and interest payments, which in turn adds to subsequent deficits," he said. Similar "debt spirals" have contributed to financial crises in other countries, a subject Mr. Bernanke studied as an academic. "Ultimately, this expansion of debt would spark a fiscal crisis, which

could be addressed only by very sharp spending cuts or tax increases, or both," he said.

Mr. Bernanke didn't predict -- as more pessimistic analysts have -- that such a crisis would entail sharply higher interest rates or a sharply weaker dollar. Still, he noted higher debts would divert capital from growth-enhancing investments and funnel more of Americans' income to foreign bondholders. This will "have an effect on the vibrancy, efficiency and growth rate of our economy, which will be palpable," he said.

Mr. Bernanke took office promising to be less outspoken on fiscal policy than Mr. Greenspan. In his initial appearances before Congress, he irritated some legislators by refusing to comment on specific topics. Yesterday's appearance suggests he has refined his approach. Asked a year ago about restoring Paygo, he said the Fed chairman "should not be involved in making specific recommendations about [Congress's] internal decision-making process." Asked the same question yesterday, he said, "I don't really have the expertise to advise on [those] types of rules."

Write to Greg Ip at greg.ip@wsj.com¹²

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