EE460: Issues in agricultural policy

Bhanupong

Lecture 13

Outline

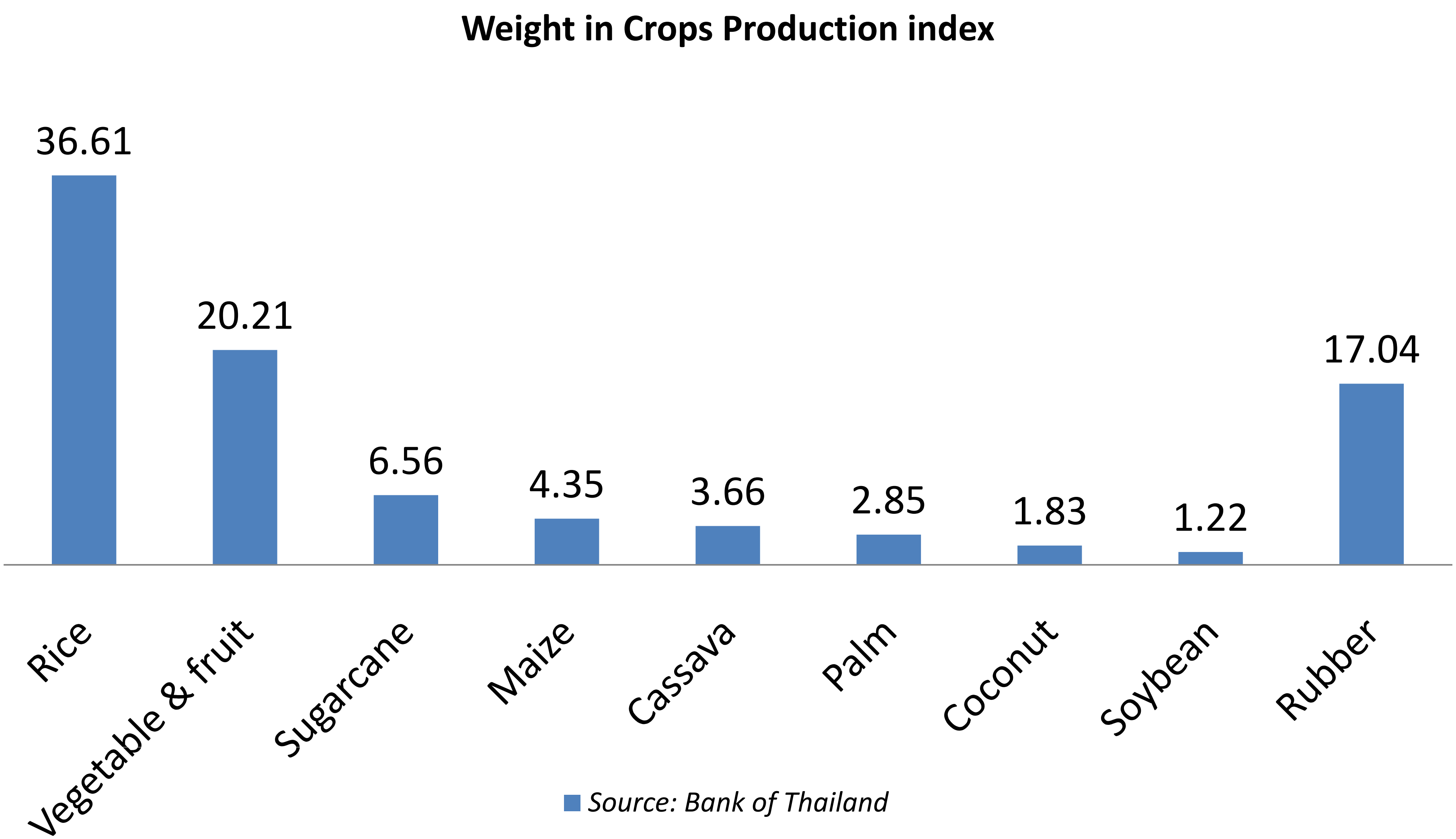
- Thai farm sector revisited
- Agricultural pricing policy blunder
- Jazzman and Jasmine
- Impact of global recession
- Lessons from market intervention

The farm sector

- **The farm sector generates up to Bt1.2 trillion annually.**
- **Farm revenue accounts for 11 per cent of gross domestic product, and up to half of the population, or 32.5 million people, are involved in the sector.**
- **Globally, agricultural commodities are classified into four groups - cereals, vegetables and fruit, livestock, and fuel crops and vegetable oils.**

Cereals groups

- Cereals is the biggest group, with production averaging 2 billion tons per year.
- Rice, maize, wheat, sorghum, rye and oats
- However, cereal production dropped by an annual average of 0.92 per cent from 2005 to 2007.
- The biggest producer was the US (20 per cent) followed by China (19.2 per cent) and the European Union (11.67 per cent).
- Thailand's share was a minimal 1.02 per cent: A far cry from being the Kitchen of the world



Weight in Crops Production index
36.61
20.21
6.56
4.35
3.66
2.85
1.83
1.22
17.04
Rice
Vegetable & fruit
Sugarcane
Maize
Cassava
Palm
Coconut
Soybean
Rubber
Source: Bank of Thailand

Vegetables and livestock

- Vegetables and fruit annual production has reached 1.4 billion tons, of which vegetables accounted for 900 million tons.
- China is the biggest producer, responsible for 39 per cent of world production, **while Thailand shares only 0.8 per cent.**
- **Livestock** covers pigs, chicken, cows and raw milk. Annual production is 570 million tons.
- The EU is the biggest manufacturer, controlling 26.48 per cent of global production.
- **Thailand is a small producer, accounting for 0.49 per cent of world production.**

Fuel crops

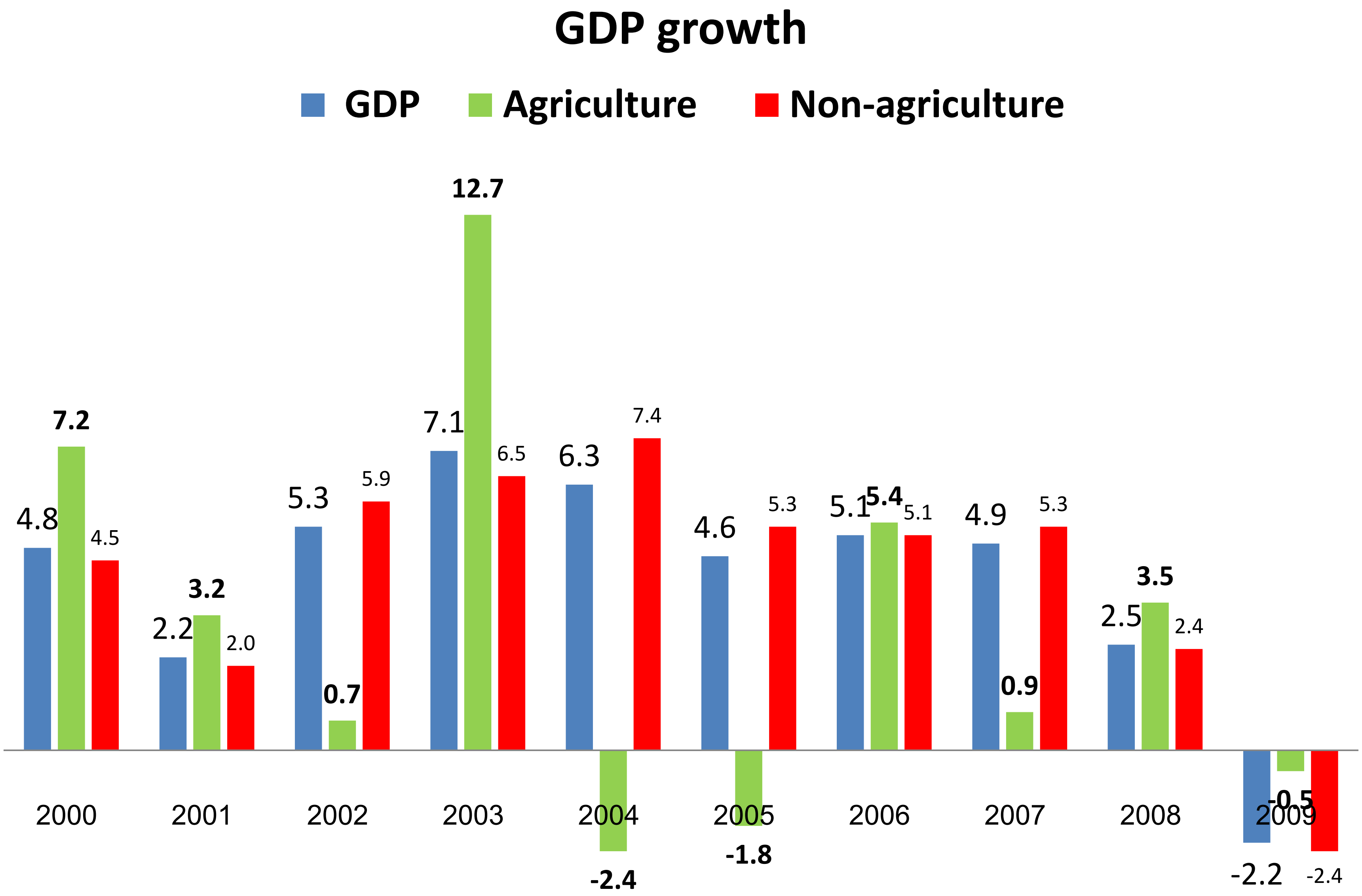
- Fuel crops and vegetable oil have total production of 520 million tons per year.
- Fuel crops, including soybean, rapeseed and cotton, account for 400 million tons and the remainder consists of soybean, palm oil, rapeseed, sunflower and cotton.
- Thailand's share in world production amounts to 0.28 per cent.

Major farm crops

- Office of Agricultural Economics (OAE) has classified Thai farm crops into five groups - field crops, horticultural crops, fuel crops, livestock and fishery.
- Under those groups are 19 products, including **rice, maize, soybean, cassava,**

sugarcane, palm oil   rubber, pineapple, longan,

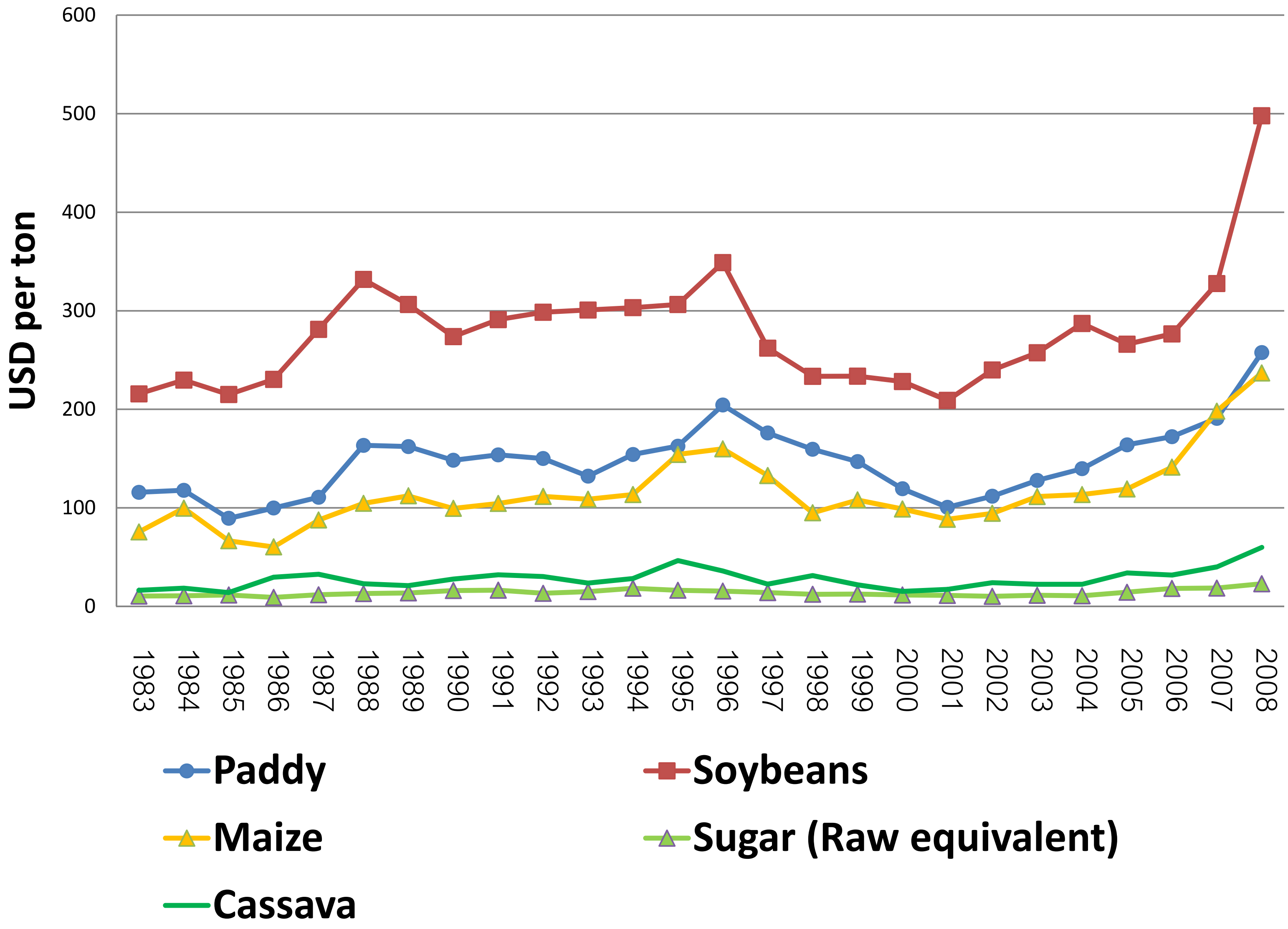
chicken, shrimp and fish meal.


GDP growth
GDP
Agriculture
Non-agriculture
4.8
7.2
4.5
2.2
3.2
2.0
5.3
0.7
5.9
7.1
12.7
6.5
6.3
-2.4
7.4
4.6
-1.8
5.3
5.1
5.4
5.1
4.9
0.9
5.3
2.5
3.5
2.4
-2.2
-0.5
-2.4
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009

A lucky year: 2008

- Thai rice farmers only managed to get good prices in 2008 because the other main rice-producing countries, such as Vietnam and India, had to cope with natural disasters such as droughts and flooding.
- But when there are no natural disasters in other countries, Thai farmers are not able to compete with others in terms of price, because

Farm gate prices

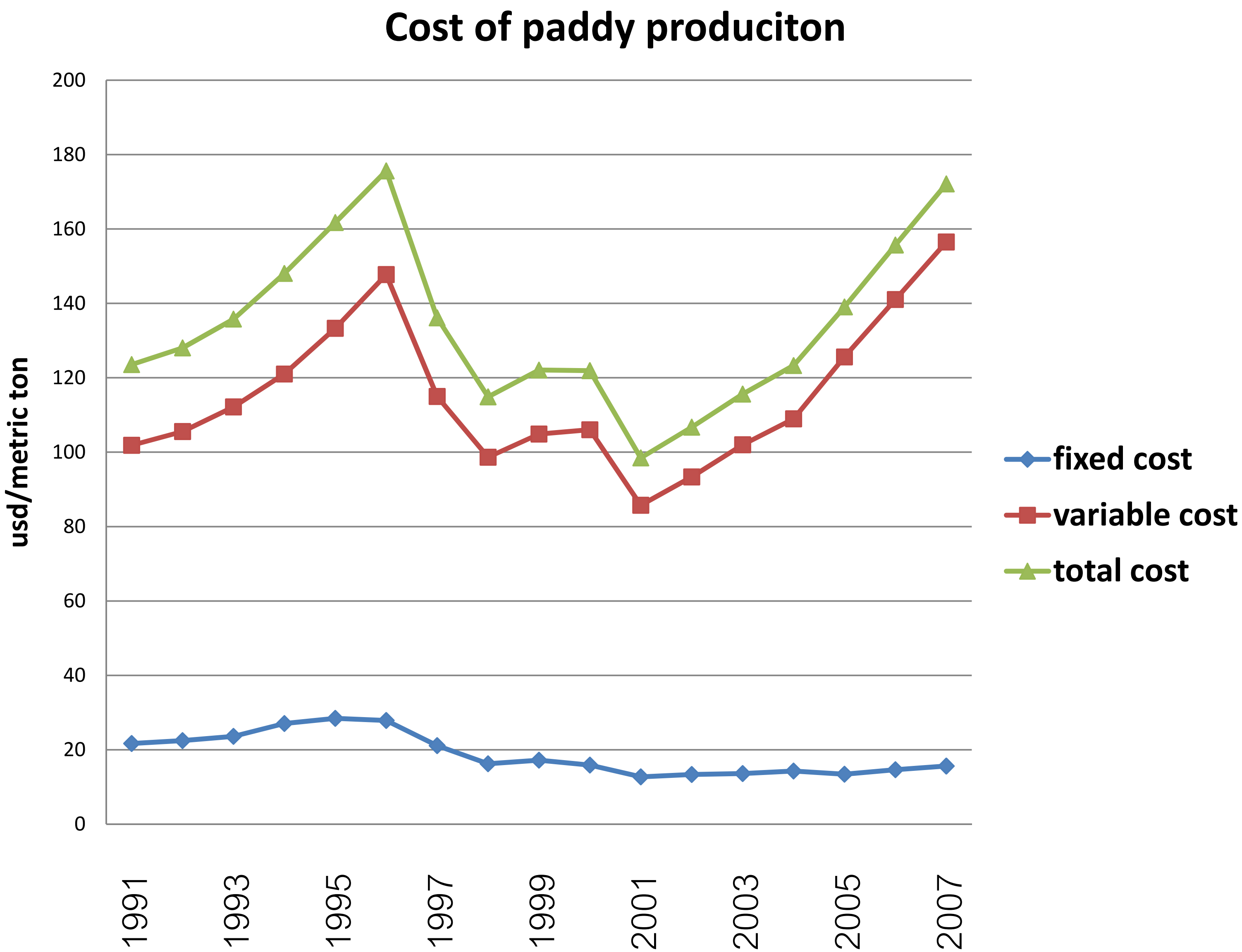


Agflation

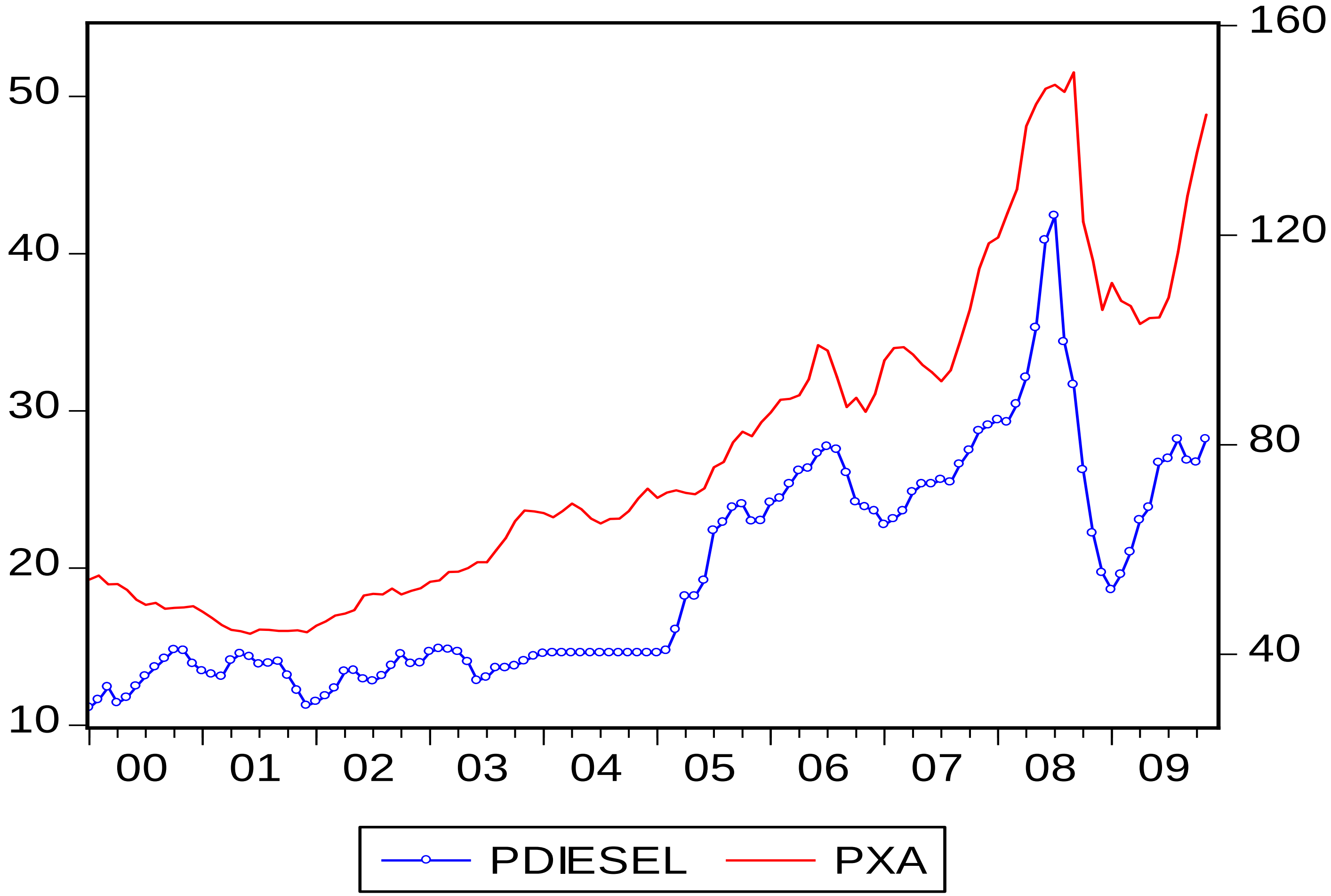
- A wide range of factors has been blamed for the food price increases.
- Culprits include slowing agricultural productivity, climatic and weather-related factors, rising demand from China and India, higher oil prices and demand for bio-fuels, speculative behavior in financial markets, hoarding, falling stocks, dollar depreciation, low interest rates, among others.

From boom to bust

- But from the second half of 2008, global attention shifted again.
- The eruption of the global financial crisis and slide of the global economy into recession raised fears that the world economy would plunge into another Great Depression.
- One consequence of the global recession has been a fall in world commodity prices that has also affected food commodity prices.
- This fall in food prices (and the fall in oil prices) has mitigated immediate concerns about large-scale food insecurity.


Cost of paddy produciton
usd/metric ton
200
180
160
140
120
100
80
60
40
20
0
1991
1993
1995
1997
1999
2001
2003
2005
2007
fixed cost
variable cost
total cost

Impact of energy prices on agriculture

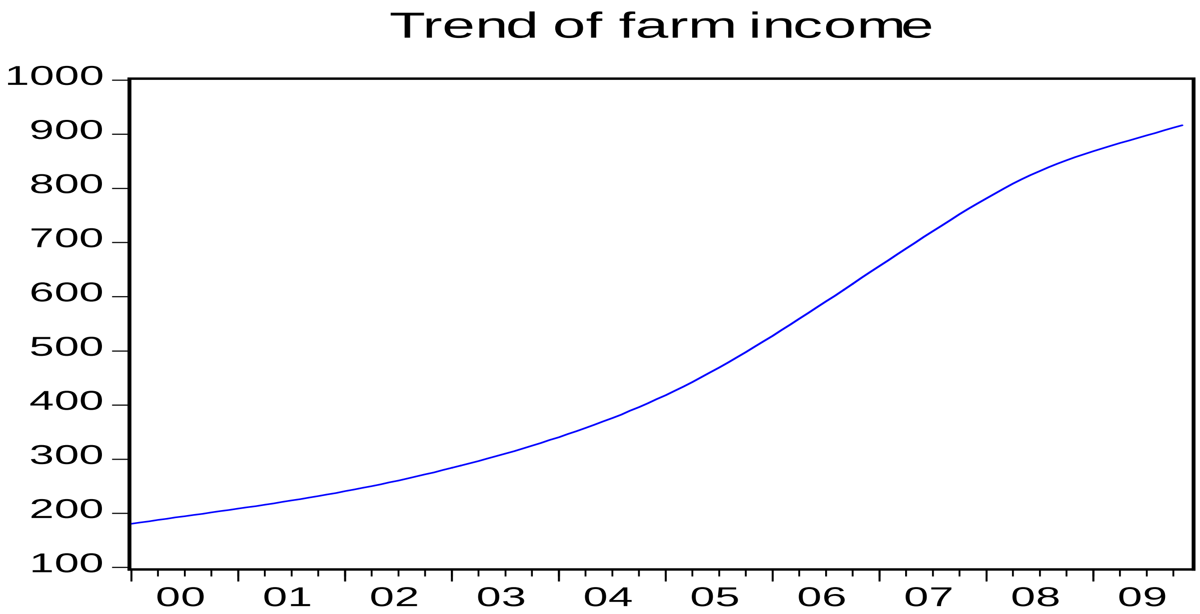


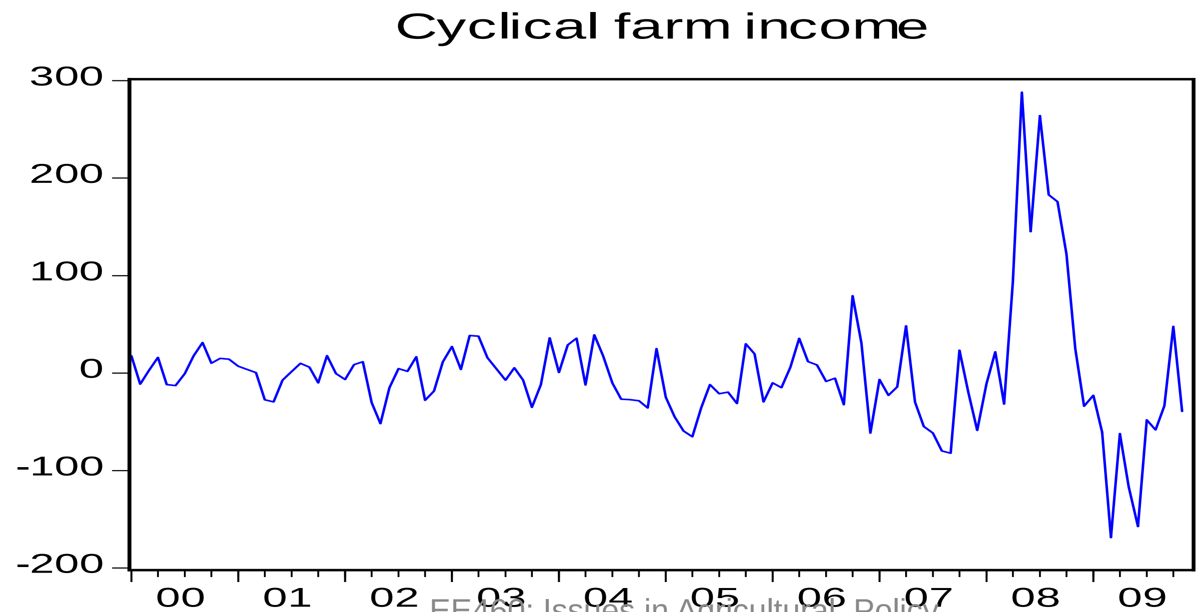
Farm income

(% y-o-y)

Source: www.bot.or.th

	2008	2009 (Q1)	2009(Q2)
Farm income	33.0	0.9	-21.7
Production	9.0	1.2	-6.3
Price	24.0	-0.3	-16.4


Trend of farm income
1000
900
800
700
600
500
400
300
200
100
00
01
02
03
04
05
06
07
08
09


Cyclical farm income
300
200
100
0
-100
-200
00
01
02
03
04
05
06
07
08
09

A bright idea: income guarantee

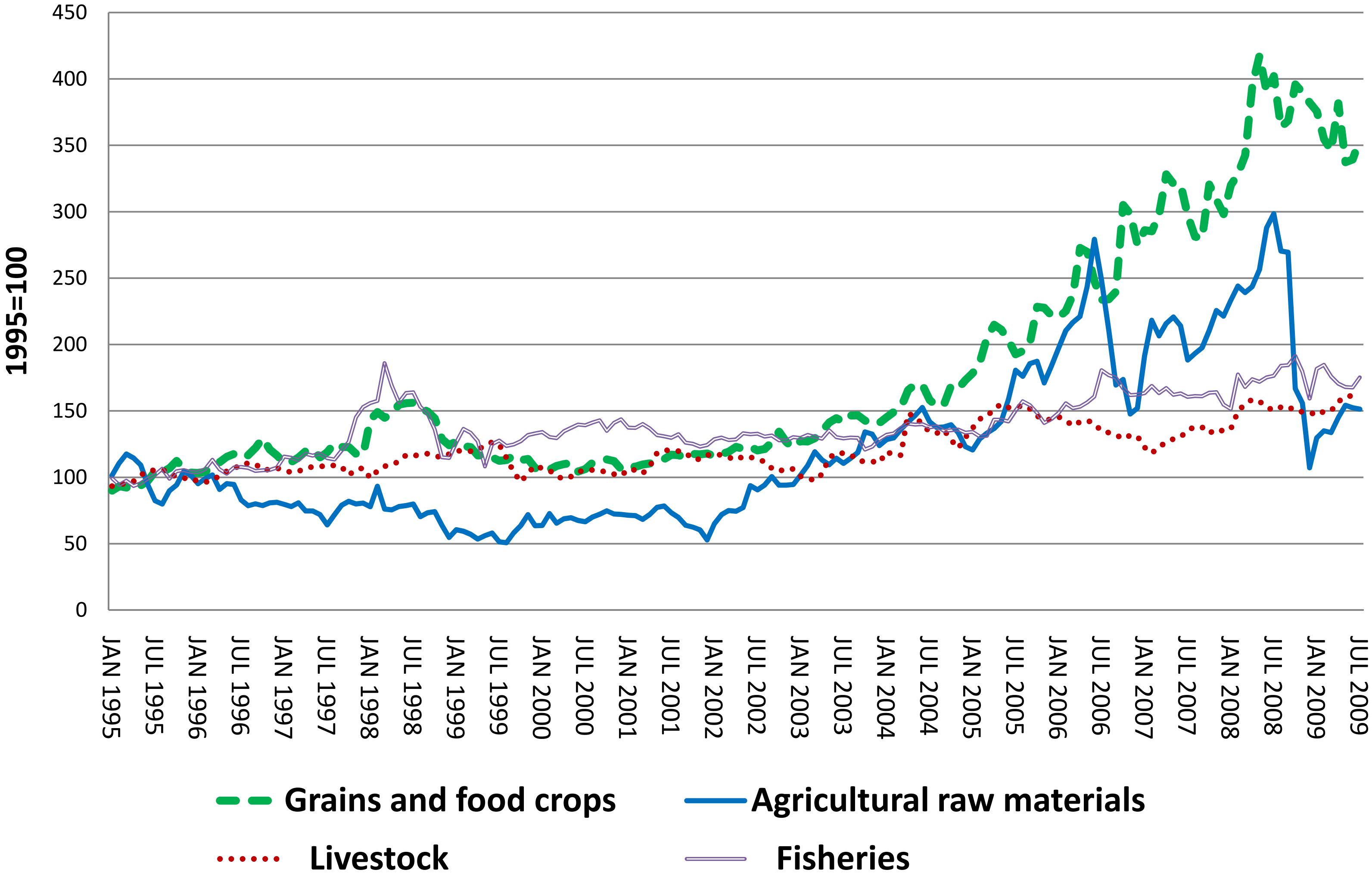
Under Abhisit government

From mortgage to income guarantee:

Commodity under the income guarantee program	Total allocated budget (million baht)
Rice	28,000
Maize	7,000
Cassava	1,000

Farmers must register by January 1, 2010
reporting their farm sizes for their income estimation
Compare and contrast the efficiency between mortgage and income guarantee programs.

Farm price indexes



Being complacent

- **Over the past few years, Thai farmers have not only been complacent and failed to improve their yields, they have not developed new strains of Thai rice.**
- **Vietnamese farmers, however, have developed several new rice strains over the past few years. Their rice yield per hectare is also better than Thailand's.**

Blame the politicians

- Instead of focusing on how to improve production in a sustainable manner, Thai farmers tend to ask for short-term price support measures from the government whenever they face sluggish rice prices at home.
- Politicians see this as an opportunity to spend quick money to increase their popularity, even though some price support measures are bad decisions.

Not just rice

- Rice is just one example that demonstrates the country's failure to develop its farming sector.
- It is also a consequence of the country's lack of a national agenda for farm goods management to ensure sustainable development in the sector.
- **In the second quarter of 2009, hundreds of desperate farmers took turns to protest and to ask for price support.**
- **The Thai government likes to boast how the country is a leading agricultural nation, but the planters who grow rubber, sugar cane and maize, in recent months, also rallied at the government's door to ask for more subsidies**.

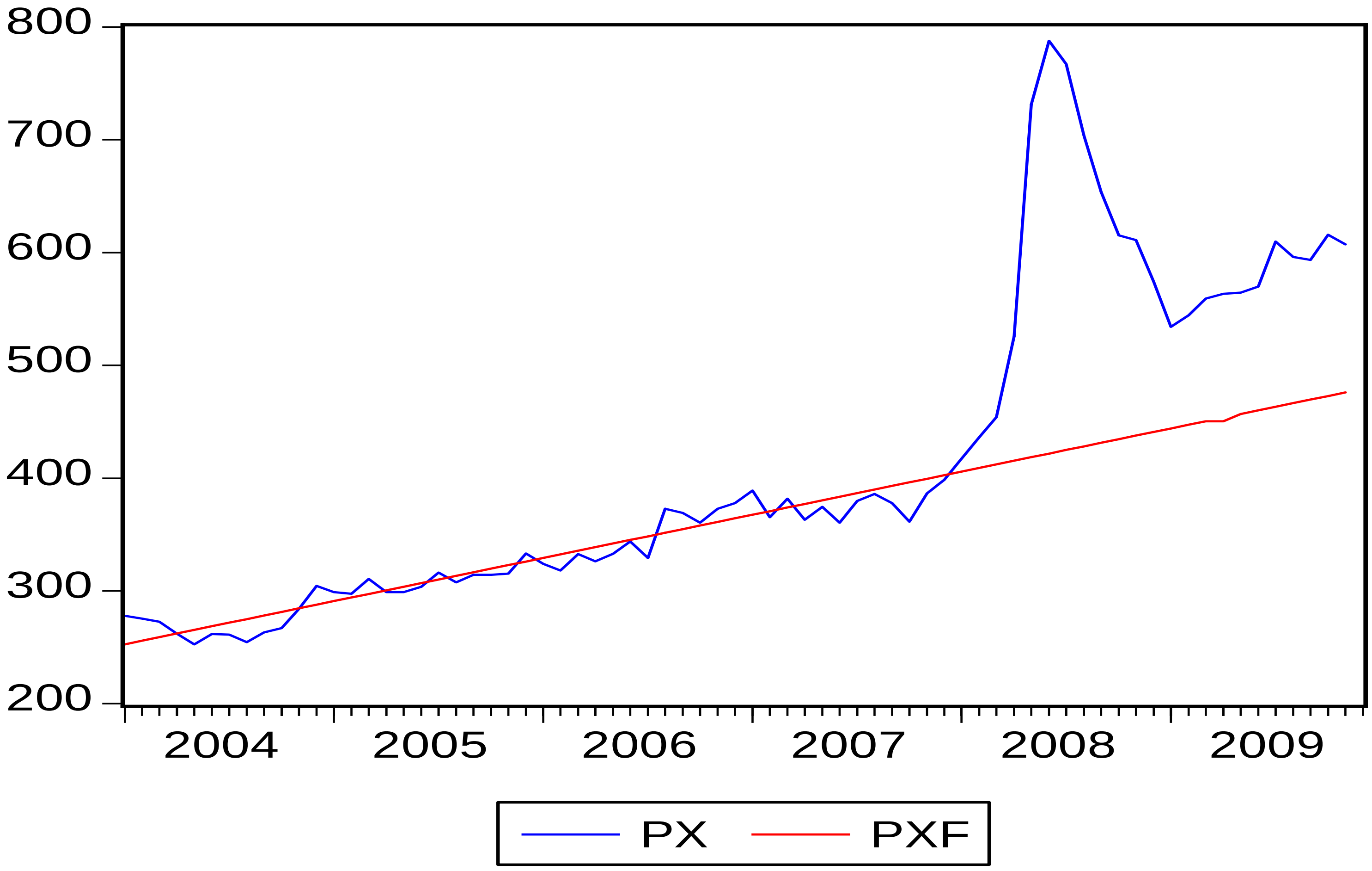
The cost of subsidy

- The government should invest more energy and resources in promoting agriculture, which has long proved to be a backbone of the country.
- But so far, governments have tended to introduce short-term measures, which at times hurt farmers because they *distort* the market prices.
- An example is the domestic rice price support program, which caused the Thai rice export prices to escalate and thus made the Thai rice non-competitive overseas.

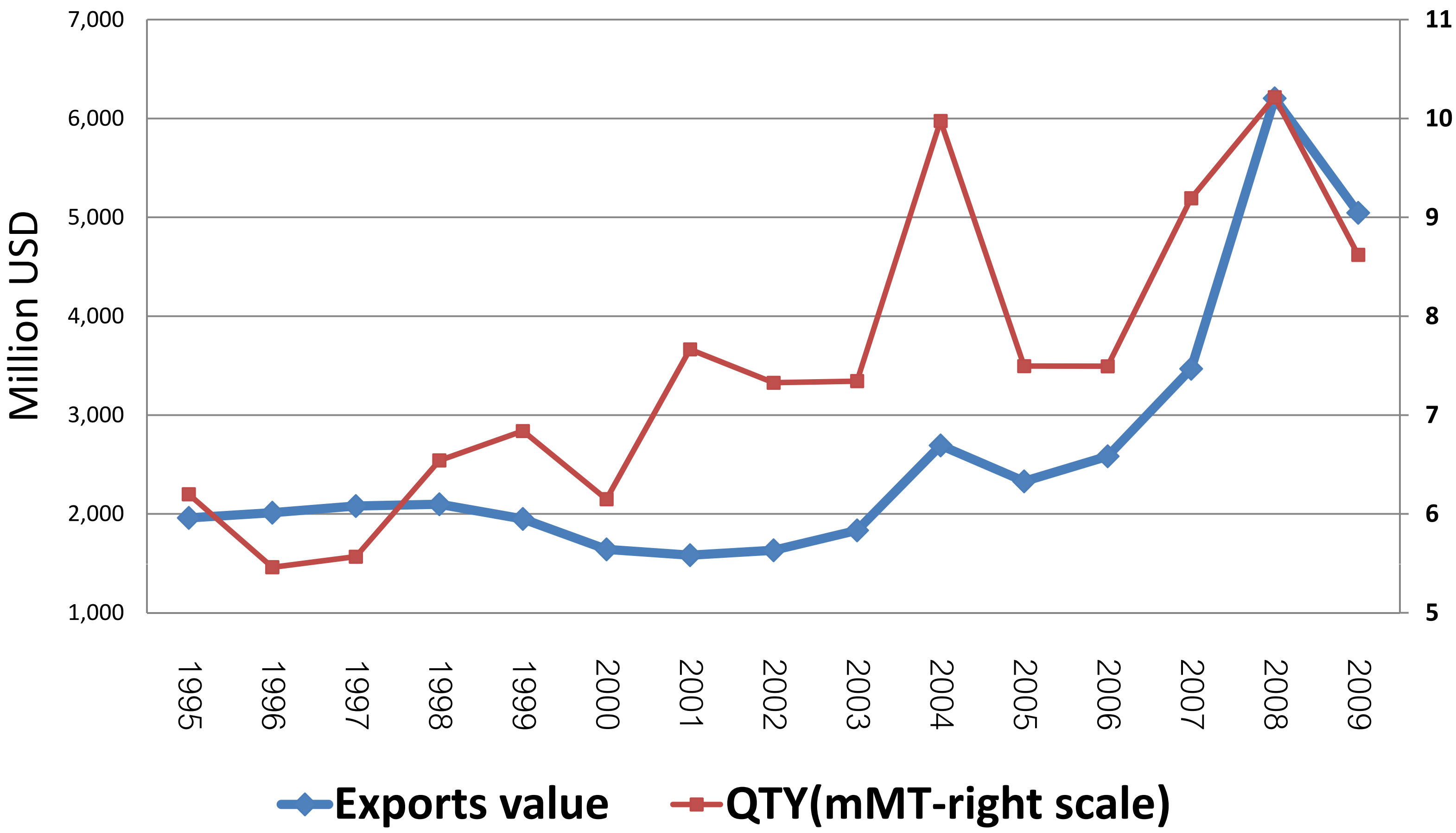
Too expensive Thai rice

- The Thai Rice Exporters' Association said that in February, 5-per-cent rice was sold at **US$585(Bt21,146) per tons compared to the $400 at which Vietnamese traders sold their produce.**
- The Commerce Ministry tried to defend the large drop in Thai rice exports in 2009, blaming the decline on the world market situation.
- But the lower demand for Thai rice is a result of it being too expensive, as well as the increased availability of rice from other exporting countries.
- Can we compete with Vietnamese rice after the 25% devaluation f the dong?

Trend and actual export prices of rice



Thai rice exports



Cambodian Cassava

- **Cassava** planters were suffering from **unclear** government policies regarding guaranteed prices.
- The market speculation over the policy direction on farm prices made prices fluctuate.
- **Short-term government price intervention tends to lead to the smuggling of commodities from neighboring countries.**
- **A large volume of cassava from Cambodia is said to be brought into the country because some middle-men want to benefit from the pledging scheme.**
- **Price intervention tends to invite corruption as the scheme normally involves a large sum in handouts.**

Changing comparative advantage

- Thailand has long been dependent on geographical advantage, but our competitors have recently managed to overcome their disadvantages.
- Thai farmers and the responsible agencies and officials remain complacent.
- The series of protests by farmers shows that Thai farmers cannot stand on their own two feet.
- They have been slow in developing and improving yields per rai and the quality of their products.
- As a result, most Thai farmers have failed to improve their competitiveness while our competitors are progressing.

Scent of Jasmine

- Thai jasmine rice is very well recognized by American consumers as a specialty product with aromatic and soft grains.
- The US orders about 350,000-400,000 tones of jasmine rice from Thailand a year.
- Jasmine is the ***highest premium grade of Thai rice, which can only be raised in five provinces in the Northeast***.

The importance of Jasmine

- Although Thailand mainly exports white rice, half of the income comes from jasmine rice.
- Normally, Thailand exports about 2 million tones of jasmine rice a year*.*
- ***Jasmine rice exports are quoted at US$1,056 (Bt35,400)per ton, while normal white rice sells for $569 a ton.***

Jasmine vs. jazzman

- **Jasmine rice exports will soon run into fierce competition in the United States, which has successfully grown and registered a new type of fragrant rice called "Jazzman".**
- Louisiana State University's Agricultural Centre have come up with a new variety of aromatic rice, known as LA2125 , with a very similar fragrance, soft grain and quality as Thai jasmine rice.
- Consumers and Asian restaurants in the US may shift to serving Jazzman rice as it tastes the same but is cheaper.
- Another challenge is the yield: up to 1260 kilograms per rai of Jazzman rice can be grown, compared to 400 kilograms of Thai jasmine rice production.

Innovation and competition

- The LSU rice breeder who developed the variety said the project required 12 years of work to obtain a long-grain rice with good milling quality, high yield and the correct aroma and flavor.
- Consumers and Asian restaurants in the US may shift to serving Jazzman rice as it tastes the same but is cheaper.

No room for complacency

- **The president of the Thai Rice Exporters Association, said exporters were not worried** about the innovative rice in the short term as most consumers still favor Thai jasmine rice, categorized as the highest grade of rice.
- However, he expressed concern about any mixing of Jazzman rice with Thai jasmine rice as it may destroy the premium quality image of Thai rice.

Jasmine rice from Vietnam

- Vietnam has already come up with rice that tastes similar to Jasmine.
- It is now on sales in supermarkets in London at 1,000 baht for 20 kg bag, compared with 1,500 baht Jasmine rice from Thailand.
- The recent dong devaluation has enabled Vietnam to offer 50% lower price than Thailand.

Loss in subsidies

- Rice exports plummeted more than 30 per cent in the first half of this year because of competition from cheaper Vietnamese jasmine rice, according to Thai Rice Exporters Association president *July 30, 2010*
- "More buyers in Hong Kong are turning to Vietnamese rice as its jasmine rice is about US$550 per tonne while Thai jasmine rice is sold at US$900 a tonne,“

  Only **60,000** tonnes of Thai rice were exported to Hong Kong in the first two quarters of 2010. The country sold **300,000** tonnes to Hong Kong at the same time last year.

Price and income guarantee program

- The government's announcement to guarantee the price of unmilled rice at 15,000 baht a tonne has made Thai rice more expensive and this year's rice output would likely be lower than the previous year.

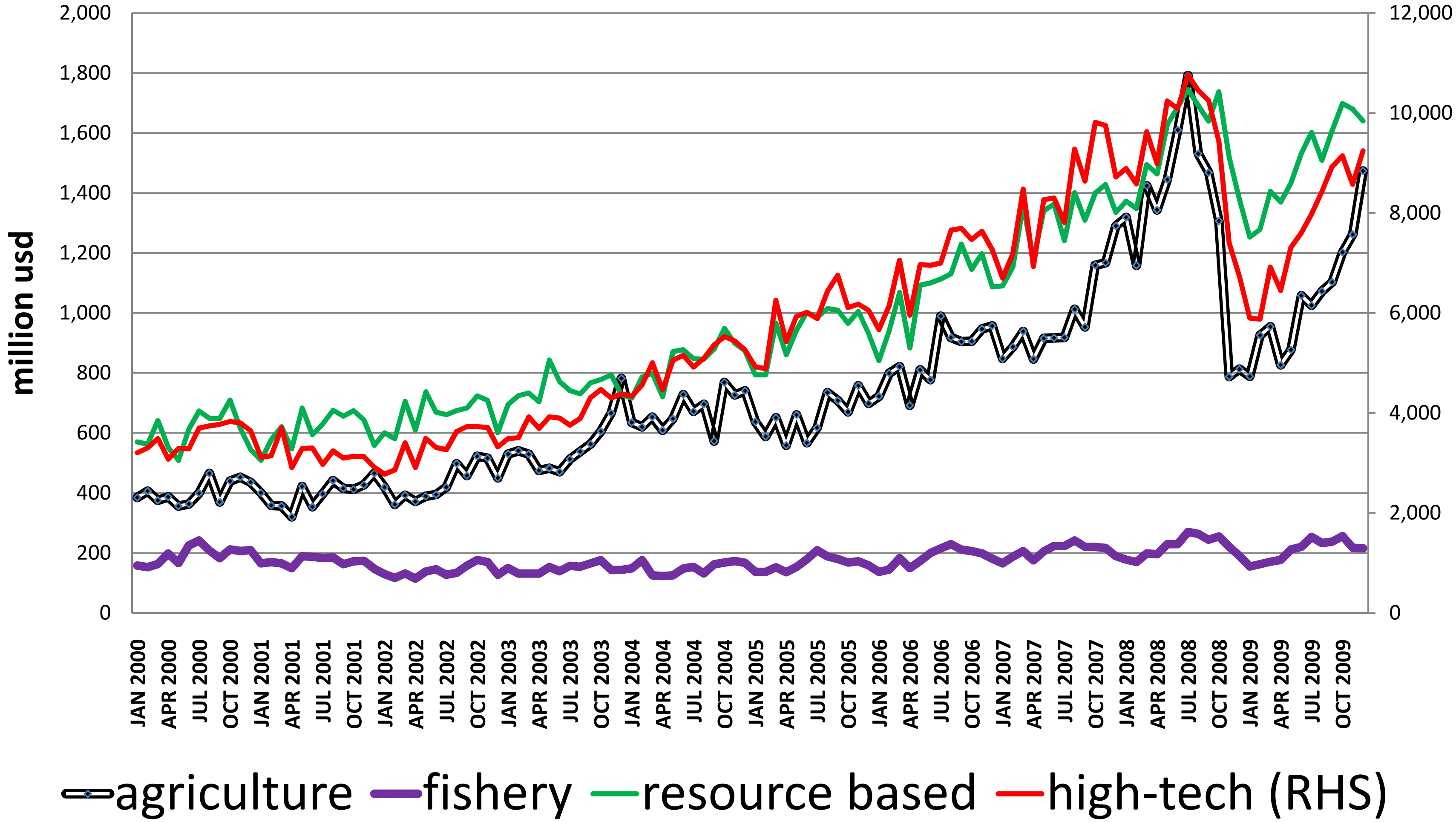
  Thailand's jasmine rice exports for 2010 could drop to 1.6 million tonnes. The country previously projected exports of two million tonnes in 2010.

  The Department of Export Promotion reported that Vietnam sold US$11 million worth of rice to Hong Kong and China in the first five months of this year.
- The amount is almost equal to Thailand's total rice exports to Hong Kong for an entire year.

The Economist, Feb 13, 2010

- Last year it was banks; this year it is countries.
- The economic crisis, which seemed to have eased off in the latter part of 2009, is once again in full swings as the threat of ***sovereign default*** looms.
- Greece avoided default with a German-led rescue scheme.
- Bond markets are worried about the capacity of Spain, Ireland and Portugal to repay their debt, forcing these courtiers to increase taxes and cut spending, even as the remain mired in recession.

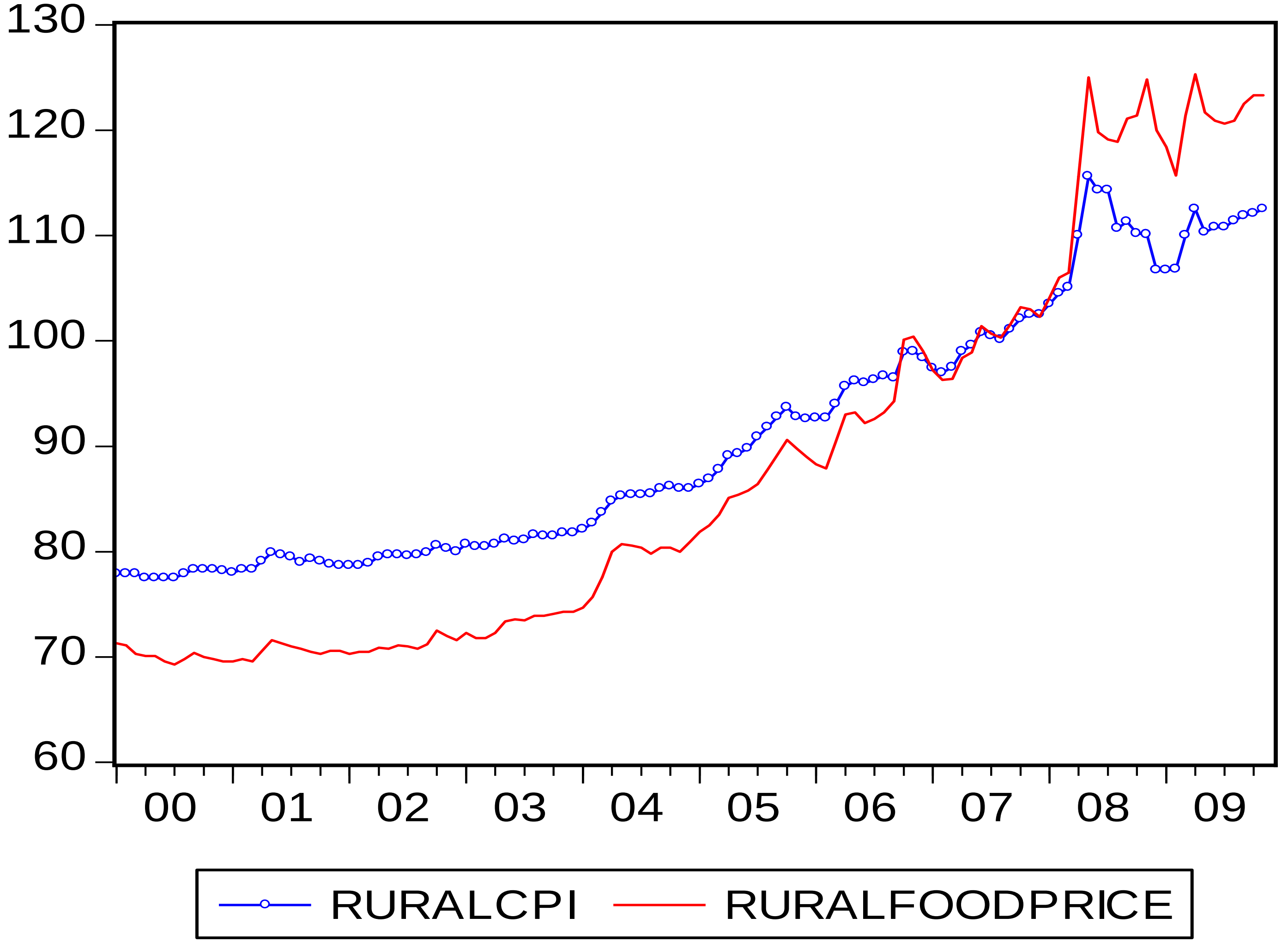
Impact of global recession and recovery: Thai exports



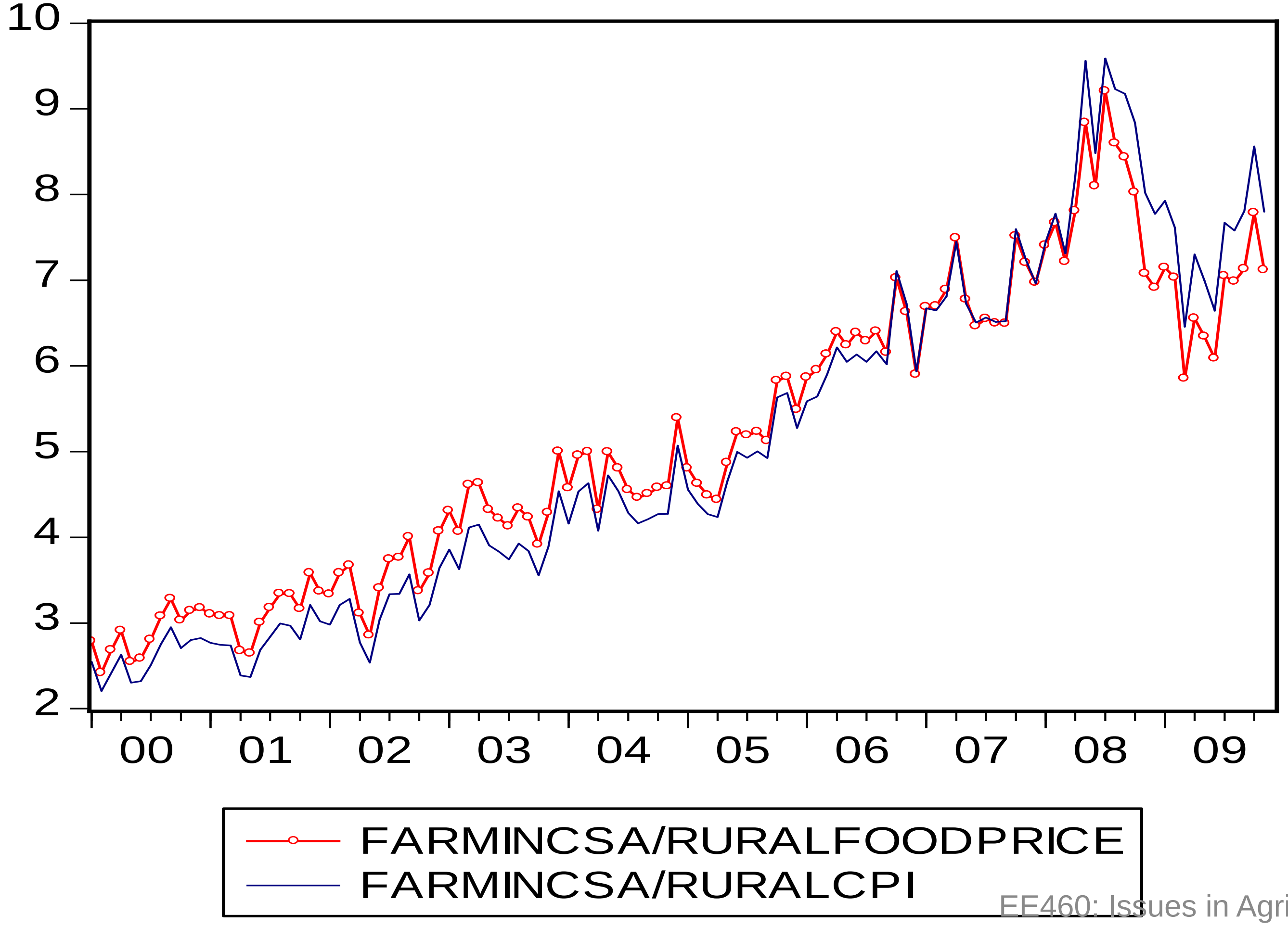
Imminent double dip?

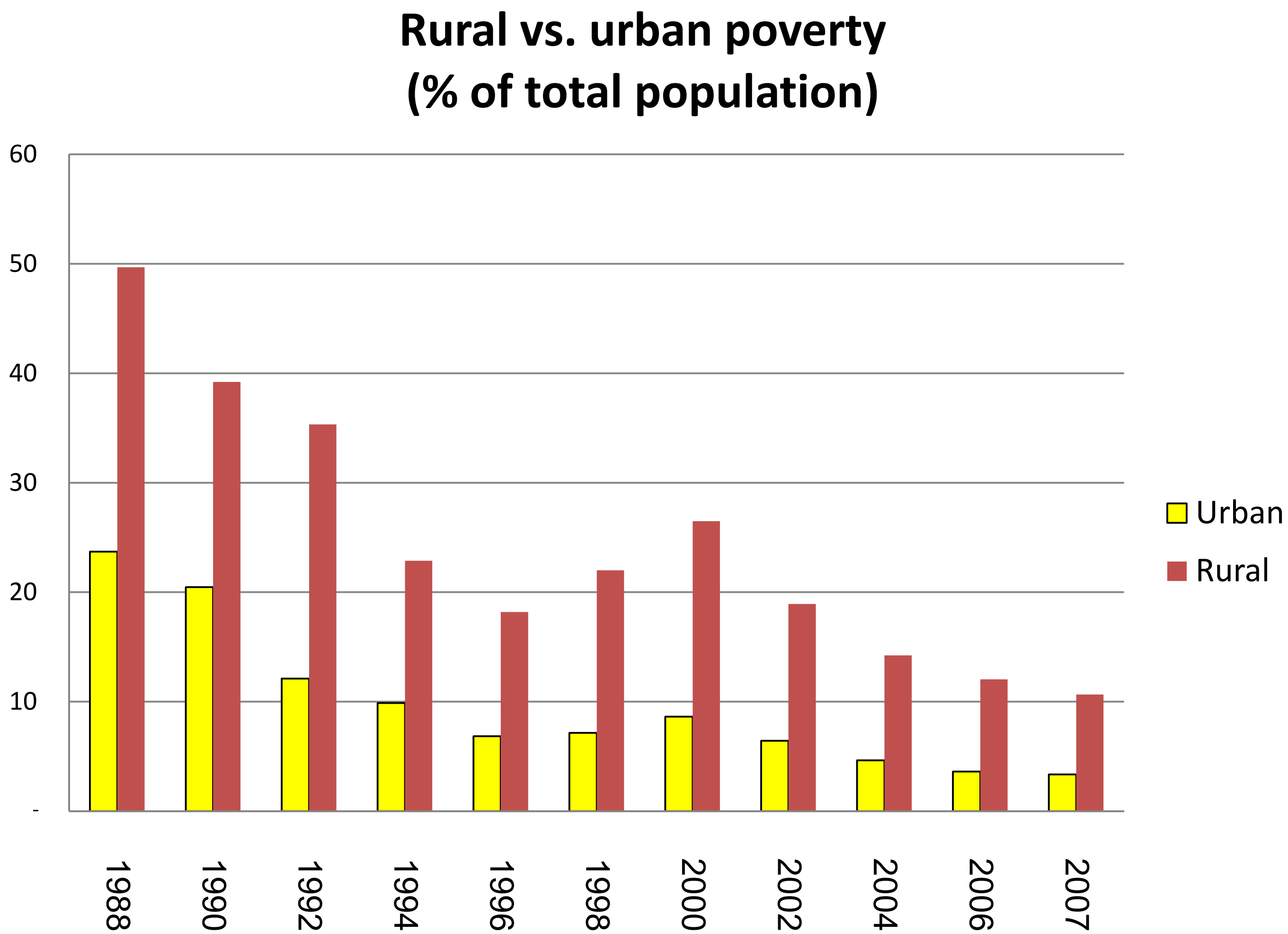
- Optimism about "V" shaped recovery is being replaced with pessimism about double-dip recession.
- China began to control excessive lending, worried about accelerating inflation and asset bubbles.
- India's central bank has raised reserved requirements.
- Brazil's fiscal stimulus is being phased out
- Unemployment in developed countries remain stubbornly high.

Analyze this



Will poverty and income inequality get worse when the food price rises this year?




Rural vs. urban poverty
(% of total population)
60
50
40
30
20
10
-
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2007
Urban
Rural

A few good farms: Good Agricultural Practices (GAP)

- The country has 57 million rai of rice paddies, only 640,000 rai have been certified as GAP farms.
- GAP aims to promote ***sustainable*** growth in rice farming by encouraging better management and less fertilizer and pesticide usage for high-quality grains.
- The use of non-chemical or bio-fertilizers and pesticides and the intensive care of farmers throughout the harvesting period helped cut the production cost or rice to an average of 2.7 baht a kg from 4.3 baht for conventional farming (Ministry of Agriculture)

GAP certificate

- Paddy production from GAP-certified farms is ***above*** the local average at about 600 to 650 kgs per rai, and 300 to 350 kgs for Hom Mali rice.
- The method requires farmers to take great care with harvest sites, from planting to reaping paddy, to give sufficient time to deal with plant diseases or infestations in the early stage.

To make GAP work

- Normally farmers would run for jobs in big cities right ***after*** they planted seed in the filed.
- They would return ***three months*** later to cut the paddy no matter the quality.
- To encourage farmers to use GAP, the Ministry provides ***free rice seed*** and ***bio-fertilizers*** in addition to instruction and training courses.

Market intervention

Lesson from price ceilings:
Cooking oils in early 2011

- The Commerce Ministry has capped the retail price of cooking palm oil at 47 baht a litre.
- Palm oil has disappeared from the shelves of most retail stores and is being sold at fresh markets at high prices.
- Most other cooking oils are also in short supply as consumers buy whatever they can find.

Stampede to join rubber farm scheme

The Nation, Feb 16, 2011

- Around 80,000 rai of rubber farms in Buri Ram enter harvest age, yielding around Bt2.4 billion to farmers, at the price as high as Bt160 per kilo.
- The rubber farming craze has prompted price of land to rise fivefold, either in Buri Ram and other northeastern provinces.

Intervention and externality

- Qualified applicants are those owning two to 15 rai of land who have ***neither grown*** rubber nor registered under this scheme in two previous phases.
- They will be given ***free*** fertiliser, seeds and samplings in the first three years, worth around Bt3,500 per rai, before they shoulder the cost in the remaining four years, before the harvest in the eighth year.

Northeast

- In Si Sa Ket, around 50,000 farmers from all 22 districts queued up at an office to register.
- Si Sa Ket has allotted 30,000 rai of farmland as rubber plantations under a government policy, now entering third and final phase to promote rubber farming across the country apart from the South - in which rubber is the key corp.

In the North

- In Phayao in the North, 1,600 farmers yesterday registered for 13,500 rai of land - 3,600 of which are available this year, another 4,950 in 2012 and 4,950 in 2013.
- The entire North is allotted the least amount of land 150,000 rai under the three-year period with government subsidy, compared to the whole country with a total of 800,000 rai allotted.
- Those were policy offered by Abhisit government.
- What has Yingluck government got to offer to farmers?