

How will China's Saving- Investment Balance Evolve?

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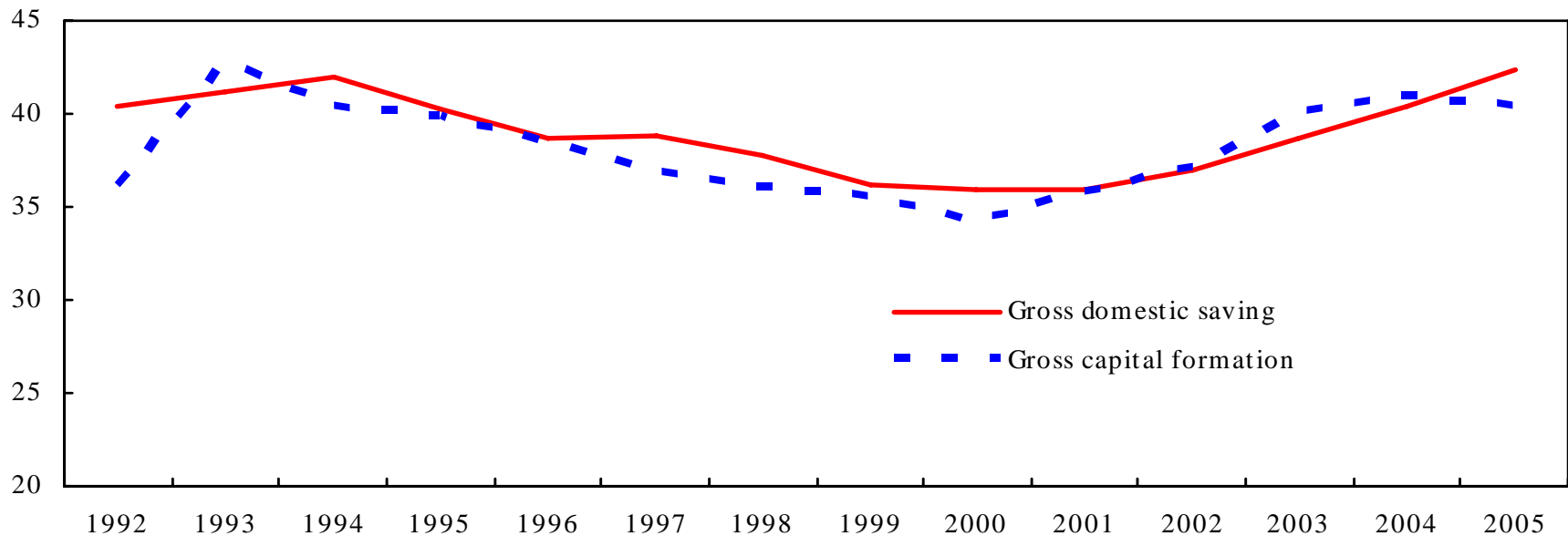
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Outline

- Recent patterns
 - Key findings on S and I
 - Composition of S and I
 - Explanation of patterns
- Prospects
 - Literature
 - Cross country regressions
 - Importance of policies → Impact of policy adjustments

Key findings on S and I

- China's S and I are high (% GDP)



Source: NBS, and author's estimates.

Growth has been capital intensive

| | 1978-93 | 1993-2005 |
|---------------------------------------|---------|-----------|
| GDP growth | 9.7 | 9.5 |
| Employment growth | 2.5 | 1.1 |
| Labor productivity growth | 7.0 | 8.4 |
| From TFP growth | 3.8 | 3.0 |
| From increasing K/L ratio | 3.1 | 5.3 |
| Memorandum items (in percent) | | |
| Investment/GDP ratio (period average) | 29.4 | 36.6 |

Source: NBS, Kuijs and Wang (2005), and author's estimates.

Key findings on S and I (cont.)

- High domestic saving → external financing plays modest role
- Literature on saving leaves a large part of China's economy-wide saving unexplained
- To understand S and I, we need to look at sectoral composition

Going beyond totals

- Importance of household saving overrated
- Much of China's high saving is due to unusually high enterprise and government saving
- Increasing enterprise saving has driven the rising economy-wide saving over the last decade

Who does the saving? (% GDP)

| | 1996 | 2000 | 2004 | 2005 |
|------------------------------|------|------|------|------|
| Households | | | | |
| S | 20 | 15 | 16 | 16 |
| S-I | 14 | 10 | 10 | 10 |
| Enterprises | | | | |
| S | 13 | 15 | 19 | 20 |
| S-I | -16 | -11 | -13 | -11 |
| Government | | | | |
| S | 5 | 6 | 6 | 6 |
| S-I | 3 | 3 | 3 | 2 |
| China | | | | |
| GNS (above the line) | 37 | 35 | 41 | 44 |
| Gross capital formation | 38 | 34 | 41 | 40 |
| Current account (bop data) : | 1 | 2 | 4 | 7 |

Source: NBS, and author's estimates.

Who does the saving? (% GDP)

| | China | United States | France | Japan | Korea | Mexico | India |
|-------------|-------|---------------|--------|-------|-------|--------|-------|
| GDS | 42 | 14 | 21 | 25 | 31 | 21 | 28 |
| Households | 16 | 5 | 11 | 8 | 4 | 8 | 22 |
| Enterprises | 20 | 10 | 10 | 19 | 15 | 11 | 5 |
| Government | 6 | -1 | 0 | -2 | 12 | 2 | 2 |

Source: Kuijs (2005), and Indian authorities.

Data for China is for 2005 (estimated), Mexico 2001, India 2004, and others 2002.

Explanations for China's high saving

- Households
 - Demographics
 - Growth
 - Uncertainty and withdrawal of government
- Enterprises
 - Importance of industry
 - Dividend policy (especially v-a-v SOEs)
- Government

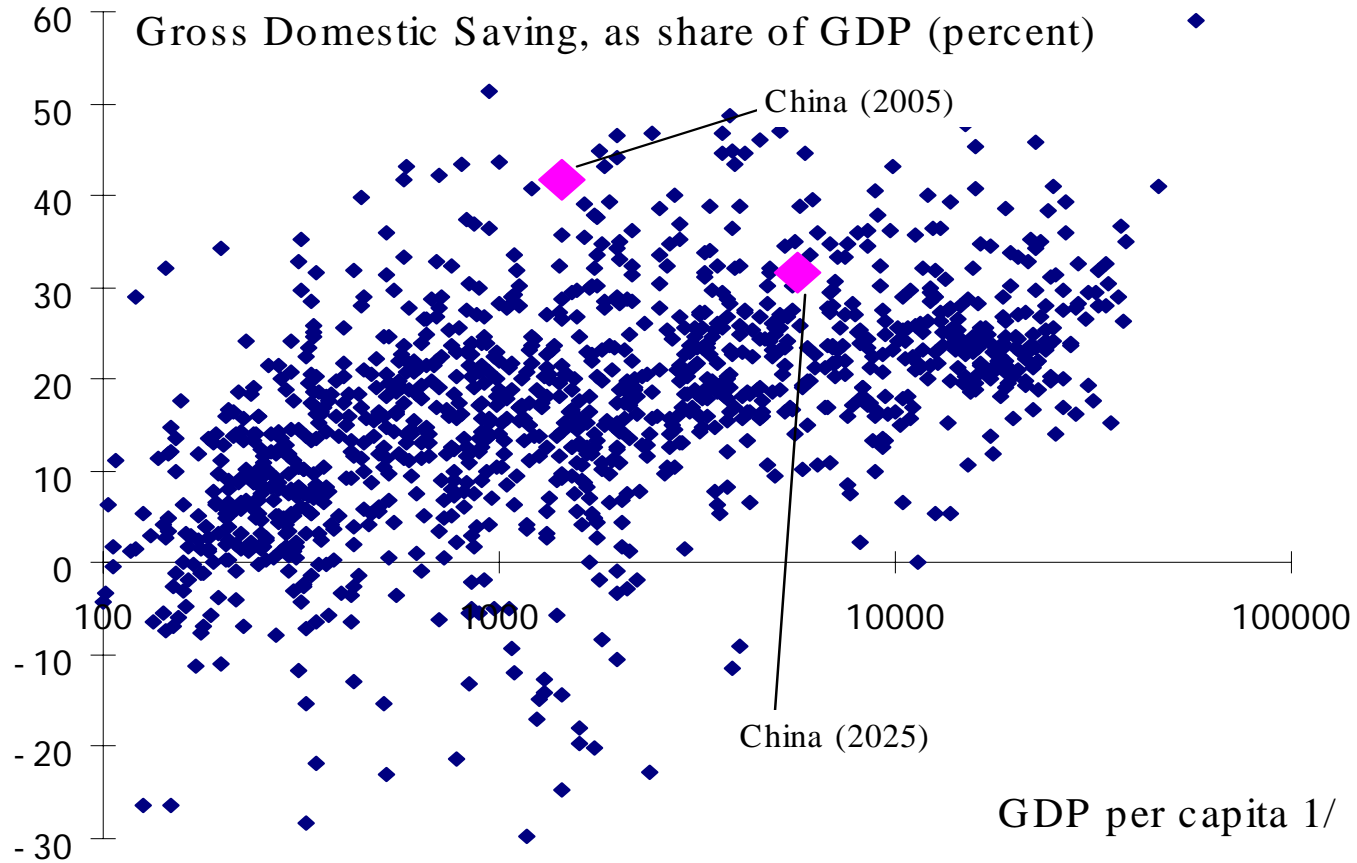
Prospects for S and I in coming decades

- Fehr, Jokish, and Kotlikoff (2005)
 - On current patterns, China would remain large net saver
- Dollar and Kraai (2005)
 - China should become significant borrower

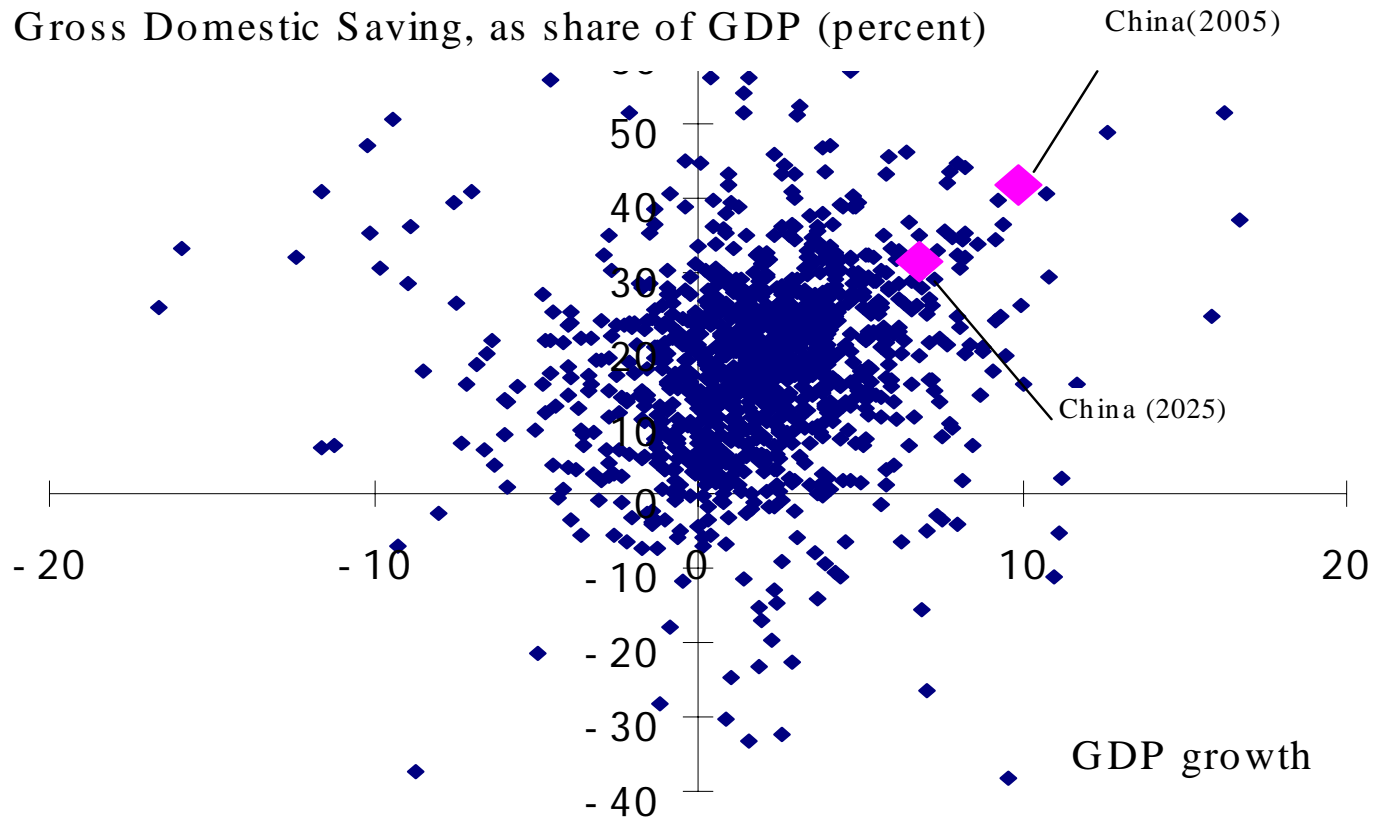
1. Cross country regressions: $S, I = f()$

- GDP per capita
- Growth
- Young and old age dependency
- Urbanization
- Industry
- Public spending

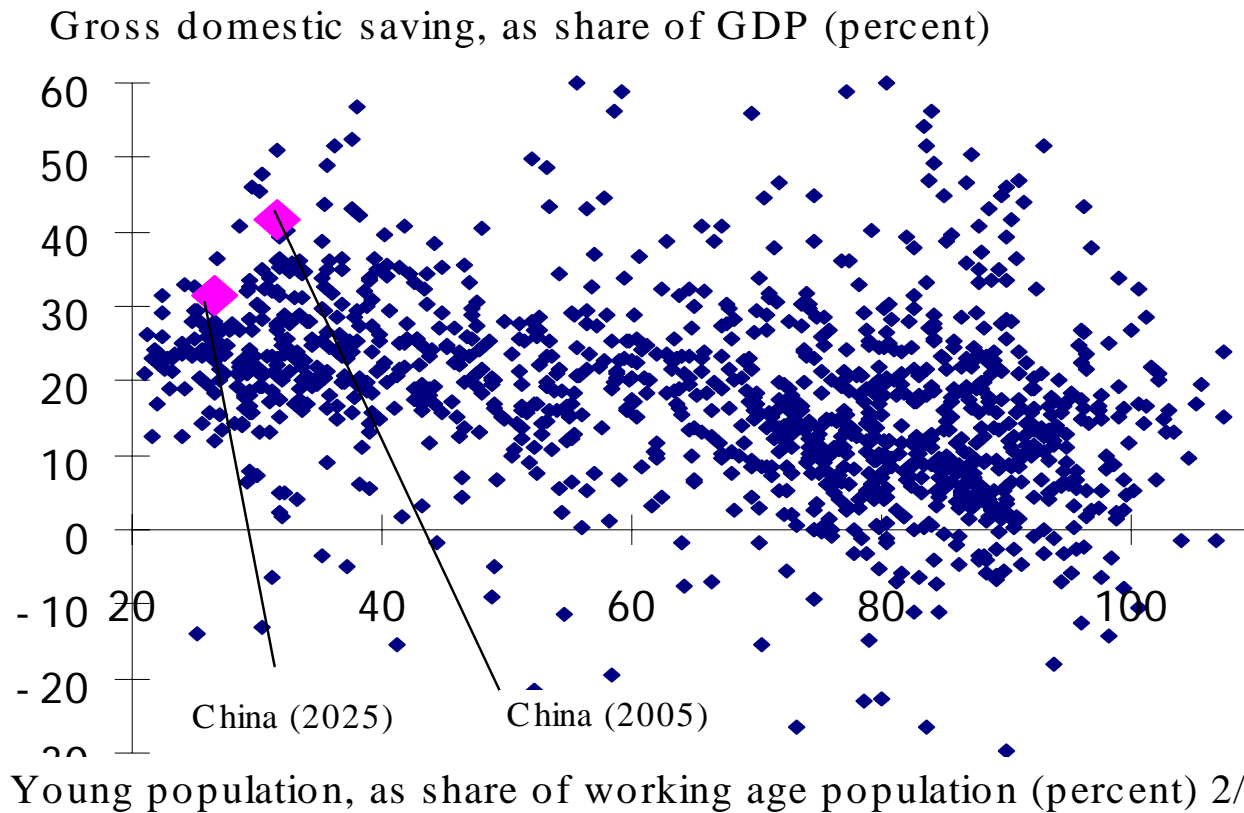
GDP per capita



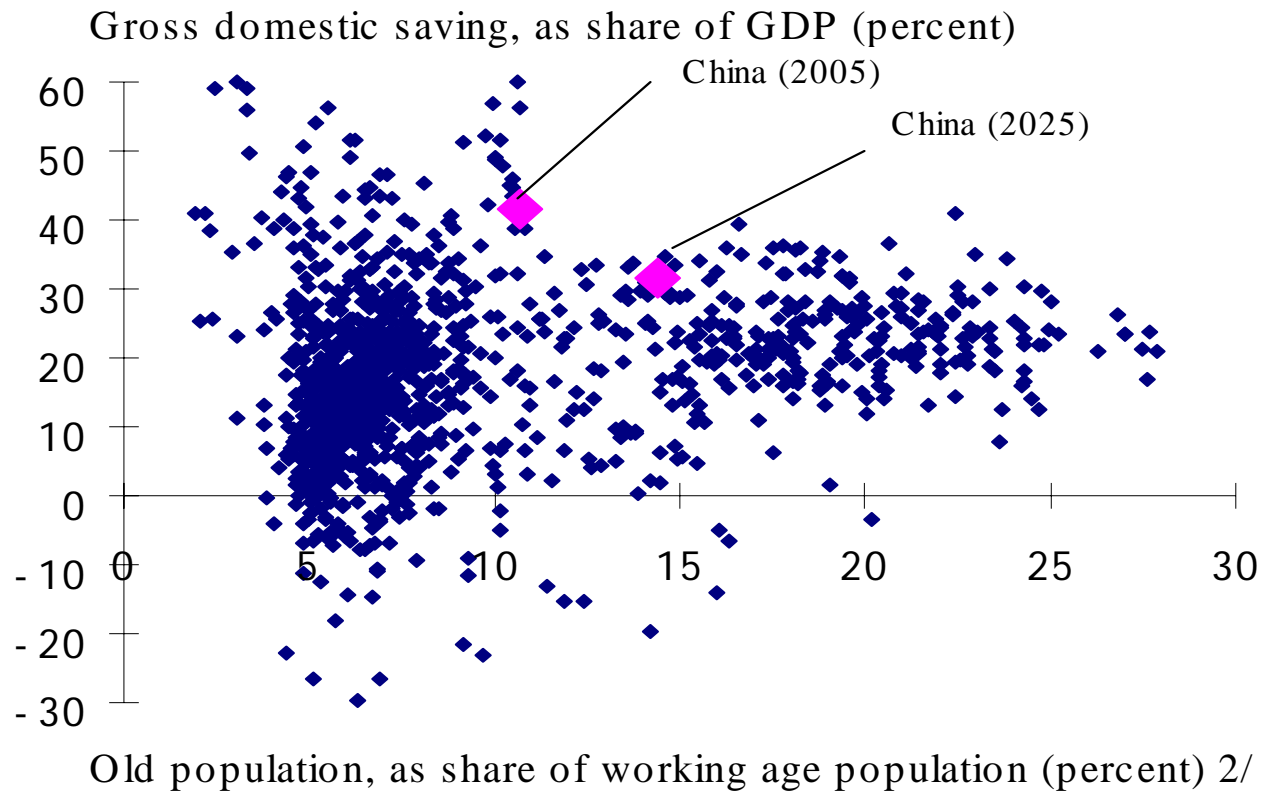
GDP growth



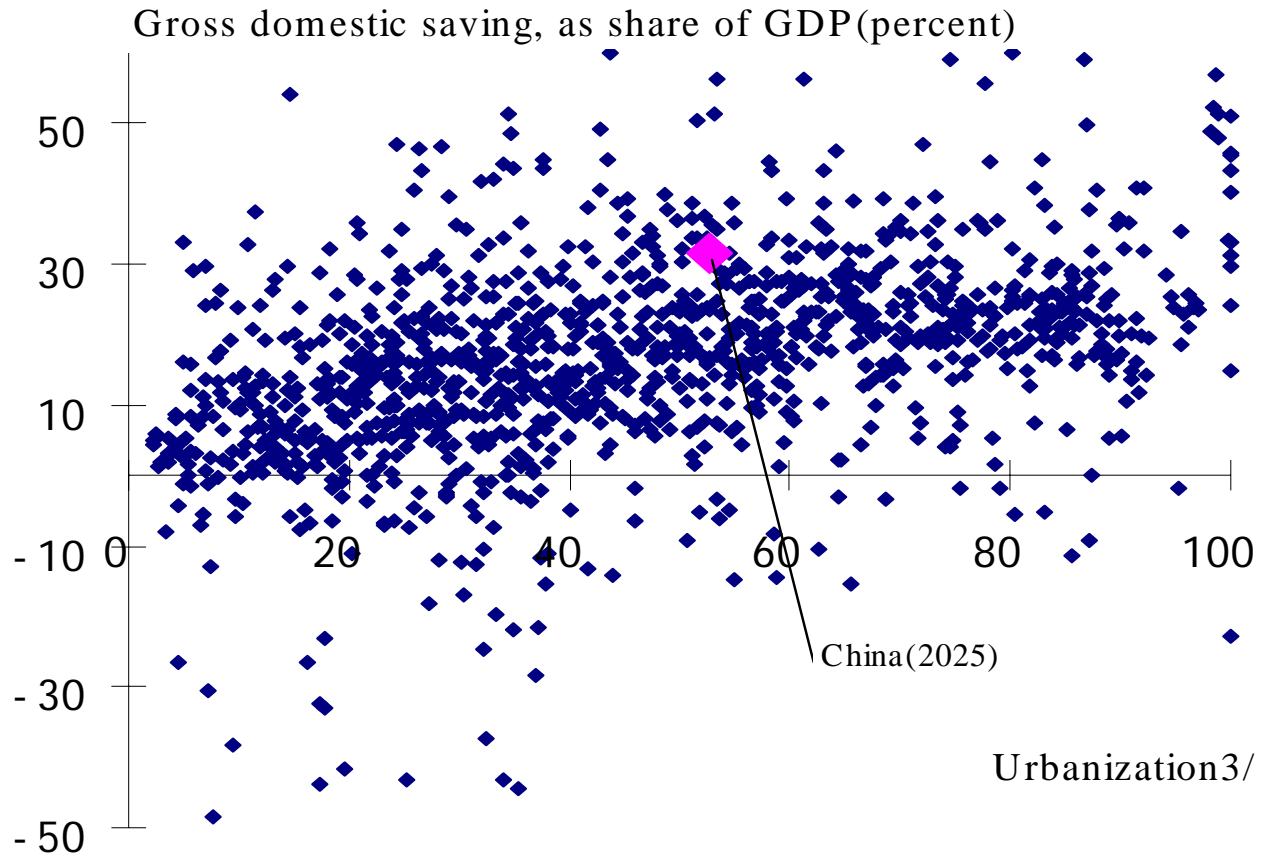
Young dependency



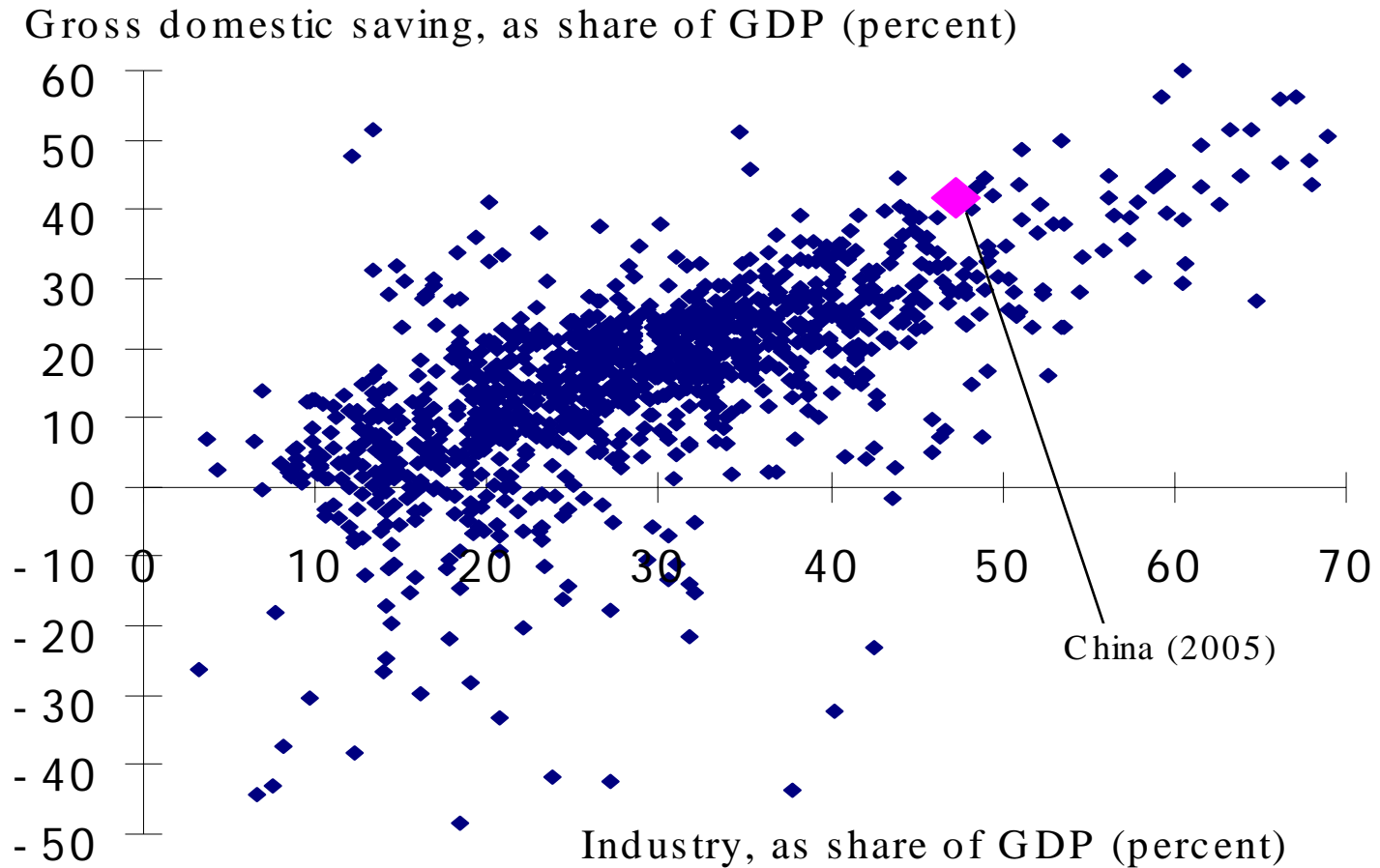
Old age dependency



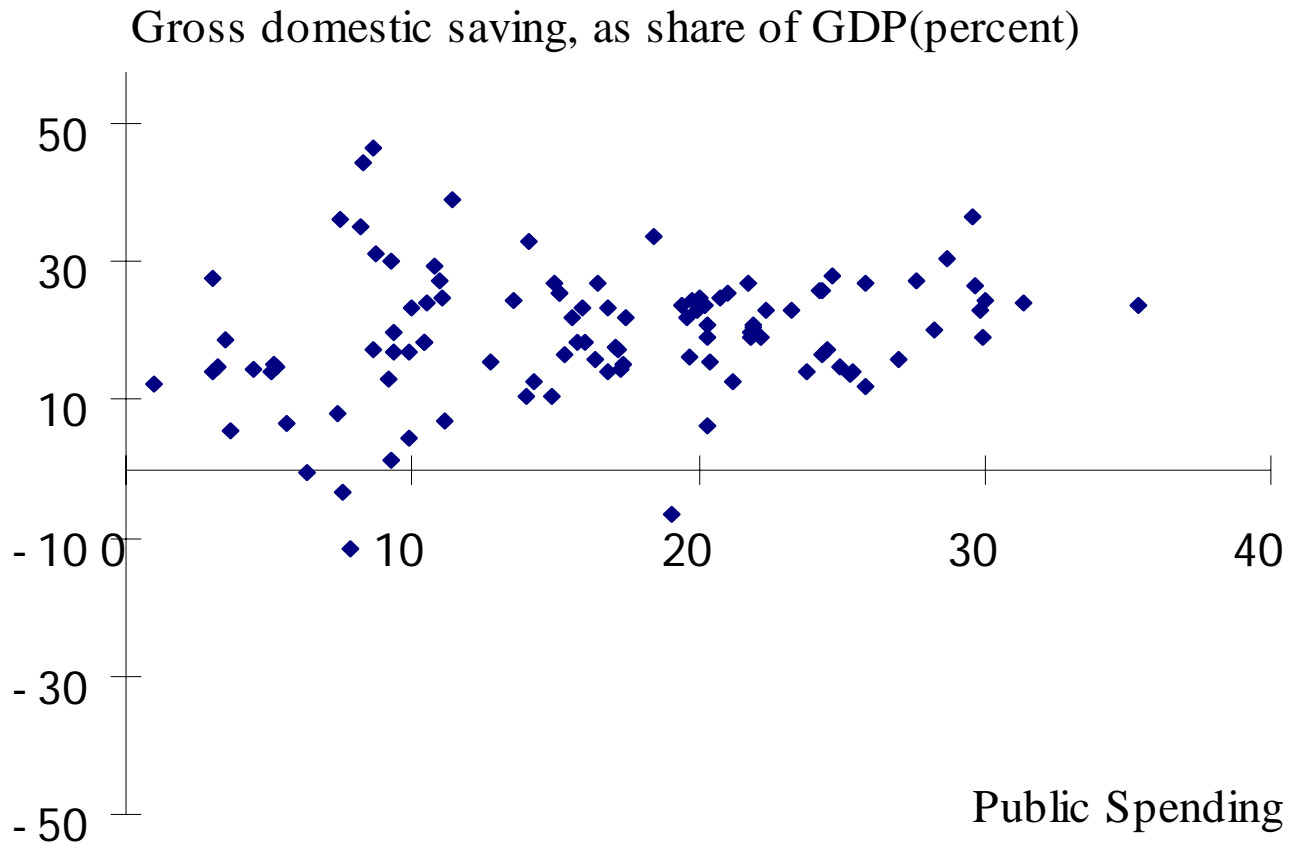
Urbanization



Importance of industry



Public spending



Regression results

| | 1 | 2 | 3 |
|-------------------------------|----------|----------|--------------|
| | OLS | OLS | Panel-within |
| log of real per capita GDP 1/ | 2.92 ** | 2.97 ** | 9.67 ** |
| Real GDP growth | 0.03 | 0.20 | |
| Real GDP growth (-1) | | | 0.15 ** |
| Young dependency ratio | -0.19 ** | -0.18 ** | 0.02 |
| Old dependency ratio | -0.73 ** | -0.72 ** | -0.39 ** |
| Urbanization ratio | -0.06 ** | -0.10 * | -0.19 ** |
| Public spending/GDP 2/ | | 0.21 | |
| Industry/GDP | 0.58 ** | 0.52 ** | 0.53 ** |
| Constant | | | -58.67 ** |
| Dummies for decades | * | | |
| Dummies for 5 year periods | | | * |
| Adjusted R-squared | 0.49 | 0.45 | 0.86 |
| S.E. of regression | 10.05 | 6.77 | 5.08 |
| Akaike info criterion | 7.46 | 6.73 | 6.27 |
| Schwarz criterion | 7.51 | 6.92 | 7.25 |
| Durbin-Watson stat | 0.41 | 0.50 | 1.26 |
| Number of observations | 995 | 96 | 896 |

Cross country regressions

- Regression results (S and I)
- Projections for determinants
- → modest decrease in S and I in next 2 decades,
- with ambiguous impact on the current account

2. Impact of policy adjustments

- On account of “structural developments”, little change in S , I , and $S-I$
- China’s high saving largely rooted in policies
- → What would be impact of policy changes?
 - Go through mechanics, look at size of relevant flows

Impact of policy adjustments

- Dividend policy
- Shifting government spending
 - Phase out capital transfers
 - Increasing government spending h,e,s
 - Indirect effect on household saving
- Financial market reform

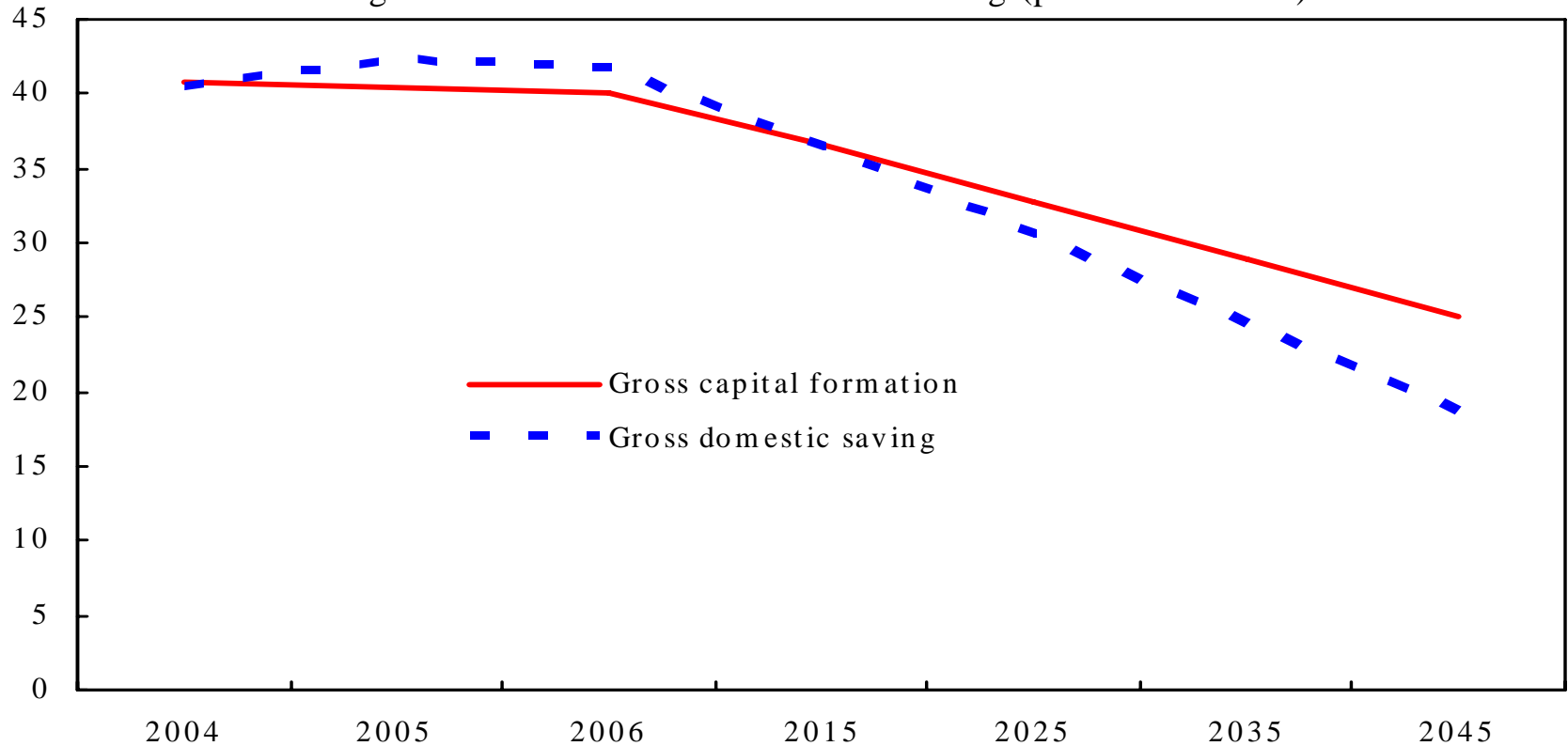
Impact of policy adjustments

| | Demo- graphics | Dividend policy | Shift government spending | | | Financial market reform | Rebalan- cing economic structure | Total |
|---------------------------|-------------------|--------------------|---------------------------|--|--------------------|-------------------------------|---|-------|
| | | | Capital transfer | Increasing government spending health/educ. | Indirect effect | | | |
| China | | | | | | | | |
| S | 0 | -3 | 0 | -5 | -2 | -3 | -5 | -18 |
| I | 0 | -2 | -3 | 0 | 0 | -1.5 | -5 | -11.5 |
| S-I | 0 | -1 | 3 | -5 | -2 | -1.5 | 0 | -6.5 |
| Memorandum items, in 2005 | | | | | | | | |
| S | | 46 | | | | | | |
| I | | 40 | | | | | | |
| S-I | | 6 | | | | | | |

Source: author's estimates.

Saving and Investment would both decline

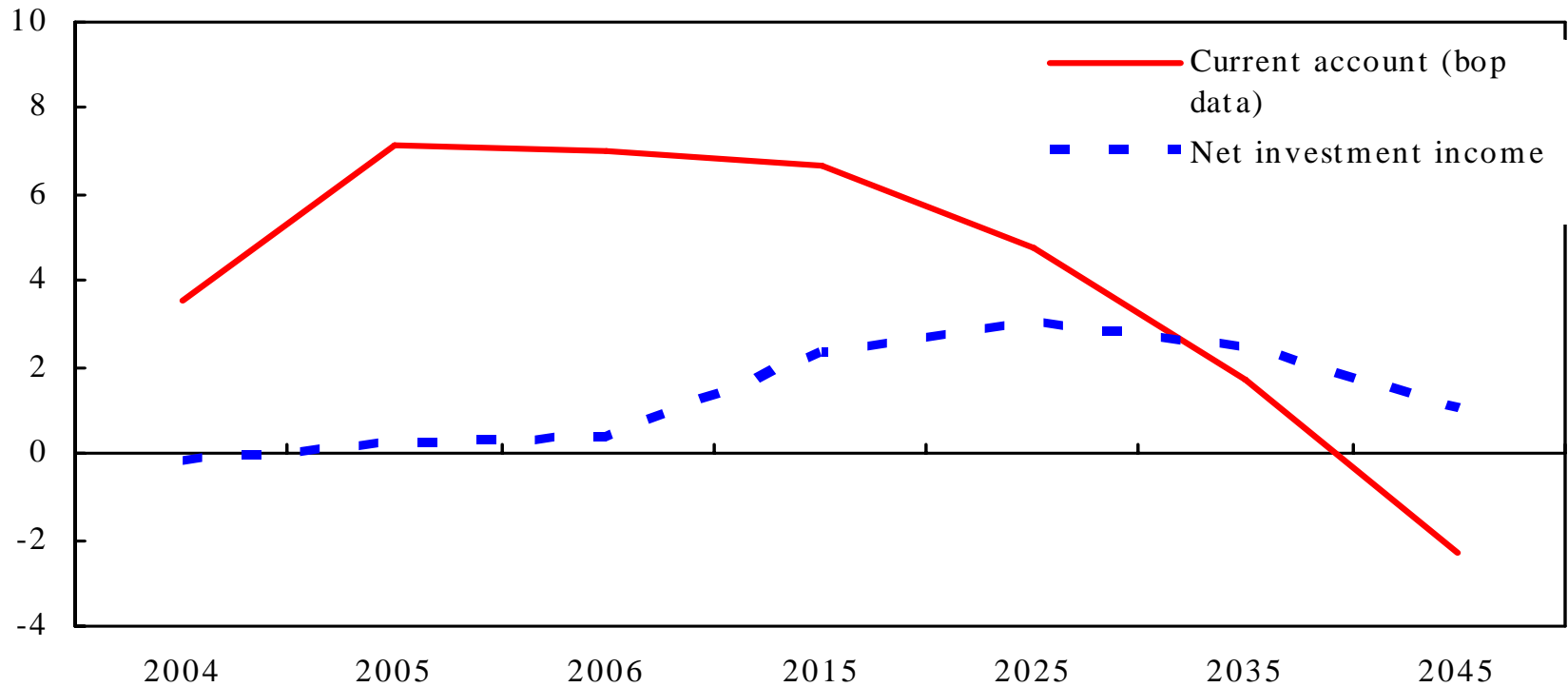
Figure 1. China: Investment and saving (percent of GDP)



Source: NBS, and author's estimates.

The current account surplus would also decrease

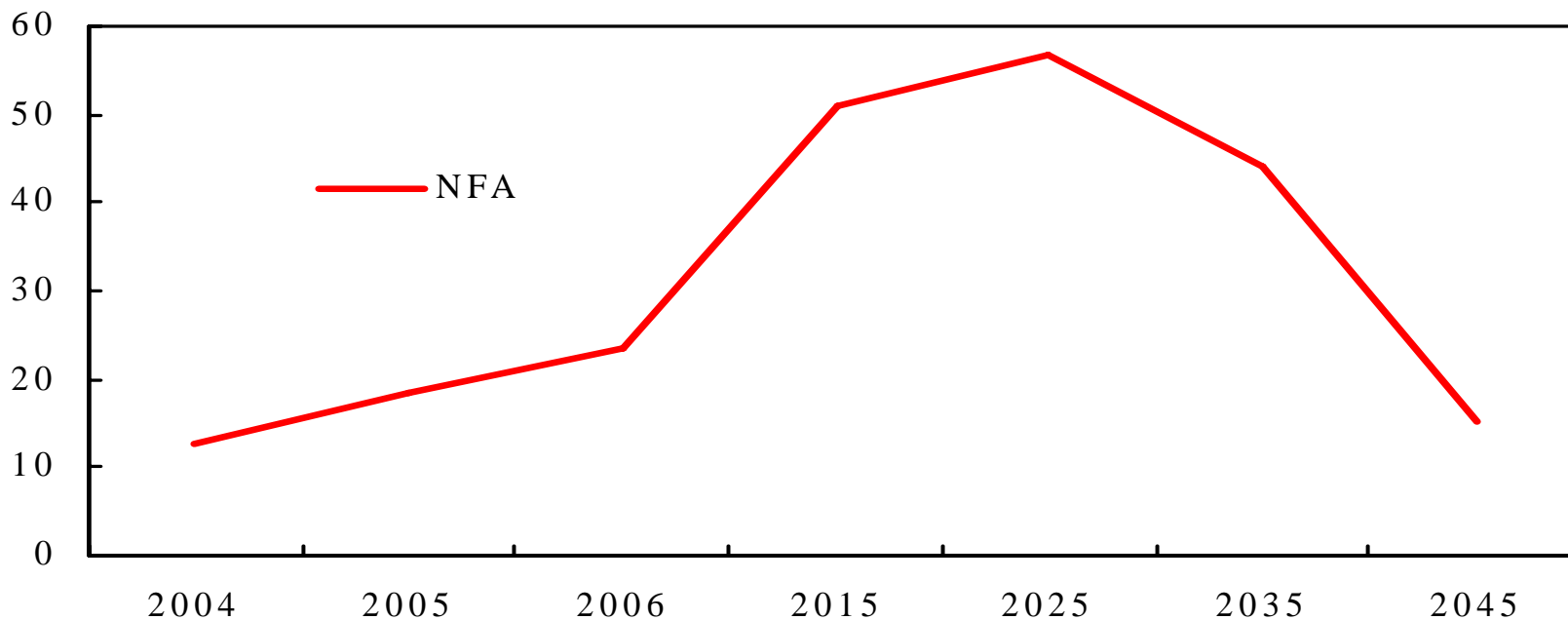
Figure 2. China: External flows (percent of GDP)



Source: NBS, and author's estimates.

China would continue to have positive NFA

Figure 3. China: Net Foreign Assets (percent of GDP)



Source: NBS, and author's estimates.

Conclusion and summary

- Household S in China is higher than in OECD.
- But high enterprise and government S are key.
- Cross country regressions: I and S are higher than expected, even if adjusted for differences in economic structure. →
- China's high saving is largely the result of particular policies.
- Looking ahead, looking at structural developments (not policy), S and I would decline only mildly in the coming 2 decades, with ambiguous impact on the current account surplus.
- The effect on S, I, and S-I of policy adjustments could be large. →
- But the current accountsurplus is unlikely to turn into a deficit soon.