



Australian
National
University

CRAWFORD
SCHOOL



Crawford School Dialogue

Asia's Economic Transformation:

Implications for Australia

Presented by the Arndt-Corden Department of Economics and the Crawford School

Tuesday, 12 March, 2011

Weston Theatre, J G Crawford Building 132, Lennox Crossing, ANU

Crawford School Dialogue
Asia's Economic Transformation



Australian
National
University

Japan

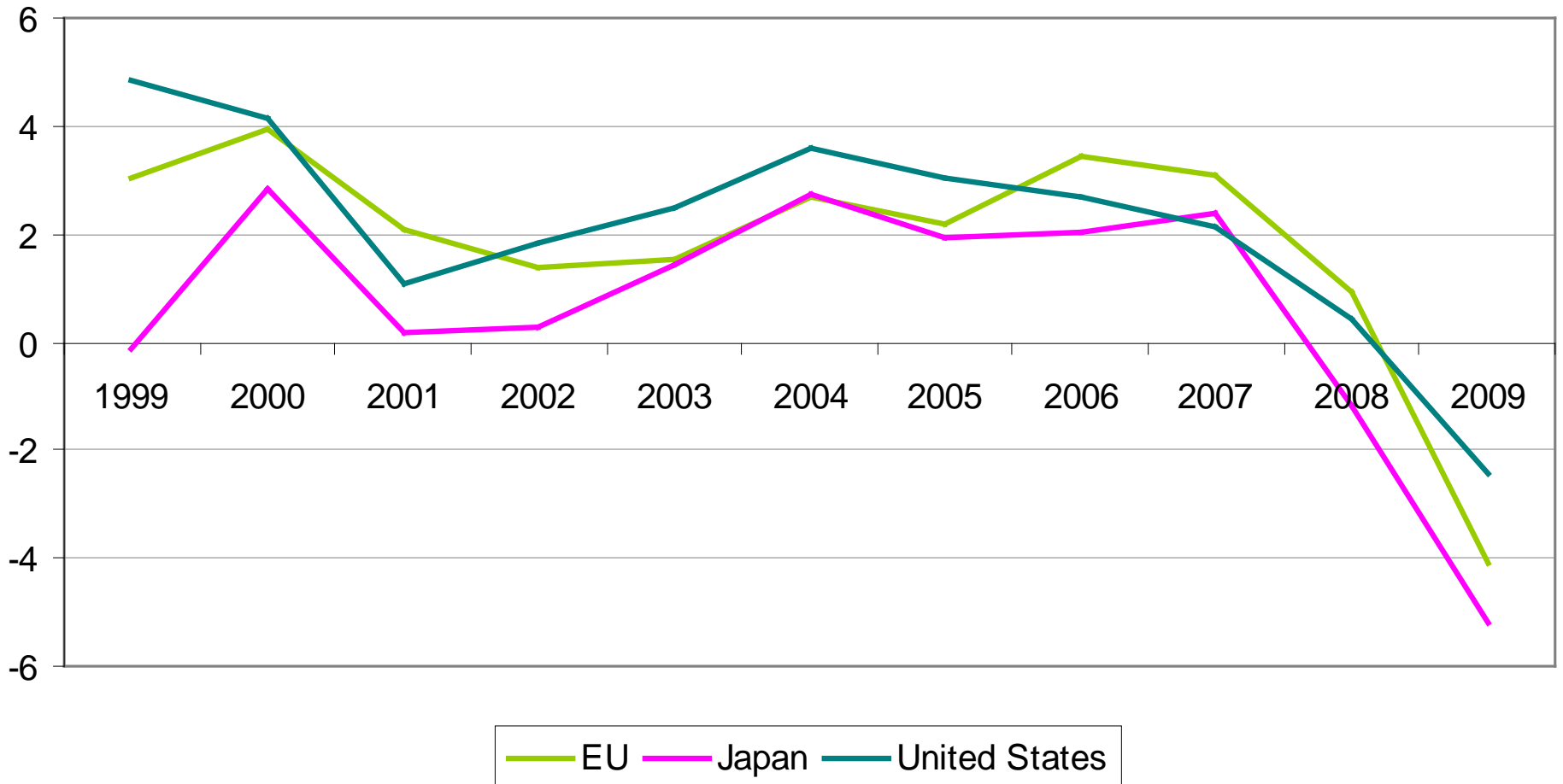
Jenny Corbett

Crawford School of Economics and Government

- Japan's economic situation: strengths and weaknesses
- Prospects before the disaster
- Connection to the region
- Impact of the disaster
 - In Japan
 - In the region
- Implications for Australia

Japan was recovering pre GFC

The Real GDP Growth





- **Strengths**

- Longest sustained post-war expansion 2001-6, despite yen strength.
- Growth sources balanced.
- Financial system reform in place. Corporate governance reforms gradually taking place.
- Govt debt domestically held.

- **Weaknesses**

- Demography.
- Mixed Productivity and below-potential growth.
- Govt debt still growing.
- Lack of policy direction – pernicious deflation.

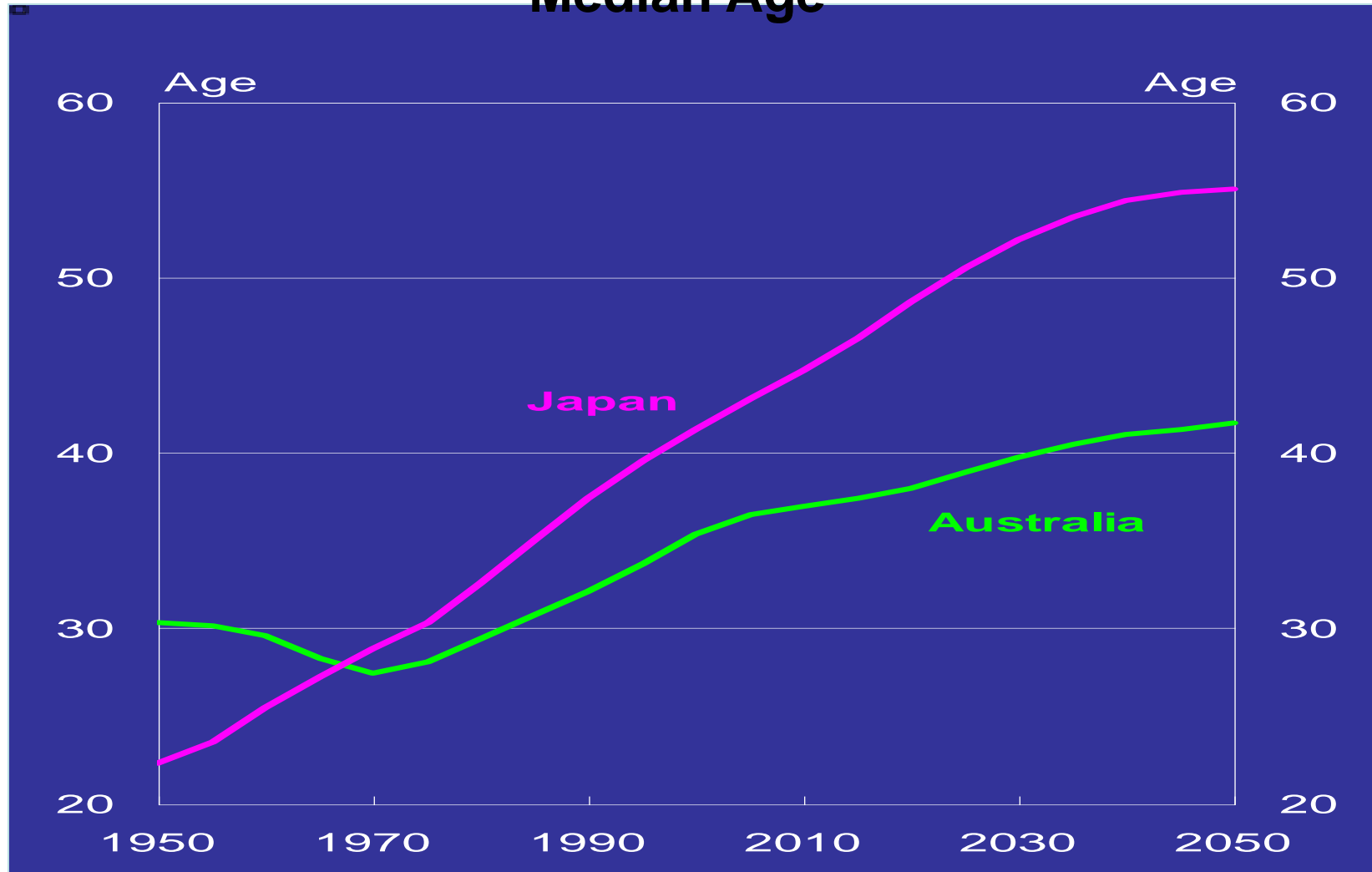
Crawford School Dialogue

Asia's Economic Transformation



Australian National University

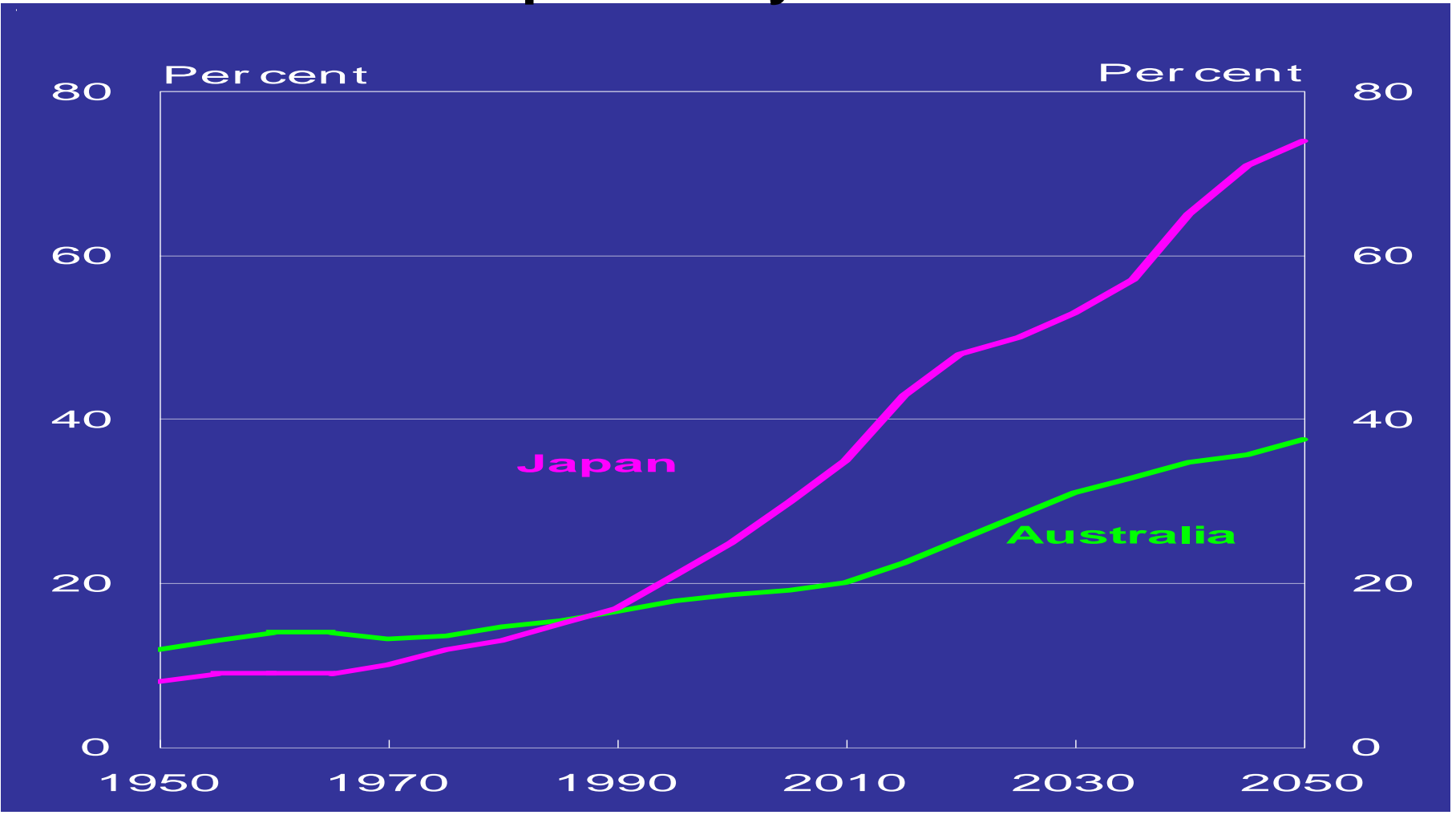
Median Age



Source: IGR 2010 and UN World Population Prospects: 2008 revision (median growth scenario) cited in speech by Dr Ken Henry to the Australia-Japan Roundtable Sydney Sept 30, 2010



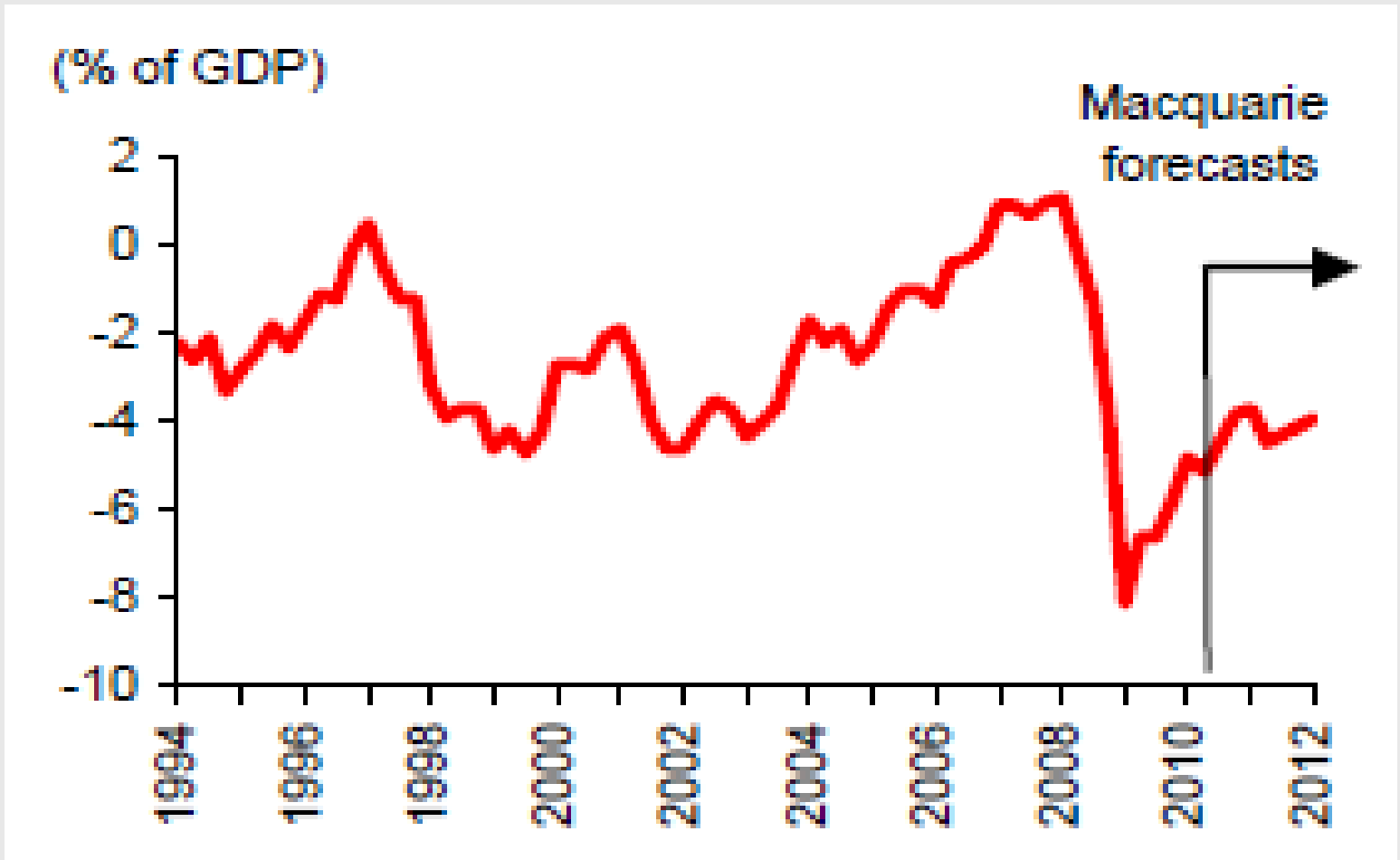
Dependency Ratio



Source: IGR 2010 and UN World Population Prospects: 2008 revision (median growth scenario) cited in speech by Dr Ken Henry to the Australia-Japan Roundtable Sydney Sept 30, 2010



Output gap remains wide



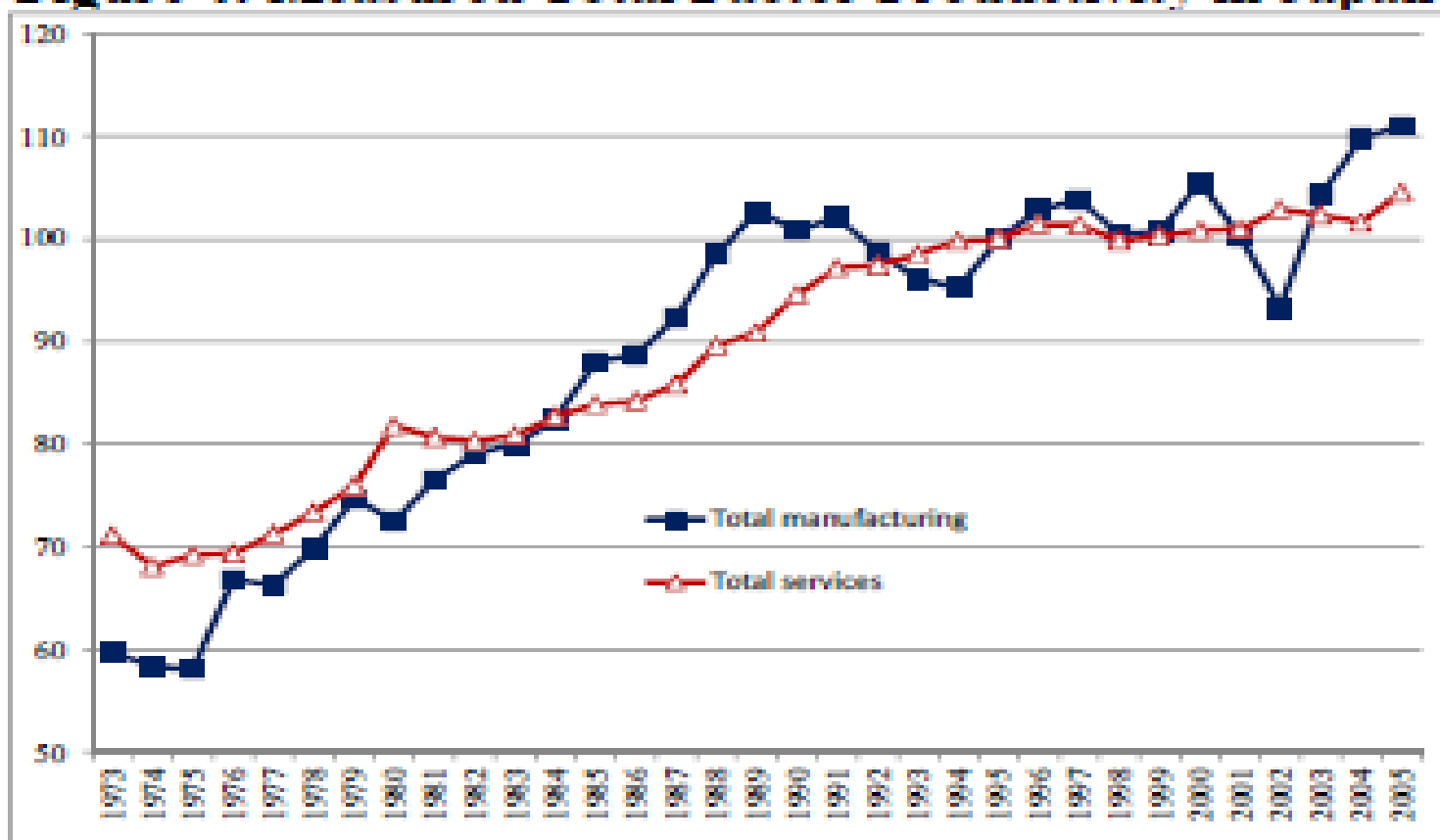
Source: CAO, Macquarie Research, August 2010

Table 1.4. Labour productivity growth by sector
 Average annual growth per year

Industry	ISIC code	1976-89	1989-2002	2002-05	Change from 1989-2002 to 2002-05
Manufacturing		6.0	1.9	7.5	5.7
Total services	40 to 99	2.1	1.7	1.8	0.1
Market services	40 to 74	2.2	1.8	2.3	0.5
Non-market services	75 to 99	1.6	1.2	-0.6	-1.8
Total economy	1 to 99	3.6	1.9	2.3	0.4

Source: 2009 EU KLEMS Database.

Figure 4: Measured Total Factor Productivity in Japan^a



^a These are indices of Japanese total factor productivity, 1995=100. Sectoral value-added productivity figures are constructed from less aggregated industry data using Törnqvist indices with value added weights.

Source: EU KLEMS database (<http://www.euklems.net/>, March 2008).

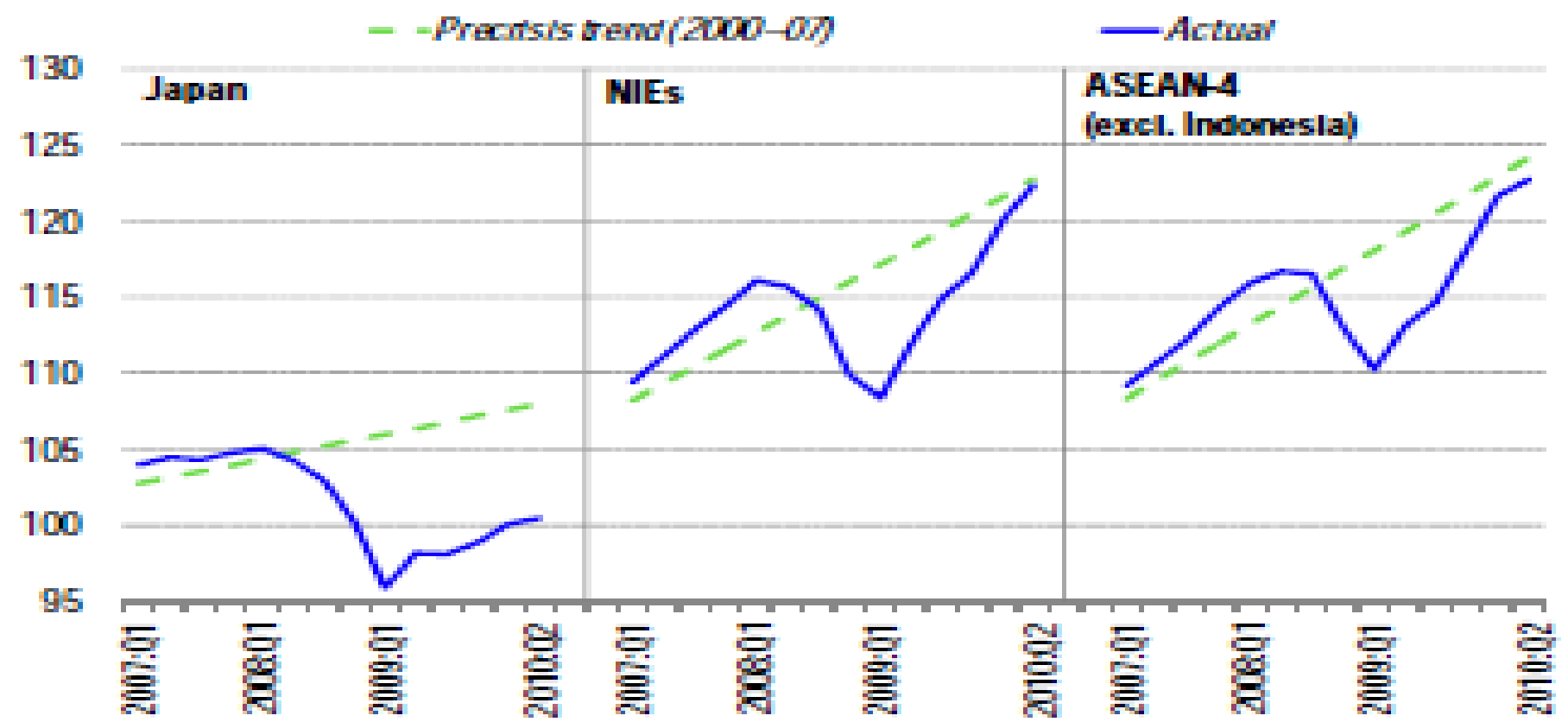
Source: Tyers and Zhang, 2011, Japanese Economic Stagnation: Insights from Real Multi-Region Dynamics, conference paper at AJRC, ANU, March 2011

Growth Outlook at end 2010

- Industrial production grew 15.4% y-o-y to August 2010
- Prices falling -0.8% over 2010
- Unemployment 5.2%
- Oct 2010 consensus for 2010: 2.7% – 3.0% (IMF 2.8%)
 - US 2.7%, UK 1.5%, Australia 3.1%
- Consensus 2011: 1.3% – 1.7% (IMF 1.5%)



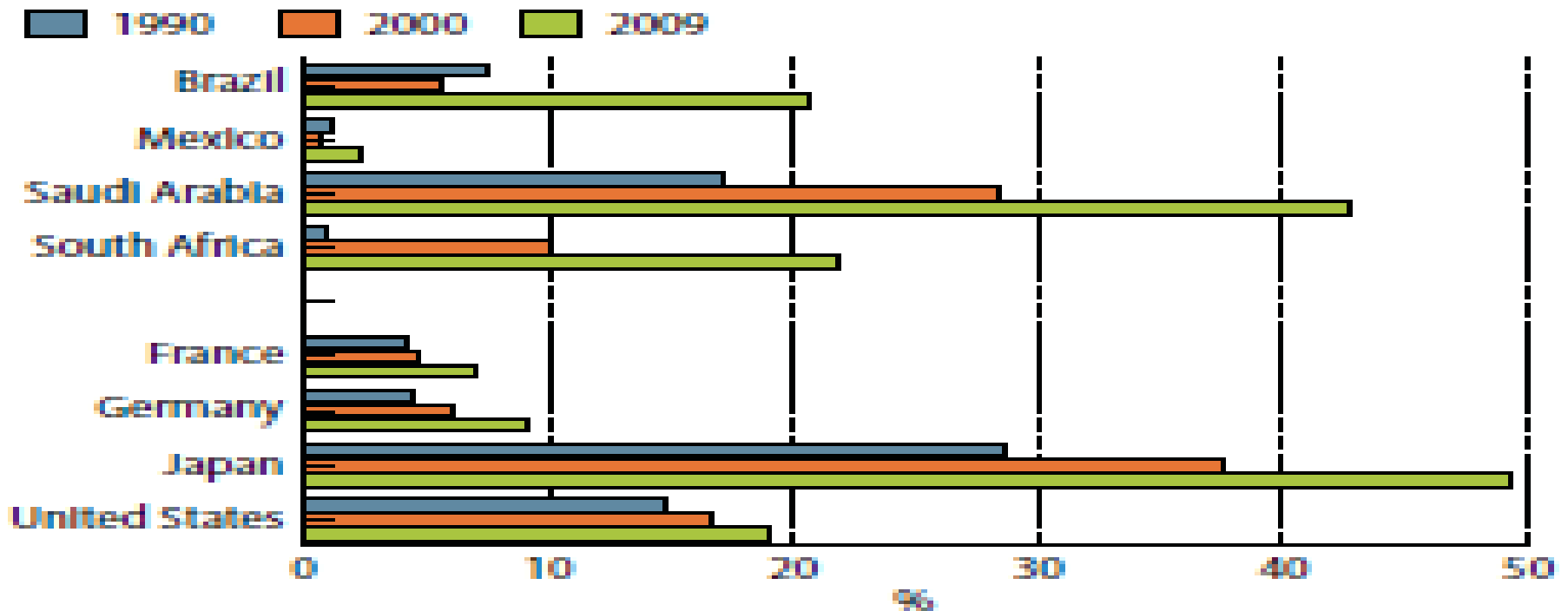
Figure 1.2. Export-Oriented Asia: Real GDP
(2005 = 100; seasonally adjusted)



Sources: CEIC Data Company Ltd.; and IMF staff calculations.

Japan in the Asian region

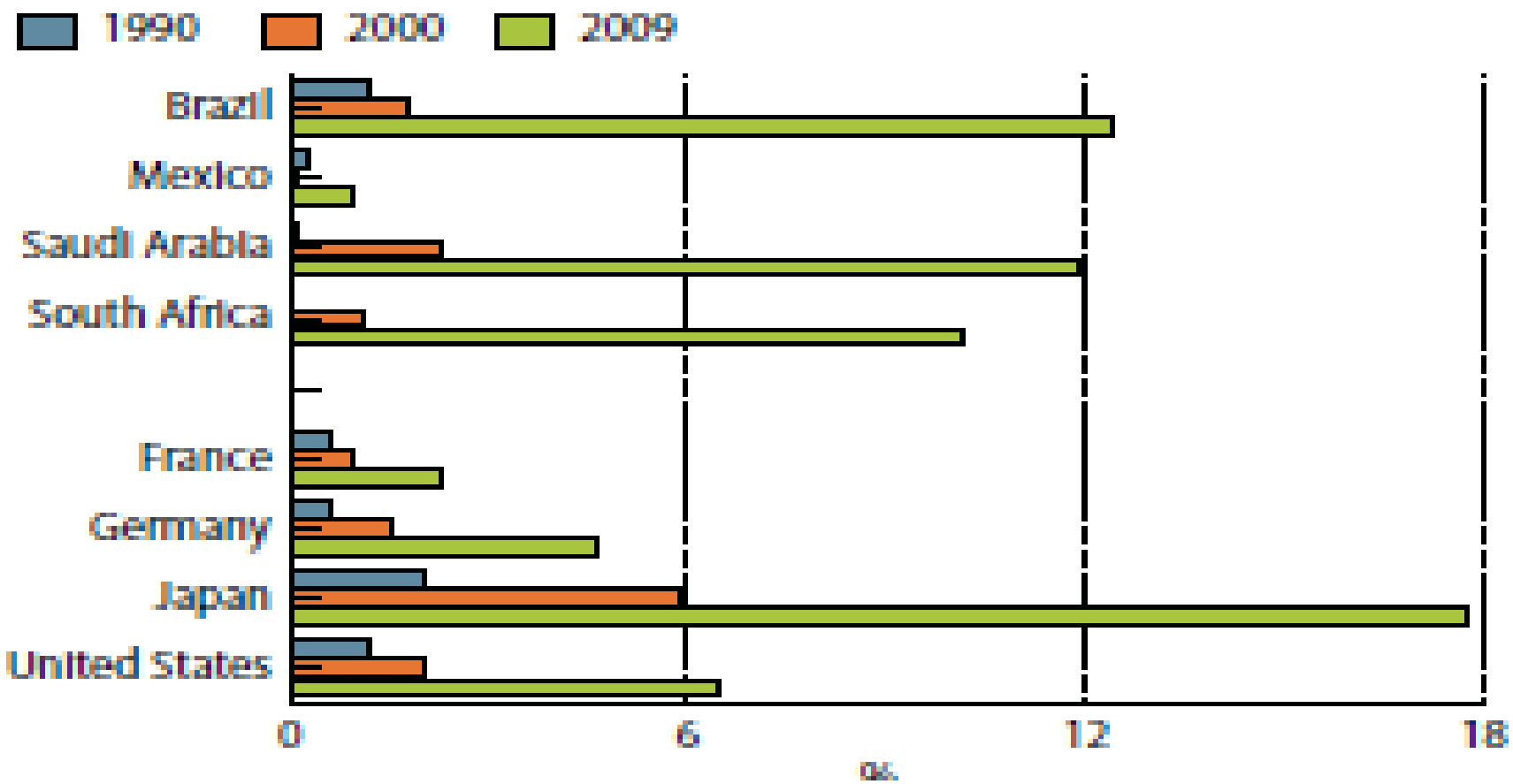
1.1.14 Share of exports to Asia-10 in total exports, eight economies



Note: Asia-10 are China, People's Rep. of; Hong Kong, China; India; Indonesia; Korea, Rep. of; Malaysia; the Philippines; Singapore; Taipei, China; and Thailand.



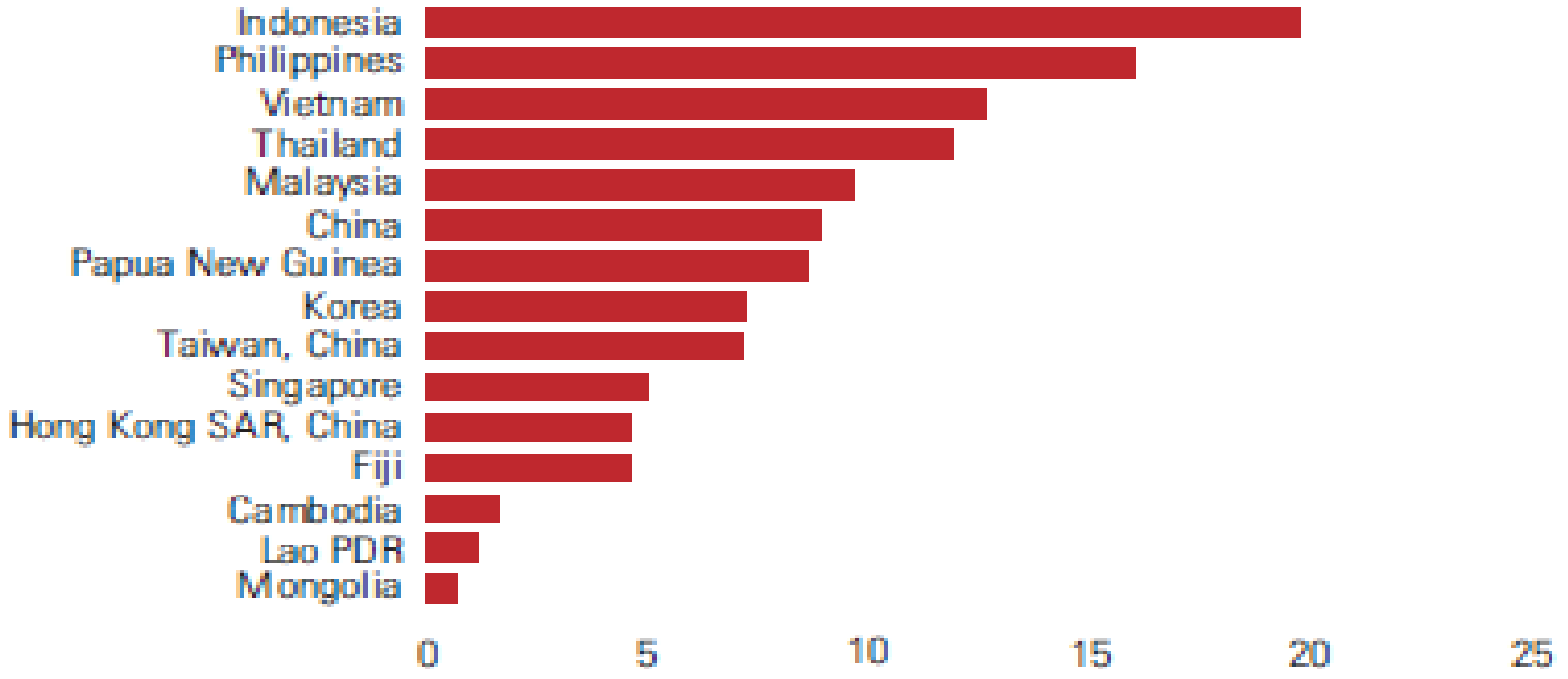
1.1.15 Share of exports to the PRC in total exports, eight economies





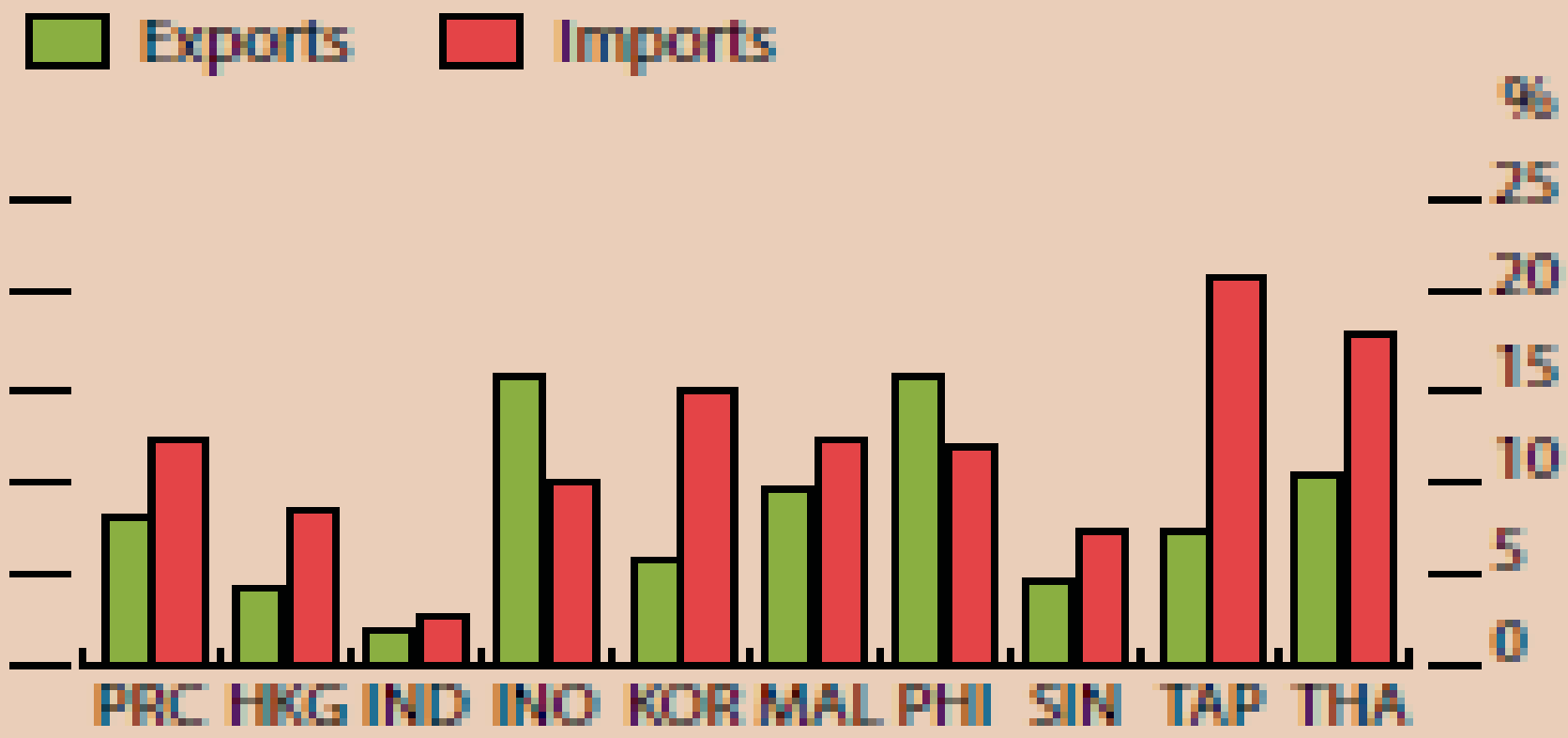
On average, exports to Japan account for about 10 percent of East Asia's total exports

in percent of total



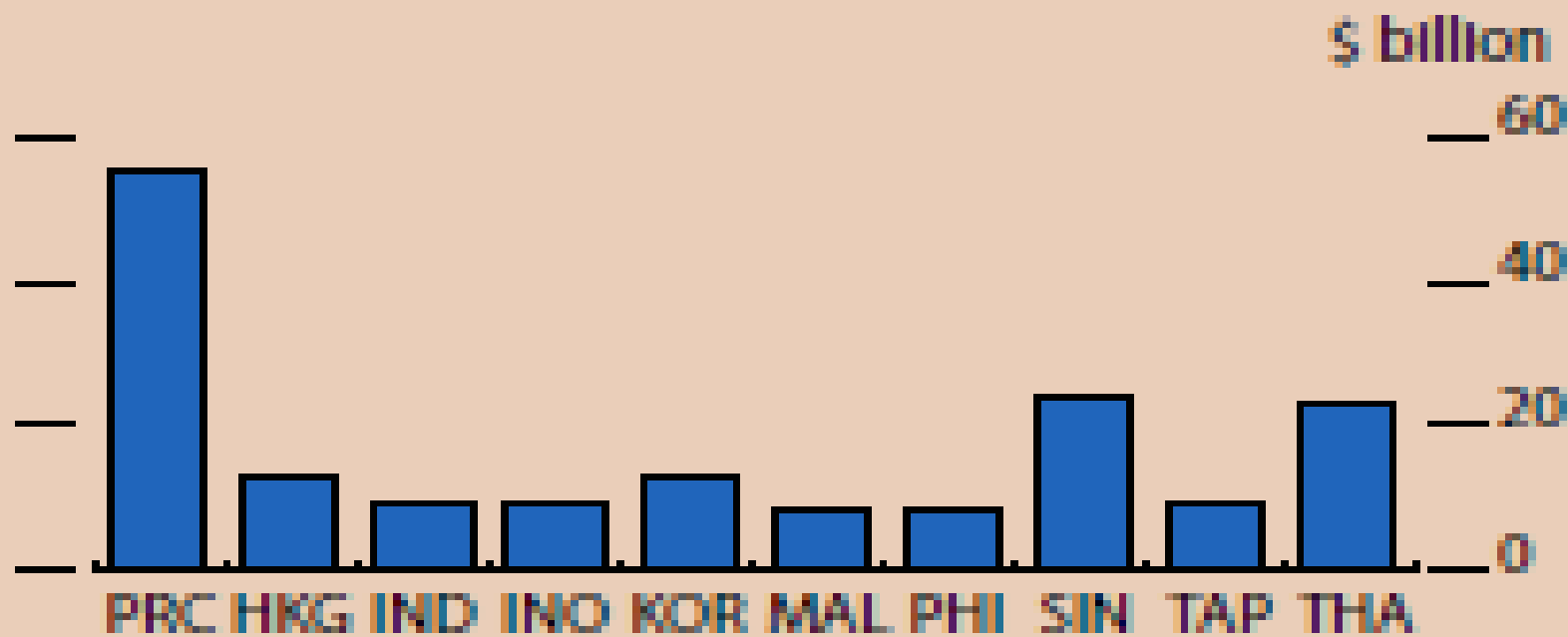
Source: IMF Direction of Trade Statistics.

1 Share of Japan in exports and imports, 2009



Source: ADB, Asian Development Outlook 2011

2 Japan's outward FDI stock, end-2009



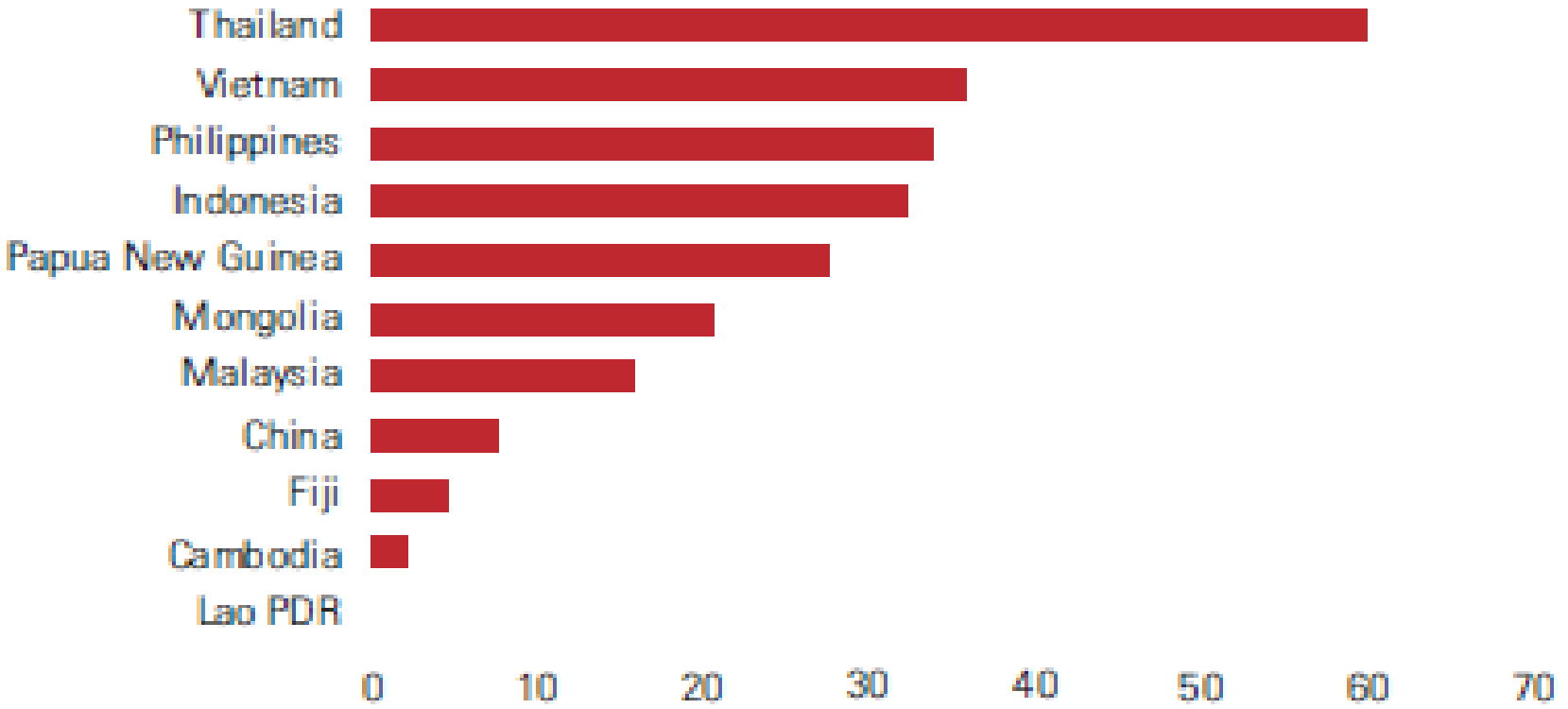
Note: For country acronyms, see box figure 1.

Source: Japan External Trade Organization.



Governments have a significant share of external debt denominated in yen

in percent of total government external debt



Source: Haver.

IMPACT OF THE EARTHQUAKE

The March 11, 2011 northeast earthquake and the 1995 Kobe earthquake: some comparisons

	March 11, 2011 northeast earthquake and tsunami - estimates	The 1995 Kobe earthquake
Damage	Estimates range from \$122 to 235 billion (2.5 to 4 percent of GDP)	\$100 billion (around 2 percent of GDP)
Death toll	15,214 (dead and missing)	6,434
Cost to private insurance	\$14-33 billion*	\$783 million
National budget for reconstruction	\$12 billion from current budget. Much more in FY2011.	\$38 billion over 2 fiscal years

Sources: Government of Japan and private estimates and projections as of March 17, 2011.

Note: * AIR World estimate.

Damage estimates

- Damage could be from 16 trillion yen (\$200 billion) to as much as 25 trillion yen (\$309 billion) - an amount almost four times the cost of Hurricane Katrina on the U.S.
- This is close to 6% of GDP, compared with around 2% of GDP damage from Kobe earthquake and *does not include impact of ongoing **radiation-related** damages*
- But also does not account for rebuilding effects – CAO is much more optimistic

Crawford School Dialogue

Asia's Economic Transformation



Australian
National
University

		FY 2011						FY 2012		FY 2013			
		First half			Second half								
Stock	Damages to the stocks (Social capital, Housing, Private plant & equipment)	around 16~25 trillion yen											
Flow	Impact on GDP in the disaster area												
	Decline in production due to the damage done on private plant & equipment	$-1\frac{1}{4}$	~	$-\frac{1}{2}$	$-1\frac{1}{4}$	~	$-\frac{1}{2}$	$-2\frac{1}{4}$	~	$-1\frac{1}{4}$	$-2\frac{1}{4}$	~	$-1\frac{1}{4}$
	Impact on GDP in the non-disaster area (1)												
	via supply-chain connections	$-\frac{1}{4}$	~	$-\frac{1}{4}$ (*2)	—			—			—		
	Impact on GDP in the non-disaster area (2)												
	via constraint on electric power supply ^(*3)		$-\alpha_1$			$-\alpha_2$			$-\beta$			$-\gamma$	
	Impact of Reconstruction of damaged stocks (assuming a scenario where reconstruction takes 3 years)												
	Increase in production corresponding to the gross fixed capital formation ^(*4)	2	~	3	3	~	5	6	~	$9\frac{1}{2}$	5	~	$7\frac{3}{4}$
	Total impact on GDP	$\frac{1}{2}$	~	$2\frac{1}{4}$	2	~	$4\frac{1}{4}$	$3\frac{3}{4}$	~	$8\frac{1}{4}$	$2\frac{3}{4}$	~	$6\frac{1}{2}$
			$-\alpha_1$			$-\alpha_2$			$-\beta$			$-\gamma$	
	In percent of real GDP (annualized)	$\frac{1}{4}$	~	$\frac{3}{4}$	$\frac{3}{4}$	~	$1\frac{1}{2}$	$\frac{3}{4}$	~	$1\frac{1}{2}$	$\frac{1}{2}$	~	$1\frac{1}{4}$
			$-\alpha_1$			$-\alpha_2$			$-\beta$			$-\gamma$	

Impact in the region

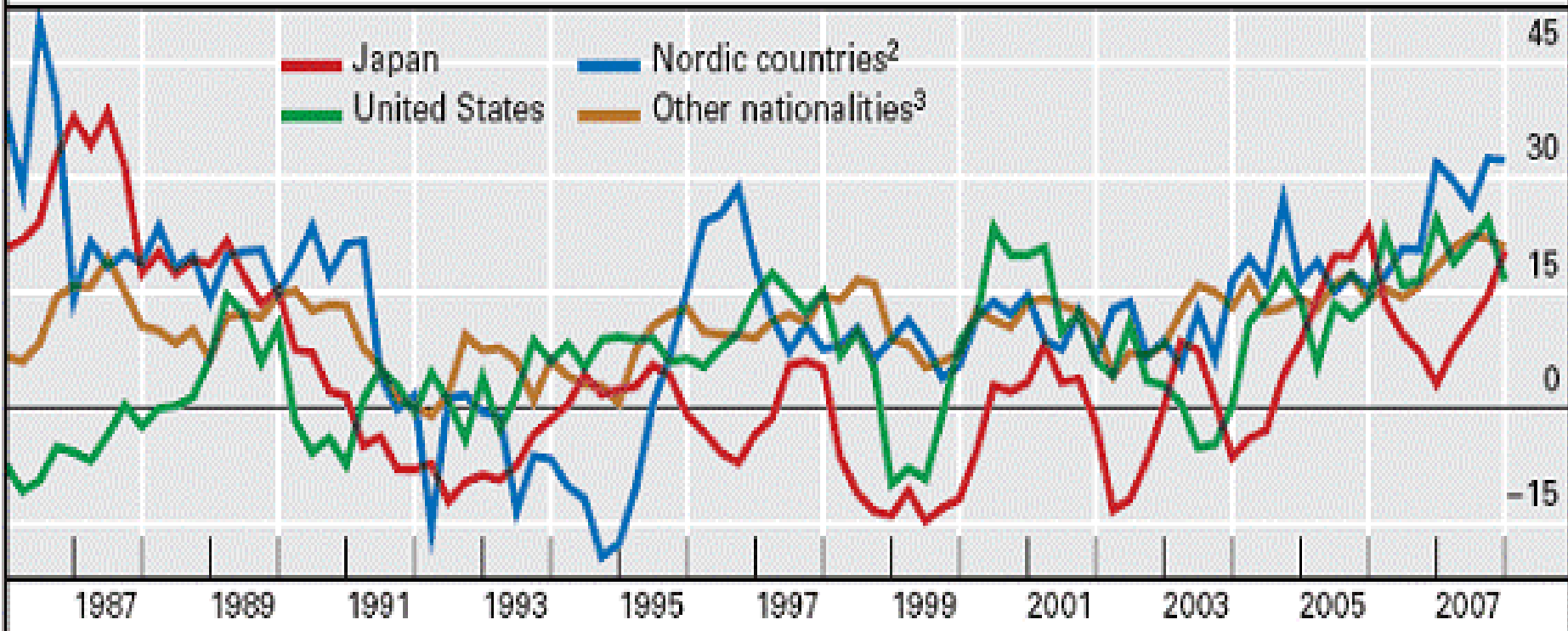
- Trade links – if J growth slows by 0.25- 0.5 % exports from EA slow by 0.75 to 1.5% (World Bank) plus production chain effects
- Financial flows – banks, portfolio investment, FDI?, aid?
- Exchange rate valuations on govt debt held in yen. 1% appreciation causes 0.25% rise in debt service ratio for region.
- Food and commodity prices?



Japan's banks' cross-border lending has grown

International lending and interbank exposures

Growth in international claims, by bank nationality¹



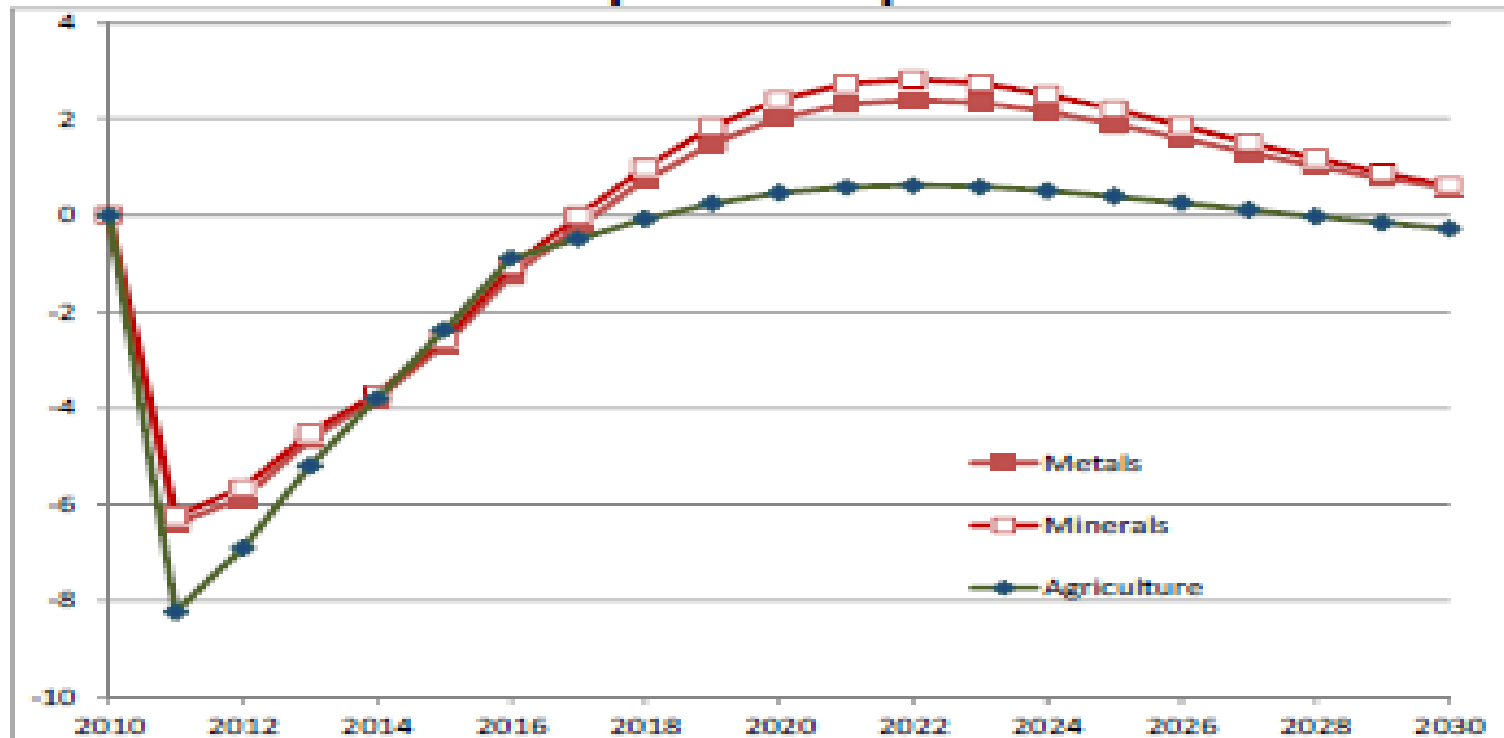
Source http://www.roubini.com/analyst-monitor/252901/cross-border_bank_lending_and_international_exposures_who_s_most_exposed_to_the_u_s_

IMPLICATIONS FOR AUSTRALIA

- Treasurer has warned of bad effects from declining exports – why?
- If no reconstruction takes place and Japan's GNP drops drastically this could occur but
- More likely that recovery will begin by 3rd or 4th quarter if fiscal spending starts soon.
- And can expect increased demand for commodities (coal, LNG, steel) and food to replace lost production.

A worst case scenario – with no fiscal spend and a savings rise

Figure A8: Simulated Effects of the March Earthquake on Australia's Exports to Japan^a



^a This shows per cent departures from a baseline simulation due to the March 2011 earthquake and tsunami in Northern Honshu. Note that the fall in investment is comparatively large and so it is shown in the RHS.

Source: Simulations of the model described in the text.