

# A Snapshot of Asia in 2005: Purchasing Power Parity

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# Some Questions to the Audience

- Which are the largest and smallest economies in Asia?
- Which are the richest and poorest economies in Asia?
- How long is it likely to take the poorer economies to catch up?
- What is the relative level of economic well-being among Asian countries?
- Where are the best shoes and clothes worn?
- What are the relative costs of living in Asia?

# Asian Example of PPP: Happy Shopping in India

Country	Local Currency Price	Exchange Rate (to HK\$)	PPP (HK\$ numeraire currency)	PLI (base HK\$=100)
Hong Kong, China	HK\$ 2.00	1.00	1.00	100
India	Rp 5.16	5.67	2.58	46

# The Big Mac Index

- *The Economist's* celebrated *Big Mac Index* represents the PPP concept in a simplified form.
- The Big Mac hamburger is consumed in 120 countries. The Economist compares its price in different global cities to estimate PPPs.
- The Big Mac PPP for the Philippines is the exchange rate that equalizes the cost of a Big Mac in America.
- The Big Mac Index is an rough approximation of the purchasing power of currencies.

# Big Mac Index for the US and the Philippines

Country	Local Currency Price (Feb 2007)	Exchange rate (to US\$)	PPP (US\$ numeraire currency)	PLI (US=100)
United States	US\$ 3.22	1.00	1.00	100.00
Philippines	₱ 85.00	45.18	26.40	58.43

# Shortcomings of Exchange Rates: Indonesia

- **Currency speculation and short-term capital movements caused exchange rates to fluctuate during the Asian financial crisis.**
- **Indonesia's market-rate-based GDP per capita declined from US\$1,600 in 1997 to US\$530 in 1998.**
- **Massive decline of 67% without a significant change in economic fundamentals**

# Shortcomings of Exchange Rates: Japan vs US

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- The use of exchange rates suggests that:
  - In 1985, Japan's GNP per capita was 64% that of the USA
  - By 1995, this figure had shot up to 152%
- This was not the result of a significantly superior performance by the Japanese economy.
- The real reason was a 250% appreciation of the Japanese yen.
- Then between 1995 to 2004, Japan's per capita GNP *apparently* dropped to 90% of the US.
- The real reason was a depreciation of the Japanese yen.

# PPPs are more appropriate currency converters than exchange rates

- Exchange rates do not reflect actual purchasing power of currencies.
- Exchange rates cannot measure parity or equivalence.
- PPP is the number of currency units of another country that is required to purchase the amount of goods and services equivalent to what can be bought with one unit of currency in the base country.

# 2005 ICP: *Beyond the Big Mac Index*

- The International Comparison Program (ICP) prices
- 800 Goods & Services
- Covering whole GDP, e.g. *Food, Clothing, Capital Formation*
- *Not* the Big Mac as one single indicator
- The program is organized by regions & managed by regional agencies

# The program is organized by regions & managed by regional agencies

- The ICP surveys are carried out in:
  - Asia-Pacific
  - Africa
  - Commonwealth of Independent States
  - OECD/EU countries
  - Latin America
  - Western Asia
- Asian Development Bank is the regional coordinator for Asia and the Pacific
- At the global level, the 2003-2007 ICP Round is managed by the World Bank

# The Essentials of ICP

- World's largest data collection initiative: 140+ countries, all regions
- The ICP produces:
  - Internationally comparable price levels
  - Economic aggregates in real terms
  - Purchasing Power Parity (PPP) estimates

# The Essentials of ICP

- PPP-based data are more precise measures of the:
  - Relative economic development
  - Relative sizes of markets
  - Relative purchasing power of currencies

# Hong Kong Dollar as the Reference Currency

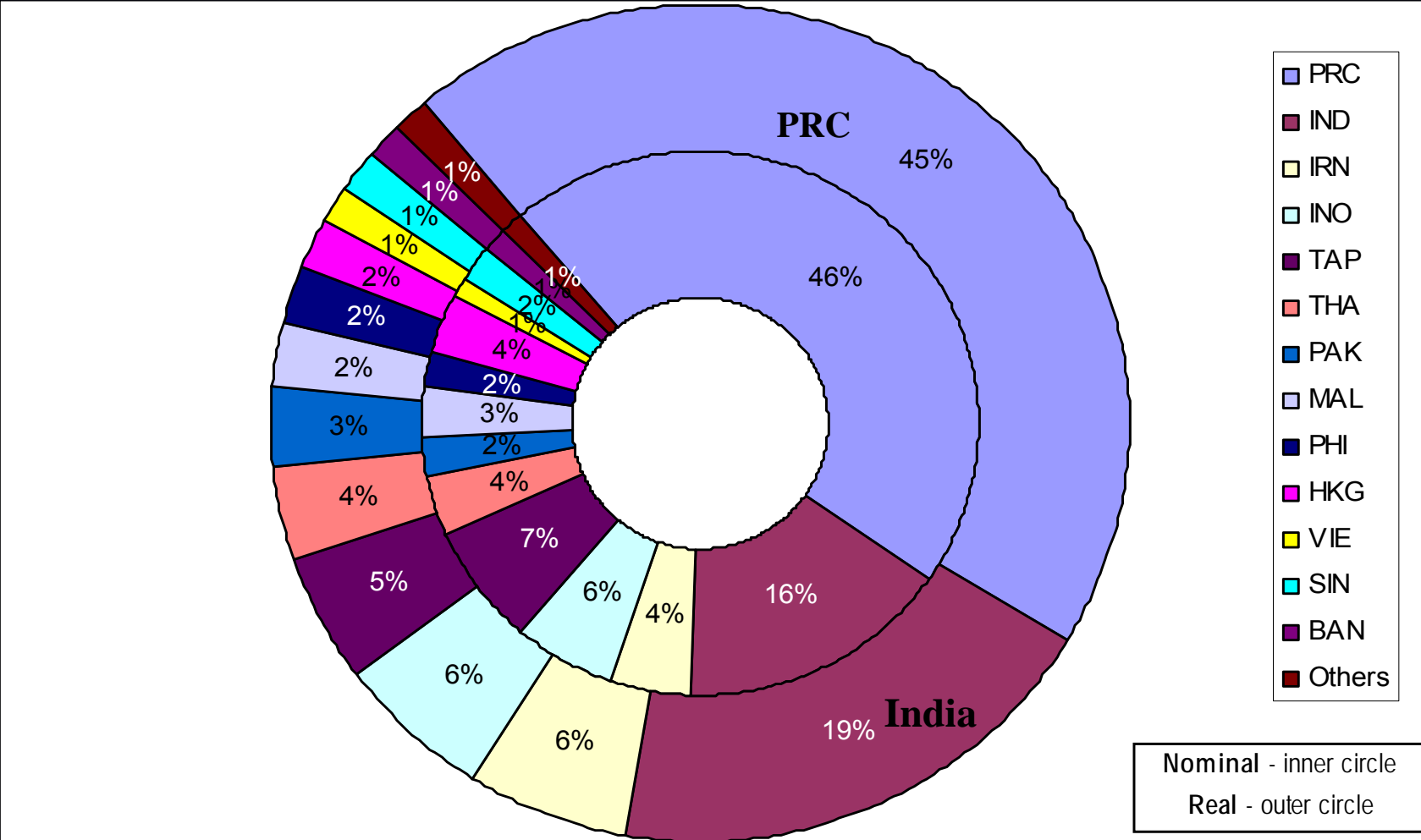
- The currency unit used for Asia and the Pacific region comparison is the Hong Kong dollar.
  - Broad-based economy: prices are available for many products
  - Strong statistical system for both prices and national accounts
  - HK\$ well-recognized in the region
- Relativities between countries are not affected by the reference or numeraire currency chosen.

# Comparative Exchange Rates, Purchasing Power Parity and Price Level Indices of Select Economies, 2005

Economy	Exchange rate (LCU/HK\$)	PPP (Hong Kong, China = 1.000)	PLI (Hong Kong, China = 100)
Hong Kong, China	1.00	1.000	100
Singapore	0.21	0.189	88
Taipei, China	4.14	3.407	82
Malaysia	0.49	0.305	63
PRC	1.05	0.599	57
Indonesia	1,247.82	690.583	55
Thailand	5.17	2.800	54
Philippines	7.08	3.828	54
India	5.67	2.583	46
Pakistan	7.65	3.351	44
Viet Nam	2,039.12	821.174	40
Lao, PDR	1,370.03	522.475	38

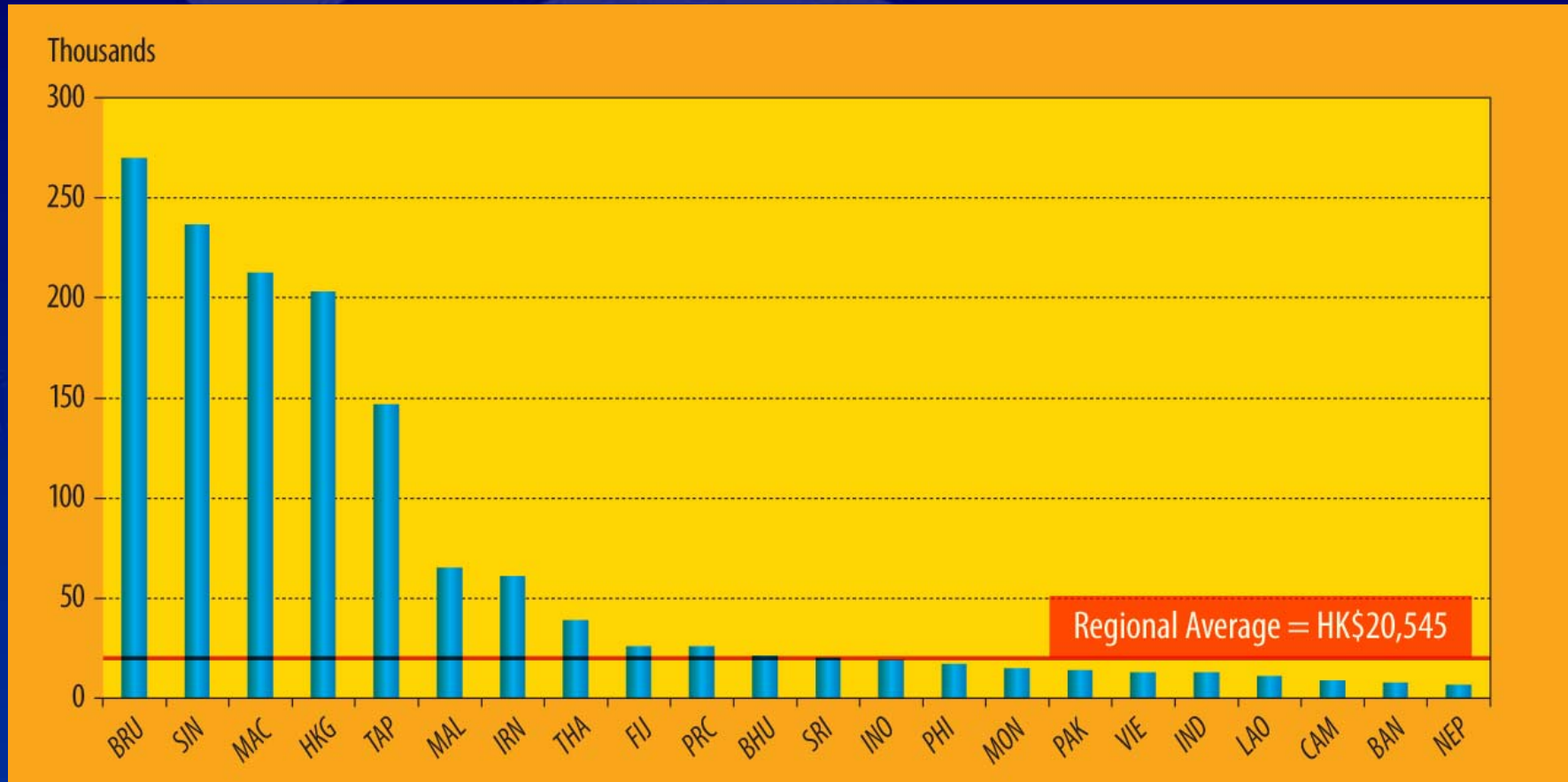
# Largest and Smallest Economies of Asia-Pacific

Figure 1: Nominal and Real GDP:  
Country Shares in Asia, 2005



## Divergence between Rich and Poor Countries is Striking

(Per Capita Real GDP, 2005, HK\$)

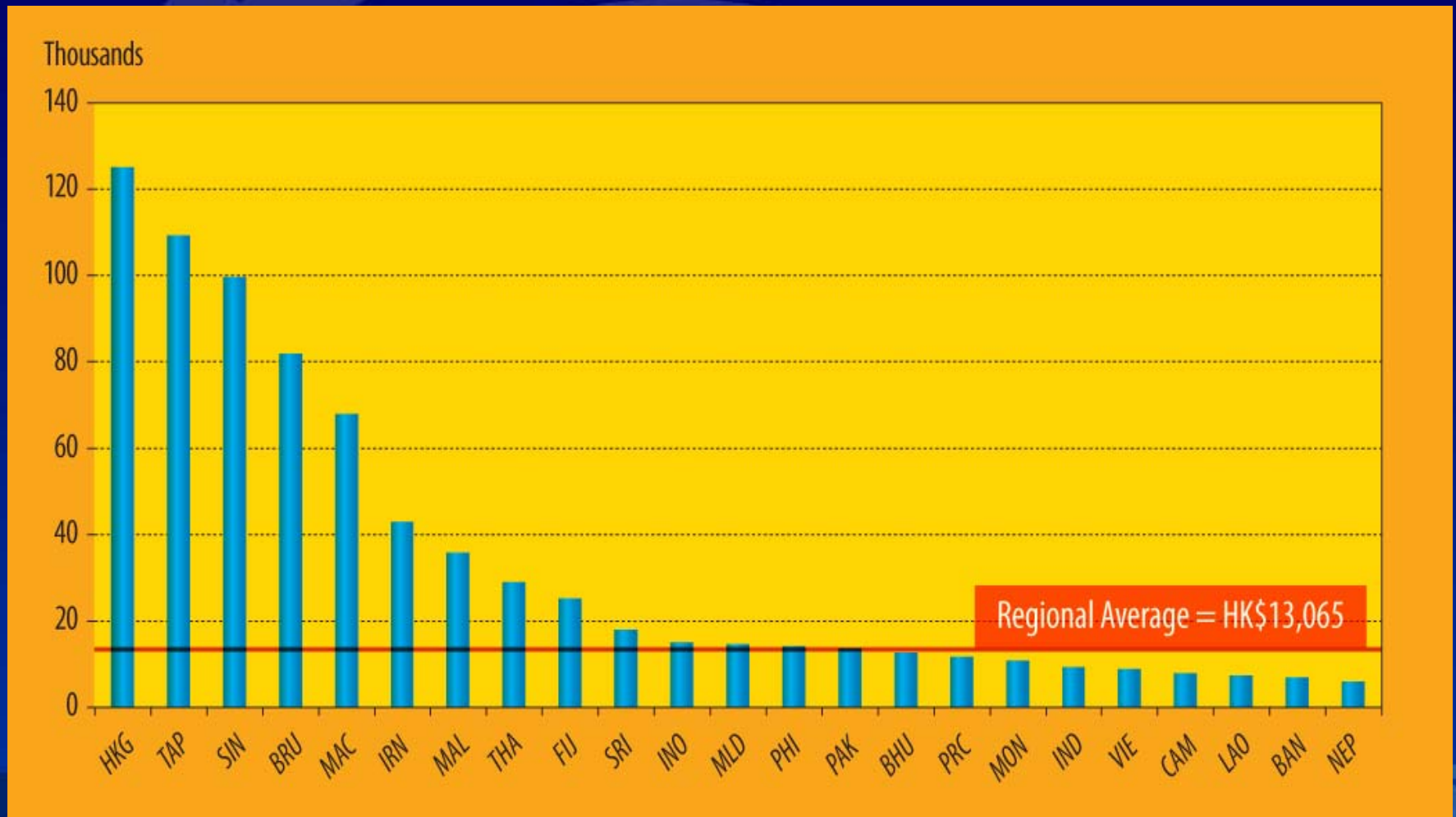


# Convergence of Per Capita GDP: Years Needed for Catch up

	Average Per Capita GDP Growth Rate (%)	Required No. of Years
PRC to reach \$HK 100,000	9.2	16
PRC to reach Brunei	9.2	28
India to reach \$HK 100,000	6.5	33
India to reach Brunei	6.5	49
Lao PDR to reach Malaysia	3.9	49
Philippines to reach Brunei	3.7	77
Philippines to reach Thailand	3.7	23

# Range of Economic Well-Being Very Wide

(Per Capita Real Actual Final Consumption of Households, 2005, HK\$)



## **Range of differences in per capita real AFCH is lower than per capita real GDP**

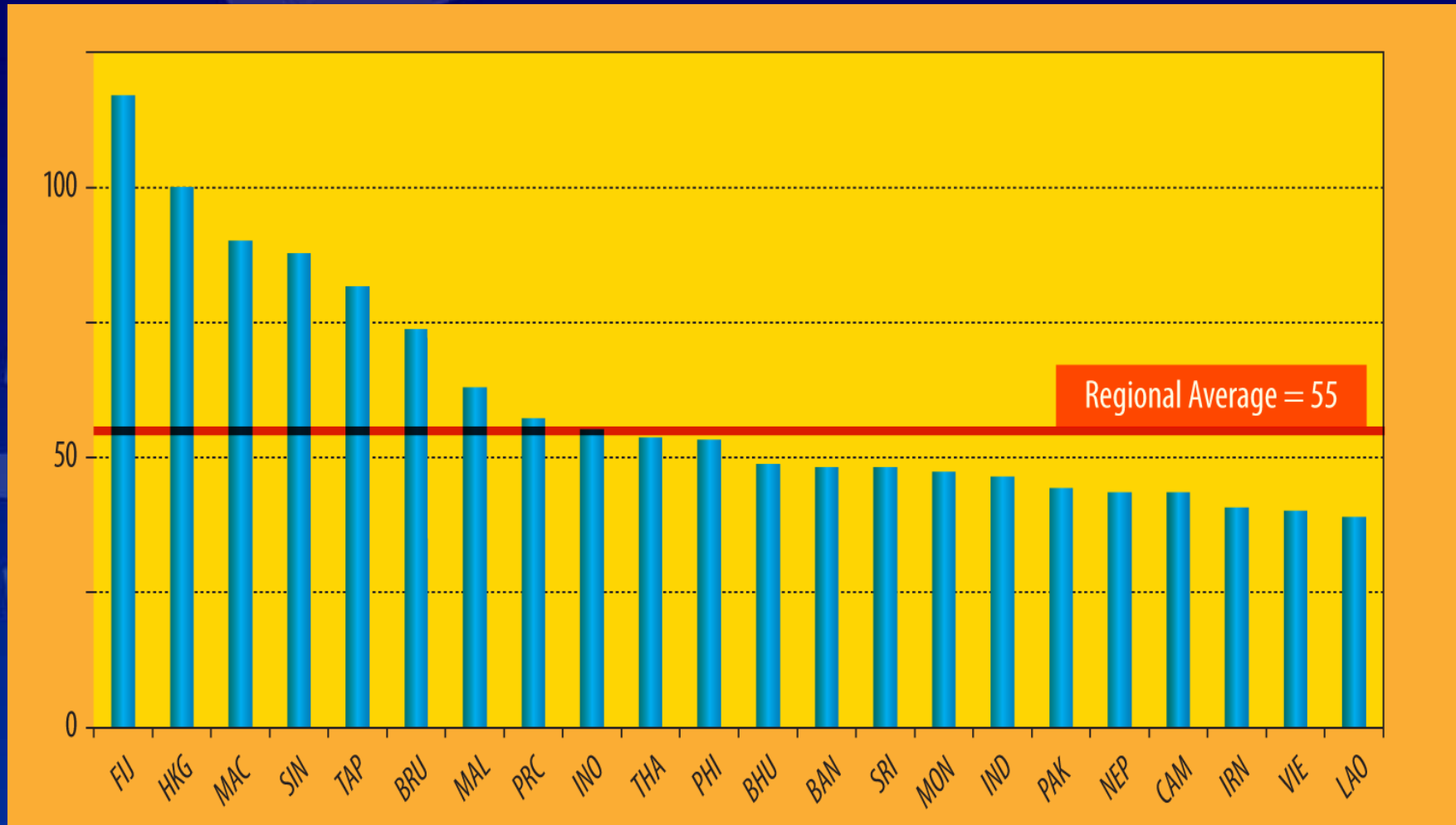
- **Per capita real AFCH in Hong Kong, China is 20 times greater than Nepal**
- **Per capita real GDP in Hong Kong, China is 30 times greater than Nepal**

## **Within AFCH, range of clothing and footwear greatest**

- **In food and non-alcoholic beverage, range is from 67 for Vietnam to 44 for Brunei.**
- **In clothing and footwear, range is from 16 for Lao PDR to 2425 for Hong Kong, China.**
- **Hong Kong, China's spending in clothing and footwear is in line with its status as a shopping paradise for high-end clients.**

# Relative Living Costs

(Price Level Indices, 2005, Hong Kong, China = 100)



# ICP Asia Pacific: Distinct and Unique

- Most ambitious initiative to collect price and national accounts data at a comparable level across 23 economies, including PRC and India
- Robust PPPs result from sound methodology and stringent quality control of data
- PPP estimates provide a sound basis for meaningful cross-country comparisons

# Next Steps

- Final Report on ICP Asia and the Pacific PPPs to be released by end 2007
- Link HK\$ to the US\$: ring comparison
- Global results to be released by end 2007
- PPP Poverty to be released by first quarter 2008
- Decision on 2010 ICP

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