

# Use of the CPIS for Data Compilers: the United States Perspective

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# Brief Review of U.S. System for Collecting and Reporting Cross-Border Data

- Data on U.S. cross-border holdings and transactions are collected under authority of the U.S. Treasury Department (TIC data)
- Operational responsibility for overseeing the data collection and dissemination resides with the Federal Reserve System, including both the Federal Reserve Bank of New York and the Board of Governors
- U.S. Balance of Payments and International Investment Position are produced by the Bureau of Economic Analysis, U.S. Department of Commerce

# TIC System

- Monthly data on cross-border transactions in long-term securities
- Monthly data on cross-border positions in short-term securities and other bank-reported positions
- Quarterly data on cross-border positions reported by non-banks
- Periodic (now annual) surveys of foreign holdings of U.S. securities and U.S. holdings of foreign securities

# U.S. Asset Surveys: U.S. contribution to the CPIS

- First survey conducted in 1994
- Surveys repeated in 1997, 2001, 2003, 2004
  - Added short-term securities in 2001
- Data are collected from major custodians who hold securities on behalf of U.S. investors and also from major institutional investors who do not use U.S. custodians
- Data are collected at the security level
  - Roughly 500,000 records processed for December 2004 survey

## Security level detail of asset surveys

- Allows for accurate identification of country of issuer of securities and thus correct geography of U.S. investors' holdings
- Allows for better understanding of the composition of our assets abroad
  - Overall, roughly 65 percent of U.S. assets abroad (including direct investment) are foreign currency denominated whereas 95 percent of our liabilities are dollar-denominated
    - Foreign currency assets are largely equity and direct investment
    - Debt securities held are predominantly dollar-denominated
    - As of December 2004: 72 percent of foreign-issued long-term debt held by U.S. investors was dollar-denominated
    - Of \$84 billion held in Latin American long-term debt, 95 percent was dollar-denominated

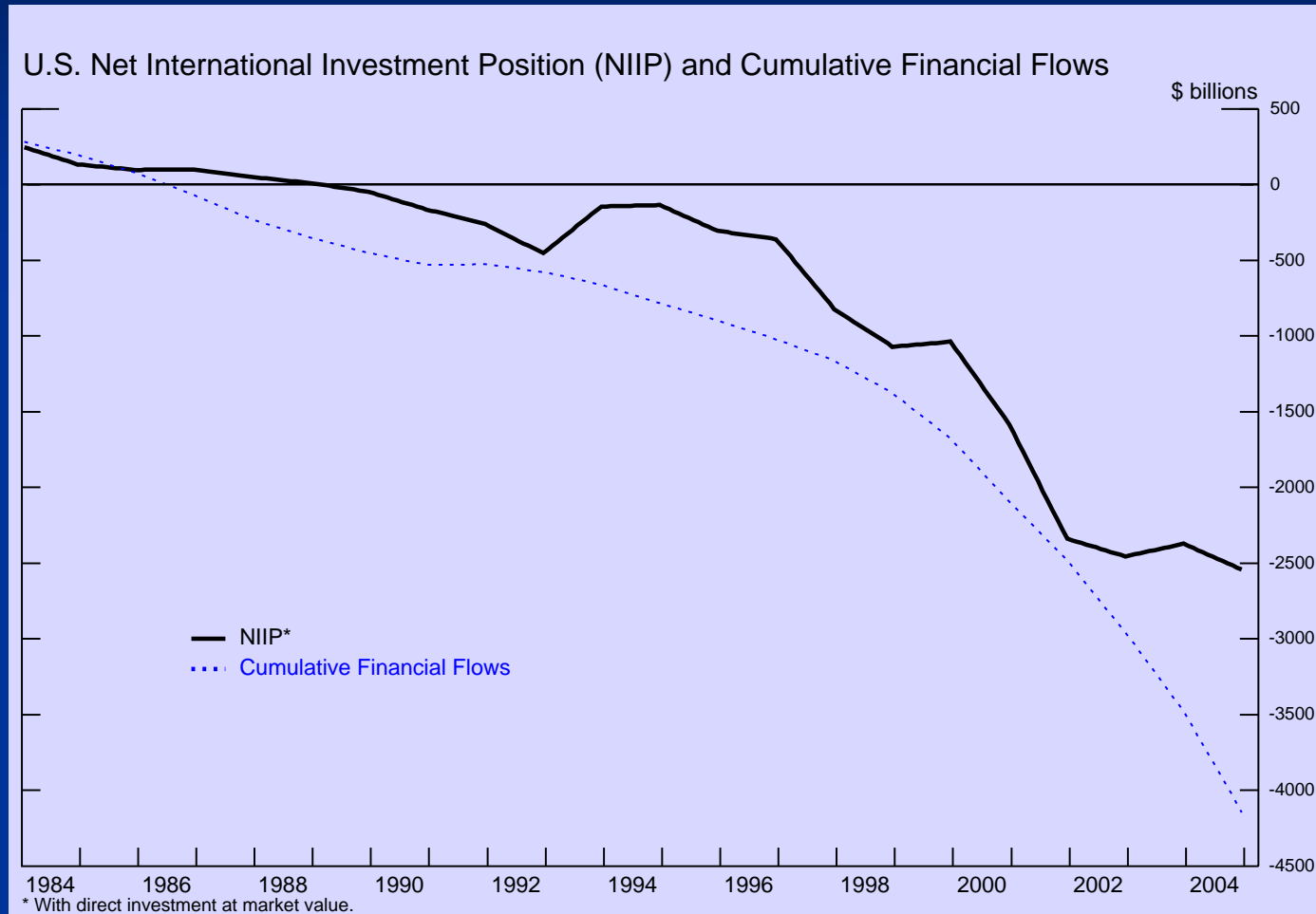
# Security level detail: equity issued by Caribbean offshore financial centers

- In terms of U.S. investors' holdings: Primarily Bermuda and the Cayman Islands
  - In large part reflects equity of multinational reincorporates and shell corporations
  - Understanding offshore center holdings is important both for interpretation of what foreign exposure means as well as for estimating valuation effects
    - Tyco and Ingersoll-Rand are examples of recent reincorporates in Bermuda
    - Equity of both trade on U.S. exchanges (and are included in S&P 500 index)
- Equity in offshore Caribbean centers:
  - \$48 billion or 4 percent of U.S. investors' holdings of foreign equity 1997
  - \$277 billion or nearly 11 percent by 2004

# Holdings of debt securities issued by Caribbean offshore financial centers

- In large part issued by Special Purpose Vehicles (SPVs) for acquiring assets and issuing securities, often asset-backed
- SPVs in the Caymans are often established by U.S. corporations
- Debt issued by Caymans SPVs is largely dollar-denominated
- Cayman Islands debt amounted to \$14 billion, or 2 percent of U.S. investors' foreign debt portfolio in 1997
- \$114 billion, or nearly 12 percent, by 2004

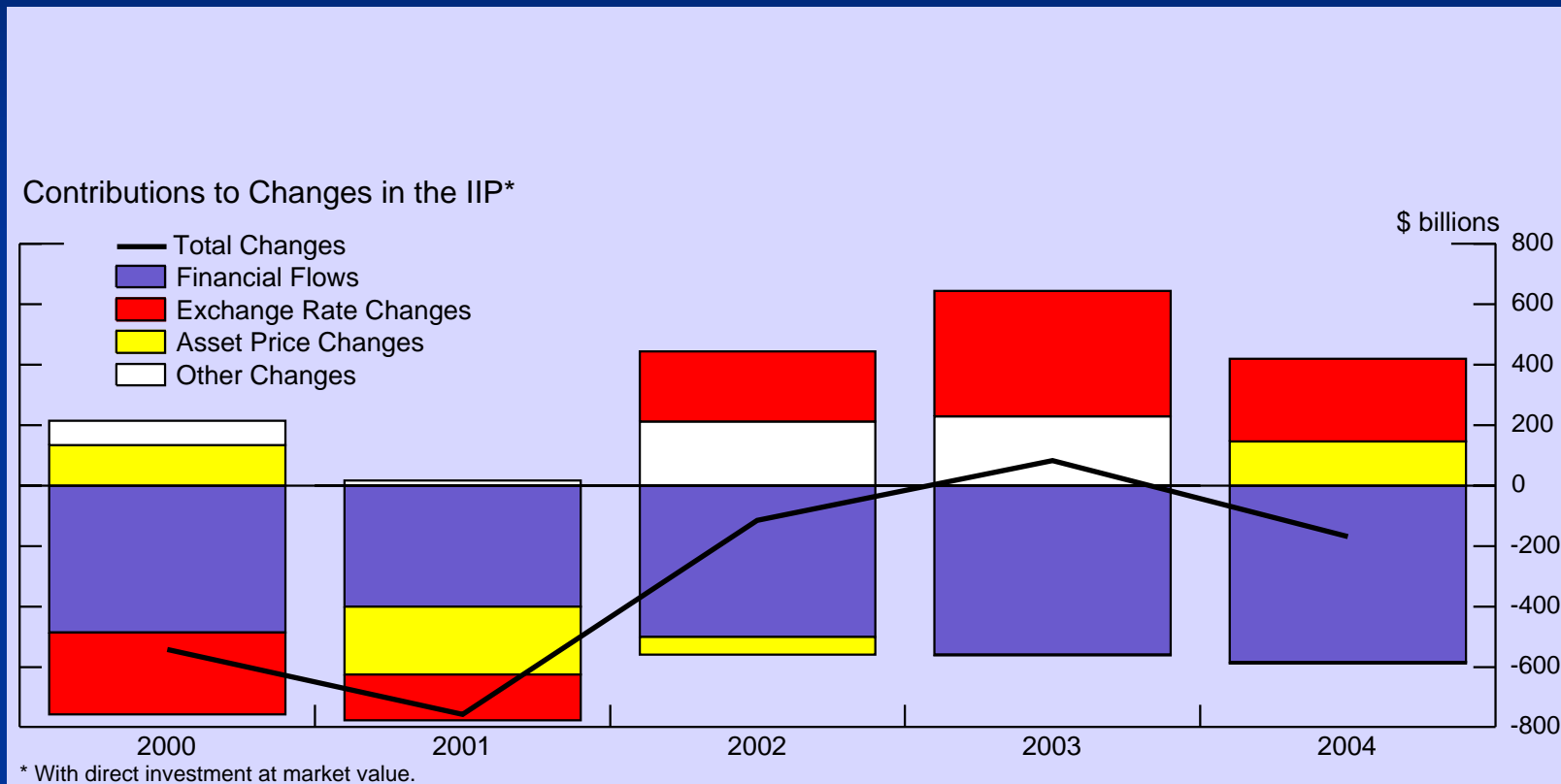
# Valuation and financial flows: contribution to the NIIP



Source: U.S. Department of Commerce



# Decomposition of flows and valuation effects from exchange rates and asset prices on IIP

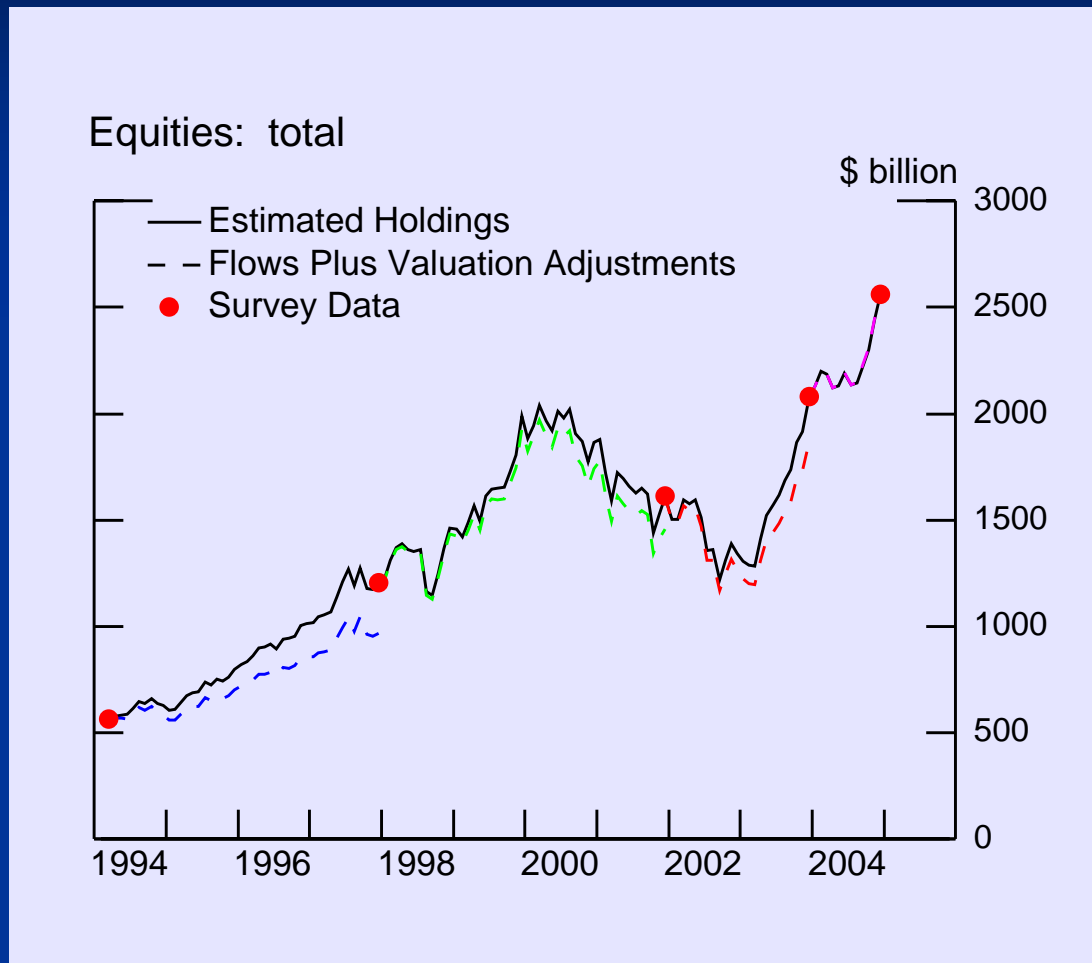


Source: U.S. Department of Commerce

# Estimates of holdings between surveys

- Surveys give comprehensive periodic snapshot of U.S. portfolio investment abroad
- Processing asset surveys is time consuming: Takes roughly 9 months from as-of date of survey to prepare and release preliminary results
- Between surveys and for current period: estimate positions with cumulated flows from monthly transactions data and valuation changes

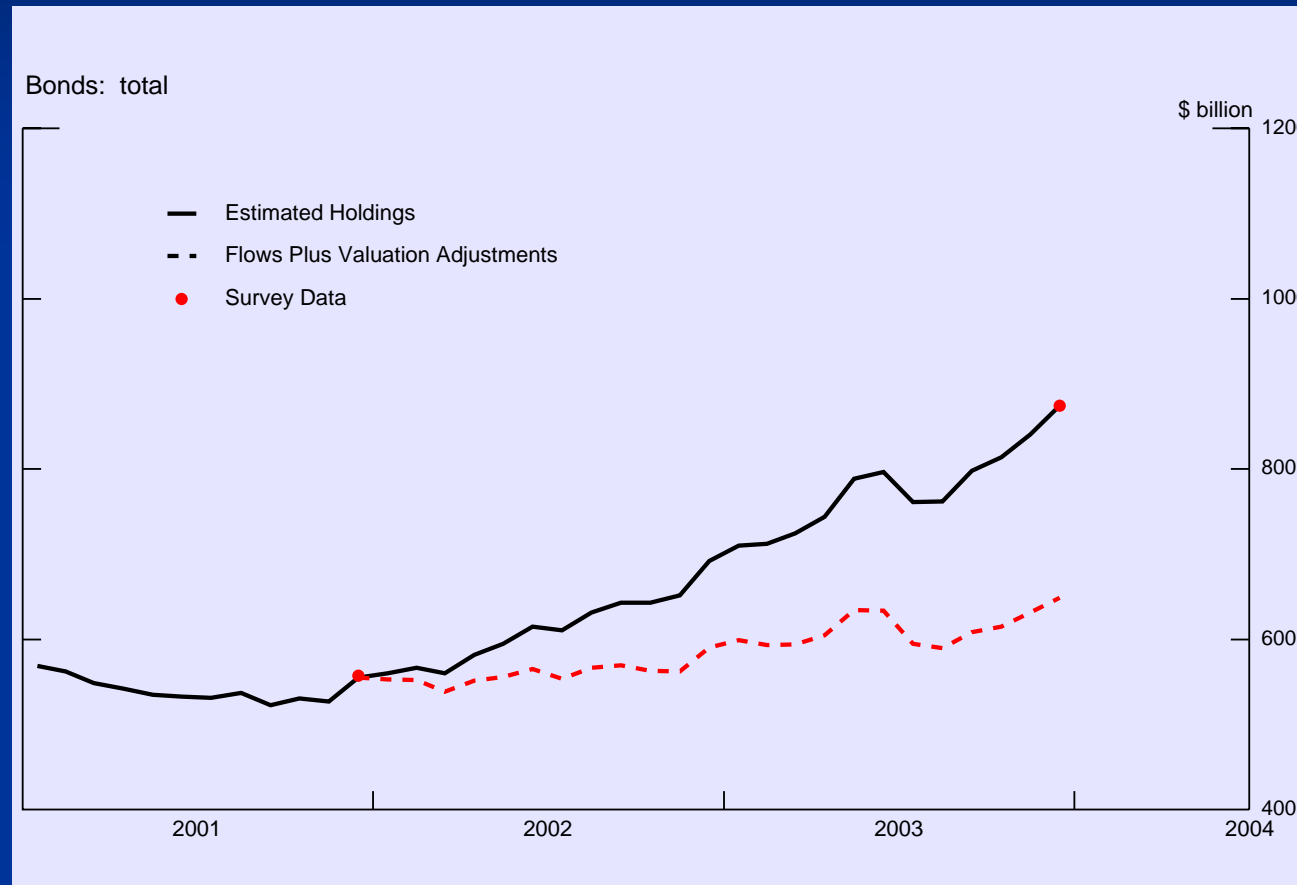
# Estimated holdings of foreign equity



## Surveys and estimated holdings also provide a useful cross-check on comprehensiveness of transactions data and estimates of valuation changes

- 2003 Survey: holdings of foreign bonds
- Starting position: holdings of foreign bonds at year-end 2001 were measured at \$502 billion
- Transactions data indicated small net sales of foreign bonds over the two-year period
- Dollar depreciation and asset price changes over 2002-2003: contribute an estimated \$100 billion to holdings by December 2003
- Based on these data: estimated that U.S. holdings of foreign bonds were about \$600 billion at year-end 2003

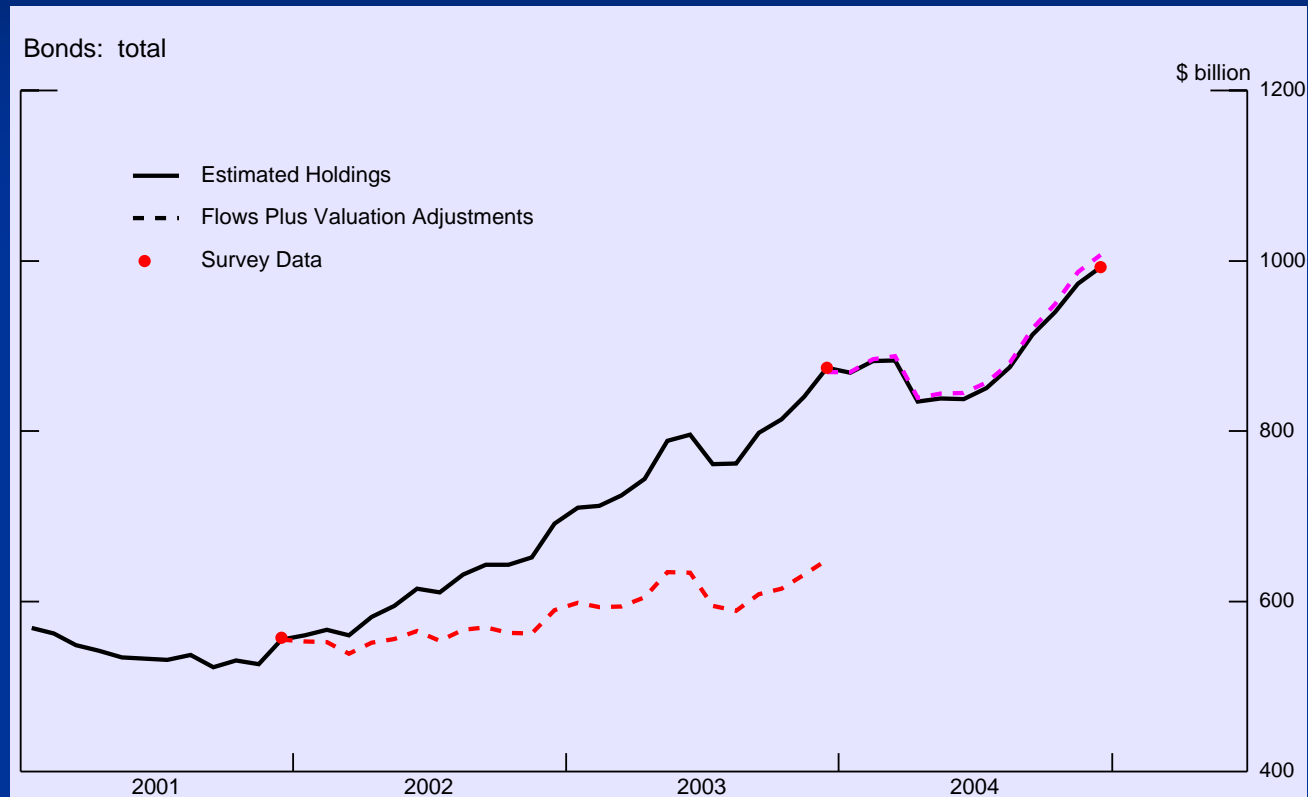
# Estimated and measured holdings of foreign bonds, December 2003



# Investigation into underestimate of holdings of foreign bonds

- Missed holdings in December 2001 of \$50 billion reduces the discrepancy some
- Investigation into reporting on cross-border transactions revealed several instances of missed reporting
- Investigation of the debt securities held in the 2003 survey revealed relatively large number of newly-issued securities
- Suggests that underreporting of foreign debt newly issued in the United States was a problem
- Not possible to correct reporting for transactions in 2002 and 2003, but transactions data for 2004 have been revised substantially
- 2004 asset survey tracked estimated holdings much more closely

# Estimated and measured holdings of foreign bonds, December 2004



# Using information from the full CPIS asset surveys to better understand ultimate owners of U.S. liabilities

- Comprehensive U.S. liabilities surveys
  - Conducted roughly every 5 years since 1974
  - Beginning in June 2002, have been conducted annually (data as of end-June)
  - Also collected security-by-security
- Detail on both short-term and long-term U.S. Treasury, U.S. government agency, corporate debt securities as well as corporate equity



# U.S. liabilities surveys are comprehensive in coverage but geography is incomplete

- Custodial bias: securities held in custody at major financial centers: Cayman Islands, Belgium, Luxembourg, Switzerland
  - Example: German resident holds US securities in an account in Luxembourg. US custodian's contact is with institution in Luxembourg.
  - Assume ultimate owner is foreign but have no means of identifying nationality
- Bearer securities (corporate bonds)
  - Little or no information on owners because they need not make themselves known.
  - Generally cannot be issued in the US but US firms can and do issue them abroad

# U.S. liabilities should correspond to what other countries report in their asset surveys

- With caveat that not all countries participate in the CPIS, including some significant holders of U.S. debt (China, Taiwan, Middle-east OPEC)
- Asset surveys may be less comprehensive than liabilities surveys
- CPIS reports only non-reserve holdings but U.S. liabilities surveys include official holdings
  - Not quite same as reserves, because includes government investment funds
- For long-term debt comparison: we impute value for reserves holdings using IMF data on total reserves (excluding gold) and estimates of share of reserves in dollars
  - Internally, we can compare CPIS to U.S. liabilities to private foreigners

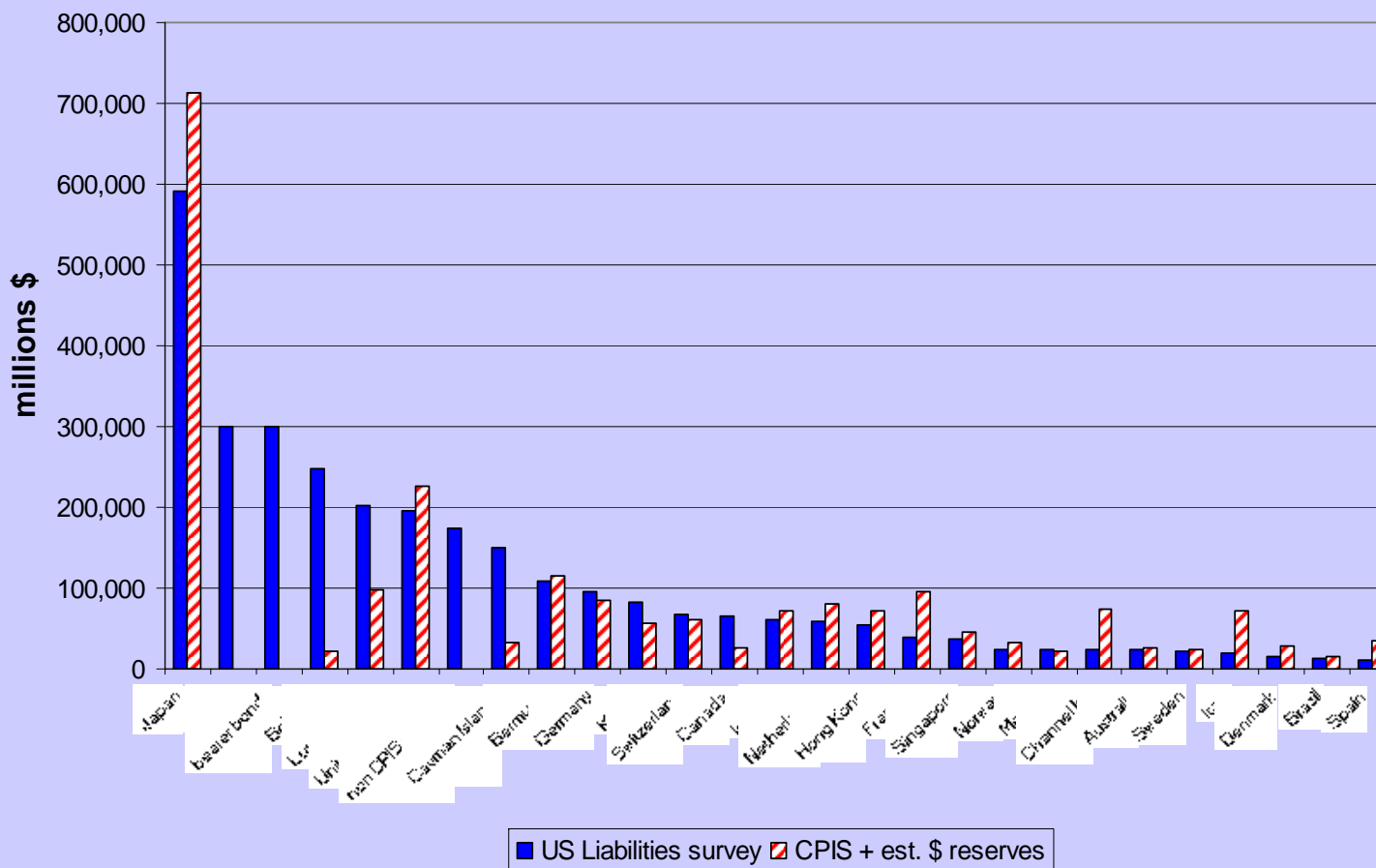
## Comparison of CPIS long-term debt + estimated \$ reserves with estimates based on US liabilities surveys

	<u>2002</u>	<u>2003</u>	<u>2004</u>
U.S. long-term debt securities reported by CPIS	\$1,379	\$1,710	\$2,010
Estimated reserves in \$	\$580	\$710	\$802
Total U.S. long-term debt, CPIS + reserves	\$1,948	\$2,420	\$2,812
Total for CPIS countries + bearer bonds	\$2,294	\$2,617	\$3,333
U.S. LT debt liabilities: non- CPIS reporting countries	\$428	\$529	\$566

(billions \$)

## U.S. long-term debt securities

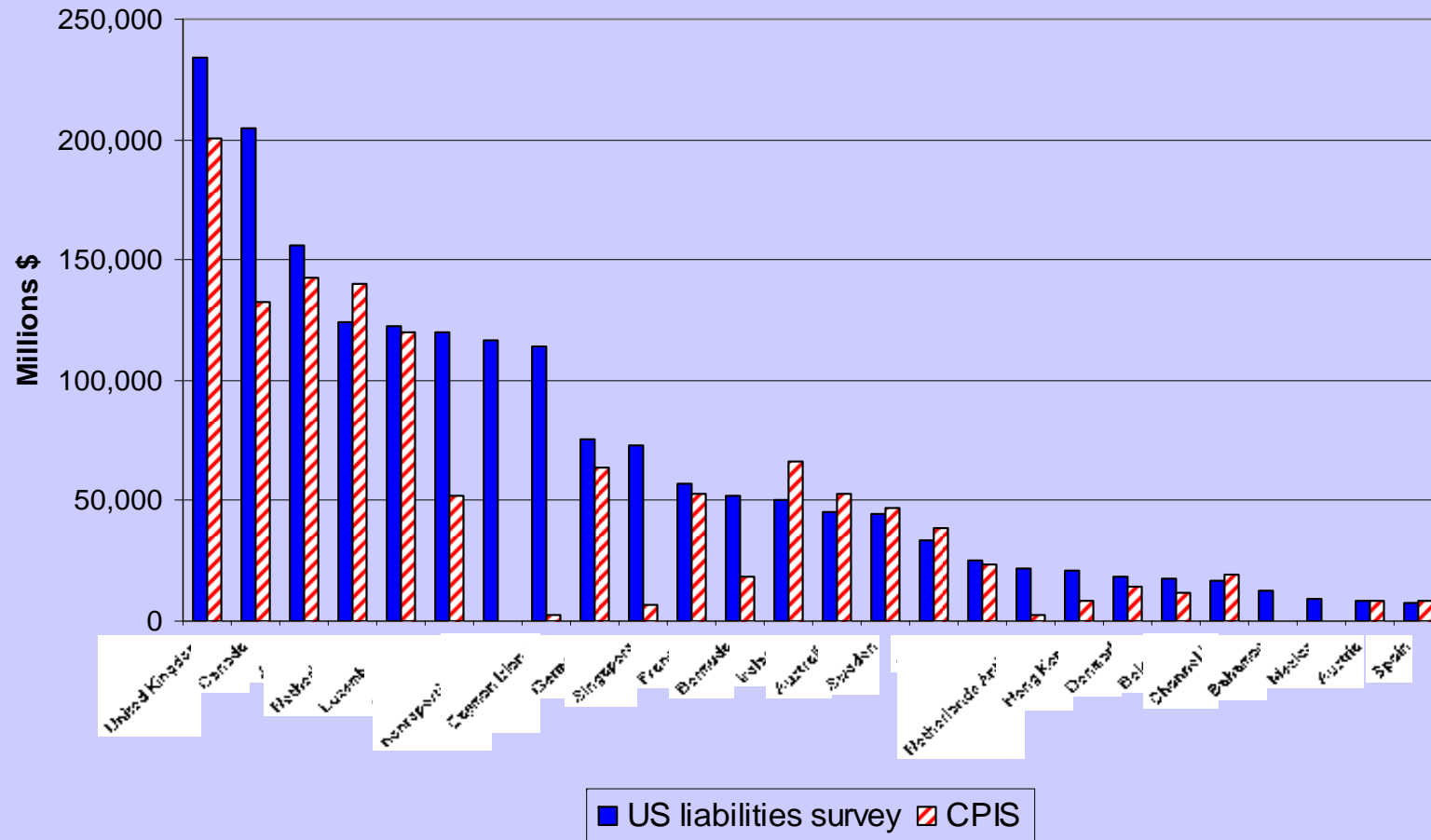
comparison of estimates based on U.S. liabilities surveys and CPIS asset surveys plus reserves, December 2003



## Comparison of CPIS equity with estimates based on US liabilities surveys

U.S. equities:	<u>2002</u>	<u>2003</u>	<u>2004</u>
Reported by all CPIS countries	\$904	(billions \$) \$1,282	\$1,494
Total U.S. equity liabilities for CPIS countries	\$1,237	\$1,706	\$1,960
U.S. equity liabilities: non- CPIS reporting countries	\$93	\$118	\$153

**U.S. equities: comparison of estimates based on U.S. liabilities surveys  
and CPIS asset surveys, December 2003**



# Comparison of estimates from U.S. liabilities and CPIS

- Even adjusting for securities held by countries not participating in the CPIS: U.S.-based liabilities estimates tend to be larger
  - U.S. portfolio liabilities to foreigners are securities registered with U.S. authorities, and thus are typically easy to identify
  - But U.S. securities held as assets by foreign investors may be held by investors that escape detection in asset surveys
- Comparison illustrates custodial bias for Belgium, Luxembourg, Switzerland, and Cayman Islands
  - U.S. holdings are notably larger than CPIS-based estimates
- Underestimates for several European countries
  - Channel Islands, France, Italy, Netherlands, Spain
  - Also Japan (for debt), Australia
- But overall: holdings are quite comparable

# Concluding remarks

- U.S. asset survey (U.S. contribution to CPIS) is a valuable tool for U.S. data compilers
  - Provides detailed information on foreign securities held by U.S. investors
  - More accurate estimation of valuation adjustments and relative contributions of flows, price and exchange rate changes to evolution of the International Investment Position
  - Information on foreign holdings raises some questions on interpretation of foreign exposure
  - Can help identify sources of reporting error, missed reporting in transactions data



# Concluding remarks, continued

- Using CPIS surveys holdings of U.S. securities also valuable for U.S. data compilers
  - Ability to compare our liabilities data against other country asset data – and vice versa – can help identify sources of error and allow for better country attribution of holdings
  - Helps uncover ultimate holders of U.S. securities (custodial bias in U.S. data)
  - Can help identify ultimate owners of U.S. bearer bonds
- Overall, comparison is very encouraging: amounts captured by the two sources appear comparable
  - Suggests that both types of surveys are picking up what they should be
  - Especially beneficial if comparison could be done at detailed security level