Welcome Remarks
Alicia Leonard-Stacker
Overview
Tatyana Dreger

Overview

- Overview of Changes to SHL(A) Instructions and Common Reporting Errors
- Reporting Central Access Requirements
- Overview of XML File Structure
- TIC Comparison
- Uses of Treasury International Capital (TIC) Data
Overview of Changes to SHL(A) Instructions and Common Reporting Errors
Tatyana Dreger

Update to SHL(A) Instructions: TIPS

- Stripped Securities
  - Treasury Inflation Protected Securities (TIPS) provide protection against inflation/deflation by increasing/decreasing principal (face value).
  - Holding of TIPS and Floating Rate Notes should be reported at fair market value and should not include inflation accretion for both, the TIC SLT and the SHL(A).
Common SHC(A)/SHL(A) Reporting Errors

SHC(A) - Misclassifying Type of Foreign Issuer

1- Foreign Official Institutions (FOI)
   - Treasuries, Ministries of Finance, or corresponding departments of national governments.
     - e.g. Russian Federation Ministry of Finance
   - Central banks and Development Banks that perform the functions of an FOI
     - e.g. Central Bank of Nigeria, Korea Development Bank
   - Stabilization Funds, diplomatic and consular establishments and other departments and agencies of national governments.
     - e.g. Korea Monetary Stabilization
   - International and Regional Organizations (IROs)
     - e.g. International Bank for Reconstruction and Development
   - Corporations, or Other Agencies
     - Fiscal agents of national governments
     - Perform activities similar to those of a treasury, central banks, stabilization fund, or exchange control authority.

2- All Other Foreigners
   - All Other Entities that do not meet the definition of FOIs

   - Departments and agencies of foreign states’, provincial, and local governments
     - Province of Ontario is not a Foreign Official Institution for SHC(A) and SHL(A) purposes

   - Foreign Government-Sponsored Businesses, other foreign financial and non-financial businesses and foreign individuals (natural persons)
Common SHC(A)/SHL(A) Reporting Errors

SHL(A) - Misclassifying Type of Issuer

- **2014**

<table>
<thead>
<tr>
<th>Type of Issuer: Please enter one of the following.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = United States Department of the Treasury</td>
</tr>
<tr>
<td>2 = Other Federal agency or federally sponsored enterprise</td>
</tr>
<tr>
<td>3 = State or local government, including their subdivisions</td>
</tr>
<tr>
<td>4 = Other</td>
</tr>
</tbody>
</table>

- **2015**

<table>
<thead>
<tr>
<th>Type of Issuer:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = United States, Treasury and Federal Financing Bank</td>
</tr>
<tr>
<td>2 = Federal agency or federally sponsored enterprise</td>
</tr>
<tr>
<td>3 = State or local government, including their subdivisions</td>
</tr>
<tr>
<td>4 = Depository institution</td>
</tr>
<tr>
<td>5 = Other financial organization (including BHC, FHC, broker/dealer)</td>
</tr>
<tr>
<td>6 = Nonfinancial organization</td>
</tr>
</tbody>
</table>

Common SHC(A)/SHL(A) Reporting Errors

SHL(A) - Misclassifying Reporting As Code:

- **2014**:

  4. Issuer Code: ........................
     1 = Custodian (did not issue security)  2 = Issuer

- **2015**:

  5. Reporting As: ........................
     1 = Issuer  2 = Custodian
Common SHC(A)/SHL(A) Reporting Errors

**Incorrect Country Attribution**

- **Country of Issuer (SHC(A))/Country of Foreign Holder (SHL(A))**
  - Country of Incorporation
    - If a foreign subsidiary of a U.S. company issues a security, the security is considered *foreign*.
    - If a U.S. subsidiary of a foreign company issues a security, the security is considered a *U.S. security*.
    - If the holder of a U.S. security is incorporated in one country but located in another, report the country of incorporation.
  - For branches of U.S./foreign banks, report the *country where the branch is licensed*.
    - If the security was issued by a U.S. branch of a foreign bank, the security is domestic.
  - For International and Regional Organizations (IROs) (SHC(A) only).
    - These have their own *country codes that start with a ‘7xxx’*.
    - For Depositary Receipts, use the *country of incorporation of the issuer of the underlying security*.

**FRBNY Price Calculations**

<table>
<thead>
<tr>
<th>Equity</th>
<th>Debt</th>
</tr>
</thead>
<tbody>
<tr>
<td>USD Market Value</td>
<td>USD Market Value (Face Value in Currency of Denomination*ExRate)</td>
</tr>
<tr>
<td>Number of Shares</td>
<td></td>
</tr>
</tbody>
</table>

**Aggregation of Reported Securities**

- Reported USD Market Values and calculated Quantities for every distinct security reported are added and each security is assigned a price.
- The Total Quantity is multiplied by the price to get a calculated Market Value.
- The Total Calculated Market Value ideally is very close to the Total Reported Market Value for each security.

\[
\text{SUM(USD Market Value)} = \text{Quantity} \times \text{Price}
\]
Errors related to Pricing Analysis

- Reporting Units within a filing institution report inconsistent currencies for the same security. A security should be reported consistently across all reporting units.

- Currency of the country of issuer is reported instead of currency of denomination. The currency of denomination is the currency that the security was issued in.

- Face Value should be reported in currency of denomination, not necessarily in U.S. dollars.

- Fair Market Values should exclude accrued interest on securities.

- Debt securities issued or quoted in units:
  - FV in Currency of Denomination = FV of each unit * number of units

Common SHC(A)/SHL(A) Reporting Errors

Internally Generated Security IDs (Security ID System Code = 6) Inconsistent

- If using internally generated IDs, keep them consistent from year to year and use unique IDs for individual securities.
  - Security ABC on the SHC(A) in 2013 should be Security ABC on the SHC(A) 2014. Security ABC should not be on the SHL(A).

- If a third party ID, such as a CUSIP or an ISIN are available, do not use Sec ID System Code of 6.
Common SHC(A)/SHL(A) Reporting Errors

- **Direct Investment is Reportable to the B.E.A.**
  - When a U.S. company owns **10% or more of the voting equity** securities of an incorporated foreign business (or an equivalent interest in an unincorporated foreign business, including a branch).
  - When a foreign company owns **10% or more of the voting equity** securities of an incorporated U.S. business (or an equivalent interest in an unincorporated U.S. business, including a branch).
  - If a direct investment relationship exists, **all positions between the entities are considered direct investment** and are not reportable in the TIC System, **unless** one of the entities is:
    - Deposit-taking corporations
    - Securities brokers and dealers
    - Financial and bank holding companies
    - Investment funds
    - Other financial intermediaries (excluding insurance companies and pension funds)

Common SHC(A)/SHL(A) Reporting Errors

- **Reporting of Derivatives**
  - Derivative contracts (including futures, forwards, swaps, options and warrants) meeting the definition of a derivative under ASC 815 should not be reported.
  - Embedded derivatives that are not bifurcated under ASC 815 should be included in the value of the host contract.

- **Reporting of Asset Backed Securities (ABS)**
  - Report as Security Type 12
  - **Exclude from ABS:**
    - Asset Backed Commercial Paper (Report as Security Type 5)
    - Securities backed by a Sinking Fund (should be classified as short-term or long-term debt).
Common SHC(A)/SHL(A) Reporting Errors

**Securities Mistakenly Excluded from the SHC(A)**
- Securities entrusted to U.S.-resident or foreign-resident central securities depositories
  - Should be reported on Schedule 2 by the end-investor
  - If the securities are entrusted to a U.S. resident custodian and then in turn held at a depository, then the securities should be reported by the U.S. resident custodian
- Securities entrusted to foreign-resident custodians, including foreign offices of U.S.-resident custodians
  - Should be reported on Schedule 2 by the end-investor
- Restricted securities
- Securities in custodians’ own portfolios
- Securities held in trading accounts
- Depositary receipts, if the underlying security is foreign
- Matured securities that are outstanding

Common SHC(A)/SHL(A) Reporting Errors

**Securities Mistakenly Included on the SHC(A)**
- Foreign securities underlying depositary receipts.
- Securities issued by U.S. subsidiaries/ U.S. offices of foreign-resident entities, even if traded outside of the U.S.
- All general partnership interests and similar controlling interests which constitute direct investment.
- Loans, derivatives and non-negotiable CDs.
Common SHC(A)/SHL(A) Reporting Errors

Securities Mistakenly Excluded from the SHL(A)

- Securities issued by US-incorporated affiliates of foreign entities.
- Securities entrusted to U.S.-resident or foreign-resident central securities depositories.
  - e.g.: Depository Trust Company (DTC)
- Securities entrusted to foreign-resident custodians, including foreign offices of U.S.-resident custodians.

Securities Mistakenly Included on the SHL(A)

- Securities issued by a foreign resident but guaranteed by a US entity.
  - The country of residence of a guarantor does not factor into the determination of whether the security is foreign or domestic.
    - If a foreign subsidiary of a U.S. institution issues commercial paper that is guaranteed by the U.S. parent, the security is foreign.
- Securities issued by international or regional organizations, even if they reside in the US.
Reporting of Funds

**U.S. IM creates:**
1) Cayman Master Fund (CMF)
2) Cayman Feeder Fund (FF)
3) U.S. Feeder Fund (FF)

The U.S. IM reports the U.S. FF investment in the CMF on the SHC(A) report.

**Foreign IM creates:**
1) Cayman Master Fund (CMF)
2) Cayman Feeder Fund (CFF)
3) U.S. Feeder Fund (FF)

The U.S. FF reports its investment in the CMF on the SHC(A).
Reporting of Funds

U.S. IM creates:
1) U.S. Master Fund (MF)
2) Cayman Feeder Fund (CFF)
3) U.S. Feeder Fund (FF)

The U.S. IM reports the CFF investments in the U.S. MF on the SHL(A).

Reporting of Funds

Foreign IM creates:
1) U.S. Master Fund (MF)
2) Cayman Feeder Fund (CFF)
3) U.S. Feeder Fund (FF)

The U.S. MF reports the CFF investment on the SHL(A).
Reporting of Funds

- **Foreign Resident Funds:**
  - If the Fund holds U.S. securities, those securities should be reported on the SHL(A) by the U.S. Investment Manager.

- **U.S. Resident Funds**
  - If the Fund holds foreign securities, those securities should be reported on the SHC(A) by the U.S. Investment Manager or the U.S. fund.
Onboarding Process - Overview

- There are four steps to gaining access to Reporting Central
- Three steps are handled through the Customer Contact Center (CCC)
  - Step 1 – Official Authorization List – OAL
  - Step 2 – End User Authorization Contact – EUAC (2 needed per entity)
  - Step 3 – Subscriber Request Form – SRF
- One step handled through the Statistics Function
  - Step 4 – RC-1 Form

Step 1 – Official Authorization List – OAL

- Individual designated to establish authority with the Federal Reserve
- Banking organizations need a Board resolution passed to entitle OAL
- Original signature is necessary, notarized by organization’s secretary or legal counsel
- Combine with Step 2 for mailing
### Step 2 – End User Authorization Contact – EUAC

- End User Authorization Contact established by OAL
- Add/delete Subscribers, perform annual attestation, liaison for Customer Contact Center
- Each institution must have at least 2 EUACs
  - Each serves as the other’s backup
- EUAC will receive unique token to process Subscribers through EUAC Center in Access Fedline
- Authorization list (Step 1) and EUAC form are mailed together to:
  - Customer Contact Center
  - P.O. Box 219416
  - Kansas City, MO 64121-9416

### Step 3 – Subscriber Request Form – SRF

- Subscribers are managed through EUAC Center within Access Fedline
- Each Subscriber receives token to authenticate them to Reporting Central application
- 1 token per person, with drivers installed on computer to use token, expire once every three years
  - There is no notice of token expiration
- EUACs can also serve as Subscribers
- Internet Explorer must be used as a browser in order to access both the EUAC Center and Reporting Central
Step 4 – Form RC-1

- This form is processed by the Statistics Function at FRBNY
- Must be submitted by authorized EUAC
- Allows EUAC to request access for which RSSD IDs and all reports that Subscriber will submit
- Separate forms for each Subscriber per legal entity
- For TIC filings, if Subscriber needs access to more than 10 RSSD IDs, the EUAC can send a spreadsheet in the place of multiple RC-1 forms
  - One initial RC-1 must still be sent
Emergency Credentialing

- If a Token is damaged/lost and a report is due, an emergency credential can be provided
- Subscriber must already be authorized for report series
- EUAC can call the Customer Contact Center
- A temporary soft certificate for an internet browser will be downloaded
- Emergency credentials will only be issued on a very temporary basis, e.g., one or two days
- EUAC should follow up on FedLine if a new Token is needed

After Access is Granted

- Institutions can establish one OAL, and several EUACs to process Subscriber access for the entire organization
  - However, institutions filing TIC reports (such as SHC(A)/SHL(A)) must have an OAL and an EUAC set up for each legal entity
- EUACs/Subscribers outside of United States need to contact Customer Contact Center
- Can also remove Reporting Central access through form RC-1
- For assistance in determining who the EUACs are for your organization, contact the Customer Contact Center
  - Customer Contact Center: 1-888-333-7010 (option 1)
Helpful Links

- Reporting Central Main Webpage
- Reporting Central Application Setup
  - https://frbservices.org/centralbank/reportingcentral/application_setup.html
- Reporting Central User Guides
  - https://frbservices.org/centralbank/reportingcentral/reportingcentral_userguides.html
- Access FedLine (EUAC Center)
- RC-1 Form

Helpful Information

- RC-1 Form should be sent to:
  - NY.REPORTINGCENTRALCOMMUNICATION@ny.frb.org
- Customer Contact Center: 1-888-333-7010 (option 1)
XML Documentation

- **SHC(A) and SHL(A) Technical User Guides**
  - Benchmark Series XML File Format Specification Required (with 100 or more Schedule 2s)
    - Report of Foreign Holdings of U.S. Securities, Including Selected Money Market Instruments (SHL(A))
  - [https://www.frbservices.org/centralbank/reportingcentral/reportingcentral_userguides.html](https://www.frbservices.org/centralbank/reportingcentral/reportingcentral_userguides.html)
- Benchmark Schema
- Benchmark Claims SHC(A) Sample File
- Benchmark Liabilities SHL(A) Sample File
XML File Structure

- The XML structure is as follows:
  
  ```xml
  <financialDataFile>
    <fileDescription>
    </fileDescription>
    <asofDate>
      <financialData>
        <reportingEntity>
          the financial data for the <reportingEntity>
        </reportingEntity>
      </financialData>
    </asofDate>
  </financialDataFile>
  ```

XML File Structure: Sections

- `<financialDataFile>`
  - all of the data in the file
- `<fileDescription>`
  - file header information, report name, file’s creation date and time
- `<asofDate>`
  - financial data for the reporting entity
  - MUST ONLY contain report data for a single ‘as of date’
- `<financialData>`
  - financial data for the reporting entity and as of date
- `<reportingEntity>`
  - Reported values for the items appearing on the report
  - Value for each report item is contained in a `<reportItem>` tag
- `<itemGroup>`
  - Groups a collection of related report items
    - Business Contacts, Service Providers, Valuation Techniques, Individual Schedule Items
MDRM

- Attribute used internally by the Federal Reserve Banks
- Tags are consistent within reports (SHC(A)/SHL(A))
  - Ensure SHC(A) tags are not placed within an SHL(A) XML file submission and vice versa
- Its value is the line identifier for the report item
- `<itemName>` is a text description of the mdrm specified by the `<rs_id>`

```
<rs_id type="mdrm">SHLA9017</rs_id>
<itemValue>ABC Corp</itemValue>
```

Common Errors – Pretty Print Format

- All XML files must be in pretty print format. If not, it will be marked as invalid.
  - Indentation to visually determine hierarchy and nesting
  - Non.pretty print formatted example:
    ```xml
    <financialDataFile><fileDescription><createDate>20140311</createDate><createTime>131035</createTime><dataTypeIndicator>Test</dataTypeIndicator><requestType>Scheduler</requestType><receivingSite>New York</receivingSite><seriesName>SHCA</seriesName><reportingForm>SHCA</reportingForm><fileDescription><asofDate date="20141231">20141231</asofDate><financialData><financialData/>
    </financialData></fileDescription></financialDataFile>
    ```
  - Pretty print format example:
    ```xml
    <financialDataFile>
      <fileDescription>
        <createDate>20140311</createDate>
        <createTime>131035</createTime>
        <dataTypeIndicator>Test</dataTypeIndicator>
        <requestType>Scheduler</requestType>
        <receivingSite>New York</receivingSite>
        <seriesName>SHCA</seriesName>
        <reportingForm>SHCA</reportingForm>
      </fileDescription>
      <asofDate date="20141231">20141231</asofDate>
      <financialData>
        <financialData/>
      </financialData>
    </financialDataFile>
    ```
Common Errors – Unacceptable Characters

- Five (5) unacceptable special characters in an XML file
  - If required, the appropriate mapping code must be used in its place
  
<table>
<thead>
<tr>
<th>Special Character</th>
<th>XML Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&amp;</td>
<td>&amp;</td>
</tr>
<tr>
<td>‘</td>
<td>'</td>
</tr>
<tr>
<td>&lt;</td>
<td>&lt;</td>
</tr>
<tr>
<td>&gt;</td>
<td>&gt;</td>
</tr>
<tr>
<td>‘</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

- Reporting Central only accepts UTF-8 encoding
  - International characters not acceptable
    - For example: Norwegian æøå, French ééè
- Double dash (--) is not an acceptable character

Common Errors – Comments & Case Sensitivity

- Comments
  - Must start with a <!-- and end with -->
  - i.e. <!--Service provider group 1-->  <!--Service provider 2-->

- <tag> names are case-sensitive based on a given schema
  - i.e. <reportItem>, <itemValue>, <itemGroup>, <reportingEntity>

- <tag> values are case-sensitive
  - <seriesName>SHLA</seriesName>/<seriesName>SHCA</seriesName>
  - <confidentiality status="1">None</confidentiality>
  - <estimation>None</estimation>
### Common Errors – Required/Non-required Fields

**Required Fields**
- **Address**
  - SHCA9028/SHLA9028
  - SHCA9130/SHLA9130
  - SHCA9200/SHLA9200
  - SHCA9220/SHLA9220
- **Reporting As**
  - SHCAN261/SHLA261

**Non-required Fields**
- `<dataTypeIndicator>`
- `<requestType>`
- `<receivingSite>`
- `<seriesName>`
- `<transferType>`
- `<sendingSiteReportKey>`
- `<processingDistrict>`
- `<confidentiality status="1">`
- `<estimation>`

### Common Errors – Decimals & Rounding

**Decimal values are not accepted**

**Rounding incorrectly can cause Schedule 1 total values not to match the sum of Schedule 2 or Schedule 3 values, thus causing one of the below validity edits to trigger**

- **V029**: Total US$ Fair Value of All Equity Securities Reported on Schedule 2 (Line 20, Schedule 1) must equal the sum of total US$ fair value of all Schedule 2 records with Security Types 1-4 and time between issue and maturity date is less than or equal to 365 days
- **V033**: Total US$ Fair Value of All STD Securities Reported on Schedule 2 (Line 21, Schedule 1) must equal to the sum of total US$ fair value of all Schedule 2 records with Security Types 5-11 and time between issue and maturity date is less than or equal to 365 days
- **V037**: Total US$ Fair Value of All LTD Securities Reported on Schedule 2 (Line 22, Schedule 1) must equal to the sum of total US$ fair value of all Schedule 2 records with Security Types 5-11 and time between issue and maturity date is greater than 365 days
- **V041**: Total US$ Fair Value of All Asset Backed Securities Reported on Schedule 2 (Line 23, Schedule 1) must be greater than or equal 0 if a Schedule 2 record is reported with Security Type 12
Common Errors – Schedule 2 & 3 Preface

- Schedules 2 & 3 are prefaced with:

```xml
<itemGroup ref="Schedule 2">
  <reportItem key="yes">
    <rs_id type="mdrm">SHLDN186</rs_id>
    <itemValue>1</itemValue>
  </reportItem>
</itemGroup>
```

Common Errors – Null Values

- If there are no values to be input for the specific mdrm
  - The field can be left blank as follows:
    - `<itemValue></itemValue>`
  - The field can also be represented as follows:
    - `<itemValue/>`
  - Do NOT put a value of “NULL”
Validation – Validity Edits

- Reporting Central: maximum of 250 validity edits
  - If you get 250 validity edits, solve some and look for more!
  - Remaining validity edits will populate once queue is cleared

- Reporting Central: maximum of 25 instances per unique validity edit
  - If you get 25 instances for one validity edit, solve some and look for more!
  - Remaining instances will populate once queue is cleared

Please note that editing ceases after 250 errors; if you see this number listed please be aware that your file may actually have more errors than this. There is 1 error on the form:

Error: V140: If Security Type is 1, 2, 3, or 4 (equity), Number of Shares Held cannot be blank
Sequence Number 215

TIC Comparison
Joseph Lovell
TIC Comparison

- TIC SLT
  - Monitors Aggregate Holdings of Long Term Securities by U.S. and Foreign Residents
  - Monthly
  - Due on the 23rd of the month after the as-of-date
  - Two parts:
    - (A) for U.S.-resident custodians and central securities depositories
    - (B) for U.S.-resident issuers and end-investors
  - Must be filed electronically through Reporting Central

TIC Comparison

- TIC SLT
  - The SHL(A) and SHC(A) are comparable to the TIC SLT
  - The SHL(A) represents the U.S. securities held by foreign residents. (Columns 1-9)
  - The SHC(A) represents the foreign securities held by U.S residents. (Columns 10-13)
### TIC Comparison

#### TIC SLT VS SHC(A)

<table>
<thead>
<tr>
<th>SLT Item Codes</th>
<th>SHC(A) Item Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOI And Corporate and Other Bonds on Column 10 &amp; 11, and Code 9999-6 of grand total countries value</td>
<td>SHC(A) Security Types 7-12, Term Indicator=2 and Sum of US Fair (Market) Value of Security Held, FOI = Issuer Type 1, Corporate= Issuer Type 2</td>
</tr>
<tr>
<td>Foreign Equity Securities, on column 12, and Code 9999-6 of grand total countries value</td>
<td>SHC(A) Security Types 1-4, Sum of US Fair (Market) Value of Security Held</td>
</tr>
<tr>
<td>FOI Government Bonds and Corporate and Other Bonds, on column 10 &amp; 11 and Item Code 8999-1 of (Asset-Backed Securities)</td>
<td>SHC(A) Security Type 12, Term Indicator=2 and Sum of US Fair (Market) Value of Security Held, FOI= Issuer Type 1; Corporate = Issuer Type 2</td>
</tr>
<tr>
<td>Foreign Equity Securities, on column 12, of Item code 8401-8 of (Fund Shares)</td>
<td>SHC(A) Security Type 3-4 and Sum of US Fair (Market) Value of Security Held</td>
</tr>
</tbody>
</table>

#### TIC Comparison

#### TIC SLT VS SHL(A)

<table>
<thead>
<tr>
<th>SLT Item Codes</th>
<th>SHL(A) Item Codes</th>
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</thead>
<tbody>
<tr>
<td>U.S Treasuries and Federal Financing Bank Bonds and Notes on Columns 1 &amp; 2, and Code 9999-6 of grand total countries value</td>
<td>SHLA Type of Issuer=1, Security Type=9 or 10, Term Indicator=2, the Sum of US Fair (Market) of Foreign Owned US Security</td>
</tr>
<tr>
<td>Bonds of US Governments Corporations and Federally Sponsored Agencies on columns 3 &amp; 4, and Code 9999-6 of grand total countries value</td>
<td>SHLA Type of Issuer=2, Security Types = 7-12, Term Indicator=2, Sum of US Fair (Market) of Foreign Owned US Security</td>
</tr>
<tr>
<td>U.S Corporate and Other Bonds on columns 5 &amp; 6, and code 9999-6 of the grand total countries value</td>
<td>SHLA Type of Issuer =3-6 Security Types = 7-12, Term Indicator 2, SUM of US Fair (Market) of Foreign Owned US Security</td>
</tr>
<tr>
<td>U.S Equity Securities on columns 7 &amp; 8, and code 9999-6 of grand total countries value</td>
<td>SHLA Type of Issuer=2, 4,5,6 Security Types = 1-4, the SUM of US Fair (Market) of Foreign Owned US Security</td>
</tr>
<tr>
<td>U.S Treasuries and Federal Financing Bank Bonds and Notes on column 1 (FOI), and Code 9999-6 of grand total countries value</td>
<td>SHLA Type of Issuer =1, Security Type = 9 or 10, Type of Holder=1, Term Indicator 2, the SUM of US Fair (Market) of Foreign Owned US Security</td>
</tr>
</tbody>
</table>
## TIC Comparison

<table>
<thead>
<tr>
<th>SLT Item Codes</th>
<th>SHL(A) Item Codes</th>
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<tr>
<td><strong>TIC SLT VS SHL(A)</strong></td>
<td></td>
</tr>
<tr>
<td>U.S Treasuries and Federal Financing Bank Bonds and Notes on column 2, and (All Other Holders), code 9999-6 of grand total countries value</td>
<td>SHLA Type of Issuer =1, Security Type = 9 or 10, Type of Holder=2 and 3, Term Indicator 2, the SUM of US Fair (Market) of Foreign Owned US Security</td>
</tr>
<tr>
<td>Bonds of US Governments Corporations and Federally Sponsored Agencies on columns 3 (FOI), and code 9999-6 of grand total countries value</td>
<td>SHLA Type of Issuer =2, Type of Holder=1, Security Type = 8, 9, 10, 12, Term Indicator 2, SUM of US Fair (Market) of Foreign Owned US Security</td>
</tr>
<tr>
<td>Bonds of US Governments Corporations and Federally Sponsored Agencies on columns 4 (All Other Holders), and Code 9999-6 of grand total countries value</td>
<td>SHLA Type of Issuer =2, Type of Holder=2 and 3, Security Type = 8, 9, 10, 12, Term Indicator 2, SUM of US Fair (Market) of Foreign Owned US Security</td>
</tr>
<tr>
<td>U.S. Corporate and Other Bonds on columns 5 (FOI), and Code 9999-6 of grand total countries value</td>
<td>SHLA Type of Issuer =3, 4,5,6 Security Type = 8-12, Type of Holder=1, Term Indicator 2, SUM of US Fair (Market) of Foreign Owned US Security</td>
</tr>
<tr>
<td>U.S Corporate and Other Bonds on columns 6 (All Other Holders), Code 9999-6 and code 9999-6 of grand total countries value</td>
<td>SHLA Type of Issuer =3, 4,5,6 Security Type = 7-12, Type of Holder=2 and 3, Term Indicator 2, SUM of US Fair (Market) of Foreign Owned US Security</td>
</tr>
<tr>
<td><strong>Bonds of US Governments Corporations and Federally Sponsored Agencies, on columns 3 &amp; 4, and Code 8999-1 of (Asset-Backed Securities)</strong></td>
<td>SHLA - 2 Type of Issuer =2, Type of Holder=1,2,3 Security Type = 12, Term Indicator 2, SUM of US Fair (Market) of Foreign Owned US Security</td>
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<tr>
<td>Bonds of US Governments Corporations and Federally Sponsored Agencies, on columns 3(FOI), and Code 8999-1 of (Asset-Backed Securities)</td>
<td>SHLA Type of Issuer =2, Type of Holder=1, Security Type = 12, Term Indicator 2, SUM of US Fair (Market) of Foreign Owned US Security</td>
</tr>
<tr>
<td>Bonds of US Governments Corporations and Federally Sponsored Agencies, on columns 4(All Other Holders), and Code 8999-1 of (Asset-Backed Securities)</td>
<td>SHLA Type of Issuer =2, Type of Holder=2,3 Security Type = 12, Term Indicator 2, SUM of US Fair (Market) of Foreign Owned US Security</td>
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# TIC Comparison

<table>
<thead>
<tr>
<th>SLT Item Codes</th>
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<td>U.S Corporate and Other Bonds on columns 5 &amp; 6, and Code 8999-1 of (Asset-Backed Securities)</td>
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<td>U.S Corporate and Other Bonds on columns 5 (FOI), and Code 8999-1 of (Asset-Backed Securities)</td>
<td>SHLA Type of Issuer =3-6, Type of Holder=1 Security Type =12, Term Indicator 2, SUM of US Fair (Market) of Foreign Owned US Security</td>
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<td>U.S Equity Securities on columns 7 &amp; 8, and Code 8401-8 of (Fund Shares)</td>
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<td>U.S Equity Securities on columns 8 (All Other Holders), and Code 8401-8 of (Fund Shares)</td>
<td>SHLA Type of Issuer =4-6, Type of Holder=2 and 3, Security Type =3 &amp; 4, the SUM of US Fair (Market) of Foreign Owned US Security</td>
</tr>
</tbody>
</table>

## Resources

- **Securities Data Division (SDD)**
  - Alicia Leonard-Stacker, Staff Director (212) 720 5482
  - Jason Stein, Staff Manager (212) 720 2752
  - Ed Sapozhnikov, Staff Manager (212) 720 6455
  - SDD Helpline (212) 720 6300
    - SHLA.Help@ny.frb.org
    - SHC.Help@ny.frb.org
  - Sign up to receive updates regarding upcoming seminars at: https://public.govdelivery.com/accounts/USFRBNEWYORK/subscriber/new?
Uses of Treasury International Capital (TIC) Data

FRBNY 2016 SHC/SHL Training

Ruth Judson
Division of International Finance
February 2016

**TIC System Overview**

- What is the TIC data system?
  - Comprehensive effort to collect cross-border financial data
  - Cross-border
    - U.S. liabilities (U.S. financial assets held by foreigners)
    - U.S. claims (foreign assets held by U.S. residents)
  - Financial
    - Bank and nonbank loans, deposits, and other
    - Derivatives positions and transactions
    - **Securities (bonds and stock) positions and transactions**
How are TIC data used?

- Published monthly / quarterly / annually on Treasury’s TIC website
- Important inputs to
  - BEA’s balance of payments (BOP) and international investment position (IIP)
  - Federal Reserve Board’s Flow of Funds (Z.1)
  - IMF’s Coordinated Portfolio Investment Survey
- Data are watched closely by market and policy analysts

Examples: TIC in the news

Example: Bloomberg, this week:
China’s Holdings of Treasuries Decline to Lowest Since February
Scott Lanman
February 16, 2016 — 4:00 PM EST

Japan’s portfolio of U.S. government debt also sinks
Cross-border investment outflow in December at $114 billion

China’s holdings of U.S. Treasuries in December fell to a 10-month low, a government report showed in Washington, as the world’s second-largest economy reduced foreign-exchange reserves to support a weakening yuan.

The biggest foreign holder of U.S. government debt had $1.25 trillion in bonds, notes and bills in December, down $18.4 billion from a month earlier and little changed from a year earlier, according to U.S. Treasury Department data released Tuesday. The portfolio of Japan, the largest holder after China, dropped $22.4 billion to $1.12 trillion, the data showed.

For all of 2015, total foreign holdings of U.S. Treasury debt rose to $6.17 trillion from $6.16 trillion, the report showed. Official holdings, which include central banks, fell by $27.2 billion to $4.1 trillion, it showed.

The report, which also contains data on international capital flows, showed net foreign selling of long-term securities totaling $29.4 billion in December. It showed a total cross-border outflow, including short-term securities such as Treasury bills and stock swaps, of $114 billion.

Net selling by foreign governments of U.S. securities including Treasuries, agency debt, corporate bonds and stocks totaled $51.3 billion, the biggest monthly outflow on record for official holders, according to the department.
Publication by BEA for Official International Transactions Accounts

- Quarterly Balance of Payments (BOP) statistics
  - Current account: broadest measure of cross-border transactions: trade flows plus transfers and remittances, and investment income
    - TIC data used for estimates of fees and commissions on cross-border securities transactions
    - Interest and dividend payments on foreign holdings of US assets and interest and dividend receipts on US holdings of foreign assets
  - Financial Account
    - Financial flows that provide financing of the current account

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- Annual (and now quarterly) International Investment Position (IIP)
  - How large is stock of US holdings of foreign assets relative to foreign holdings of US assets?

US IIP (cont.)

- Categories are
  - DI (blue)-from BEA
  - Portfolio investment (green): TIC securities and banking data
    - Derivatives (yellow): TIC
    - Other and reserve assets: Various sources
  - Net IIP (black line)
    - Net IIP is negative: US liabilities (below Y axis) exceed US assets
    - In other words, rest of world is lending to US
    - This gap narrowed a bit after the 2008 crisis but is now widening again
Questions from TIC and Related Data: Is Current Account and NIIP Deficit Sustainable?

- Interest rates will almost surely rise at some point
  - Stock of debt owed to foreigners is large enough to generate growing net interest payments on debt securities.
  - Liabilities to foreigners will grow as a share of GDP (unsustainable in the long run) unless dollar depreciates
  - But how and when the balance changes will depend in part on the composition of our claims on and liabilities to foreigners.
Example: Who holds Treasuries, and implications for Treasury yields as Fed “normalizes”

- During “quantitative easing”, Fed bought Treasuries
  - Treasury purchases lowered supply, so increased price, which lowers rates
  - Foreign investors’ holdings and purchases were also strong, amplifying the effect
    - Foreign holdings of Treasuries are about $5.5 trillion, or about half the stock of marketable Treasury debt outstanding
    - China the largest foreign holder at almost $1.3 trillion

Looking Forward

- If foreign investors move away from Treasuries as the Fed is raising rates and [possibly] reducing its portfolio, rates could rise faster
- Policymakers watch the TIC data, as well as market movements, to gauge impact
Another Use of TIC Data: Federal Reserve Flow of Funds Accounts (Z.1)

- Flow of Funds gives comprehensive accounting of:
  - Quarterly financial asset and liability positions
  - Quarterly changes in positions (flows)
  - For sectors of the U.S. economy to measure financial “wealth” of the United States
- Balance of Payments and International Investment position data are source of Flow of Funds “Rest of the World” sector.

Flow of Funds Accounts (cont’d)

- Flow of Funds wealth of the U.S. household sector is derived by residual:
  - For example, Flow of Funds has measure of total U.S. Stock market capitalization
  - Minus estimate of U.S. stocks held by U.S. financial and nonfinancial corporations
  - Minus U.S. stocks held by foreigners (based on annual survey of foreign holdings US securities + monthly estimates based on TIC S & new SLT)
    - = U.S. stocks held by U.S. households
      - + estimate of portion of foreign stocks held by U.S. households (annual claims survey and monthly estimates based on TIC S & SLT)
    - = U.S. household wealth in the form of stocks
Flow of Funds Accounts (cont’d)

- U.S. household wealth is an important determinant of U.S. household spending
  - Some estimates suggest that $1 increase in financial wealth leads to roughly $.06 increase in spending
  - Aggregated over all U.S. households: has significant effect on U.S. GDP

- Getting accurate measure of U.S. household wealth and components of household wealth is important for outlook for U.S. consumer spending
  - Depends on getting accurate measure of ROW wealth

Use of TIC Data in Board’s International Finance Division

- Current Analysis: Events of past few years: how can monthly TIC data and annual surveys help us understand current global financial issues?
- Also for longer-term analysis: what are emerging trends in cross-border financial flows and investor portfolios?
Example of Analysis: developments in emerging market economies and investor responses to low interest rate environment

- How exposed are U.S. investors to EMEs? How have they responded to recent turbulence in EME financial markets?
- What’s keeping Treasury yields so low? Are Chinese purchases of Treasuries helping hold down yields?
- Are there implications for demand for U.S. securities, U.S. asset prices and interest rates, and the value of the dollar?
- What are the implications for foreign growth and activity? Are there potential spill-overs for U.S. economic activity?
  - Recent FOMC statements explicitly mentioned this factor.
- Are there concerns for financial stability?

Concluding comments

- Data collected in the TIC reporting system is used for range of official publication uses
- Wealth of detail in the data is strongly valued by senior staff in the International Finance division for the ability to analyze important questions about the current economic and financial situation
- Care and effort taken by reporters to ensure the data are accurate is highly valued and much appreciated!
- TIC data releases and reports can be seen at https://www.treasury.gov/resource-center/data-chart-center/tic/Pages/index.aspx