

# Evaluation of the International Monetary Fund (IMF) RDF Data Sets

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**Abstract.** Evaluation of the International Monetary Fund (IMF) RDF Data Sets

**Keywords:** RDF Validation, RDF Constraints, DDI-RDF Discovery Vocabulary, Disco, RDF Data Cube Vocabulary, Linked Data, Semantic Web

## 1 Data Model Consistency

	Constraints										
Data Sets											
	<i>DATA-MODEL-CONSISTENCY-01</i>	<i>DATA-MODEL-CONSISTENCY-02</i>	<i>DATA-MODEL-CONSISTENCY-03</i>	<i>DATA-MODEL-CONSISTENCY-04</i>	<i>DATA-MODEL-CONSISTENCY-05</i>	<i>DATA-MODEL-CONSISTENCY-06</i>	<i>DATA-MODEL-CONSISTENCY-07</i>	<i>DATA-MODEL-CONSISTENCY-08</i>	<i>DATA-MODEL-CONSISTENCY-09</i>	<i>DATA-MODEL-CONSISTENCY-10 (!)</i>	<i>DATA-MODEL-CONSISTENCY-11</i>
<i>http://imf.270a.info/sparql</i>	✓	✓	✓	✓	✗	✓	99091	✓	✓	✓	✓

Table 1: Evaluation of *http://imf.270a.info/sparql*

	Constraints										
Data Sets	DATA-MODEL-CONSISTENCY-01	DATA-MODEL-CONSISTENCY-02	DATA-MODEL-CONSISTENCY-03	DATA-MODEL-CONSISTENCY-04	DATA-MODEL-CONSISTENCY-05	DATA-MODEL-CONSISTENCY-06	DATA-MODEL-CONSISTENCY-07	DATA-MODEL-CONSISTENCY-08	DATA-MODEL-CONSISTENCY-09	DATA-MODEL-CONSISTENCY-10 (!)	DATA-MODEL-CONSISTENCY-11
<i>MBLD</i>	✓	✓	✓	✓	✗	✓	98369	✓	✓	-	✓
<i>PGI</i>	✓	✓	✓	✓	✗	✓	✓	✓	✓	-	✓
<i>MCORE</i>	✓	✓	✓	✓	✗	✓	722	✓	✓	-	✓
<i>DM</i>	✓	✓	✓	✓	✗	✓	✓	✓	✓	-	✓

Table 2: Evaluation of <http://imf.270a.info/spargl>

Data Sets

## 2 Existential Quantifications

Data Sets	Constraints			
	<i>EXISTENTIAL-QUANTIFICATIONS-01</i>			
	<i>EXISTENTIAL-QUANTIFICATIONS-02</i>			
	<i>EXISTENTIAL-QUANTIFICATIONS-03</i>			
	<i>EXISTENTIAL-QUANTIFICATIONS-04</i>			
<i>http://imf.270a.info/sparql</i>	11	✓	✓	✓

Table 3: Evaluation of *http://imf.270a.info/sparql*

### 3 Cardinality Restrictions

Data Sets	Constraints			
	MINIMUM-QUALIFIED-CARDINALITY-RESTRICTIONS-02			
	MAXIMUM-QUALIFIED-CARDINALITY-RESTRICTIONS-01			
	EXACT-UNQUALIFIED-CARDINALITY-RESTRICTIONS-01			
				EXACT-QUALIFIED-CARDINALITY-RESTRICTIONS-02
<a href="http://imf.270a.info/sparql">http://imf.270a.info/sparql</a>	8	✓	✓	✓

Table 4: Evaluation of <http://imf.270a.info/sparql>

Constraints	
Data Sets	MAXIMUM-QUALIFIED-CARDINALITY-RESTRICTIONS-01
	✓
	✓
	✓
	✓

Table 5: Evaluation of <http://imf.270a.info/sparql>

Data Sets

## 4 Structure

Data Sets	Constraints	
	<i>STRUCTURE-01</i>	<i>STRUCTURE-02</i>
<i>http://imf.270a.info/sparql</i>	✓	✓

Table 6: Evaluation of *http://imf.270a.info/sparql*

## 5 Further Constraints