



Bank of Mongolia

# **Compilation of trade statistics from BOP perspective, challenges being faced**

*Tuvshingerel Tumenbayar /Gerlee/*

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## Outline

- Overview of Mongolia
- Challenges in the compilation of Balance of Payments` trade statistics
- Terms of trade index



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# Overview of Mongolia

# Mongolia

## LARGE LAND PER CAPITA

Close Proximity to the Largest Global Resource Markets



### Density (6<sup>th</sup>)

1. Greenland
2. Svalbard
3. Falkland Islands
4. Pitcairn
5. Western Sahara
6. Mongolia

Total population: **2.9 mln** (140<sup>th</sup>)  
Territory: **1.6 mln sq. km** (19<sup>th</sup>)

**1.88 pop sq km**



## ABUNDANCE OF UNEXPLOITED NATURAL RESOURCES

Exploration license covers **26% of total territory**

- Copper production: **7% of the World production**
- Coal production: **Among Top 9 (major exporter to China)**
- Uranium reserves: **Among Top 10**
- Other reserves: **Iron ore, crude oil, rare earth etc.**

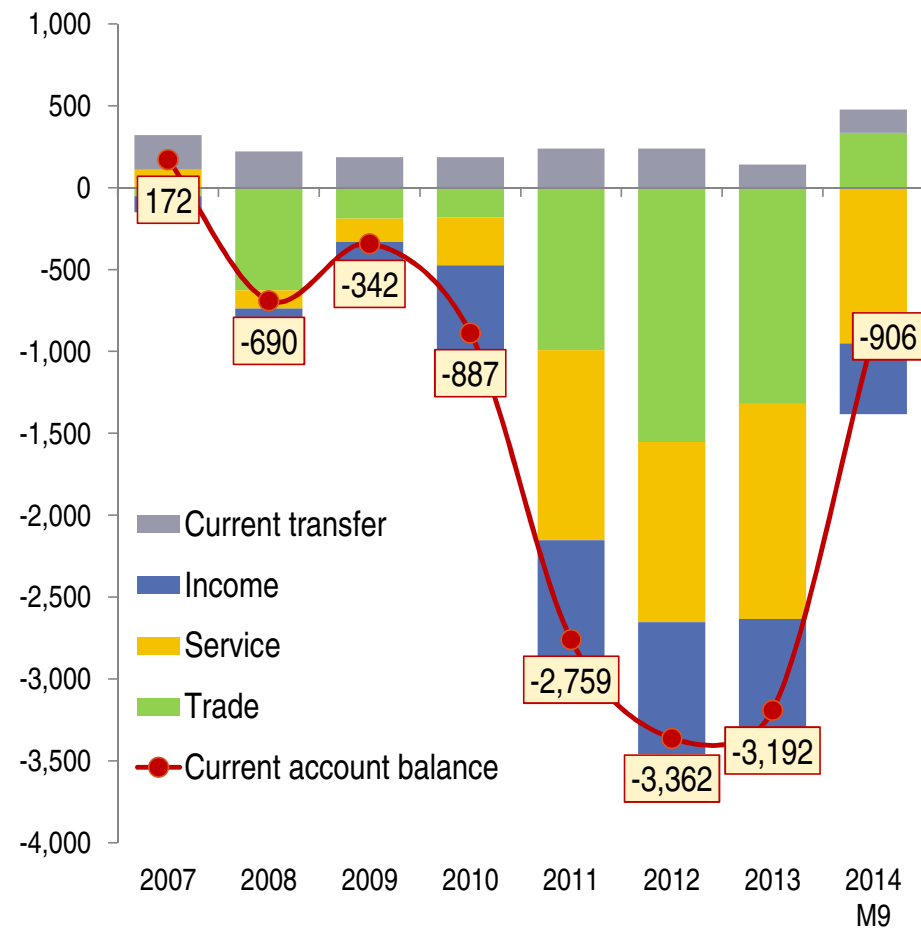
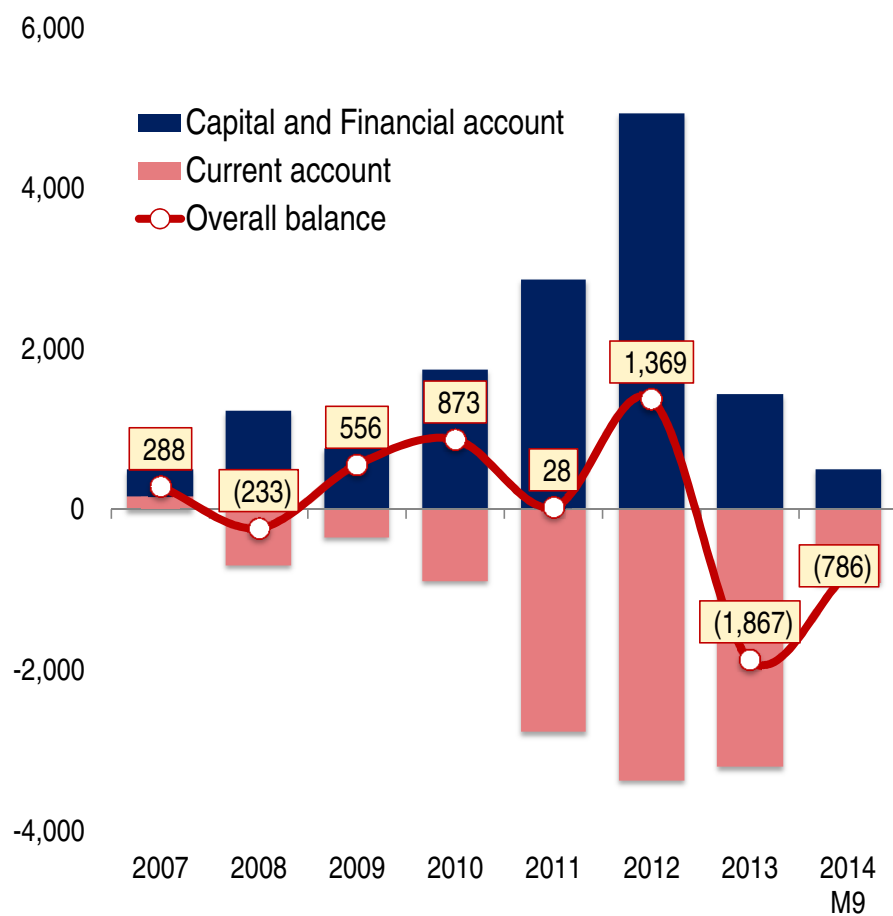


МОНГОЛ  
УЛСЫН  
ТӨЛӨӨ

# Balance of Payments /million USD/



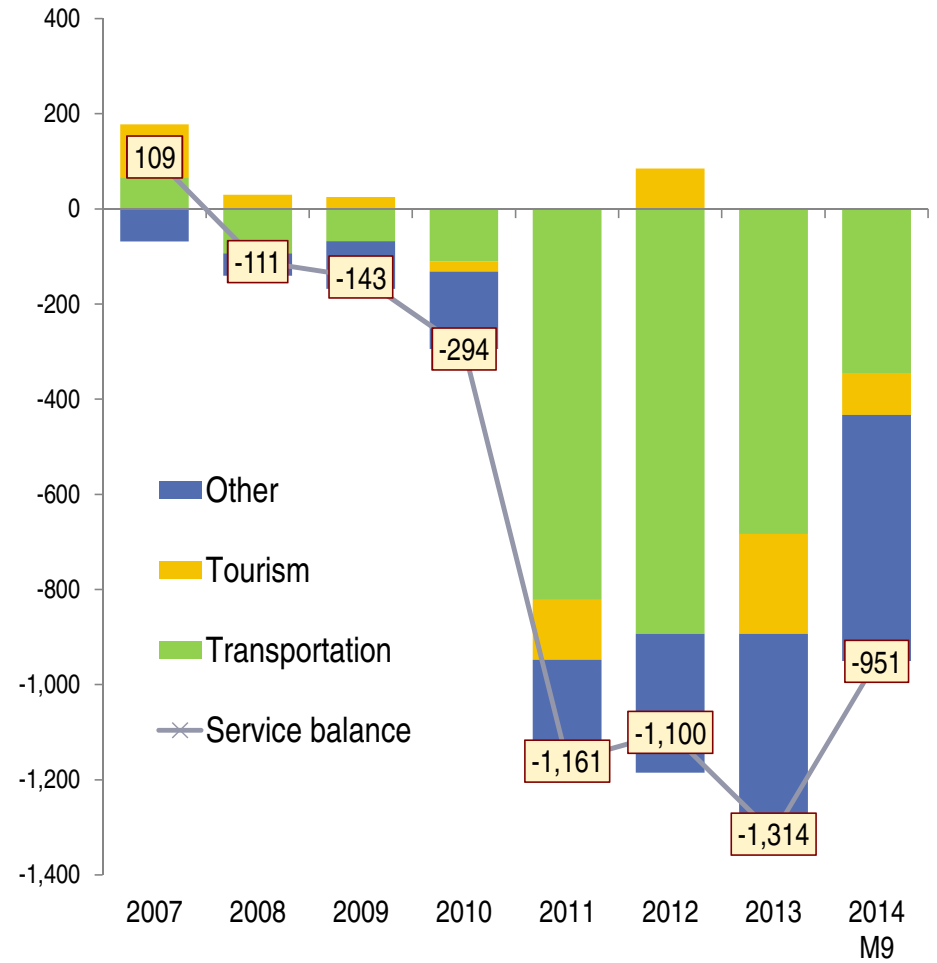
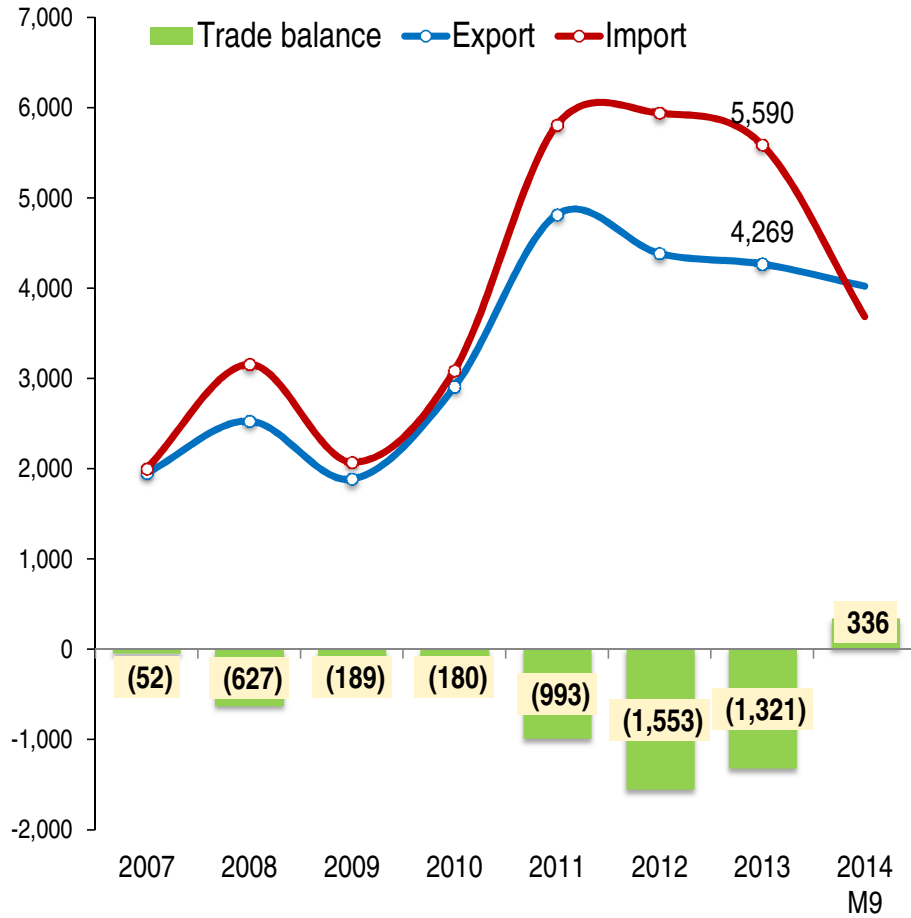
البيانات  
الأساسية



# Trade and service balance /million USD/



القطاع  
الخدمي





# Challenges in compilation of BOP trade and services statistics

## Challenges from BOP perspective

- Shuttle trade (borders with China, not being captured in customs statistics)
- Over, undervaluation of trade (Inconsistency between ITRS and customs statistics)
- Product sharing agreement (crude oil, sharing percentage is subject to production)
- CIF – FOB conversion
- Terms of trade







## Terms of trade index

# Terms of trade

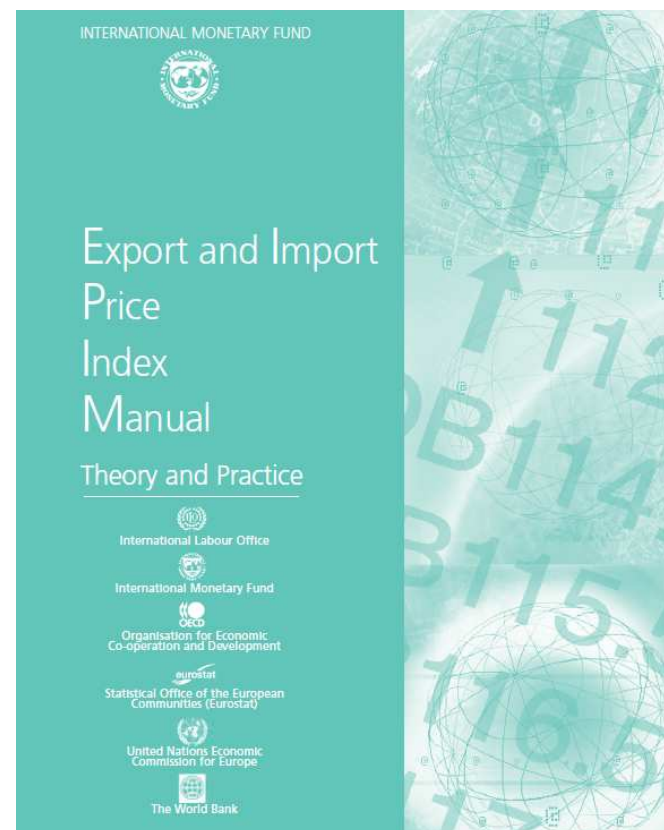
## Official ToT:

- National statistics office
  - Since 1997,
  - Quarterly basis,
  - Insufficient time series for macroeconomic analysis,

## Non-official ToT:

- Bank of Mongolia
  - For research purpose,
  - Since 2010,
  - Monthly basis,

**Now =>** In process to improve ToT calculation in cooperation with NSO, in accordance with international standard



# New methodology

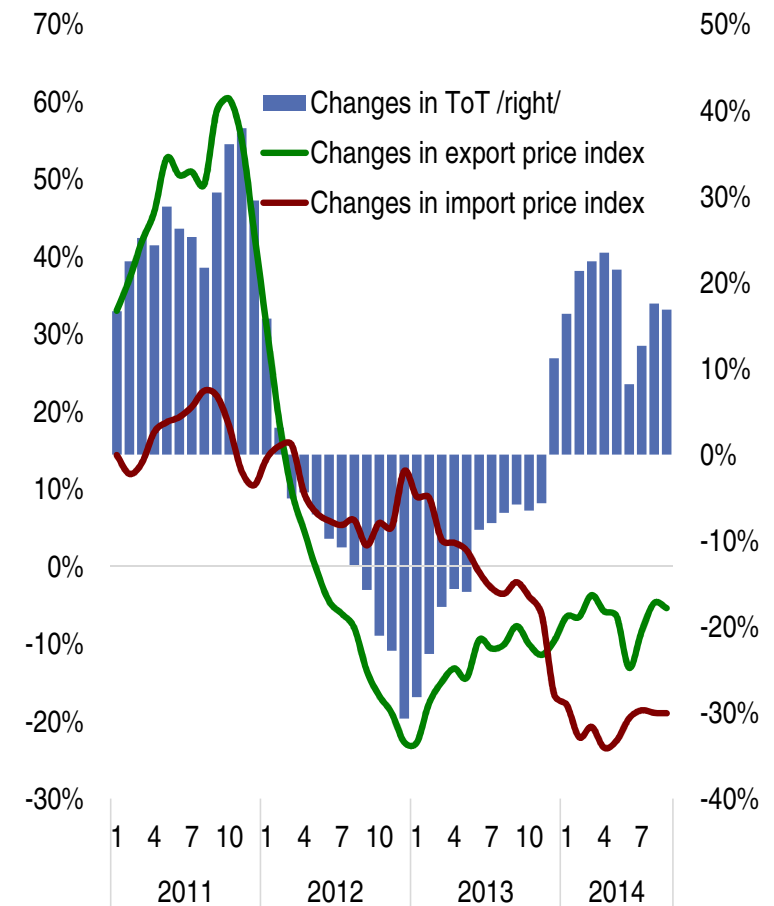
**Fischer index** (contains characteristics of the two most basic formulas used to calculate price indices, **Paasche** index and **Laspeyres** index)

## Input:

- 8 digit customs data (95% of total export, 80% of total import)

## How:

1. Basket is determined for each countries: China, Russia, USA, Germany, Japan, Korea
  - 70% of total trade during the period
  - 3 consecutive years
2. Unit value index is calculated for each item
3. Sub-category value index is calculated
4. Category index is calculated
5. Price index is calculated for each country
6. Unification of all country indices and calculate final ToT



## Questions

- 1. HOW TO USE CUSTOMS STATISTICS DATA?** Unit value is not registered in Customs statistics, so average of border price is being used in ToT. Since the unit measurement is not the same, the unit price tends to have high volatility.
- 2. HOW TO CALCULATE THE FINAL INDEX?** Should it be done on PRODUCT basis or COUNTRY basis?
- 3. APPROPRIATE INDEX CALCULATION METHODOLOGY?** Fischer? Laspayres? Paasche?
- 4. SEASONAL ADJUSTMENT HAS TO BE DONE OR?** If it is necessary, how to do seasonal adjustment while not changing the time series every time?





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**THANK YOU FOR YOUR ATTENTION.**