Globalization and the growing defects of international economic statistics

Lukas Linsi, *University of Groningen*

Based on joint work with Daniel Mügge, *University of Amsterdam*

WCO, 3 May 2019

Why do we measure our economies the way we do? www.fickleformulas.org

Background: The *Fickle Formulas* project

UNIVERSITY OF AMSTERDAM

erc

European Research Council

Established by the European Commission

university of groningen

NWO

Netherlands Organisation for Scientific Research

www.fickleformulas.org

My talk

- Based on multi-year research into negotiations of standards for balance of payments statistics

- Purposes

  1. Taking a step back

  2. Offering a different perspective on a key question for HS: **Why is it so difficult to reform statistical standards?**

Balance of payments statistics

- BOP stats
  - Trade, FDI, PFI, etc.
  - IMF issues guidelines

- Our 'eye' on the global economy
  - Guide policy-making
  - Inform public debates
  - Raw material for quant research
  - Etc.

→ Measurement quality of BOP data is critical
  - But it is low…
  - … and getting worse

Globalization and BOP statistics

- BOP statistics reflect post-WWII 'national economy'-view of world economy

- At odds with contemporary transformations

  - "There is a growing appreciation that the statistical compilation tools and accounting frameworks designed and developed over the last 60 years … may reflect a world that no longer exists" (Nadim Ahmad, OECD)
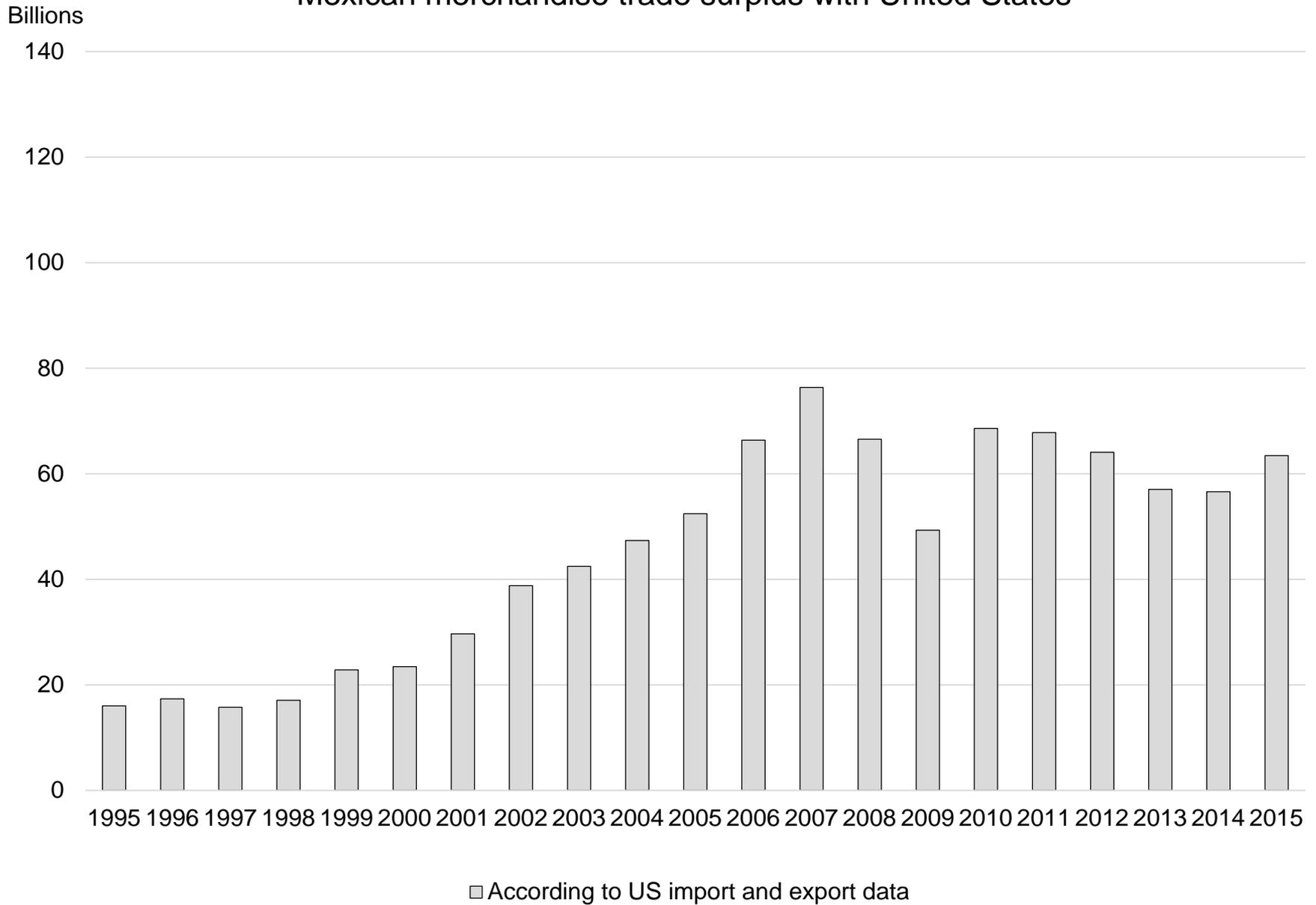
UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE
EUROSTAT
ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT
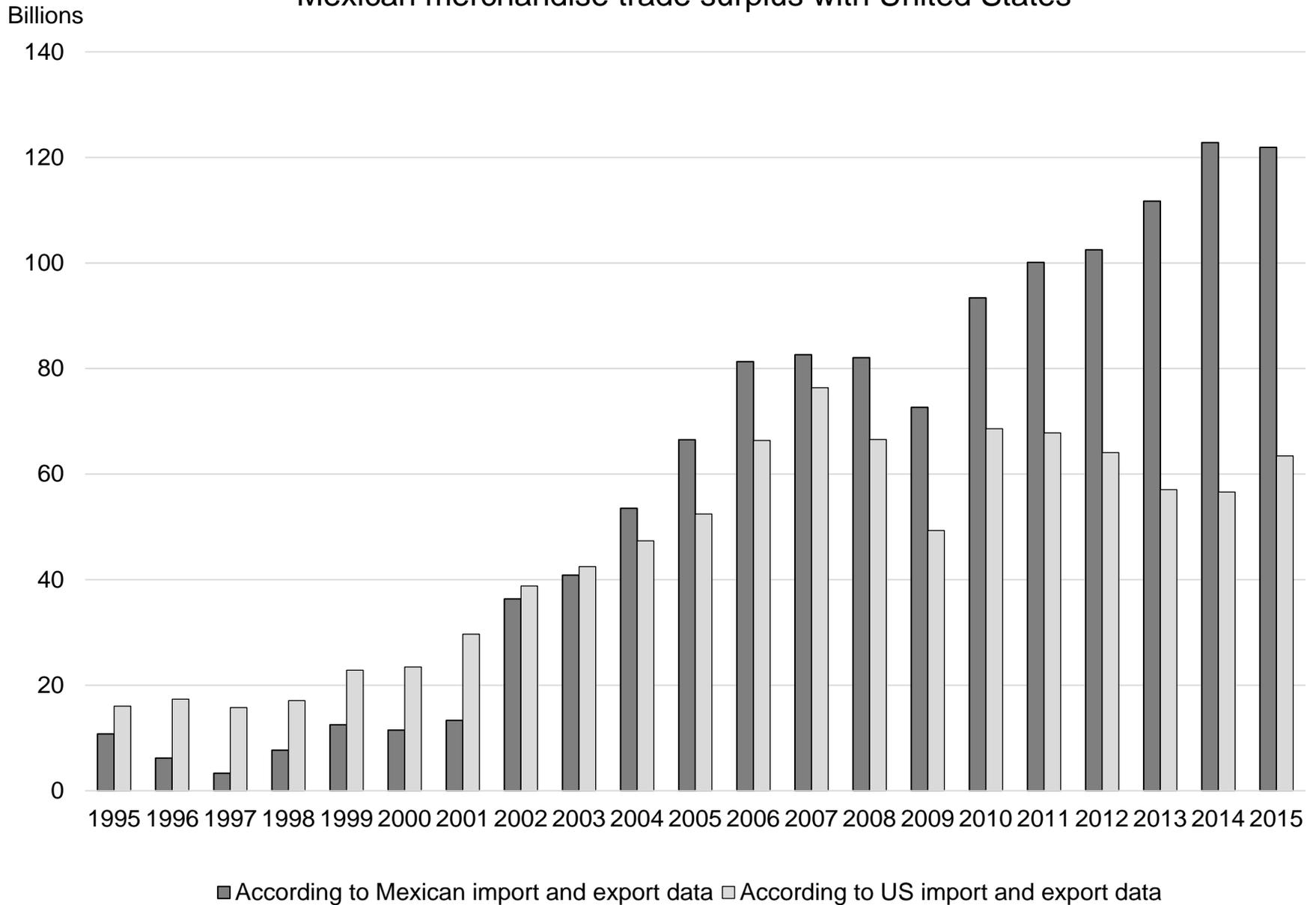
THE IMPACT OF
GLOBALIZATION
ON NATIONAL ACCOUNTS

UNITED NATIONS

Mexican merchandise trade surplus with United States

Billions

☐ According to US import and export data

Mexican merchandise trade surplus with United States

Billions

■ According to Mexican import and export data ☐ According to US import and export data

Data source: OECD STAN bilateral trade database rev.3 (1995-2011) and rev.4 (2012-2015), https://stats.oecd.org/Index.aspx?DataSetCode=BTDIXE

Sources of measurement problems

- Growing complexity of economic transactions

    - De-nationalization of production regimes and ownership structures; rise global value chains and intra-firm trade

        -> mis-attribution of geographical origin/destination

    - Digitization of economic activity = new products

        -> misclassifcation of product categories

    - Etc.

- The economy is changing rapidly, but statistical standards aren't

    why?

The 4 Cs of conservative bias

- Logics in national accounting

  – Comparability

  – Continuity

  – Certitude

  – Coherence

Comparability

- Comparability requires uniformity

- Finding consensus is hard

- Practical difficulties to implement changes

  "The standard frameworks take a while to develop. … it takes time for these international

  discussions, but in the meantime the global economy is changing." (Research interview

  with US BEA economists)

Continuity

- Change of standards disrupts time-series

- Creates path dependency: strong incentive to stick with existing standards even if they become less adequate

Certitude

- Objective 'hard' rules preferred over more flexible subjective judgments

  - Where is a product coming "from"?

    - Place of consignment vs. 'origin'

    - Legal residence vs. 'nationality'

  - How to classify hydromassage shower cabin?

- Data users want certainty; but certainty comes at a cost

  - Trade-off reliability vs. validity

Coherence

- ## National accounts as interlinked system

  "[W]e do not only put countries together in a database so that we can say this is country A and this is

  country B. We actually integrate it in a framework, so that everything adds ups with everything else"

  (Interview with senior statistician at OECD)

- ## Avoid spillover effects

  "[S]olving asymmetries in one item may create new asymmetries in another one" (BOPC 2016)

The resulting paradox

- Users expect statistics to…

  - draw on unambiguous sources [*certitude*],

  - allow for comparison over time [*continuity*] and across countries [*comparability*],

  - and they prize *coherence*—both internally and with holistic macroeconomic models

- The ambition of statisticians to meet these norms has undermined the ability of economic data to represent economic life more faithfully.

Thanks for your attention!

www.fickleformulas.org

l.a.linsi@rug.nl

@lukaslinsi

Fickle Formulas

Why do we measure our economies the way we do? www.fickleformulas.org